

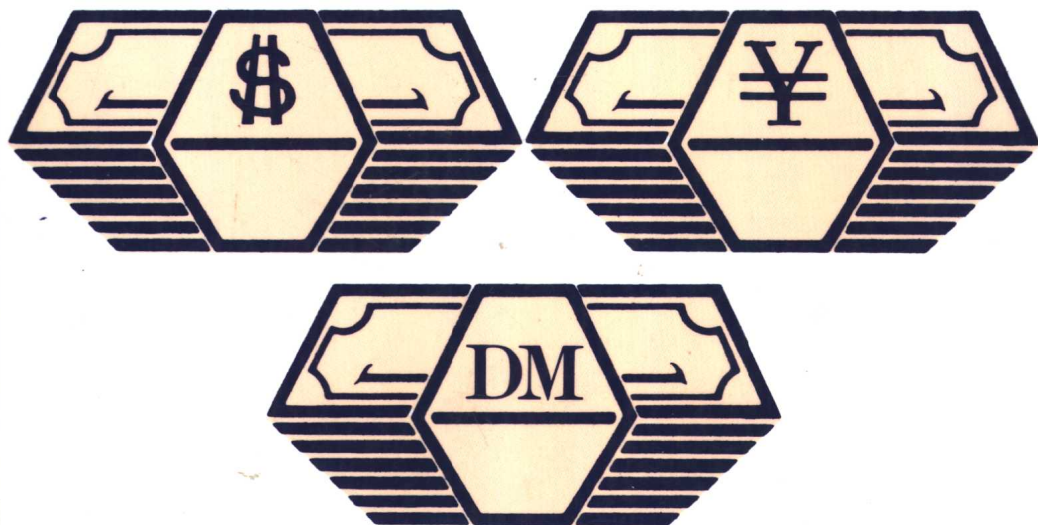
CAPITAL CONTROLS EXCHANGE RATES

A N D

MONETARY POLICY

I N T H E

WORLD ECONOMY



EDITED BY

Sebastian Edwards

Capital controls, exchange rates, and monetary policy in the world economy

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The essays collected in this volume, written by well-known academics and policy analysts, discuss the impact of increased capital mobility on macroeconomic performance. The authors highlight the most adequate ways to manage the transition from a semi-closed economy to a semi-open one. Additionally, issues related to the measurement of openness, monetary control, optimal exchange rate regimes, sequencing of reforms, and real exchange rate dynamics under different degrees of capital mobility are carefully analyzed.

The book is divided in four parts after the editor's introduction. The first part contains the general analytics of monetary policy in open economies. Parts two to four deal with diverse regional experiences, covering Europe, the Asian Pacific region, and Latin America. The papers on which the essays are based were originally presented at a conference on Monetary Policy in Semi-Open Economies, held at the Institute of Economic Research, Korea University in Seoul, Korea, in November 1992.

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Introduction

Sebastian Edwards

The past few years have seen a remarkable expansion in international trade. Throughout the globe countries have liberalized their trade accounts, reducing import tariffs and eliminating quantitative restrictions. What is perhaps most remarkable about this process is that, after years of hesitation, many developing nations have joined the more advanced countries in implementing trade liberalization reforms. For example, during the late 1980s and early 1990s most of the Latin American nations, which since the 1930s had favored an import substitution development strategy, went through gigantic unilateral trade reforms. Similar processes are taking place in Asia, where countries that for decades had pursued highly protectionist policies – India, for instance – are implementing major trade liberalization efforts. There is little doubt that, as we enter the end of the century, the view that freer trade and liberalization is conducive to improved economic performance has become dominant in academic as well as in policy circles. The decades-old debate between *outward orientation* and *inward orientation* has been decisively won by the proponents of more open commercial policies. The approval of GATT's Uruguay Round in December of 1993 has added impetus to the global efforts to open international trade.

Although impediments to international trade in goods and (to some extent) services have been greatly reduced, restrictions on capital movements continue to be widespread, especially among the newly industrialized and developing nations. In fact, during the past decade or so advanced and poorer countries have dealt with capital movements very differently. Restrictions to capital mobility have been greatly reduced in the most advanced nations, and especially in the European Community since 1992. It has been estimated that, largely as a result of the relaxation of capital restrictions in the industrial countries, the turnover in foreign exchange markets more than tripled between 1986 and 1993, with total (net) daily turnover exceeding U.S.\$1,000 billion. As Svensson (1993) has

pointed out, this figure is remarkably high when compared with the total *stock* of reserves held by the industrial countries' central banks – in the spring of 1992 the G-10 held approximately U.S.\$400 billion in official reserves. In his chapter in this collection Jeffrey Shafer provides an extensive and detailed analysis of the process of capital account liberalization in the OECD countries. He discusses the evolution of the policy and academic thinking on capital controls, assesses their early effectiveness (or *ineffectiveness*), and evaluates the most important consequences of their removal during the past few years.

In stark contrast to the liberalization process in the advanced countries, capital controls and impediments continue to be pervasive among the developing nations. Manuel Guitián points out in his contribution to this volume that the multilateral institutions have traditionally considered restrictions on trade on goods to be significantly more harmful than impediments to capital mobility. For example, while the *Articles of Agreement* of the International Monetary Fund (IMF) condemns the use of trade restrictions, it condones the use of capital controls.¹ Moreover, during the past few years most multilateral negotiations to reduce barriers on international exchange – including GATT's Uruguay Round – have concentrated on trade in goods and services, virtually ignoring capital controls.

Recently the United States has urged a number of developing nations and in particular the East Asian countries – to relax capital controls and to open their capital accounts.² However, this proposition has been met with skepticism and, in some cases, with resistance. The apprehension regarding the opening of the capital account – or at least its rapid opening – goes beyond traditional nationalistic views, and is based on both macro- and microeconomic arguments. It is often argued that under capital mobility the national authorities lose (some) control over monetary policy, and that the economy will become more vulnerable to external shocks. Also, policy makers have often expressed concerns over their (effective) freedom for selecting the exchange rate regime, if capital is highly mobile. Moreover, sometimes it has been argued that full capital mobility will result in “overborrowing” and, eventually, in a major debt crisis as in Latin America in 1982. Other concerns regarding the liberalization of capital movements relate to increased real exchange rate instability, and loss of international competitiveness. Still other analysts have pointed out that the premature opening of the capital account could lead to massive capital flight from the country in question. This type of discussion has led to a

¹ Article 6, section 3.

² See, e.g., Ito (1993) for a discussion on the U.S. political pressure for economic liberalization in East Asia.

growing literature on the most adequate sequencing and speed of liberalization and stabilization reforms.³

The essays collected in this volume were presented at a conference on *Monetary Policy in Semi-Open Economies*, in Seoul, Korea, during November 6 and 7, 1992. The purpose of the conference – jointly organized by the Institute of Economic Research, Korea University (Yung Chul Park, Director), and the Ministry of Finance of the Korean government – was to discuss candidly the consequences of increased capital mobility on macroeconomic performance, and the most adequate way to manage the transition from a “semi-closed” economy into a “semi-open” one. Issues related to the measurement of openness, monetary policy and control, optimal exchange rate regimes under capital mobility, sequencing of reform, and real exchange rate behavior under alternative degrees of capital mobility, among others, were discussed by a group of academics and policy analysts from virtually every part of the world. As the reader will find out, in spite of some differences of opinion, the authors found significant common ground during the discussion.

In preparing this collection I have divided the volume into four parts. The first one, with essays by Robert Mundell, Jeffrey Frankel, and Manuel Guitián, deals with the general analytics of monetary policy in open and semi-open economies. The other three parts concentrate on case studies for distinct geographical areas: Part II, which includes chapters by Patrick Minford, Jeffrey Shafer, Alberto Giovannini, and Wilhelm Nölling, deals with Europe. Part III concentrates on the Asia-Pacific region and includes essays by Yung Chul Park and Won-Am Park, Shin-ichi Fukuda, Michael Dooley, and Victor Argy. Finally, Part IV contains chapters by myself; Guillermo Calvo, Leonardo Leiderman, and Carmen Reinhart; and James Hanson deals with the case of Latin America. In the rest of this introduction I discuss some of the most important analytical and policy issues related to the relaxation of capital controls in the world economy.

Measuring the degree of capital mobility

The fundamental purpose of capital controls is to interfere with the free international exchange in financial assets (Einzig 1934). A key issue, however, is how effective capital controls are in practice. Ample historical evidence suggests that there have been significant discrepancies between the legal and the actual degree of controls. In countries with severe impediments to capital mobility – including countries that have banned capital movement – the private sector has traditionally resorted to the overinvoicing of imports and underinvoicing of exports to sidestep legal

³ See, e.g., McKinnon (1991).

controls on capital flows. The massive volumes of capital flight that took place in Latin America in the wake of the debt crisis clearly showed that, when faced with the “appropriate” incentives, the public can be extremely creative in finding ways to move capital internationally. A number of authors have resorted to the term “semi-open” economy to describe a situation where the existence of taxes, licenses, or prior deposits restricts the effective freedom of capital movement – see, for example, Robert Mundell’s contribution to this volume.

Harberger (1978, 1980) has argued that the effective degree of integration of capital markets should be measured by the convergence of private rates of return to capital across countries. In his empirical analysis Harberger used national accounts data for a number of countries – including eighteen LDCs – to estimate rates of return to private capital, and found out that these were significantly similar. More important, he found that these private rates of return were independent of national capital–labor ratios. He interpreted these findings as supporting the view that capital markets are significantly more integrated than what a simple analysis of legal restrictions would suggest. Harberger (1980) also argued that remaining (and rather small) divergences in national rates of return to private capital are mostly the consequence of country risk premia imposed by the international financial community on particular countries. These premia, in turn, are determined by the perceived probability of debt default or rescheduling, and depend on a small number of “fundamentals,” including the debt/GDP ratio and the international reserves position of the country in question.

In trying to measure the effective degree of capital mobility, Feldstein and Horioka (1980) analyzed the behavior of savings and investments in a number of countries. They argue that if there is perfect mobility of capital, changes in savings and investments will be uncorrelated in any particular country. That is, in a world without capital restrictions an increase in domestic savings will tend to “leave the home country,” moving to the rest of the world. Likewise, if international capital markets are fully integrated, increases in domestic investment will tend to be funded by the world at large, and not necessarily by domestic savings. Using a data set for sixteen OECD countries, Feldstein and Horioka found that savings and investment ratios were highly positively correlated, and concluded that these results strongly supported the presumption that *long-term* capital was subject to significant impediments. Frankel (1989) applied the Feldstein-Horioka test to a large number of countries, including LDCs, and largely corroborated the results obtained by the original study, indicating that savings and investment have been significantly positively correlated in most countries.

Although Harberger (1980) and Feldstein and Horioka (1980) used different methodologies – the former looking at prices and the latter at quantities – and reached opposite conclusions regarding the degree of integration of world capital markets, they agreed on the need to go beyond legal restrictions in assessing the extent of capital mobility. In a series of studies, Edwards (1985, 1988) and Edwards and Khan (1985) argued that time series on domestic and international interest rates could be used to assess the degree of openness of the capital account. Using a general model that yields the closed and open economies cases as corner solutions, they *estimated* the economic degree of capital integration. They argued that capital restrictions play two roles: First, they introduce divergences to interest rate parity conditions and, second, they tend to slow down the process of interest rate convergence. Results obtained from the application of this model to the cases of a number of countries (Colombia, Singapore, Chile, Korea) support the idea that, in general, the actual degree of capital mobility is greater than what the legal restrictions approach suggests. Haque and Montiel (1990) and Reisen and Yeches (1991) have provided expansions of this model that allow for the estimation of the degree of capital mobility even in cases when there are not enough data on domestic interest rates, and that considered the possibility of a changing degree of capital mobility through time. Their analyses also suggest that in these developing countries the degree of capital mobility has been less than full.

In his contribution to this volume Michael Dooley further expands this approach in an effort to measure the degree of effective capital mobility in Korea. Dooley compares the evolution of capital controls in Germany during the early 1970s and in Korea in the early 1990s. Dooley shows that a strict application of the semi-open economy model suggests that Korea has had an implausibly high degree of capital mobility. He argues that the estimated degree of capital mobility is highly sensitive to which series on domestic interest rates is used to depict “the” domestic interest rate. He argues that when the “curb” rate prevailing in the unregulated segment of capital markets is used, the effective degree of capital mobility in Korea appears to have been limited between 1970 and 1990.

In his chapter in this collection Fukuda argues that deviations from interest rate parity provide an effective way of measuring the degree of capital mobility. If the capital market is fully liberalized from an economic perspective, covered interest parity must always hold. He argues that after December 1980 deviations from interest parity became negligible in Japan. Fukuda goes on to argue that in the case of Japan the extent of effective capital controls was endogenously determined by the behavior of the current account. Moreover, he points out that – in spite of the existence of generalized capital controls – until 1980 Japanese multinational trading

companies were given de facto preferential treatment. This allowed those firms to circumvent many of the restrictions to capital mobility.

Nominal exchange rate regimes, monetary policy, and capital controls

The international monetary system forged in Bretton Woods experienced a final collapse in 1973, when the industrial nations decided to adopt freely floating exchange rates.⁴ In spite of this significant change in the international financial system, throughout the 1970s most of the developing countries continued to rely heavily on fixed exchange rates. For example, by December 1979 85 percent of the developing countries had some variant of fixed exchange rates.

During the 1980s and early 1990s, however, a large number of advanced nations moved slowly toward reducing the degree of exchange rate flexibility. The exchange rate mechanism (ERM) of the European Monetary System, with its narrow ± 2.25 percent bands, represented the institutionalization of a system of limited flexibility. It was thought that by reducing the extent to which nominal exchange rates could fluctuate it was possible to combine the best features of purely floating and purely fixed exchange rate regimes (Giavazzi and Giovannini 1989). The crisis of the ERM in 1993 has introduced, however, very serious doubts on the desirability of fixed exchange rates in a world with a very high degree of capital mobility.

Interestingly enough, as the industrial countries were shying away from exchange rate flexibility, more and more developing countries abandoned fixed exchange rates and adopted more flexible regimes. For example, according to the December 1990 issue of *International Financial Statistics (IFS)*, the proportion of LDC members of the IMF under some type of fixed exchange rate regime had declined to 67 percent.⁵ This movement on behalf of the LDCs toward greater exchange rate flexibility was, to a considerable extent, associated with the debt crisis unleashed in 1982. Those countries that had to cope with sudden cuts in external financing had very limited policy options. In an effort to engineer gigantic resource transfers to their creditors, most of these countries adopted adjustment

⁴ Parts of this section draw on Edwards (1993).

⁵ The *IFS* distinguishes several categories of fixed exchange rate countries, including those pegged to the U.S. dollar, those pegged to the French franc and those pegged to a "composite of currencies." It is unclear, however, to what extent the countries in this latter group have indeed followed a policy of pegging their currency to a basket. For all practical purposes, if a country alters continuously the composition of the basket, the resulting policy will *not* be one of a pegged exchange rate, but rather a form of exchange rate management.

packages that included, as an important component, large nominal devaluations. It is in this context that in the mid-1980s we saw the end of long experiences with fixed exchange rates in countries such as Venezuela, Paraguay, and Guatemala.

In the late 1980s and early 1990s, a number of observers and experts – including prominent members of the IMF executive board – began to argue that the enthusiasm for an active and flexible exchange rate policy in the developing countries had gone too far. It was pointed out that by relying too heavily on exchange rate adjustments, and by allowing countries to adopt administered systems characterized by frequent small devaluations, many adjustment programs had become excessively inflationary. According to this view exchange rate policy in the developing countries should move toward greater rigidity – and even complete fixity – as a way to introduce financial discipline and provide a nominal anchor. This position was largely influenced by modern macroeconomic views that emphasized the role of expectations, credibility, and institutional constraints. Indeed the arguments used to promote a return to greater fixity in the LDCs were very similar to those used to support systems such as the ERM. In spite of the increasing enthusiasm for fixed rates during the early 1990s a number of authors – including Patrick Minford in this volume – continued to argue that exchange rate flexibility allowed countries, both developed and developing, to avoid real exchange rate (RER) overvaluation, and to accommodate shocks to real exchange rate fundamentals without incurring real costs.⁶

The implementation of major stabilization programs in eastern Europe and the former Soviet Union added interest to the exchange rate debate in the 1990s. Many countries in the region, including Poland, Czechoslovakia, and the former Yugoslavia, adopted a fixed exchange rate as a fundamental component of their anti-inflationary programs. However, some authors have argued that this approach is likely to generate a real exchange rate appreciation, putting the balance-of-payments target of the program in jeopardy.⁷

The debate on the desirability of alternative exchange rate regimes stems largely from the fact that exchange rates are perceived as playing two different roles. On the one hand, exchange rates, jointly with other policies, play an important role in helping maintain international competitiveness. On the other hand, they help in promoting macroeconomic stability and low inflation. In a way, when making decisions regarding ex-

⁶ For a flavor of the discussion within the IMF, see, for example, Burton and Gillman (1991), Aghevli, Khan, and Montiel (1991), and Flood and Marion (1991).

⁷ See Nunnenkamp (1992).

change rate action, economic authorities face a classical *policy dilemma*. The recent literature on the subject has focused on optimal ways of assigning exchange rates and other policy tools to competing objectives, and on determining the optimal degree of exchange rate flexibility. In this volume the contributions by Minford, Guitián, Frankel, and myself deal with different aspects of the selection of the most appropriate exchange rate regime under alternative institutional context.

In his chapter in this volume Minford presents simulation results from the *Liverpool Model* suggesting that a system of flexible exchange rates gives rise to a significantly more stable economy than an ERM-type system. This is especially the case when in the band-type system no attempts are made to coordinate monetary policy across countries. Minford goes further to argue that a monetary union, such as the one envisaged in the European Monetary Union (EMU), will result in a high degree of output instability if supply shocks are dominant.

In his contribution to this collection Jeffrey Frankel also deals with the selection of an exchange rate regime, and discusses the choices faced by rapidly growing middle income countries, such as the Asian newly industrialized countries (NICs). He argues that the degree of openness of the country will largely determine whether it is worthwhile to adopt a fixed exchange rate and to give up, in the process, monetary independence. Frankel points out that the availability of alternative means of adjustment should also be an important ingredient in deciding on what type of exchange rate regime to adopt. In the second part of his chapter Frankel deals with the selection of a nominal anchor for monetary policy and argues that, under a set of plausible conditions, nominal GNP dominates the nominal exchange rate, money supply, and the price level. In his analysis of the experiences of Australia and New Zealand, Victor Argy also tackles the important issue of choosing an exchange rate regime. He points out that the appropriate regime for a particular country will depend on the structural characteristics of the economy, and especially on the degree of labor market and wage rate flexibility.

Much of the discussion on the desirability of alternative monetary and exchange rate arrangements has been couched in terms of the theory of optimal currency areas pioneered by Mundell (1961). The unification of Germany provides possibly the most dramatic example of a rapid formation of a political and economic union. In his contribution to this collection Nölling deals with the German experience and discusses the considerations behind the introduction of the deutsche mark in East Germany. He also deals with some of the consequences – both real and monetary – of having implemented the unification at a one-to-one exchange rate.

In my own chapter I evaluate the functioning of fixed exchange rate

regimes both in the long and short runs. In the first part of my essay I analyze the long-term – that is, at least fifty years – experiences of a score of South American countries with fixed exchange rates. I argue that while this system worked well during relatively tranquil periods, it largely failed during the turbulent 1970s and 1980s. In the second part I analyze the experiences of Chile and Mexico with exchange rate-based stabilization programs. I find out that in Mexico the adoption of an exchange rate anchor changed the character of inflation and accelerated the convergence of domestic to world inflation. Interestingly enough this was not the case in Chile during the late 1970s and early 1980s.

Real exchange rates and capital flows: the sequencing issue

An important problem that has been addressed when designing a liberalization strategy refers to the sequencing of reform (McKinnon 1991). This issue was first considered in the 1980s in discussions dealing with the Southern Cone (Argentina, Chile, and Uruguay) experiences, and emphasized the macroeconomic consequences of alternative sequences. Recent discussions on the experiences of the former communist nations have broadened the debate, and have asked how privatization and other basic institutional reforms should be timed in the effort to move toward market orientation.

It is now generally accepted that resolving the fiscal imbalance and attaining some degree of macroeconomic reform should be a priority in implementing a structural reform. Most analysts also agree that the trade liberalization reform should precede the liberalization of the capital account, and that financial reform should only be implemented once a modern and efficient supervisory framework is in place.⁸

The behavior of the real exchange rate is at the heart of this policy prescription. The central issue is that liberalizing the capital account would, under some conditions, result in large capital inflows and in an appreciation of the real exchange rate (McKinnon 1982, Edwards 1984, Harberger 1985).⁹ The problem with this is that an appreciation of the real exchange rate will send the “wrong” signal to the real sector, frustrating the reallocation of resources called for by the trade reform. The effects of this real exchange rate appreciation will be particularly serious if, as argued by McKinnon (1982) and Edwards (1984), the transitional period is characterized by “abnormally” high capital inflows that result in tempo-

⁸ Lal (1985) presents a dissenting view.

⁹ This would be the case if the opening of the capital account is done in the context of an overall liberalization program, where the country becomes attractive for foreign investors and speculators.