Challenges for Central Banking

Perspectives from Latin America

Editors
Yan Carrière-Swallow
Hamid Faruqee
Luis Jácome
Krishna Srinivasan

INTERNATIONAL MONETARY FUND

The challenges facing emerging market central banks in many ways are as complex as those confronting the issuers of major international currencies, and nowhere is this more evident than in Latin America. This volume provides a broad overview of the principal issues facing the region's monetary authorities, together with detailed consideration of the impact of spillover effects, and an examination of these issues' implications for their policy frameworks. It is an excellent and timely contribution to a highly relevant policy debate.

—John Lipsky
Johns Hopkins University School of Advanced International Studies
Former First Deputy Managing Director, International Monetary Fund

Latin American economies have made substantial progress in monetary policy. Independent central banks with a firm handle on inflation and flexible exchange rates were key to successfully weathering the global financial crisis. This book is an excellent contribution toward helping us understand the challenges facing central banks in the new economic landscape, and analyzes prescient issues such as the autonomy of monetary policy in the context of spillovers and the role of macroprudential policies in addressing financial stability challenges. There is a lot to learn from this book.

—José De Gregorio
University of Chile
Former President, Central Bank of Chile

Having tamed inflation, Latin American central banks face a new challenge: Whether and how to move on from inflation targeting, without losing their dearly acquired credibility? If you want to know where they stand, on monetary versus macroprudential policy, on the handling of capital flows, etc., you cannot do better than to read this extremely interesting and well-informed book.

—Olivier Blanchard
Peterson Institute for International Economics
Former Chief Economic Counsellor, International Monetary Fund

Future monetary historians will divide the history of central banking into before and after the global financial crisis of 2008–09. Before, central banks would quietly steer the monetary ship through low-inflation waters without worrying about much else. After, a perfect storm forced central banks to desperately try to prevent the ship from sinking by resorting to new, untested, and controversial monetary navigation methods. Did they go too far? Did the new "unconventional" instruments work? Was hard-earned autonomy lost in the process? This fascinating volume offers a first look at these critical issues through the lenses of five major Latin American central banks. After reading this book, it is hard to escape the feeling that perhaps a century of trials and tribulations in the region has helped central bankers to navigate these uncharted waters with more aplomb, ingenuity, and resourcefulness than many of our neighbors to the north. In this new era, learning has become a two-way street.

—Carlos A. Végh
Fred H. Sanderson Professor of International Economics
Johns Hopkins University

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Foreword

Since the global financial crisis, central banking has been undergoing a massive renovation. The crisis brought to light fundamental challenges for central bankers in terms of our purpose, our instruments, and what we hope to achieve. From the lessons learned, we have made progress in rewriting the central banking handbook, as it were, but that handbook is still a work in progress. Innovations such as quantitative easing, macroprudential policies, and the postcrisis capital framework for banks are still in their infancy, and public debate about the appropriate objectives and role of central banks is ongoing in many parts of the world.

That debate about central banking is no less important for emerging markets, including in Latin America. This is both because there are lessons to be learned from others' experience and because today's world is so interconnected. An overarching theme that connects us in both advanced and emerging market economies alike is that of setting monetary policies in an increasingly financially integrated world and addressing the underlying challenges that this presents.

At the IMF–World Bank Annual Meetings in Lima in October 2015, I had the pleasure of moderating a panel discussion on central banking challenges in Latin America from the perspectives of the central bank governors from five major economies: Brazil, Chile, Colombia, Mexico, and Peru. There was a strong consensus that central bank independence has been a great accomplishment in Latin America that should not be jeopardized. It has helped deliver low and stable inflation after a long history of countries' struggling to achieve price stability and, in some cases, experiencing episodes of hyperinflation. Looking forward, concerns have shifted to the challenges of price stability in a world of globally integrated capital markets. A common theme is the volatility of capital flows and the lack of synchronization of cycles in the United States and many Latin American economies. For some, this poses challenges in terms of the independence of monetary policy.

Some challenges are more specific to Latin America. The region has greater exchange rate flexibility than other emerging market regions, so vulnerability to large exchange rate depreciations associated with negative terms-of-trade shocks is to some degree driving a rise in inflation above that observed in the other emerging market regions. Countries dependent on commodities have also had greater vulnerability to terms-of-trade shocks that then spilled over into balance of payments and fiscal challenges.

This volume is timely and important in many respects. As evident from the discussions in Lima with the five governors, Latin America's central banks have to contend with new challenges in pursuing their policy mandates. They are doing so at a time when many of the traditional paradigms associated with central banking are in flux. The identification of those new challenges suggests a new agenda for research and policymaking, especially in terms of maintaining financial stability and containing international spillovers.

For the inflation-targeting central banks in Latin America, this volume brings together a discussion of core challenges such as monetary autonomy and spillovers with highly integrated financial markets, including issues such as exchange rate pass-through, managing market expectations, and the use of forward guidance.

From a financial stability perspective, how and when to use macroprudential policies and how to best coordinate with a flexible inflation-targeting framework are as much of an issue in Latin America as in the United Kingdom. But there are some differences in the challenges facing central banks in Latin America, such as the role of foreign capital flows with shallower domestic markets and the impact of a high degree of dollarization on their financial systems.

This book also addresses the link between macroprudential and monetary policy—a subject that is much debated in both advanced and emerging market policy circles. Macroprudential policies are increasingly seen as a first line of defense (along with microprudential supervision) to address concerns about financial stability, but experience with these tools is still nascent, and we have not accumulated enough evidence through a credit cycle to make definitive judgments about optimal policy. In that sense, this book makes a contribution to the discussion of a topic on which views are not yet conclusive, and from the distinct perspective of regional policymakers and researchers.

Finally, producing an authoritative volume such as this requires considerable analytical work and coordination (much of it behind the scenes), particularly by the staff of the IMF's Monetary and Capital Markets Department and Western Hemisphere Department. In addition, the joint work between the staffs of the IMF and of the five central banks that contributed to this volume reflects a broader, conscientious effort to build a closer intellectual partnership between the Fund and its members in Latin America—an effort that I observed during my time as a Deputy Managing Director. In a way, this collaboration represents a deeper type of engagement—not one of the IMF giving policy advice, but rather of building a shared understanding of the issues as a stepping stone to developing policy strategies together. It is a good example of the IMF's seeking to become more agile, integrated, and member-focused to better engage and serve its membership in pursuit of its global mandate.

Minouche Shafik
Deputy Governor
Bank of England

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The editors are grateful to Alejandro Werner and José Viñals for their unwavering support of research on central banking issues in Latin America and of this project in particular. This collaboration would not have been possible without the support of central bank governors Agustín Carstens (Mexico), Ilan Goldfajn and Alexandre Tombini (Brazil), José Darío Uribe (Colombia), Julio Velarde (Peru), and Rodrigo Vergara (Chile). Under their leadership, senior staff members across the various central banks have been able to dedicate valuable time to study the critical questions that make up this volume. Indeed, the governors themselves participated in a seminar on the topic of this book during the 2015 Annual Meetings of the International Monetary Fund in Lima, Peru, which was moderated by Minouche Shafik, Deputy Governor of the Bank of England.

The editors gratefully thank Maria Gutierrez and Andrea Herrera for their dedication and graceful assistance throughout the process; Rocio Arevalo and Modupeh Williams for helping organize the seminar in Lima; and Zohair Alam, Steve Brito, and Genevieve Lindow for excellent research assistance. Michael Harrup, Joanne Johnson, and Patricio Loo of the IMF Communications Department provided invaluable inputs to the editorial process and production of the book.

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CHAPTER 1

Introduction: Latin America's Central Banking Challenges—Past, Present, and Future

HAMID FARUQEE AND KRISHNA SRINIVASAN, INTERNATIONAL MONETARY FUND

In the wake of the 2008–09 global financial crisis, central banking and monetary policy in many corners of the world—mainly, in advanced economies—came under intense pressure and entered uncharted waters. Two overarching aspects encapsulate well the serious challenges that major central banks faced during the crisis and its aftermath.

First, the breadth and scale of central bank operations were modified or expanded in unprecedented and even unimaginable ways given the circumstances. Specifically, unconventional policy measures and communications strategies were vigorously pursued initially to prevent a financial sector meltdown, and subsequently to support economic activity given a disappointing recovery and stubbornly high unemployment.

Second, as lessons from the crisis were being drawn, a fundamental rethinking of central banking and its policy frameworks has been taking place.[1] Notably, this has included the consideration of new objectives and instruments surrounding financial stability. Moreover, the experience with the crisis led some to ask whether the exceptional monetary measures deployed should remain part of the "normal" policy toolkit. Beyond this, there has been a wide-ranging discussion of institutional arrangements and whether central banks should be tasked with regulating and supervising financial institutions—banks and nonbanks—or if such responsibility should be assigned elsewhere.

In response to the crisis, central banks lowered policy rates to essentially zero given the sharp fall in output below trend but stable inflation. Conventional policy space was quickly exhausted in major advanced economies. To support and strengthen a fragile recovery (a burden that largely fell on monetary policy),

The authors thank Alejandro Werner, Luis Jácome, and Yan Carrière-Swallow for their help and comments in guiding and coordinating the efforts behind this volume, as well as our central bank colleagues for their important contributions on the key central banking challenges facing the region.

[1]See Blanchard and others (2012) and Akerlof and others (2014) for a discussion.

central banks thus had to improvise and resort to a range of unconventional policies, ranging from quantitative easing to negative interest rates.[2] Many of the measures undertaken were new and their efficacy not well understood, and some blurred the lines between monetary and fiscal policy. This posed longer-term risks (e.g., quasi-fiscal costs) that might ultimately hurt central bank independence. Nevertheless, the risks of policy inaction were perceived to be simply too high. With policy rates near zero, there were unusual challenges in terms of policy communications as well. Several central banks experimented with forward guidance to help shape the market's expectations of future policy accommodation to further stimulate domestic demand given persistent weakness in private spending.

Alongside these policy challenges, the central banking paradigm itself has been reevaluated in the wake of the crisis. Specifically, inflation targeting—relying essentially on one objective and one instrument—came into question. In retrospect, price and output stability were insufficient to ensure financial stability. Many asked if multiple objectives with multiple instruments were needed, albeit with less agreement on which ones constitute the right combinations (Akerlof and others 2014). Four main lines of questioning have emerged:

1. Should policies be more proactive in addressing asset-price developments and safeguarding financial stability (i.e., "lean against the wind")?
2. If so, should the central bank do this (with an expanded mandate) or does the task need to be assigned elsewhere?
3. How should such policies be carried out, and, more specifically, what choice of instruments is most effective?
4. How should macroprudential and monetary policies, given their interactions, be coordinated?[3]

Furthermore, given that exceptional monetary accommodation remains in place globally, concerns persist about moral hazard (i.e., excessive risk-taking), begging the question of how current policies (including interest rates) should be calibrated to mitigate financial stability risks given a still-fragile economic recovery and potential trade-offs between supporting growth and managing risk. Finally, against this backdrop, there have been emerging voices calling for greater coordination and "rules of the game" for monetary policy given international spillovers from the major central banks—notably, through capital flows and exchange rates.

In emerging markets, a fundamental rethinking of central banking, its evolving challenges, and its policy frameworks has received relatively less attention since the global financial crisis. Part of the reason is that these economies were not

[2]See, for example, Blanchard and others (2012).

[3]Some have argued that microprudential policies—that is, regulation and oversight of individual financial institutions—may also be pursued too narrowly and should be part of broader coordination efforts with other policies given the existence of systemically important firms, interaction among financial firms, and interactions between the financial and real sectors. See Akerlof and others (2014).

at the epicenter of the crisis that ensued following the collapse of the U.S. investment bank Lehman Brothers in September 2008.[4] Moreover, in Latin America, central banks underwent a successful transformation in the 1990s in transitioning to formal inflation-targeting frameworks and delivering price stability for their economies. The focus has remained on preserving these gains. That said, two fundamental issues strongly suggest that many of the same central banking concerns that have arisen in the context of the global financial crisis are no less important in emerging markets, including in Latin America, requiring some rethinking.

First, *spillovers and interdependence* in monetary policy were evident during the crisis and the subsequent "taper tantrum" episode. This has raised issues about the extent of local monetary autonomy in an increasingly integrated global financial system (Rey critique).[5] Indeed, one can argue that some of the recent monetary policy decisions in Latin America were taken more in response to changing external conditions than domestic exigencies. As mentioned above, some have argued in this context that unintended consequences across borders from unconventional policies in major central banks may exceed their domestic benefits, and that this calls for stronger rules of the game for monetary policy (Rajan critique).[6]

Second, issues on how best to *safeguard financial stability* similarly arise in Latin America given the prevalence of inflation targeting in the region and the importance of domestic and external financial developments. Specifically, Latin America has been striving for larger, deeper, and more inclusive financial systems, which can raise financial stability concerns. At the same time, emerging markets have been coping with volatile capital flows against a backdrop of exceptional monetary accommodation in advanced economies, with risks of boom-bust cycles and financial instability. This has led to rethinking about the appropriate use of capital flow management measures in this policy domain, but more so than in the other areas.[7] For these reasons, more attention is needed in a postcrisis world on managing the evolving policy challenges facing emerging market central banks in key dimensions.

This volume reflects a multilateral effort to help close the gap in our knowledge in meeting these challenges. It provides perspectives on critical challenges confronting central banks in Latin America from major players in the region as

[4]In the immediate aftermath of the Lehman event, the U.S. Federal Reserve was at the forefront of policy responses, introducing multiple liquidity facilities (i.e., credit easing) to support dislocated financial markets. Other central banks, including in emerging markets, also faced challenges in the early days of the crisis. For example, dollar swap lines with the Federal Reserve were introduced to address the shortage of dollar liquidity and disruptions in several funding markets.

[5]See Rey (2013).

[6]Rajan and Mishra (2016) question the ability of central banks in advanced economies to effectively boost internal demand at this stage and whether continued stimulus risks doing more harm than good through beggar-thy-neighbor implications. In this context, they argue for needed "rules of the game" across central banks.

[7]See Ostry and others (2011) and Ostry and others (2015).

well as from IMF staff. The project started in the fall of 2014 when IMF staff reached out to chief economists from five major central banks in the region—Brazil, Chile, Colombia, Mexico, and Peru—and invited analytical contributions from their staff for this volume. This culminated with the five governors participating in a seminar on central banking challenges for the region at the IMF–World Bank Annual Meetings in Lima, Peru in October 2015.

ROADMAP

This volume is divided into three sections. The first section provides a panoramic overview of the policy progress made to date and the challenges that lie ahead for central banks in Latin America. Specifically, this section lays down the historical context of how central banking has evolved over the past century in the region and outlines the policy challenges for monetary authorities going forward in a more financially integrated global economy. The related issue of spillovers and monetary independence is taken up more fully in the next section with three chapters by staff from the IMF and from central banks in the region. The final section presents chapters by staff from three central banks that reexamine macroprudential and monetary policies and policy frameworks from their perspective. Key themes from each of these three sections are summarized below.

Past Progress and Future Challenges

To understand the future challenges facing Latin American central banks, one needs to first understand the historical context and policy progress made by these institutions over the years. How did we get here? In the second chapter, Luis Jácome provides a historical narrative on the evolving nature of the institutional arrangements and performance of these central banks since their inception in the 1920s. Notably, it took about 80 years for Latin America to achieve low and stable inflation. Along this long and winding road, central banks were assigned different mandates and governments influenced monetary policy to varying degrees. As a result, many countries went through periods of high inflation or hyperinflation. The 1990s, however, marked a turning point for the region as central banks were increasingly granted political and operational autonomy to focus primarily—and even exclusively—on inflation. Following this institutional reform and subsequent introduction of forward-looking monetary policy aimed primarily at fighting inflation, a number of central banks achieved price stability.

Latin American central banks later contributed decisively to successfully weathering the global financial crisis. Having said that, the consequences of the crisis may usher in a new era of central banking in the region—something already happening in many advanced economies where central banks are being called upon to provide extraordinary support to economic activity by expanding both their balance sheets and their role in safeguarding financial stability. The challenge for Latin America is to avoid new institutional and policy frameworks that might undermine central bank autonomy and accountability and, in turn, the hard-won credibility the central banks earned in fighting inflation.

With this historical context in mind, Alejandro Werner, Luis Jácome, Yan Carrière-Swallow, and Nicolás Magud outline in Chapter 3 the main challenges going forward for central banks in Latin America in order to build on the important progress made in achieving price stability. These policymakers will need to confront emerging challenges following the global financial crisis, when the roles and tools of central banks are being expanded. The chapter covers operational and communication issues that are instrumental for strengthening the inflation-targeting regime as the nominal anchor and revisits the role of the exchange rate and central bank intervention in currency markets for these five major economies in the region.

Spillovers and Monetary Independence

With the continued reliance on exceptional monetary accommodation in the wake of the crisis and subsequent episodes of market volatility such as the U.S. taper tantrum episode, issues of financial spillovers and local monetary policy autonomy remain on the radar screen for many emerging markets.[8] For example, Rey (2013) challenged the conventional wisdom of an "impossible trinity"—between monetary independence, capital mobility, and fixed exchange rates—in favor of a "policy dilemma" where central banks essentially must choose between monetary independence and an open capital account. Behind this view, a global financial cycle acts as an important driver of local monetary and financial conditions for more financially integrated economies, complicating if not undermining domestic monetary policy efforts.

In Chapter 4, Yan Carrière-Swallow and Bertrand Gruss reexamine the issue of monetary policy autonomy in Latin America. Over the past few decades, the region has embarked on a process of removing restrictions on the movement of international capital, moved from fixed to more flexible exchange rate regimes, and adopted inflation targeting as the nominal anchor. By better anchoring inflation expectations, the new frameworks have led to greater monetary autonomy and declining exchange rate pass-through (with second-round effects from currency depreciations not perceivable in many countries). Consistent with this, the chapter finds that a large degree of correlation in interest rates across countries does not necessarily reflect a lack of monetary autonomy, but rather is largely a consequence of co-movement in business cycles. This does not imply that financial spillovers are irrelevant for the region—spillovers to domestic long-term interest rates from changes in the U.S. term premium, for instance, can be large. Moreover, some Latin American economies do not enjoy full autonomy in pursuit of domestic price and output stability objectives and are, to a certain extent, forced to follow external signals given the extent of financial dollarization and

[8]See Sahay and others (2014) on the cross-border effects and policy responses in emerging markets during the taper tantrum episode.

credibility of their nominal anchor. However, with careful design and implementation of their policy frameworks, central banks in Latin America can enjoy substantial monetary independence to achieve their domestic objectives even in the face of shifting global financial conditions.

In Chapter 5, Alberto Naudon and Andrés Yany study the macroeconomic effects of the global financial cycle on small and open economies and their monetary policy implications. To tackle this issue, they examine long-term interest rates in nine small and open economies and the United States, decomposing these rates into two components—the expected path of short-term rates and the term premium. The former is related closely to the future path of monetary policy and the latter is influenced inter alia by financial factors, including through spillovers. The analysis suggests a clear "pass-through" to local financial conditions with a rise in U.S. long-term interest rates and term premiums. These effects may be stronger in Latin America than in other emerging markets. From a general perspective, the global financial cycle can have significant effects on small and open emerging market economies that might pose financial stability trade-offs for the central bank. This issue will be crucial going forward as U.S. monetary policy continues to gradually normalize.

In Chapter 6, Julián Parra Polanía looks at central bank communications, exploring the role of forward guidance (i.e., committing to future policy rates), and monetary policymaking under uncertainty. He argues that unconditional forward guidance—that is, one that is time-based—improves welfare only in the most severe zero lower bound cases and should likely be reserved only for these exceptional circumstances. With regard to dealing with uncertainty, a prudent central bank may change its policy rate more or less aggressively to a demand shock, depending on the clarity of the signal (e.g., volatility of measurement errors), the extent to which markets are forward looking, and the central bank's degree of risk aversion.

Macroprudential and Monetary Policy Frameworks

A central lesson from the global financial crisis is that a price stability mandate (e.g., inflation targeting) is not sufficient by itself to guarantee macroeconomic and financial stability. This applies to Latin America as well, where domestic financial deepening and foreign capital flows can raise stability risks in local financial markets. Thus, greater attention to macroprudential frameworks and instruments is needed to help safeguard stability. How do monetary and macroprudential policies interact, and how can they be integrated in Latin America to meet these dual objectives of price and financial stability?

In Chapter 7, Jessica Roldán-Peña, Mauricio Torres-Ferro, and Alberto Torres examine potential trade-offs between the pursuit of inflation targeting and financial stability. First, they show in a simplified framework for Mexico that when monetary policy "leans against the wind" to reduce the volatility of financial variables, this typically implies greater volatility for both inflation and output. That is, there may be a trade-off using a single policy instrument (especially when financial shocks are more prevalent). The degree of the trade-off depends on the strength of the credit channel of monetary policy—for example, the impact of changes in credit and spreads on macroeconomic variables. This opens the door for macroprudential policy as a second instrument and for coordination among policy instruments, but the gains from coordination need not be large. The larger the impact of macroprudential policy on credit spreads, the greater the gains from coordination. The results highlight the importance of further research on at least two fronts: the behavior of banks and profit margins in understanding credit dynamics, and the characteristics of the financial system in shaping the amplification and persistence of financial shocks to the real economy, as well as how the effectiveness of macroprudential instruments can be enhanced.

In Chapter 8, Fabia de Carvalho and Marcos de Castro note that Brazil's credit cycle appears to be significantly influenced by financial deepening, foreign capital flows, and fiscal policy. These factors can create domestic financial vulnerabilities and pose challenges for central bank policies in dealing with them. Financial deepening resulted from greater financial inclusion following technological improvements, income distribution policies, and credit origination policies of public banks (which adds a fiscal dimension). In terms of financial vulnerabilities, household indebtedness increased substantially and credit accelerated. On a number of occasions, key policy instruments (e.g., reserve requirements) were used for macroprudential purposes in Brazil, and some were used countercyclically. However, when related policy announcements were out of sync with monetary policy, the anchoring of inflation expectations was challenged. This stresses the importance of improving the communication of the central bank's policy intentions. Examining different combinations of macroprudential and monetary policy rules that react to the financial cycle, the chapter also finds that simpler rules that are easier to implement—such as reserve requirements, risk-weight factors, and monetary policy—can nonetheless achieve results close to those that involve a more comprehensive set of policy instruments.

In the last chapter of this volume, Paul Castillo, Hugo Vega, Enrique Serrano, and Carlos Burga examine the interaction between monetary and macroprudential policy in the context of financial dollarization in Peru. In economies affected by significant financial dollarization, a large depreciation of the exchange rate can lead to higher default rates among firms and affect the balance sheets of borrowers. In a sense, the existence of a currency mismatch on the balance sheet of some domestic agents generates an externality for the financial system as a whole. In contrast with other inflation-targeting central banks, Peru's monetary policy regime thus needs to consider the implications of dollarization on monetary transmission and financial stability. In particular, liquidity and credit risks induced by exchange rate fluctuations or foreign currency liquidity shocks are highly relevant for domestic stability. Important instruments include higher reserve requirements on foreign currency liabilities, holdings of international reserves, and exchange rate intervention in spot and forward markets. The chapter evaluates the use of such unconventional monetary policy tools to reduce credit dollarization. The empirics show that high reserve requirements, used countercyclically since 2010, and the de-dollarization program put in place by the central bank since 2013, have had beneficial effects in Peru. Furthermore, measures aimed at reducing vulnerabilities such as credit dollarization have enhanced financial stability, thereby creating space for monetary policy to fulfill its traditional role.

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