Money, Crises, and Transition Essays in Honor of Guillermo A. Calvo: An Introduction

Reinhart, Carmen and Vegh, Carlos and Velasco, Andres

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Money, Crises, and Transition
Essays in Honor of Guillermo A. Calvo:
An Introduction

Carmen M. Reinhart, *University of Maryland, NBER and CEPR*
Carlos A. Végh, *University of Maryland, NBER*
Andrés Velasco, *Minister of Finance, Chile*

Most of the chapters in this volume were prepared for a conference in honor of Guillermo Calvo, organized by the International Monetary Fund's Research Department and held at Fund headquarters in Washington, DC, on April 15–16, 2004. At the editors' request, a couple of chapters were specially prepared after the conference for inclusion in this volume. The Fund was a natural and gracious host since Guillermo had a distinguished affiliation with the Fund's Research Department from 1987 to 1994. Under his intellectual leadership, the Research Department carried out path-breaking research on, among other issues, capital flows, debt maturity, and inflation stabilization. Guillermo also made important contributions to the internal discussion and formulation of Fund policies, particularly in Eastern Europe, the former Soviet Union, and Latin America.

The conference brought together renowned academics and policy makers who have had the privilege of being associated with Guillermo throughout his illustrious career. Some of Guillermo's former colleagues at Columbia University—where he began his academic career in the early 1970s—also gave fascinating behind-the-scenes accounts of Guillermo's early professional blossoming. One such account, by Edmund Phelps, recent winner of the Nobel Prize in economic sciences, is included in this volume.

Delivering the opening remarks, Agustin Carstens (at the time IMF Deputy

Managing Director) struck a theme that would resonate throughout the conference. In Carstens's words, ''Guillermo's ability to reduce complex problems to its essential elements has taught us that complex models are for lesser minds—for those who cannot grasp the essential elements out of a given reality. In Guillermo's hands, the chaos of reality has always yielded simple and illuminating models.'' Indeed, in an era in which increasingly complicated paradigms have become the rule, Guillermo's simple—but never simplistic—models are a constant reminder that intellectual elegance and policy relevance can indeed go hand in hand.

A second theme that pervaded the conference was Guillermo's crucial role in bringing Latin American policy issues to the forefront of the academic discussion. In fact, Guillermo is arguably the single most important person in bringing modern economics to bear on the problems of nations south of the Rio Bravo. He brought rigor, discipline, and intellectual clarity to the difficult task of illuminating some of the region's most pressing economic problems. As a token of gratitude, numerous academics and policymakers crossed the Rio Bravo to be present at the conference. Among them was Roque Fernandez—former Argentine finance minister—who spoke on Guillermo's contributions to recent Argentine economic policy and whose remarks are also part of this volume.

This volume is divided into six parts. The first five parts cover many of the issues that have been dear to Guillermo's heart over his thirty-year career: monetary and exchange rate policy, financial crises, debt, taxation, reform, growth, and transition. The last part sheds light on the mind behind the man. In one capacity or another, all the chapters' authors have been closely associated with Guillermo and have had the privilege of learning and benefiting from Guillermo's seemingly infinite wisdom.

Since some of Guillermo's most influential contributions have been in monetary and exchange rate policy, it seems only appropriate for the volume to open with theoretical advances in this area. A perennial and important question in open economy macroeconomics is: should countries fix or float? In other words, should an open economy peg its currency against a strong world currency or should it let the currency float? The standard response, based on the Mundell-Fleming model, is that the optimal exchange rate regime should depend on the type of shock hitting the economy. If shocks are predominantly of real origin, flexible exchange rates are optimal as they allow a quicker adjustment of relative prices through changes in the nominal exchange rate. If shocks are predominantly monetary, however, then fixed (or predetermined) exchange rates are preferred because adjustments to the nominal money supply are automatically carried out by the central bank. As Guillermo has put it, this is a result that ‘‘every well-trained economist carries on the tip of her tongue.’’ The first two chapters in the book deal with challenges to this basic tenet.

In chapter 1, Maurice Obstfeld takes issue with a recent finding by Michael Devereux and Charles Engel, which holds that even if an economy is hit by real shocks, fixed exchange rates may be preferable if the nominal prices of both exports and imports are preset in the domestic currency. The key behind the Devereux-Engel result is that, under such a pricing assumption, flexible rates cease to be a useful tool to effect adjustments in relative prices. Obstfeld argues that a minor modification of the Devereux-Engel set up—adding nontradable goods to their model—restores the optimality of flexible exchange rates under real shocks, though for different reasons than those emphasized by the traditional Mundell-Fleming model. In Obstfeld's set up, flexible exchange rates become optimal again because the nominal interest rate is freed as a monetary stabilization instrument.

In chapter 2, Amartya Lahiri, Rajesh Singh, and Carlos Végh approach the same problem from a very different angle by departing altogether from the traditional Mundell-Fleming set up. Based on the idea that asset market imperfections are likely to be as—if not more—important than goods market frictions in developing countries, they present a model of flexible prices where some economic agents do not have access to capital markets (in other words, there is asset market segmentation). In such a world, the authors show that the Mundell-Fleming result is turned on its head: flexible rates become optimal if monetary shocks dominate, while fixed rates are preferable if real shocks dominate. The key to understanding these results is that asset market segmentation critically affects the standard adjustment mechanism that operates under pegged exchange rates as it does not allow some agents to adjust their nominal money balances. In contrast, adjustments in the nominal exchange rate hit all agents equally. The chapter's punchline is thus that the choice of the optimal exchange rate regime should depend not only on the type of shock (real versus monetary), but also on the type of friction (goods market versus asset market).

In chapter 3, Leonardo Auernheimer goes back to basics and revisits some of the themes that Guillermo has focused on in many of his contributions: the relevance of the government budget constraint, the concern with levels versus rates of change, and the nominal interest rate as a policy instrument. The central question addressed in this chapter is the well-known (but controversial) fiscal theory of the price level. As Auernheimer points out, the literature on this topic is extensive, occasionally obscure, and not lacking in sound and fury (witness Willem Buiter's claim that ''the fiscal theory of the price level is fatally flawed''). As though guided by Guillermo's own invisible hand, Auernheimer sets up an extremely simple model and takes the reader on an illuminating journey into the fiscal theory of the price level (and some related issues), stressing some of its truths and debunking some of its myths.

The second part of the book turns to practical and empirical aspects of monetary and exchange rate policy. In chapter 4, Frederic Mishkin notes that Guillermo has been rightly skeptical of the adoption of inflation targeting schemes in emerging markets. Guillermo has convincingly argued in various pieces that, given weak monetary and fiscal institutions, high degrees of dollarization, and financial vulnerability, the consequences of giving policy makers too much discretion could be disastrous. While taking Guillermo's concerns seriously, Mishkin presents a strong case for inflation targeting in emerging markets provided that countries can find ways of dealing effectively with large exchange rate fluctuations. He illustrates his arguments by looking closely at the cases of Chile and Brazil.
In chapter 5, Enrique Mendoza goes a step further and forcibly argues that, all

things considered, emerging market countries would be better off giving up their national currency altogether. In his view, while giving up the national currency would certainly not eliminate business cycle fluctuations or financial problems associated with loose fiscal policies, it would considerably reduce an emerging market's vulnerability to abrupt changes in capital flows and enable it to freeride on some of the credibility already gained by the country issuing the hard currency.

But how do countries without a national currency fare in practice? There is virtually no hard evidence. In chapter 6, Sebastian Edwards and Igal Magendzo take a novel approach to analyzing the inflation and growth performance of countries with no currency of their own. To this end, they address an important methodological problem: joining a common-currency area (or dollarizing) may itself be an endogenous decision that could be related to economic performance. Their innovative answer is to resort to a ''treatment effects model'' (a technique often used in the labor literature) that jointly estimates the probability of being a common currency country and macroeconomic performance equations. Their main finding is that countries with no currency of their own have had significantly lower inflation and enjoyed higher growth, but suffered from higher macroeconomic volatility. The jury is thus still out on the net benefits of giving up a national currency.
Ever since the now (in)famous Mexican crisis of December 1994 (aptly referred to as ''the first financial crisis of the twenty-first century''), Guillermo's research on financial crises has set the agenda for much of the academic work in this area. The three chapters in part III provide new insights into this critical topic.

In chapter 7, Andrés Velasco and Alejandro Neut show how, in a simple world with capital market imperfections (that cause borrowing to be collateralized), pessimism can lead to self-fulfilling crises. To understand the basic idea, suppose that, due to a sudden burst of pessimism, stock market prices are expected to fall. If investment is subject to collateral constraints, the fall in stock market prices reduces the value of firms and hence investment. But lower investment leads to smaller returns in the future which, in turn, reduce stock market prices, thus validating the initial pessimism. Hence, bouts of pessimism can be self-fulfilling (Keynes' animal spirits?), a scary thought indeed. Velasco and Neut proceed to analyze policies that might make this possibility less likely, such as expansionary monetary and fiscal policy, debt restructuring, and financial and legal reform.

But in practice, once a crisis erupts, how does it spread out? And what determines the speed with which countries recover? In chapter 8, Graciela Kaminsky and Carmen Reinhart tackle the first question, analyzing how financial turbulencein emerging countries can spread across borders. They conclude that a financial crisis will spread globally only if it affects some major financial center; otherwise, it spreads, at most, regionally. For example, during the Asian crisis, Japanese banks' exposure to Thailand—and their subsequent curtailment of lending to other Asian countries—played a critical role in spreading the crisis.

The second question is tackled by Padma Desai and Pritha Mitra in chapter 9. They find that export performance before a crisis appears to be a critical variable in predicting the speed of recovery. Through investor expectations, export performance explains most of the difference in postcrisis interest rate and exchange rate movements. In contrast, the fiscal position and national savings do not seem to matter as much. This casts some serious doubts on the desirability of contractionary fiscal policies, typically advocated by the International Monetary Fund.

Some of Guillermo's most influential contributions have been in the area of debt, taxation, and reform. In joint work with Pablo Guidotti, Guillermo showed that, under certain conditions, unanticipated increases in government spending are optimally financed with unanticipated inflation, which, in the model, imposes no costs. But does unanticipated inflation really have few costs? In chapter 10—the opening chapter of part IV—Michael Kumhoff and Evan Tanner argue that the reason why policy makers avoid unanticipated levies on government debt (through outright default or sudden burst of high inflation) is that government debt plays a key role in financial intermediation. Hence, defaulting or inflating it away would be akin to a negative technological shock. To make an empirical case for this argument, they show that in developing countries (1) government domestic debt is now larger than external debt, and growing relative to external debt; (2) banks voluntarily hold a very large fraction of their assets in domestic government debt; and (3) a deep and stable government bond market is critical for further development of domestic financial markets. In this light, explicit or implicit defaults on government debt would have real costs that would need to be traded off against the benefits of lower distortionary taxation.

As countries develop, they increasingly rely on (personal and capital) income taxes. But how feasible is it to rely on capital income taxation in an increasingly globalized economy? As globalization makes it easier for firms to either locate in low-tax countries and/or shift operations across countries to avoid taxation, will there be a race to the bottom? In chapter 11, Assaf Razin and Efraim Sadka build a political economy model to assess how feasible it is for governments to impose capital income taxes. They conclude that a race to the bottom will indeed take place and argue that available evidence for European countries bears this out. It is easy for theory to suggest this or that policy. But in practice implementation of different policies is fraught with difficulties. In particular, the IMF's track record in helping developing countries achieve successful reforms is, at best, sions than developed ones? Clearly, as the authors note, the phenomenon of deep and prolonged recessions presents a challenge to standard macroeconomic theory by suggesting that the typical growth picture of economic fluctuations around an increasing trend does not quite apply to the developing world. By focusing on a large sample, the authors conclude that while countries fall into these growth crises for multiple reasons—including wars, export collapses, sudden stops, and political transitions—most of these variables do not help predict the episode's duration. They do find, however, that a measure of the density of a country's export base is significantly associated with lower crisis duration.

The volume closes with three short chapters that provide a rare and fascinating behind-the-scenes look at Guillermo's career and intellectual journey from his early days in Buenos Aires through his doctorate at Yale, his years at Columbia, and his tenure at the IMF's Research Department, to his more recent and highly influential role as the Inter-American Development Bank's Chief Economist. In chapter 16, Edmund Phelps (recent Nobel Prize winner in Economics and Guillermo's colleague at Columbia University for many years) first reminisces about the years at Columbia (where a macroeconomic ‘‘dream team’’ had assembled). In chapter 17, Roque Fernandez (former Central Bank President and Finance Minister in Argentina) reveals Guillermo’s advisory role at a critical juncture in Argentina’s recent economic history. Finally, in chapter 18, Enrique Mendoza conducts a probing interview with Guillermo, which offers an incisive and penetrating look into Guillermo’s intellectual evolution and his views about the major ideas that have shaped the profession, both academically and from a public policy point of view.

References

Auernheimer, Leonardo, "Monetary Policy Rules, the Fiscal Theory of the Price Level, and (Almost) All that Jazz In Quest of Simplicity," in *Money, Crises, and Transition Essays in Honor of Guillermo A. Calvo,* Carmen M. Reinhart, Carlos A. Végh, and Andrés Velasco, eds. (Cambridge: MIT Press, 2008).

Coricelli, Fabrizio, Bostjan Jazbeč and Igor Masten, "Sources and Obstacles for Growth in Transition Countries: The Role of Credit," in *Money, Crises, and Transition Essays in Honor of Guillermo A. Calvo,* Carmen M. Reinhart, Carlos A. Végh, and Andrés Velasco, eds. (Cambridge: MIT Press, 2008).

Desai, Padma, and Pritha Mitra, "Why Do Some Countries Recover More Readily from Financial Crises?" in *Money, Crises, and Transition Essays in Honor of Guillermo A. Calvo,* Carmen M. Reinhart, Carlos A. Végh, and Andrés Velasco, eds. (Cambridge: MIT Press, 2008).

Drazen, Alan and Peter Isard, "Can Public Discussion Enhance Program ''Ownership''? in *Money, Crises, and Transition Essays in Honor of Guillermo A. Calvo,* Carmen M. Reinhart, Carlos A. Végh, and Andrés Velasco, eds. (Cambridge: MIT Press, 2008).

Edwards, Sebastian and I. Igal Magendzo, "Hard Currency Pegs and Economic Performance," in *Money, Crises, and Transition Essays in Honor of Guillermo A. Calvo,* Carmen M. Reinhart, Carlos A. Végh, and Andrés Velasco, eds. (Cambridge: MIT Press, 2008).

Fischer, Stanley and Ratna Sahay, "Growth in Transition Economies Domestic Policies, External Assistance, and Institution Building," in *Money, Crises, and Transition Essays in Honor of Guillermo A. Calvo,* Carmen M. Reinhart, Carlos A. Végh, and Andrés Velasco, eds. (Cambridge: MIT Press, 2008).

Hausmann , Ricardo Francisco Rodríguez and Rodrigo Wagner "Growth Collapses." in *Money, Crises, and Transition Essays in Honor of Guillermo A. Calvo,* Carmen M. Reinhart, Carlos A. Végh, and Andrés Velasco, eds. (Cambridge: MIT Press, 2008).

Kaminsky, Graciela L. and Carmen M. Reinhart, "The Center and the Periphery the Globalization of Financial Turmoil," in *Money, Crises, and Transition Essays in Honor of Guillermo A. Calvo,* Carmen M. Reinhart, Carlos A. Végh, and Andrés Velasco, eds. (Cambridge: MIT Press, 2008).

Kumhof, Michael and Evan Tanner "Government Debt: A Key Role in Financial Intermediation," " in *Money, Crises, and Transition Essays in Honor of Guillermo A. Calvo,* Carmen M. Reinhart, Carlos A. Végh, and Andrés Velasco, eds. (Cambridge: MIT Press, 2008).

Lahiri, Amartya, Rajesh Singh and Carlos A. Végh, "Optimal Exchange Rate Regimes Turning Mundell-Fleming's Dictum on Its Head" in *Money, Crises, and Transition Essays in Honor of Guillermo A. Calvo,* Carmen M. Reinhart, Carlos A. Végh, and Andrés Velasco, eds. (Cambridge: MIT Press, 2008).

Mendoza, Enrique G. "A Case for ''Institutions Substitution'' in *Money, Crises, and Transition Essays in Honor of Guillermo A. Calvo,* Carmen M. Reinhart, Carlos A. Végh, and Andrés Velasco, eds. (Cambridge: MIT Press, 2008).

Mishkin, Frederic S. "Can Inflation Targeting Work in Emerging Market Countries?" in *Money, Crises, and Transition Essays in Honor of Guillermo A. Calvo,* Carmen M. Reinhart, Carlos A. Végh, and Andrés Velasco, eds. (Cambridge: MIT Press, 2008).

Obstfeld, Maurice "Pricing-to-Market, the Interest-Rate Rule, and the Exchange Rate," in *Money, Crises, and Transition Essays in Honor of Guillermo A. Calvo,* Carmen M. Reinhart, Carlos A. Végh, and Andrés Velasco, eds. (Cambridge: MIT Press, 2008).

Razin, Assaf and Efraim Sadka, "Capital Income Taxation in the Globalized World," in *Money, Crises, and Transition Essays in Honor of Guillermo A. Calvo,* Carmen M. Reinhart, Carlos A. Végh, and Andrés Velasco, eds. (Cambridge: MIT Press, 2008).

Velasco, Andrés and Alejandro Neut, "Asset Prices and Self-Fulfilling Macroeconomic Pessimism," in *Money, Crises, and Transition Essays in Honor of Guillermo A. Calvo,* Carmen M. Reinhart, Carlos A. Végh, and Andrés Velasco, eds. (Cambridge: MIT Press, 2008).