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MACRO RESEARCH FOR DEVELOPMENT
An IMF-DFID Collaboration

Department for International Development

Inequality Toolkit

The publicly available toolkit solves a small-open economy general equilibrium model capturing salient features of low-income countries, including a distinction between the rural and urban areas, and large agricultural and informal service sectors. The model can be used for investigating the implications of fiscal policies on both macro aggregates and distributional issues. Revenues can be mobilized through value added tax, personal income tax, and corporate income tax. Taxes can be used for uniform and targeted cash transfer programs, as well as infrastructure investment that boosts productivity. The toolkit features a user-friendly interface and advanced functions that allow the user to conduct customized analyses. The first application was for the 2017 Article IV Consultation for Benin. The team will present the features of the toolkit to the IMF's Inequality Advisory Group on December 15th.

Peer Learning Conference on Gender Equality

The MF, the Rwandan Ministry of Gender and Family Promotion, UN Women Rwanda and Uogonzi Institute sponsored a peer learning event in Rwanda, a country that has emerged as a leader in advancing gender equality. Approximately 170 participants from 22 countries in sub-Saharan Africa gathered in Kigali to discuss best practices on national gender strategies, public service delivery, data collection, and innovative solutions. The mornings featured presentations from high-level experts while the afternoons included site visits to Rwanda's parliament and projects focused on addressing gender gaps.

The team is currently planning capacity building workshops for early 2018, in partnership with UN Women and other international organizations. This next round of peer learning would target key senior civil servants and focus on select macro-critical policies where gender considerations are important, with a particular emphasis on gender budgeting as a tool for improving gender equality outcomes.

IMF Annual Meetings Features Analytical and Policy Work

The IMF Annual Meetings in October featured a high-level conference, “Towards 2030: Trends, Opportunities, Challenges and Policies for Inclusive Growth,” with opening remarks from IMF Deputy Managing Director Tao Zhang, and keynote speeches from Dani Rodrik and Ricardo Hausmnan. The IMF-DFID team also presented their analytical and policy research throughout the meetings: Andrea Presbitero discussed monetary policy and credit dynamics in LICs, and Lisa Kolovich talked about gender budgeting.

Modernizing Monetary Policy in Sub-Saharan Africa

The IMF-DFID team continues to collaborate closely with selected central banks in sub-Saharan Africa and respective IMF country teams in their efforts to modernize the practice and analysis of monetary policy, mainstreaming ongoing research and drawing on the experience in other countries. As part of this initiative, customized training missions to Malawi and Mozambique took place in September through November 2017. The team assisted the central banks’ modelling teams to further develop their quarterly projection models, which capture the authorities' view of the monetary transmission mechanism and of the shocks hitting the economy, in line with best practices in emerging economies. In addition, the IMF experts supported the central banks’ staff to incorporate model-based insights into policy decision-making process ahead of MPC meetings.

Roads or Schools: A Critical Tradeoff

Roads or schools? It’s a question akin to the “guns or butter” choice that governments around the world confronted in the 20th century: How to spend a nation’s finite resources to produce the maximum benefit for its people. In our recent IMF Working Paper, we offer an explanation of why investment in education may be a more pressing need in their societies. An IMF blog, translated into Chinese, French, Japanese, and Spanish provides further details.

The Macroeconomic (and Distributional) Effects of Public Investment in Developing Economies

This paper provides new empirical evidence of the macroeconomic effects of public investment in developing economies. Using public investment forecast errors to identify unanticipated changes in public investment, the paper finds that increased public investment raises output in the short and medium term, with an average short-term fiscal multiplier of about 0.2. We find some evidence that the effects are larger: (i) during periods of slack; (ii) in economies operating with fixed exchange rate regimes; (iii) in more closed economies; (iv) in countries with lower public debt; and (v) in countries with higher investment efficiency. Finally, we show that increases in public investment tend to lower income inequality.

Trends and Challenges in Infrastructure Investment in Low-Income Developing Countries

Gurara et al. (2017) examine trends in infrastructure investment and its financing in low-income developing countries (LIDCs). Following an acceleration of public investment over the last 15 years, the stock of infrastructure assets increased in LIDCs, even though large gaps remain compared to emerging markets. Infrastructure in LIDCs is largely provided by the public sector; private participation is mostly channeled through Public-Private Partnerships. Grants and concessional loans are an essential source of infrastructure funding in LIDCs, while the complementary role of bank lending is still limited to a few countries. Bridging infrastructure gaps would require a broad set of actions to improve the efficiency of public spending, mobilize domestic resources and support from development partners, and crowd in the private sector.

Building Resilience to Natural Disasters: An Application to Small Developing States

We present a dynamic small open economy model to explore the macroeconomic impact of natural disasters. In addition to permanent damages to public and private capital, disasters cause temporary losses of productivity, inefficiencies during the reconstruction process, and damages to the sovereign's creditworthiness. We use the model to study the debt sustainability concerns that arise from the need to rebuild public infrastructure over the medium term. In an application to Vanuatu, we find that donors should provide an additional 50 percent of pre-cyclone GDP in grants to be spent over the following 15 years to ensure public debt remains sustainable following Cyclone Pam. Helping the government build resilience on the other hand, reduces the risk of debt distress and at lower cost for donors.

Oil Prices and Inflation Dynamics: Evidence from Advanced and Developing Economies

We study the impact of fluctuations in global oil prices on domestic inflation and find that a 10 percent increase in global oil inflation increases, on average, domestic inflation by about 0.4 percentage points on impact, with the effect vanishing after two years and being similar between advanced and developing economies. We also find that the effect is asymmetric, with positive oil price shocks having a larger effect than negative ones. We further examine the transmission channels of oil price shocks on domestic inflation during the recent decades. The results suggest that the share of transport in the CPI basket and energy subsidies are the most robust factors in explaining cross-country variations in the effects of oil price shocks during the this period.

Fiscal Stabilization and Growth: Evidence from Industry-level Data for Advanced and Developing Economies

Medium-term growth can be enhanced by fiscal stabilization. However, to date, no systematic effort has been made to study the specific channels through which fiscal stabilization affects growth. This paper examines the effect of fiscal stabilization on industrial growth and how this effect depends on different technological characteristics. The results suggest that fiscal stabilization fosters growth in industries with: i) higher external financial dependence and lower asset fixity; ii) higher degree of labor intensity; iii) higher investment lumpiness and relationship-specific input usage. These effects tend to be larger during economic recessions.

Growth and Jobs in Developing Economies: Trends and Cycles

This paper investigates the relationship between economic growth and job creation in developing economies with a focus on low and lower middle-income countries along two dimensions: growth patterns and short-run correlations. Analysis on growth patterns shows that regime changes are quite common in both economic growth and employment growth, yet they are not synchronized with each other. Okun's Law—the short-run relationship between output and labor market—holds in half of the countries in our sample and shows considerable cross-country heterogeneity.

Inflation Targeting and Exchange Rate Management in Less Developed Countries

We analyze coordination of monetary and exchange rate policy in a two-sector model of a small open economy featuring imperfect substitution between domestic and foreign financial assets. Our central finding is that tight management of the exchange rate greatly enhances the efficacy of inflation targeting. In a flexible exchange rate system, inflation targeting incurs a high risk of indeterminacy. Moreover, small inflation shocks may escalate into much larger increases in inflation ex post. Both problems disappear when the central bank fixes the path of the nominal exchange rate or leans heavily against the wind in a managed float.

The Role of Policies in Coping with Weather Shocks: A Model Based Analysis

To illustrate how policies can help moderate the consequences of weather shocks in low-income countries, we simulate, using the Buffie et al. (2012) model, the macroeconomic effects of temperature increases. In hot countries, an increase in temperature reduces productivity. Moreover, a temperature increase could precipitate the loss of productive land. Consequently, the analysis calibrates the weather damage to total factor productivity and private capital to broadly match the estimated response of GDP to a 1°C increase in temperature in a representative low-income country with a baseline temperature of 25°C and examines how this damage can be shaped by macroeconomic and structural policies.

Economic Diversification in Sub-Saharan Africa

The October 2017 IMF Regional Economic Outlook: Sub-Saharan Africa featured a chapter on diversification that drew upon the IMF-DFID team's updated dataset and toolkit. At the aggregate level, structural transformation in sub-Saharan Africa has been slower than in other regions. Still, workers have moved from low-productivity agriculture into higher-productivity manufacturing and services jobs, contributing to overall productivity growth. Some of the region's other resource-intensive economies and non-resource-intensive economies have achieved export diversification at a similar pace as global peers. In contrast, the region's oil exporters have seen increased specialization, reflecting higher oil prices and new production.

Global Gender Circle

IMF staff presented recent work on gender budgeting and shared best practices with representatives from the UAE Gender Balance Council at the Global Gender Circle, held at the IMF headquarters on November 15, 2017. The team highlighted the importance of leadership from ministries of finance, legal frameworks, monitoring and evaluation, and the role of different stakeholders including Parliament and NGOs. Country-specific examples from the global survey on gender budgeting (including Morocco, Rwanda, Ukraine, Uganda) showing best practices were provided. Various media outlets covered the event.

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