Monetary Policy In Dollarized Economies Occasional Paper International Monetary Fund

Over the past two decades, many low- and lower-middle income countries (LLMICs) have improved control over fiscal policy, liberalized and deepened financial markets, and stabilized inflation at moderate levels. Monetary policy frameworks that have helped achieve these ends are being challenged by continued financial development and increased exposure to global capital markets. Many policymakers aspire to move beyond the basics of stability to implement monetary policy frameworks that better anchor inflation and promote macroeconomic stability and growth. Many of these LLMICs are thus considering and implementing improvements to their monetary policy frameworks. The recent successes of some LLMICs and the experiences of emerging and advanced economies, both early in their policy modernization process and following the global financial crisis, are valuable in identifying desirable features of such frameworks. This paper draws on those lessons to provide guidance on key elements of effective monetary policy frameworks for LLMICs.

My dissertation has four chapters. I use dynamic stochastic general equilibrium (DSGE) models to study the welfare implications of exchange rate, monetary, and fiscal policies in de facto dollarized economies. Dollarization is a common phenomenon in emerging economies. In many of them economic agents hold liabilities in foreign currency while most income is earned in domestic currency. Thus, a sudden depreciation of the domestic currency may cause significant adverse effects on domestic agents' wealth and welfare. That is why governments try to design and implement macroeconomic policies that help reduce these adverse effects. My work aims at contributing to the design and implementation of these policies. In the first chapter, I study alternative exchange rate regimes in a dollarized economy. I develop a DSGE model and pursue Bayesian estimation using data from Singapore. The main conclusion is that the flexible exchange rate regime is better than the fixed exchange rate. In the second chapter, I work on an extension of my first chapter by introducing nontradable goods, which allows me to study a broader set of exchange rate regimes in a dollarized economy. I develop a DSGE model and pursue Bayesian estimation using data from Peru. The main conclusion is that a policy that pegs the domestic currency price of exports is better than a flexible exchange rate regime that targets the consumer price index, which in turn is better than the fixed exchange rate. The third chapter studies the optimal fiscal rule for a dollarized economy. Using a DSGE model with endogenous dollarization, I obtain that an optimal fiscal rule should take into account deviations (from their steady state values) of the level of government debt, government spending, and inflation. The fourth chapter characterizes the optimal exchange rate policy in a dollarized economy using a method developed by Devereux and Sutherland (2007, 2008). The method allows me to use a DSGE model in order to compute the optimal currency composition of the portfolio of (foreign) liabilities in the long-run equilibrium and its dynamics. The main finding is that the flexible exchange rate is better than the fixed rate.

Theoretical and empirical analysis of de jure dollarization.

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This volume provides a rigorous and balanced perspective on the causes and implications of dollarization, and the basic policies and options to deal with it: the adaptation of the monetary and prudential frameworks, the development of local-currency substitutes, and the scope for limiting dollarization through administrative restrictions.

The paper conducts a comparative study of the monetary policy transmission in two economies that run a well-established IT regime, Chile and New Zealand, vis-à-vis two economies operating under relatively newer IT regimes, and which are exposed to a significant degree of dollarization, Peru and Uruguay. It is shown that the traditional interest rate channel is effective in Chile and New Zealand. For Peru and Uruguay, the exchange rate channel is instead more relevant in the transmission of monetary policy. This latter result follows from the limited impact of the policy rate in curbing inflationary pressures in these two countries, in combination with the fact that they have a relatively large and persistent exchange rate pass through. Finally, it is shown that the on-going de-dollarization process of Peru and Uruguay has somewhat strengthened their monetary transmission through the interest rate channel.

Increasing global financial market integration is presenting new challenges to central banks as they seek to attain low inflation and financial stability. This volume is based on a conference hosted by the IMF in September 2002. It examines key issues such as the choice of nominal anchor for countries susceptible to shifts in capital flows, what can be done to prevent and deal decisively with financial crises, and how central bankers should think about the difficult choices when monetary objectives and financial stability objectives come into conflict.

This paper identifies key aspects that countries willing to officially dollarize must necessarily address. Based on country experiences, it discusses the critical institutional bases that are necessary to unilaterally introduce a new legal tender, describes the relevant operational issues to smooth the transition toward the use of the new currency, and identifies key structural reforms that are necessary to favor the sustainability over time of this monetary regime. The paper is aimed at providing preliminary guidance to policy makers and practitioners adopting official dollarization. The paper does not take a position on how appropriate this monetary arrangement is. Experiences from adopting dollarization in Ecuador, El Salvador, Kosovo, Montenegro, and Timor-Leste are illustrated briefly.

Despite significant strides in financial development over the past decades, financial dollarization, as reflected in elevated shares of foreign currency deposits and credit in the banking system, remains common in developing economies. We study the impact of financial dollarization, differentiating across foreign currency deposits and credit on financial depth, access and efficiency for a large sample of emerging market and developing countries over the past two decades. Panel regressions estimated using system GMM show that deposit dollarization has a negative impact on financial deepening on average. This negative impact is dampened in cases with past periods of high inflation. There is also some evidence that dollarization hampers financial efficiency. The results suggest that policy efforts to reduce dollarization can spur faster and safer financial development.

We re-appraise the cross-country evidence on the dollarization of financial systems in emerging market economies. Amidst striking heterogeneity of patterns across regions, we identify a broad global trend towards financial sector de-dollarization from the early 2000s to the eve of the global financial crisis of 2008–09. Since then, de-dollarization has broadly stalled or even reversed in many economies. Yet a few of them have continued to de-dollarize. This suggests that domestic factors are also important and interact with global factors. To gain insight into such an interaction, we examine the experience of Peru since the early 1990s and find that low global interest rates, low global risk-aversion, and high commodity prices have fostered de-dollarization. Domestic macro-prudential measures that raise the relative cost of domestic dollar loans and the introduction and adherence to inflation targeting have also been key.

The paper looks at the challenges of conducting monetary policy in a context of high dollarization of the banking system and weak institutions in the Democratic Republic of the Congo. The empirical analysis confirms the limited effectiveness of the Central Bank of Congo in controlling inflation, despite a rapid policy response to inflation shocks. Options available to enhance the effectiveness of monetary policy are limited. After exploring the pros and cons of different exchange regimes we conclude that strengthening the current monetary policy framework remains the first-best option, given the country’s exposure to frequent terms-of-trade shocks.

Exchange rate targeting is considered the best policy option in dollarized economies when wages and prices are indexed to the exchange rate. Croatia is a highly dollarized economy, but empirical investigation conducted in this paper shows that exchange rate pass-through has been low after stabilization. This finding, which is robust to different methodologies (VAR, cointegration), would suggest that dollarization is mostly limited to financial assets and therefore that strict exchange rate targeting may not necessarily be the best option. However, policy implications are unclear due to the endogeneity of the pass-through to the policy regime.

This paper assesses the benefits and risks associated with dollarization of the banking system. We provide novel empirical evidence on the determinants of dollarization, its role in promoting financial development, and on whether dollarization is associated with financial instability. We find that: (a) the credibility of macroeconomic policy and the quality of institutions are both key determinants of cross-country variations in dollarization; (b) dollarization is likely to promote financial deepening only in a high inflation environment; and (c) financial instability is likely higher in dollarized economies. The implications of these findings for financial sector and monetary policies are discussed.

Dollarization—the use of foreign currencies as a medium of exchange, store of value, or unit of account—is a notable feature of financial development under macroeconomically fragile conditions. It has emerged as a key factor explaining vulnerabilities and currency crises, which have long been observed in Latin America, parts of Asia, and Eastern Europe. Dollarization is also present, prominently, in sub-Saharan Africa (SSA) where it remains significant and persistent at over 30 percent rates for both bank loans and deposits—although it has not increased significantly since 2001. However, progress in reducing dollarization has lagged behind other regions and, in this regard, it is legitimate to ask whether this phenomenon is an important concern in SSA. This study fills a gap in the literature by analyzing these issues with specific reference to the SSA region on the basis of the evidence for the past decade.

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 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 where macroeconomic fluctuations can be driven by self-fulfilling expectations. Moreover, small inflation shocks may escalate into much larger increases in inflation ex post. Both problems disappear when the central bank leans heavily against the wind in a managed float.

The shift to inflation targeting has contributed to the relatively low inflation observed in some emerging market economies although, as noted by many economists, the preconditions required for a successful implementation were not in place. The existence of managed exchange rate regimes, a narrow base of domestic nominal financial assets, the lack of market instruments to hedge exchange rate risks, together with fear of floating and dollarization, have been stressed as factors that might weaken the efficacy of monetary policy. By examining various aspects of monetary transmission and policy formulation in two highly dollarized economies (Peru and Bolivia) vis-à-vis two economies with low levels of dollarization (Chile and Colombia), we found that, while dollarization imposes differences in both the transmission capacity of monetary policy and its impact on real and financial sectors, it does not preclude the use of inflation targeting as a policy regime.

The process of dollarization can take multiple forms, including when a country adopts the US dollar either as its predominant currency, or establishes a bicurrency system with the local currency. This publication examines how to establish an adequate supervisory and crisis management framework in dollarized economies, particularly when central banks and regulators may be constrained in the use of standard monetary and financial policy tools. It is based on a paper produced by the IMF Executive Board, as part of the policy development work conducted by the IMFs Monetary and Financial Systems Department.

We examine the implications of high degrees of dollarization for the choice of exchange rate regime and the information content of various monetary aggregates in developing countries. We conclude that a high degree of currency substitution argues for a more fixed exchange rate regime, while asset substitution may imply that either more rigid or more flexible regimes may be appropriate. We also ask whether the most informative monetary aggregates include dollar assets. Based on an analysis of five countries, we conclude inter alia that broader aggregates that include dollar assets perform better than those that do not.

Recent crises in emerging markets have been heavily driven by balance-sheet or net-worth effects. Episodes in countries as far-flung as Indonesia and Argentina have shown that exchange rate adjustments that would normally help to restore balance can be destabilizing, even catastrophic, for countries whose debts are denominated in foreign currencies. Many economists instinctually assume that developing countries allow their foreign debts to be denominated in dollars, yen, or euros because they simply don't know better. Presenting evidence that even emerging markets with strong policies and institutions experience this problem, Other People's Money recognizes that the situation must be attributed to more than ignorance. Instead, the contributors suggest that the problem is linked to the operation of international financial markets, which prevent countries from borrowing in their own currencies. A comprehensive analysis of the sources of this problem and its consequences, Other People's Money takes the study one step further, proposing a solution that would involve having the World Bank and regional development banks themselves borrow and lend in emerging market currencies.

We explore monetary policy transmission by estimating VAR impulse response functions to illustrate the Belorussian economy's response to unexpected changes in policy and exogenous variables. We find a significant exchange rate pass-through to prices, and interest rate policy following, rather than leading, financial market developments. Our estimated monetary policy reaction function shows the central bank striking a balance between real exchange rate stability and containing inflation. We discuss dollarization, administrative interventions, and other features complicating monetary policy transmission, review specific constraints and vulnerabilities, and conclude with observations on possible measures that could raise the effectiveness of monetary policy in Belarus

One distinguishable characteristic of emerging market economies is that they are not financially robust. These economies are incapable of smoothing out large external shocks, as sudden capital outflows imply large and abrupt swings in the real exchange rate. Using a small open-economy model, this paper examines alternative monetary policy rules for economies with different degrees of liability dollarization. The paper answers the question of how efficient it is to use inflation targeting under high liability dollarization. Our findings suggest that it might be optimal to follow a nonlinear policy rule that defends the real exchange rate in a financially vulnerable economy.

This book explores the characteristics of inflations, comparing historical cases from Roman times up to the modern day. High and moderate inflations caused by the inflationary bias of political systems and economic relationships - and the importance of different monetary regimes in containing them - are analysed.

Peru stands out among Latin American countries as an example of successful economic reforms over the past decade. This comprehensive look at Peru's economy traces that country's journey from a debt crisis in the 1980s to having buffers in place that allowed it to emerge unscathed from the global financial crisis. The book examines the steps Peru undertook to achieve these results and extracts lessons to be learned. Chapters are written by IMF staff and Peruvian economists.

This paper extends the framework derived by Jeanne and Rancière (2006) by explicitly incorporating the dollarization of bank deposits into the analysis of the optimal level of foreign reserves for prudential purposes. In the extended model, a sudden stop in capital flows occurs in tandem with a run on dollar deposits. Reserves can smooth consumption in a crisis but are costly to carry. The resulting expression for the optimal level of reserves is calibrated for Uruguay, a country with high dollarization of bank deposits. The baseline calibration indicates that the gap between actual and optimal reserves has declined sharply since the 2002 crisis due to a substantial reduction in vulnerabilities. While the results suggest that reserves are now near optimal levels, further accumulation may be desirable going forward, partly because banks' currently high liquidity levels are likely to decline as the credit recovery matures.

Banks’ liquidity holdings are comfortably above legal or prudential requirements in most Central American countries. While good for financial stability, high systemic liquidity may nonetheless hinder monetary policy transmission and financial markets development. Using a panel of about 100 commercial banks from the region, we find that the demand for precautionary liquidity buffers is associated with measures of bank size, profitability, capitalization, and financial development. Deposit dollarization is also associated with higher liquidity, reinforcing the monetary policy and market development challenges in highly dollarized economies. Improvements in supervision and measures to promote dedollarization, including developing local currency capital markets, would help enhance financial systems’ efficiency and promote intermediation in the region.

A very commonly observed phenomenon in developing and emerging market economies is the use of another country’s currency (whether the US dollar or another currency) in lieu or in addition to the local currency. The most common type of this financial phenomenon is partial (de facto) dollarization where foreign currencies are used side by side with local currency for saving and borrowing purposes in addition to serving as medium of exchange. Governments in these countries have been encouraging dollarization for years by allowing their citizens to save and borrow from local banks in foreign currency. Yet the existence of multiple currencies on banks' balance sheets on both the asset and liability side poses risks to the health and stability of the banking system. This book evaluates the practical aspects of partial dollarization in countries such as Turkey, South Korea, Peru, and Cambodia among others. Starting with the origins of the phenomenon, the impact on banking systems and financial depth of the credit markets are discussed along with risks to the banking systems. Challenges faced by Central Banks and banking regulators are evaluated using recent country studies.

Central America, Panama, and the Dominican Republic coped well with the global financial crisis of 2008-09. The impact was generally less severe and shorter lived than in previous episodes, the balance of payments adjustment was orderly, and the stability of the financial system was not compromised. This resilience can be attributed to a large extent to the strengthening of the fiscal frameworks, monetary management, and financial reforms conducted in the years preceding the global crisis. Nevertheless, the region faces considerable challenges for the period ahead, including the need to raise medium term growth above historical levels and protect macroeconomic and financial stability. This book argues that meeting these challenges will have to come from within, in light of the anticipated modest demand growth from trade partners. Raising growth in the region will depend on the adoption of structural reforms that generate substantial productivity gains. Rebuilding fiscal space and securing debt sustainability will hinge on efforts to increase tax revenue and reorienting spending to social and investment priorities. In the non-officially dollarized economies, it will also be essential to strengthen the monetary policy frameworks to keep inflation low and increase exchange rate flexibility, and improve financial regulation and supervision.

Annotation Provides an analysis of the global monetary system and proposes a comprehensive yet evolutionary reform of the system aimed at creating better monetary cooperation for the twenty-first century.

How has Latin America coped with external shocks and economic vulnerabilities in the aftermath of the global financial crisis? Managing Economic Volatility in Latin America looks at how the region has fared in recent years in an environment of uncertainty. It presents a collection of novel contributions on capital flows, terms of trade, and macroeconomic policy in Latin America. The rigorous expert analysis offers an up-to-date guide to many of the key economic policy questions in the region. Chapters focus on important analytical issues, including assessing reserves adequacy and current account levels. The roles of macroeconomic policies and exchange rates regimes in coping with large capital inflows are examined, as well as the effectiveness of both monetary policy and fiscal policy in dealing with economic challenges in the region.

Over the past decade, Cambodia has become Asia’s most dollarized economy. In contrast, dollarization in neighboring Lao P.D.R., Mongolia, and Vietnam has been either declining or broadly stable. Somewhat paradoxically, growing dollarization in Cambodia has occurred against the backdrop of greater macroeconomic and political stability. The usual motive, currency substitution, does not appear to have been a factor. As the volume of dollars increased over the years, so has the volume of riel. A strong inward flow of dollars related to garments sector exports, tourism receipts, foreign direct investment, and aid, has benefitted the dollar based urban economy. The riel based rural economy has, however, lagged behind. Given international experience in de-dollarization, a carefully managed market based strategy, supported by a continued stable macroeconomic environment is essential for Cambodia's de-dollarization.

This paper seeks to draw lessons from the IMF's experience in handling financial crises around the globe over the past ten years that are relevant to the challenges faced by countries in Latin America, especially in the wake of the recent crisis in Argentina. Experience suggests that there is no quick or easy fix in the face of a wide-ranging crisis involving both acute external financing pressures and rapidly changing asset prices that undermine financial stability and household and corporate balance sheets. In the end, effective solutions depend on developing a comprehensive strategy combining the full range of fiscal, monetary, financial system, and debt policy instruments. Recent experience with crises has had important implications for the IMF's work in assessing crisis vulnerabilities. IMF surveillance work has been strengthened and a more objective framework has been developed for assessing debt sustainability, and this approach continues to be refined.

Analyzes the costs and benefits of full dollarization, or the adoption by one country of another country's currency. Potential advantages include lower borrowing costs and deeper integration into world markets. But countries lose the ability to devalue, and become dependent on the U.S. Compares with currency board option.

Dollarization - the holding by residents of a substantial portion of their assets in foreign-currency-denominated assets- is a common feature of developing and transition economies, and therefore typical of many countries with IMF - supported adjustment programs. This paper analyzes policy issues that arise-and various monetary strategies that may be pursued- when the monetary sector is dollarized, and it considers the implications that dollarization has for the design of IMF programs.

Foreign exchange intervention is widely used as a policy tool, particularly in emerging markets, but many facets of this tool remain limited, especially in the context of flexible exchange rate regimes. The Latin American experience can be informative because some of its largest countries adopted floating exchange rate regimes and inflation targeting while continuing to intervene in foreign exchange markets. This edited volume reviews detailed accounts from several Latin American countries' central banks, and it provides insight into how and with what aim many interventions were decided and implemented. This book documents the effectiveness of intervention and pays special attention to the role of foreign exchange intervention policy within inflation-targeting monetary frameworks. The main lesson from Latin America's foreign exchange interventions, in the context of inflation targeting, is that the region has had a considerable degree of success. Transparency and a clear communication policy have been key. For economies that are not highly dollarized, rules-based intervention helped contain financial instability and build international reserves while preserving inflation targets. The Latin American experience can help other countries in the design and implementation of their policies.

This study examines the challenges and issues facing policymakers in highly dollarized economies. Focusing on Cambodia, which achieved almost complete dollarization during 1991-95, the authors review recent developments in the literature on dollarization and examine the costs and benefits of dollarization in Cambodia, including the ensuing macroeconomic policy implications. They carry out an econometric estimation of cash foreign currency circulation in Cambodia in order to gauge the degree of dollarization. In addition to this analysis, the authors present a short description of Cambodia's economic, financial, and structural background.