

The Economic Impact of Short-term IMF Engagement in Low-Income Countries

YASEMIN BAL GÜNDÜZ*

International Monetary Fund, NW, DC, USA

Summary. — This study estimates the economic impact of IMF-supported programs addressing policy and exogenous shocks in low-income countries (LICs) using the propensity score matching approach. Focusing on a more homogenous group of financing events greatly improves the specification and predictive power of the selection model as compared to earlier studies, which is the key requirement to control for selection bias. This paper looks into a wide range of potential economic and political determinants of participation. Lower reserve coverage, deterioration in the current account balance, a weaker real GDP growth, increased macroeconomic instability (evident in higher fiscal deficits, inflation and exchange market pressures), and lagged elections would increase the probability of participation, i.e., propensity scores. Moreover, global conditions, including changes in real oil and non-oil commodity prices and world trade, are also significant; therefore, adverse global shocks could create cycles in demand for IMF financing. The short-term IMF engagement is positively associated with a wide range of macroeconomic outcomes. Notably, the impact on the short-term growth is the greatest and becomes significant only for LICs facing substantial macroeconomic imbalances or large exogenous shocks. When matching accounts for propensity scores and institutional quality, program countries in this group have changes in growth 10–30 percentage points higher than the control group.

© 2016 Elsevier Ltd. All rights reserved.

Key words — IMF-supported programs, low-income countries, economic growth, exogenous shocks, IMF financing, aid effectiveness

1. INTRODUCTION

Economic growth in low-income countries (LICs) has been strong since the late 1990s thanks to a marked improvement in macroeconomic policies and a favorable global environment until the onset of the global financial crisis. The crisis hit LICs hard primarily through adverse tail shocks to external demand, foreign direct investments (FDI), and remittances. Oil exporters also suffered from a sharp decline in oil prices. Nevertheless, unlike previous global downturns real per capita growth stayed positive for most LICs and recovered quickly after a sharp slowdown in 2009 (IMF, 2010, 2014). During this period the IMF's concessional financial support to LICs surged; commitments increased from an average of \$446 million during 2005–07 to \$1.5 billion in 2008 and reached a peak of \$3.8 billion in 2009. An IMF study argues (IMF, 2010) that countercyclical policy response, a first for LICs in contrast to past crises, as well as substantial external support, including from the IMF, were likely instrumental in supporting growth.

This paper explores how the short-term IMF supported programs responding to immediate financing needs arising from policy slippages (henceforth policy shocks) or adverse exogenous shocks may have affected economic outcomes in LICs over the last three decades. Such programs would often be called for when a country faces a pressing balance of payments problem, which would require a combination of macroeconomic adjustment and external financing. The IMF engagement in these cases would typically involve understandings on short-term macroeconomic adjustment accompanied by IMF financing. The potential channels of transmission would likely include financing to ease the burden of adjustment both through the IMF's own financing and the catalytic impact of IMF-supported programs, policy advice, especially in case of significant prior policy slippages, and the short-term crisis-related technical assistance. It is noteworthy that Bal-Gündüz and Crystallin (2014) show that programs addressing

policy or exogenous shocks have a significant catalytic impact on both the size and the modality of official development assistance (ODA), attributed primarily to multilateral ODA.¹

In the context of these short-term programs, the IMF's role in facilitating the adjustment to policy and exogenous shocks through financing and macroeconomic stabilization has potential implications on long-term growth. It is well documented that LICs are subject to larger, more frequent exogenous shocks compared to advanced and emerging market countries. The economic impact of shocks tends to get amplified by weak coping mechanisms owing to insufficient resources, weak policy buffers, and shallow financial markets. As such shocks are more likely to induce breaks in trend growth rather than transitory cyclical fluctuations around a trend, leading to significant welfare losses. Dabla-Norris and Bal Gündüz (2014) develop an index which provides early warning signals of a growth crisis in low-income countries to monitor individual country risks of sharp growth declines arising from external shocks. Their results show that macroeconomic policy buffers, exchange rate regimes, institutional quality, and the size of shocks are important determinants of growth crises in low-income countries. Findings of Becker and Mauro (2007) and Perry (2009) indicate that the impact of exogenous shocks on growth and consumption volatility is particularly pronounced in LICs. Hnatkovska and Loayza (2005) find a negative link between macroeconomic volatility and long-run economic growth, which is exacerbated in countries that are

* I would like to thank Christian Mumssen, Linda Kaltani, Christian Ebeke, Graham Bird, Dane Rowlands, Chris Lane, Hugh Bredenkamp, Doris Ross, Alun Thomas, Juan Trevino, Felipe Zanna, and two anonymous referees for helpful comments. Elizabeth Baxter and Mercedes San Pedro-Pribram provided excellent editorial assistance. The views expressed herein are those of the author and should not be attributed to the IMF, its Executive Board, or its management. The usual disclaimer applies. Final revision accepted: April 25, 2016.

poor, institutionally underdeveloped, undergoing intermediate stages of financial development, or unable to conduct counter-cyclical fiscal policies. They also report that the negative impact on growth results mostly from large drops below the trend rather than normal cyclical fluctuations. Papageorgiou, Pattillo, Spatafora and Berg (2010) suggest that adverse shocks in LICs on average translate into substantial persistent output losses over the medium-term. Higher volatility tends to reduce investment in both physical and human capital in LICs particularly given credit constraints. Moreover, Brückner and Ciccone (2010) find that commodity price downturns have a robust effect on the outbreak of civil wars in Sub-Saharan Africa.

Isolating the specific impact of an IMF-supported program from the broader economic developments and the impact of exogenous shocks in LICs is not an easy task. The vast empirical literature on the impact of IMF-supported programs has reported mixed results on economic growth, typically based on samples including both LICs and middle-income economies. Moreover, results have been particularly sensitive to the econometric methodology.

When assessing the economic impact of IMF-supported programs selection bias, arising from the fact that participation in IMF-supported programs is not random, presents a fundamental methodological challenge. In other words, initial economic conditions or the external environment will differ systematically for a program *versus* a non-program country. Countries that approach the IMF tend to already face economic difficulties or expect to experience problems in the near future. If countries that are experiencing balance of payments crises owing to policy slippages or exogenous shocks are more likely to participate in IMF-supported programs, failing to correct for selection bias could lead to a flawed conclusion that programs “cause” these crises along with adverse effects on macroeconomic outcomes.

The key step to control for selection bias and, thereby, disentangle the economic impact of programs is to estimate a strong selection (participation) model explaining the decision to request a program. Despite the vast literature on determinants of IMF arrangements, Steinwand and Stone (2008, p. 129) conclude that “the variety of models used to explain participation in IMF programs and the plethora of contradictory results they produce indicates that existing models are far from definitive. This unfinished business is the strongest reason to urge caution in rushing to judgment about the effects of IMF lending.”

The heterogeneity of countries and types of programs presents a challenge to the estimation of a selection model. In an attempt to improve the specification of participation models, recently just a handful of studies have disaggregated the analysis of participation in IMF arrangements by country income groups. Bird and Rowlands (2009), the only study that looks separately into a LIC sample, report significant differences between their regression specifications for LICs and MICs; however, the results for the LIC specification are weaker than the results for the MIC specification. They find that only three variables are significantly related to participation in IMF-supported programs in LICs: previous programs, high inflation, and the rescheduling of debt.

A key contribution of this paper to the literature is its focus on a more homogenous subset of programs with LICs addressing policy and exogenous shocks, which significantly improves the model specification and better distinguishes economic circumstances leading up to such programs. A wide range of economic variables, including reserve coverage, current account balance to GDP, real GDP growth, and a composite indicator assessing macroeconomic stability, turn out to be significant determinants of approval of IMF

arrangements with LICs. Moreover, global conditions, specifically the change in real oil and non-oil commodity prices, and the cyclical component of world trade, have significant effects on demand for programs.

This paper makes several contributions to the empirical literature on the economic impact of IMF-supported programs. First, it is the only study to explore the impact of a unique set of financing arrangements with LICs addressing policy or exogenous shocks. Second, it implements the propensity score matching (PSM) technique to address selection bias and examines the impact on a wider range of macroeconomic and social outcomes. So far, only a handful of papers have used PSM to examine the economic impact of IMF-supported programs on a few outcome variables. Third, it explicitly accounts for the implementation of programs in estimating the impact. Although the literature recognizes that the impact of programs would depend on how successfully they are implemented, previous empirical work has rarely taken it into account.

Results indicate that stepped-up IMF financing through augmentations of existing programs or short-term and emergency facilities are positively associated with short-term growth and indicators of macroeconomic stability. However, the impact on the short-term economic growth is the greatest and becomes significant only when LICs are faced with substantial short-term macro-economic imbalances or large exogenous shocks. Another noteworthy finding is that the implementation record of programs does matter in impact assessments.

This paper is organized as follows: Section 2 briefly reviews the literature on participation in and the economic impact of IMF-supported programs; an overview of the methodology is provided in Section 3; Section 4 presents the results and robustness checks; finally, conclusions are discussed in Section 5.

2. EMPIRICAL LITERATURE

Despite the vast literature on the macroeconomic consequences of IMF-supported programs no consensus has yet emerged on the impact of programs on growth, and very few papers have focused exclusively on LICs. The treatment of selection bias has been the fundamental methodological challenge and has led to an equally vast literature on participation in IMF-supported programs. This section briefly reviews the body of empirical work on participation in programs and then looks into the literature on the impact of IMF-supported programs.

(a) *Participation in IMF-supported programs*

Numerous empirical studies have looked into determinants of participation in IMF arrangements. Bird (2007) and Steinwand and Stone (2008) provide comprehensive surveys.

Early research emphasized the economic determinants (Conway, 1994; Joyce, 1992; Knight & Santaella, 1997; Santaella, 1996). While most studies agreed on the significant positive association of program participation with low levels of reserve holdings, previous participation in IMF programs, and low levels of income, the evidence was at best mixed on a range of other economic covariates. Moreover, the within sample and out-of-sample predictive power of these models was limited.

The low predictive power of these models led researchers to include political variables that would affect the supply or the demand side of programs, such as the size of governments, the quota at the IMF, the various instruments for U.S. and European influence, and the number of veto players. Evidence is again mixed; some find a role for U.S. influence but it's limited to the IMF's nonconcessional lending. Others suggest that

Download English Version:

<https://daneshyari.com/en/article/7392382>

Download Persian Version:

<https://daneshyari.com/article/7392382>

[Daneshyari.com](https://daneshyari.com)