
Crisis and Dollarization: An Overview

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Introduction

On January 9, 2000, Ecuador decided to adopt the U.S. dollar as its national currency, its domestic medium of exchange, and its unit of account,¹ thus becoming the first country to officially dollarize its economy in the 21st century. The purpose of this book is to analyze the context within which dollarization took place in Ecuador and some of its economic consequences. It describes the initial conditions, accompanying policies, and response of the economy to the official adoption of a foreign currency as the legal tender and the issues the still-new Ecuadoran experience with dollarization suggests for other countries considering the adoption of a new monetary regime. Another important theme of the book is the social impact of the crisis of the late 1990s and of subsequent dollarization.

The end of the 20th century caught Ecuador in one of the more serious economic crises—compounded by a governance crisis—in its Republican history. The country was on the verge of hyperinflation in late 1999 with the price level increasing at a rate of near 30 percent per month. The national currency, the sucre, was in free fall. The government had intervened in the banking system, and a large part of the deposits of the public was frozen. Internationally, in late 1999 the country was in partial arrears with private creditors and bondholders and, for various reasons, the International Monetary Fund (IMF) had withheld for nearly a year a crucial loan to support the balance of payments. This, in turn, forced the World Bank and the Inter-American Development Bank (IDB) to postpone their own policy-based lending to Ecuador in 1999, attendant to the

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stalemate with the loan by the IMF. At a time when hyperinflation had abated in Latin America, the Ecuadoran case of extreme monetary instability was clearly a regional anomaly for the late 1990s.

Most of the ingredients of high inflation and acute monetary instability were present: (a) a flight from national money and de-facto dollarization² as nationals and foreigners in Ecuador lost all confidence in the capacity of the sucre to serve its store-of-value function, (b) large fiscal deficits, (c) a sharp contraction in real economic activity, and (d) a severe banking crisis.³ The increasingly cornered government, led by President Jamil Mahuad, a highly educated and intellectually sophisticated social-democrat, could not gather congressional support for passing crucial tax legislation and other measures to stabilize the economy. This situation, combined with the near paralysis of the international financial institutions based in Washington, helped bring about an economic meltdown manifested in very high inflation, a banking crisis, economic depression, and social disarray during most of 1999. It is important to recognize that the Ecuadoran crisis took place in a delicate situation of security within the Andean region. On the one hand, Ecuador and Peru were trying to consolidate an historic peace agreement signed by Ecuadorian President Jamil Mahuad and Peruvian President Alberto Fujimori in October of 1998. On the other hand, Ecuador was exposed to the potentially destabilizing effects of acute intensification of the armed conflict in Colombia, a country that shares a long border with Ecuador.

In this setting, and in one of the more dramatic experiments in recent monetary history, the Ecuadoran government decided, in January of 2000, to adopt, de facto, unilaterally, and apparently without much external consultation, the U.S. dollar as its national currency. This was a "policy of last resort," an almost desperate move to restore some degree of monetary and price stability in a country that needed an urgent monetary anchor to stabilize expectations, avoid hyperinflation, stop uncontrolled currency depreciation, and enable resumption of normal economic and financial activity.

Official dollarization had a political motivation as well. In late 1999, constitutionally elected President Mahuad was facing a sharp plunge in his popularity. His presidency was being challenged by a particularly adverse set of events: a severe economic crisis, an active and militant indigenous movement with radical political and economic demands, a badly divided and fragmented parliament, and a restive army. In these circumstances, a radical change in the monetary regime toward dollarization was seen by President Mahuad as a way to regain the initiative for his government, by changing the focus of the national debate away from purely political issues toward much needed economic stabilization. In spite of the announcement of official dollarization, President

Mahuad was deposed on January 21, 2000, following an indigenous uprising that seized the parliament building with support from units of the army. After late-night negotiations involving rebellious colonels, members of the political class, the U.S. Embassy in Quito, and the Organization of American States, the rebels stood down and Vice President Gustavo Noboa was sworn in as the new President of Ecuador in the Ministry of Defense with the support of the army. The “constitutional order” was restored.

The new government of Gustavo Noboa ratified the change of monetary regime initiated by President Mahuad, and official dollarization was adopted, in haste, and under very fragile conditions. At this stage, consultations were initiated with the U.S. government, whose currency was to be adopted. The reluctant IMF, which had distanced itself from the Mahuad administration, resumed lending in April 2000, and entered into full collaboration to ensure the success of the change in the monetary regime.⁴

The mechanics and economic effects of dollarization are important subjects of this book. Supportive economic and financial legislation—the Law of Economic Transformation—was approved in March 2000. This legislation included a number of structural changes in several areas. In August 2000 Ecuador successfully carried out a bond exchange, which reduced its massive Brady debt by roughly a third, and its bilateral external debt was rescheduled in September 2000 by the Paris Club. The economy benefited from an increase in the international price of oil, which helped to improve the fiscal accounts and the balance of payments. At the same time, important efforts to improve tax collection were undertaken. The income tax, which had been suspended in January 1999, was reinstated. The fiscal accounts improved sharply, passing from a fiscal deficit of near 5 percent of gross domestic product (GDP) in 1999 to a small surplus in 2000.

The balance of payments also improved, as a result of a combination of favorable oil prices, the repatriation of flight capital helped by the liberalization of dollar deposits in the banking system associated with official dollarization and, very importantly, by a surge in foreign remittances of Ecuadorans following massive emigration after the crisis that began in 1998–99.⁵ As a consequence of all these factors, the current account of the balance of payments registered a surplus of nearly 10 percent of GDP in 2000 compared with a deficit of roughly the same magnitude in 1999.

The progress in solving the banking system crisis was slower than in other areas. In spite of intensive work to rationalize, dispose the assets of nonviable banks, privatize intervened banks, and other measures, as of 2001 a considerable segment of the Ecuadoran banking system still remained in the hands of the Deposit Insurance Agency (Agencia de

Garantía de Depósitos, AGD), which underwent several changes in its management structure in 2000 and 2001.

Dollarization succeeded in stabilizing expectations, as reflected in declining interest rates and induced capital repatriation. Banks registered an increase in their deposits from the public. Dollarization did not stop inflation immediately, because adjustment to a new equilibrium level for the real exchange rate, undervalued when dollarization was launched, was reached through inflation. In addition, GDP started to recover following official dollarization, helped by a gradual recovery of confidence and favorable external shocks. In turn, unemployment has slowly declined and real wages have become more stable, although real wage levels are rather depressed in dollar terms.

Historical and Structural Features of Ecuadoran Economy and Society

The deep economic crisis of the late 1990s that preceded dollarization in Ecuador was, as argued in this book (see chapters 2 and 3), the culmination, in dramatic overtones, of an economic and governance crisis associated with several structural characteristics of Ecuadoran economy and society. Historically, the emergence of Ecuador as an independent state from the the Confederation of Gran Colombia in 1830 created a country with two main competing regions: a coastal area (Costa) centered around the city of Guayaquil and the Sierra or highlands around the capital city of Quito. The two regions have different social, economic, cultural, and ethnic characteristics. Regional disputes have been an important source of social and political instability in Ecuador throughout the 19th and 20th centuries. Ecuador's main political parties are formed along regional lines, weakening central authority and forcing a style of policymaking that allocates resources, taxes, and quotas of political power in an effort to maintain regional balance.⁶ Economy-wide objectives such as economic growth and monetary stability are often displaced by the needs of regional balancing, redistribution, and rent-seeking. In turn, Ecuador, like most Latin American countries, is a highly socially stratified country. Wealthy people, elite landowners, and financial and industrial entrepreneurs coexist with a population that is mostly poor (see chapter 4) and with a large (at times politically active) indigenous population. This social structure superimposed on the regional divide often hampers the capacity of governments to undertake national policies that garner wide social consensus. During the 20th century the country endured repeated constitutional reforms, presidential crises, and cycles of military governments followed by civilian rule (see Solimano 2002), both trying to ensure stable governance and economic development but with often disappoint-

ing results.

The difficulties of building stable governing coalitions were exacerbated in the late 1990s. In fact, since 1996 Ecuador has had four different Presidents: Abdalá Bucaram, Fabián Alarcón, Jamil Mahuad, and Gustavo Noboa.⁷ Over the same period there were about 10 finance ministers plus a frequent rotation of the technocracy working in government. Many of the most able and qualified people left the country.

A common feature of the Ecuadoran economy in the 20th century has been the dependence of real economic activity, the fiscal accounts, and the balance of payments on exports of a few commodities, such as cacao, bananas, shrimp, and oil. This dependence has made the economy prone to volatility associated with cycles in the international prices of commodities and climatic changes. This dependence on commodity prices was accentuated in the 1970s with the oil price boom. Although the oil boom allowed a doubling of the yearly real growth rate of GDP of previous decades, from an annual rate of growth of 4.7 percent per year in 1950–60 to 9.4 percent in the 1970s, this dynamism was ultimately short-lived. In the 1980s and 1990s the economy reverted to average GDP growth rates on the order of 2 percent, lower than the historic average of the past 50 years in Ecuador and in Latin America.

In the 1980s Ecuador, like other Latin American economies, suffered a foreign debt crisis after the windfall of oil revenues of the 1970s, and the cycle of foreign overborrowing of that decade. As a consequence, GDP growth declined to around 2 percent in the 1980s, down from more than 9 percent in the previous decade. In the 1990s, Ecuador started reforms that were never completed, suffered several large external shocks and natural disasters, and then culminated the decade with the disruptive economic and financial crisis we have already discussed and which is analyzed in further detail in the next chapter of this book.

An important cause of Ecuador's unsatisfactory economic performance is weak institutions. The fiscal structure has traditionally been very dependent on the revenues of oil and taxes on other commodities and, until recently, has suffered from the widespread practice of tax evasion. Public expenditure is far from efficient and well directed. In turn, the crisis of the banking system that started in 1998 also revealed serious shortcomings in the regulatory structure of the system, a pattern of loan concentration, and the vulnerability of the bank's portfolios to high real interest rates and overall economic decline.

Still, there is room for (cautious) optimism. Ecuador is a country with significant economic potential. It has a strong natural resource base and talented people, its geographical proximity to major international mar-

kets in the “center” makes it a favorable location for international trade and foreign investment, and, in spite of its complex social and regional structure, it is generally a country of social peace.

Dollarization: Lessons and Challenges Ahead

The experience of Ecuador with dollarization is of interest for the rest of Latin America and other emerging economies wrestling with the adoption of the adequate exchange-rate regime in a world of increased financial integration but also of volatility and instability. We can highlight six important areas in which the Ecuadoran experience is relevant for other nations.

Dollarization under Fragile Initial Conditions

The choice of a monetary regime by a country is a far-reaching decision that, under normal circumstances, must be preceded by a period of internal discussion of the merits and possible disadvantages of possible alternatives. Moreover, the introduction of a foreign currency to replace the national currency needs to be accompanied by adequate preparation and by legal reforms in several areas of the economy. A solid banking system, a sustainable fiscal position, and wage and price flexibility are all economic preconditions for successful dollarization. On the legal side, basic legislation must be introduced to legally sanction the new currency and allow contracts (wages, rents, and so on) to be made in foreign currency (now also the national currency). Also, the accounting systems of banks and corporations have to adopt new practices and conventions in line with the fact that a foreign currency is the legal tender after official dollarization is adopted.

The decision of when to dollarize (for example, its timing and sequencing) is, however, a matter of debate. Some people adopt the position that dollarization need not wait on these other reforms to be in place and believe, on the contrary, that dollarization can accelerate the overall process of reform.⁸

As shown earlier, adequate fiscal, financial conditions, and accounting practices were *not* present when Ecuador announced dollarization in January 2000. It is apparent that dollarization was not a decision made under controlled conditions to ensure its success. Rather, it was a bold move to reverse a situation of near hyperinflation and massive flight away from domestic currency, debased after a long period of monetary instability. Also, as already mentioned, the fiscal budget was in a sizable deficit during the year preceding dollarization and the state intervened in a large

part of the banking system, with several important banks having negative net worth.

Important pieces of legislation regarding the banking system, the new accounting systems, the conversion of contracts from sucres to dollars, labor laws, and other laws were passed *after* dollarization was launched. In fact, the legal approval of dollarization came in March 2000 and it was fully implemented in September 2000. The degree of public support for dollarization was mixed. Various groups, such as the indigenous people's movement and left-wing political parties, opposed dollarization, in part on nationalistic grounds. The middle class, industrialists, and bankers, however, supported dollarization both in Guayaquil and Quito. Very importantly, Congress ultimately supported dollarization. The United States was initially very cautious in supporting the measure taken by Ecuador. In the end dollarization was launched, implemented, and as of early 2002 consolidated. In a metaphoric sense, dollarization was a revolutionary regime change in the monetary system of the country and, like many revolutions, starting from dramatically deteriorated conditions, it still succeeded in holding. Of course, other countries considering dollarizing would certainly benefit from more stable and balanced initial conditions. This was, indeed, the case of El Salvador, which decided to dollarize in January 2001 in far more comfortable fiscal and financial conditions than those of Ecuador just a year before. Indeed, El Salvador had maintained a fixed exchange-rate regime for almost a decade, and dollarization was seen as a "natural" consequence of a long period of a fixed exchange rate, low domestic inflation, and a largely dollarized banking system. A more distant case of dollarization is Panama, which adopted the system in 1903 and has nearly a century of economic history with a foreign currency as the national currency.⁹

The Dynamics of Inflation, the Real Exchange Rate, and Output

Dollarization was adopted in Ecuador mainly to stop very high inflation.¹⁰ In the last quarter of 1999 the consumer price index rose by 60 percent; the wholesale price index rose by 187 percent. However, the domestic price level continued to rise rapidly after dollarization was adopted, following a sharp depreciation of the currency from 18,000 to 25,000 sucres per dollar.¹¹ There were two main reasons for the large depreciation of the currency preceding dollarization that was fueled by wild expectations of Ecuador's financial markets: (1) the intent to avoid a real appreciation after dollarization on account of "residual inflation" and (2) the need to increase the purchasing power of a limited level of international reserves (dollars) to buy (cheaply) the monetary base in

suces at a more depreciated exchange rate. This latter factor was important since Ecuador had a very low level of international reserves at the time dollarization was implemented. Domestic prices nearly doubled over 2000. For 2001, however, inflation was only about 25 percent. Clearly, after official dollarization the speed of convergence of the domestic price level to a new international parity was gradual and spread over at least two years after the new currency was introduced.

A similar speed of inflation convergence was observed in Estonia, a country that introduced a currency board in 1992. In Estonia inflation converged to moderately low levels, only two years later, in 1994.¹²

The real exchange rate in Ecuador depreciated mildly in 1998 (about 3.5 percent), but depreciated about 40 percent in 1999. After an additional real depreciation in January of 2000 following the "last" maxi-depreciation of the sucre, the real exchange rate (a somewhat peculiar concept in a dollarized economy) began steadily appreciating in February 2000 and afterwards as a consequence of the slow process of convergence of the domestic price level already noted above (see chapter 3 for a more detailed analysis of these trends).

This pattern of rapid real depreciation of the national currency before the change in the monetary regime followed by a real appreciation of the currency was observed in three countries that adopted currency boards in the early 1990s: Argentina in 1991, Estonia in 1992, and Lithuania in 1994. As the acute crisis of Argentina in late 2001 and early 2002 is showing rather dramatically, the failure to correct the real appreciation of the currency through domestic deflation, cuts in nominal wages, and unemployment can be so costly as to generate an economic and political crisis of large proportions leading, among other things, to abandonment of the seemingly irreversible currency board regime.

The growth cycle before and after official dollarization in Ecuador was the following: real GDP contracted sharply in 1999, falling by 7.3 percent that year, with unemployment rising from 11 to 15 percent. As chapters 2 and 3 of this book document, this situation was the combined effect of several factors: external shocks (a decline in oil prices in 1998/99), natural disasters (the El Niño phenomena in 1997/98), domestic instability, and a severe banking crisis. The latter clearly amplified the contractionary effects of the other shocks. GDP grew by 2.3 percent in 2000, as a consequence of an improvement in domestic confidence following dollarization (domestic interest rates fell) and by a recovery in international oil prices. Real growth reached 5.4 percent in 2001 as the gradual stabilization in inflation consolidated, confidence recovered, and construction of the second Transandean oil-pipeline generated employment and income. However, social conditions in Ecuador postdollarization still remain precarious (see chapters 4 and 5).

Dollarization in Ecuador and Exchange-Rate Regimes in the Andean Area

Ecuador is a member of the Andean Community of Nations (CAN), a free-trade area. Although exchange-rate regime harmonization among its member countries is not practiced in the CAN, and monetary integration is still not on their agenda, the fact is that Ecuador's new monetary system adds to the already large variety of exchange-regimes in the Andean region. At present (mid-2002) we have floating exchange-rate regimes in Peru, Colombia, and República Bolivariana de Venezuela, a crawling peg system in Bolivia, and a foreign-currency regime in Ecuador. The fact that two trade partners (and neighboring countries) of Ecuador—Peru and Colombia—are in a floating exchange-rate regime while Ecuador is dollarized creates the potential for Ecuador to lose regional competitiveness, should these countries depreciate their currencies, an option unavailable to Ecuador. In the context of MERCOSUR (Mercado Común del Sur) countries, this is what exactly happened to Argentina when Brazil sharply devalued its national currency, the real, in early 1999, causing Argentina to suffer an important loss of competitiveness. Argentina, with its currency board system, could not adjust its exchange-rate parity to maintain competitiveness. A similar situation is starting to face Ecuador, so this can be considered a vulnerability of the new system. A more general lesson here is that decisions made by one country on its exchange-rate regime should consider the interdependences with the exchange-rate regimes of other member countries of the same integration bloc. The CAN and MERCOSUR are just starting to put in place mechanisms of consultation on monetary and fiscal policy among their member countries. Such consultations are still far behind experiences of macroeconomic coordination and harmonization such as that of the European Union (EU), in which the exchange-rate regimes were defined in a collective way. Of course, the degree of integration in goods, capital, and labor markets in the EU is far higher than in the CAN (or MERCOSUR).¹³ Still, the development of practices of mutual consultation in monetary and exchange-rate matters among member countries is worth pursuing.

Seigniorage and Lender of Last Resort

A classic argument in the case for national money¹⁴ is that, by giving up the use of national money and adopting a foreign currency, a country loses a source of revenue, given by the difference between the real command of resources that the creation of money entails and the low cost of producing (paper) money. This difference is called seigniorage. For ranges of low to moderate inflation and with "normal" demand for money, seigniorage can

represent several points of GDP. By adopting the U.S. dollar as its national currency, Ecuador loses this source of revenue and transfers seigniorage to the Federal Reserve Bank of the United States. However, the quantitative importance of the loss of seigniorage in Ecuador is bound to be modest, as the economy was already highly demonetized and de-facto dollarized before the U.S. dollar was officially adopted. In any case, it should not be ruled out that in the future some arrangement could be made for the seigniorage to be shared with Ecuador.

Another feature of a dollarized system is the apparent absence of a lender of last resort. Because the Central Bank, still in existence in Ecuador, cannot create money any more, banks will be unable, unlike in the past, to resort to bailouts and credits from the Central Bank. In the absence of national money, the Central Bank ceases to play the role of lender of last resort. However, as the commercial banking system was in such a fragile condition in Ecuador at the time of dollarization, a special contingency fund for banks in distress was created following official dollarization. From this perspective, this fund can be viewed something like a lender of last resort in the event of a banking crisis. Moreover, as has been the case in history, for example in the United States during episodes of banking crisis before 1913, the year the Federal Reserve System was created, the resolution of banking crisis or liquidity shocks was arranged by private financiers such as J. P. Morgan. In other cases, the resources for performing the functions of lender of last resort can come from the fiscal budget or from foreign borrowing.

The Adjustment Mechanism of the Dollarized Economy

An economy operating with a foreign currency as the legal tender works in several respects like the economies under the gold standard of the pre-1913 world. The so-called *price-specie flow mechanism* of David Hume described such a system as one in which balance of payments disequilibria had a domestic monetary counterpart (money expands when there is a balance of payments surplus and contracts when there is a deficit). These changes in the money supply affect domestic prices relative to world prices, thereby automatically correcting the balance of payments disequilibria and, in this way, restoring macroeconomic balance. This system rests on a combination of policy rules and price and wage flexibility. A critical point of the mechanism is that it requires both downward as well as upward wage and price flexibility. In particular, when there is a loss of external competitiveness a *deflation* of prices and salaries is needed to correct external and internal imbalances.

By adopting official dollarization, Ecuador entered into the world of tight rules in economic policy. As mentioned before, in the new system,

the Central Bank can neither print money nor adjust the exchange parity between a national and foreign currency since the national currency was abolished. Fiscal deficits cannot be monetized, and commercial banks cannot receive credit from the Central Bank in national currency to resolve financial difficulties. The new system also puts strong requirements on fiscal solvency and domestic financial stability. This, needless to say, implies a strong departure from previous practices in the conduct of monetary, fiscal, and exchange-rate policies in Ecuador.

The other component of David Hume's price-specie flow mechanism is wage and price flexibility. Certainly Ecuador has had a lot of upward price flexibility in the recent past. The point, however, is to what extent there is also downward wage and price flexibility in Ecuador to correct relative prices in the wake of external shocks and natural disasters, to which the Ecuadoran economy has been quite prone in the recent past (see chapter 2). A subtle point is that although in Argentina there was some downward wage and price flexibility, but this was still not enough to reverse a real appreciation of the currency. In addition, cutting nominal wages, as anticipated by Keynes long ago, can be very unpopular and practically costly in a modern contractual economy. Thus it is not a recommendable course of action on which to rely to correct currency misalignments.

Dollarization and Hard Pegs

In the recent discussion of exchange-rate regimes a "bi-polar" view emerged. According to this view, for a financially integrated economy, two regimes are bound to be viable: "hard pegs" (currency boards, dollarization, or currency union) or exchange-rate flexibility.¹⁵ "Intermediate" exchange-rate regimes such as (soft) fixed-exchange rates, crawling pegs, and others are bound to be susceptible to crisis and failure in a context of high capital mobility. Only hard pegs and flexible rates would endure according to the bi-polar view. After the current Argentine crisis, this view is severely challenged.

Several emerging economies have been in the hard peg group: Argentina (until December 2001), Bulgaria, and Hong Kong, China, all have had currency boards; Panama, Ecuador, and El Salvador are countries that use the U.S. dollar as their national currency. In turn, for developed economies, the countries of the EU have decided to adopt a common currency, the euro, another form of hard peg from the perspective of each member country. Argentina and Bulgaria are cases of countries that adopted currency boards after experiencing periods of very high inflation or hyperinflation. The other countries entered into a hard-peg currency arrangement in more gradual fashion and after a preparation period. Ecuador shares with Argentina and Bulgaria the fact that it adopted a

hard-peg regime because of the urgent need to restore credibility after experiencing extreme monetary instability.¹⁶

Although the recent experience with hard pegs suggests that they were mostly successful in stopping high inflation, often in a gradual way, and helped to restore stability, an important issue is the capacity of the system to last over long periods of time. This leads us to the complex problem of the "exiting option." As the events of early 2002 in Argentina show, the exiting from a currency board, if not well prepared and anticipated, can be extremely traumatic, possibly involving an implosion of the economy. In general, once a country has adopted a hard peg it is not expected to exit. The recent abandonment by Argentina of its currency board is starting to shatter this long-held view. The adoption of a hard peg is a kind of open-ended choice, almost irreversible. In fact, hard pegs are conceived to side step the main weakness of "soft pegs" (fixed exchange rates, crawling pegs), namely, that frequent exits from the fixed system are often unanticipated and disruptive and often entail credibility loss for the monetary authorities. However, loss of the exit option should ultimately be considered a limitation of hard pegs if exiting is needed *in extremis*.

Social Impact of Economic Crisis and Dollarization

Economic crisis can have very adverse social consequences. In the late 1990s Ecuador suffered a sharp recession and a large increase in unemployment. Output contraction and job losses reduced economic welfare of the citizens, particularly that of the unemployed. In addition, as the economic crisis came with instability, continuous currency depreciation, and high and volatile inflation, there was a reduction in real wages, affecting workers and their families as well as other low-income groups and classes whose incomes grow (if at all) at a slower pace than the exchange rate and average prices. In the case of Ecuador, as documented in chapter 4, unemployment, poverty, and inequality all worsened in this period. From a longer-term perspective, the low (and volatile) rate of GDP growth of the 1980s and 1990s implied almost stagnant income per capita for a long period, with minimal poverty reduction, persistent inequality, and social marginalization of minorities. This social situation worsened further because of the economic crisis of the late 1990s. The social impact of dollarization has to be evaluated against this background. Gender biases, in turn, seem to make crises affect women more adversely (see chapter 5).

Dollarization, as we document in this book, has not been costless in Ecuador. The exchange rate chosen for conversion of the money supply in sucres to dollars (25 sucres per dollar) was a very undervalued rate. As a consequence, there was a sharp reduction in real wages in dollars. As

inflation continued at a significant (although declining) pace after dollarization, real wages suffered from continuous inflation and slack in the labor market. However, as of early 2002, about two years after dollarization was adopted, the real exchange rate has started to appreciate and real wages to recover. In addition, following the pattern of other exchange-rate-based stabilization plans, a recovery of consumption and an increase in relative prices of nontradable goods and assets accompanied a recovery in economic activity, with declining unemployment and some improvement in deteriorated social conditions. Still, the medium-term effects on the external competitiveness of Ecuador of currency appreciation must not be neglected.

In retrospect, the social impact of dollarization was affected by the precarious nature of social safety nets in Ecuador that were unable to shield vulnerable groups, the poor, women, and the unemployed from the social costs associated with both the economic crisis of 1998–99 and the stabilization efforts afterwards.

Organization of This Book

This volume comprises four other chapters. In chapter 2, Paul Beckerman presents a broad analysis of long-term characteristics of the Ecuadoran economy covering several dimensions: economic structure, geography, social structure, and regional divides; frequency of governance crisis; dependence on volatile commodity prices; fiscal and financial structure; and exposure to natural disasters. The chapter places the late 1990s economic crisis that preceded official dollarization in historical perspective. Chapter 3, by Paul Beckerman and Hernan Cortés-Douglas, provides an in-depth analysis and documentation of the Ecuadoran experience following dollarization. It analyzes in detail the workings of the new monetary system, the behavior of the fiscal and banking systems, the adjustment in prices and the real exchange rate, and real economic activity after official dollarization in 2000 and 2001. Chapter 4, by Suhas Parandekar, Rob Vos, and Donald Winkler, elaborates and carefully documents the effects of the crisis on unemployment, real wages, and income distribution as well as the effects and limitations of policies to counteract these adverse social effects. Finally, chapter 5 by Maria Correia discusses the gender and family dimensions of Ecuador's severe economic crisis of the late 1990s.

Notes

1. The old national currency, the sucre, retained de jure legal status under the Constitution, essentially because the government believed it would simply have been too complicated to change the Constitution.

2. By December of 1999, around 66 percent of total deposits in the Ecuadorian financial system were in U.S. dollars and nearly 90 percent of the credit was in dollars.

3. Historically, not all experiences with very high inflation and hyperinflation came along with a banking crisis; see Solimano (1990a, 1991).

4. See Fischer (2001b) for an account of the relationship between Ecuador and the IMF, from the perspective of the latter.

5. It is estimated that around 1 million Ecuadorans left the country between 1998 and 2001.

6. See Hurtado (1993) for a thorough analysis of Ecuador's economic, social, and political structure in both the colonial period and in the Republican era.

7. See Arteta and Hurtado (2002) for a recent political economy analysis of Ecuador.

8. See Eichengreen (2002) for analysis of alternative views on the timing and sequencing of dollarization. Berg and Borenztein (2000) and Calvo (1999) review several pros and cons of dollarization as an exchange-rate regime.

9. See Moreno-Villalaz (1999) for an analysis of the Panama experience as a dollar economy.

10. A more acute situation of near hyperinflation before adopting a hard peg regime was observed in Bulgaria in the 1990s. That country adopted a currency board in July of 1997. Preceding the currency board, inflation reached 500 percent in January 1997 and more than 2,000 percent in March of that year; see Gulde (1999). For an early analysis of inflation dynamics in post-Communist Bulgaria, see Solimano (1990b).

11. See Arteta (2001) for an analysis of that period.

12. See Baliño and Enoch (1997).

13. See Scandizzo (2001).

14. See Fischer (1982 and 1993) for an assessment of the arguments for national money and their empirical significance.

15. See Fischer (2001a) for an interesting discussion of the bi-polar view of exchange-rate regimes.

16. See Calcagno, Manuelito, and Titelman (2001) for a comparison of Ecuador's dollarization with Argentina's currency board.

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