

ESSAYS IN INTERNATIONAL FINANCE

No. 147, May 1982

INTERNATIONAL FINANCIAL
INTERMEDIATION:
A LONG AND TROPICAL VIEW

EDMAR LISBOA BACHA
AND
CARLOS F. DÍAZ ALEJANDRO



INTERNATIONAL FINANCE SECTION

DEPARTMENT OF ECONOMICS
PRINCETON UNIVERSITY

Princeton, New Jersey

ESSAYS IN INTERNATIONAL FINANCE are published by the *International Finance Section of the Department of Economics of Princeton University*. The Section sponsors this series of publications, but the opinions expressed are those of the authors. The Section welcomes the submission of manuscripts for publication in this and its other series, *PRINCETON STUDIES IN INTERNATIONAL FINANCE* and *SPECIAL PAPERS IN INTERNATIONAL ECONOMICS*. See the Notice to Contributors at the back of this Essay.

Edmar L. Bacha, one of the authors of this Essay, is Professor of Economics at the Catholic University of Rio de Janeiro and has been a visiting fellow of the Harvard Institute for International Development. A frequent contributor to professional journals, he has written many books on Brazilian economic problems, including *MODELS OF GROWTH AND DISTRIBUTION FOR BRAZIL* (1980, with Lance Taylor et al.). His coauthor, Carlos F. Díaz-Alejandro, is Professor of Economics at Yale University, has twice been Visiting Professor at the Catholic University of Rio de Janeiro, and has been a consultant to various international commissions. Among his many publications on economic development in Latin America are three books, the last of which is *FOREIGN TRADE REGIMES AND ECONOMIC DEVELOPMENT: COLOMBIA* (1976). This is his second contribution to the publications of the Section.

PETER B. KENEN, *Director*
International Finance Section

ESSAYS IN INTERNATIONAL FINANCE

No. 147, May 1982

INTERNATIONAL FINANCIAL
INTERMEDIATION:
A LONG AND TROPICAL VIEW

EDMAR LISBOA BACHA
AND
CARLOS F. DÍAZ ALEJANDRO



INTERNATIONAL FINANCE SECTION

DEPARTMENT OF ECONOMICS

PRINCETON UNIVERSITY

Princeton, New Jersey

INTERNATIONAL FINANCE SECTION

EDITORIAL STAFF

Peter B. Kenen, *Director*
Ellen Seiler, *Editor*
Linda Wells, *Editorial Aide*
Kaeti Isaila, *Subscriptions and Orders*

Library of Congress Cataloging in Publication Data

Bacha, Edmar Lisboa.

International financial intermediation.

(Essays in international finance, ISSN 0071-142X; no. 147 (May 1982))

An abridged and rev. version of a paper written as part of a project on "External financial relations and their impact on the Latin American economies," carried on under the coordination of CIEPLAN (Santiago de Chile).

Bibliography: p.

1. International finance. 2. Underdeveloped areas—Finance.
3. Finance—Latin America. I. Díaz Alejandro, Carlos Federico.
II. Series: Essays in international finance; no. 147.

HG136.P7 no. 147 332'.042s 82-3096
[332'.042] AACR2

Copyright © 1982 by International Finance Section, Department of Economics, Princeton University.

All rights reserved. Except for brief quotations embodied in critical articles and reviews, no part of this publication may be reproduced in any form or by any means, including photocopy, without written permission from the publisher.

Printed in the United States of America by Princeton University Press at Princeton, New Jersey.

International Standard Serial Number: 0071-142X

Library of Congress Catalog Card Number: 82-3096
AACR2

CONTENTS

1	INTRODUCTION	1
2	INTERMEDIATION IN THREE PERIODS	2
	The Pax Britannica	2
	The Pax Americana	5
	Pax Arabica?	7
3	STYLIZED FACTS AND TRENDS IN THE 1970s	9
	Global Patterns	10
	LDC Financing Arrangements	12
	Debt Accumulation and Servicing	14
	Private Banking	17
	Other Lenders	21
4	SYSTEMIC ISSUES FOR THE 1980s	23
	Shifting Orthodoxies and Heterodoxies	23
	Financial Markets in the 1970s: Sound or Flawed? Heroes or Villains?	25
	The 1980s: Hangover, Penance, and Purges?	28
5	CONCLUSIONS	33
	REFERENCES	35

International Financial Intermediation: A Long and Tropical View

1 Introduction

Private international financial intermediation has witnessed successive cycles for the last one hundred and sixty years. In this century, it blossomed before the First World War and through the 1920s. In the 1930s and 1940s, private capital markets went into an eclipse, to reappear timidly in the 1950s, expand in the 1960s, and boom in the 1970s. Theorizing about financial markets has been extremely sensitive to those cycles. Few are the examples of powerful propositions emerging from general financial theories that are independent of historically specific institutional arrangements.

This essay analyzes the interplay between the financial history of international capitalism and the theorizing about financial markets, which has been carried out mainly in Northern countries. The essay is organized as follows. In a brief review of three epochs of financial intermediation and theories, various orthodoxies are identified and their evolution traced in the light of circumstances. Special emphasis is given to the impact of the different epochs on Latin American and other peripheral countries. A long section then describes major stylized facts and trends in international intermediation during the 1970s, sketching global patterns of current-account deficits and surpluses, the financial arrangements of less developed countries (LDCs), and the expansion of LDC debt. Major actors on the lending side and LDC savings and investment trends are also reviewed. The essay then turns to a discussion of systemic issues raised by the international arrangements of the 1970s and those which appear to be evolving during the 1980s. Central issues include the degree of imperfection and instability of international financial markets, and how imperfections in those markets are perceived by various groups in the North and South. Some reform proposals and future scenarios are also analyzed. A short section presents some conclusions.

Frequent references will be made to orthodoxy. This term is not easy to

This essay is an abridged and revised version of a paper written as part of a project on "External Financial Relations and Their Impact on the Latin American Economies," carried on under the coordination of CIEPLAN (Santiago de Chile) and with the support of the Ford Foundation (New York). We are grateful for comments received from participants in that project, particularly from its coordinator, Ricardo Ffrench-Davis. Advice from Richard Cooper, Rudiger Dornbusch, Sidney Dell, Jonathan Eaton, Edward Kane, and John Williamson is also gratefully acknowledged. The usual *caveats* apply.

define; it may be helpful to separate "academic" from "practical" orthodoxy. Academic orthodoxy is the product of the foremost academic centers of the time; it tends to be flexible and agnostic. Its leading thinkers often are its own major critics, frequently curious about heterodox notions. Practical orthodoxy is more assertive. It is found in the editorials of the business press, among private or public executives with master's degrees, and among some of the more politically or financially ambitious academics. The latter sometimes play a double role: in their Northern universities, disciplined by their colleagues, they are cautious scientists; during their summer tours of the periphery, their *libido imperante* unleashed, they become fountain-heads of practical orthodoxy.

It is practical orthodoxy that puts the system to work and typically sets the Northern tone in North-South debates. As such it will be the main focus of our analysis.

2 Intermediation in Three Periods

The Pax Britannica

The ideas underlying the pre-1929 international financial order enjoyed a degree of intellectual hegemony that has never been rivaled. The gold-exchange standard was regarded as the natural regulator of the balance of payments. Current-account deficits and increases in international reserves were financed by using bonds with long maturities and fixed interest rates as well as by direct investments. Under the long Pax Britannica, some countries (Germany, the United States) graduated from the role of capital importer to that of capital exporter. At least until the 1920s, London ruled the waves and regulated the whole system,¹ whose occasional defaults and crises were regarded as passing aberrations or a necessary purging of "excesses."

National financial systems showed greater heterogeneity. In the United States, populist pressures blocked the creation of a central bank until early in this century. France and Germany developed financial systems more centralized and state-dominated than that of the United Kingdom (see Gerschenkron, 1962, Chap. 1). Apparently, British hegemony in international relations of all types explains the greater homogeneity of the rules of the international financial game than of those applicable nationally.

African and Asian colonies had little choice in their financial systems but

¹ Some writers have claimed that Paris was the strongest financial center in the world before 1914. Kindleberger (1978, pp. 191-192) concludes that the whole question emphasizes the rivalry between France and the United Kingdom, as well as the sensitive political nature of international finance. For a demonstration that direct investments represented an important share of all foreign capital in the third world even before 1914, see Svedberg (1978).

to follow prevailing orthodoxy. By contrast, Furtado (1970, Chap. 9) has shown that several independent Latin American countries had difficulty adhering faithfully to the gold-exchange standard. Mexico followed a silver standard for many years while silver depreciated vis-à-vis gold. Argentina and Brazil often resorted to an "inconvertible paper standard," frequently accompanied by fiscal deficits and inflation. (The United States went through a similar period after its Civil War.)

These Latin American experiments with flexible exchange rates were viewed with fascinated disgust by orthodox scholars and bankers. The recurrent need for foreign finance, as well as domestic political pressures to keep debt service from taking too large a share of the budget, would sporadically dictate a return to the gold-exchange standard and greater controls over domestic credit expansion. Foreign missions played important roles in these attempted returns to orthodoxy. Examples include the Montagu Mission to Brazil in 1924 and those of Professor Edwin Kemmerer to several Andean countries. (For a fascinating analysis of the Montagu Mission, see Frisch, 1979.) At least in the case of the Brazilian return to the gold-exchange standard in the 1920s, the economic results are regarded as negative. During the 1920s, the League of Nations also participated in missions associated with stabilization plans in countries such as Austria and Hungary (Kindleberger, 1978, p. 194).

The conditionality attached to international lending before 1929 was not linked only to the natural desire of bankers to be punctually paid at least the interest due on loans. Political considerations also played a role in regulating access to capital markets. French and German lending was heavily influenced by political factors, as illustrated by France's loans to Czarist Russia and Germany's loans to the Middle East (Kindleberger, 1980, pp. 6-9). In the late 1920s, Brazilian access to the New York market was blocked by Herbert Hoover, then Secretary of Commerce, in retaliation for the Brazilian coffee price-support scheme, while its access to the London market was discreetly vetoed by the Foreign Office in retaliation for the Brazilian withdrawal from the League of Nations (de Paiva Abreu, 1980).

The conditionality imposed before 1929 on the weakest peripheral countries included foreign control over their tariff revenues and other aspects of their fiscal and monetary machinery, as was the case with some Caribbean and Central American nations. (The same sort of conditionality was imposed on Zaire during the 1970s.) Such extreme conditionality typically followed political and economic turmoil but did not always wait for default (see, for example, Thomas, 1971, Chap. 46).

The Great Depression of the 1930s destroyed the gold-exchange standard and international capital markets as they existed before 1929. The prestige of high finance collapsed. In the United States, financiers were the target

of New Deal attacks, and legislation seeking to reduce financial crime and negligence reduced the flexibility of national and international financial intermediaries. Markets previously regarded as basically self-regulating were perceived after 1929 to be intrinsically prone to instability and chock-full of informational and other imperfections. Stock markets, eminent theorists argued, were little better than casinos, whose peculiar "beauty contests" should be taxed (Keynes, 1936, Chap. 12). Both the British and the German governments adopted exchange controls, encouraging their trade and financial partners to follow suit. Several industrial countries declared moratoria on domestic debts, suspended payments on international obligations, and reformed their financial systems.

Peripheral countries with some political autonomy, such as Argentina, Brazil, and Colombia, reacted to the Great Depression with a fairly rapid abandonment of gold-standard orthodoxy, wisely avoiding classical remedies. Thus, a mission headed by Sir Otto Niemeyer of the Bank of England advised Brazil to return to a fixed exchange rate and to maintain convertibility, in June 1931, a mere two months before Britain left the gold standard (de Paiva Abreu, 1974, p. 15). Instead, these large or reactive Latin American countries allowed substantial depreciations of their exchange rates, imposed exchange controls, and maintained a reasonable degree of domestic liquidity. Normal debt servicing was suspended in most cases, just as U.S. farmers suspended payments on their mortgages. The fundamental causes of Latin American default were well put by a young economist in 1943: "If the depression of the 1930's had been mild, and if the steady expansion of world trade and capital exports had continued thereafter, defaults probably would have been infrequent and could have been settled without much difficulty. . . . Without . . . attempting to deny that insufficient care was exercised, and that Latin American countries were encouraged to borrow excessively one may question whether these factors were decisive" (Wallich, 1943, p. 321).² Partly because of the closing of international markets, Latin American countries showed greater interest than before in mobilizing domestic resources via the tax system and in the creation of new government-controlled credit institutions. The formula of letting goods be homespun whenever conveniently possible and letting finance be primarily national was remarkably successful in those countries during the 1930s.³

² Governor Wallich, in a 1981 letter to one of the authors, qualifies other points in his 1943 article, such as his approval of the repurchase of defaulted bonds by several Latin American countries. He concludes: "Today, in any event, I am all in favor of people and countries paying their debts as punctually and fully as they can."

³ The formula was suggested by Keynes (1933) in a peripheral country during the first Finlay Lecture delivered at University College, Dublin, Republic of Ireland, on April 19, 1933.

The Pax Americana

The international financial order that emerged from Bretton Woods in 1944 and lasted until 1973 initially reflected the disenchantment of the 1930s with laissez-faire in financial transactions and was influenced by Fabian/New Deal notions then dominant in the United Kingdom and the United States. The then U.S. Secretary of the Treasury, Henry Morgenthau, regarded Bretton Woods as the achievement of his lifetime ambition to "drive . . . the usurious moneylenders from the temple of international finance" (Gardner, 1980, p. xix).⁴

The International Monetary Fund (IMF) was born accepting changes in exchange rates only to correct "fundamental disequilibrium" and allowing controls over capital movements. The creation of the International Bank for Reconstruction and Development (World Bank) reflected pessimism regarding the viability of private financial intermediation in the postwar world. In the United States, the official Export-Import Bank, created in the 1930s originally to finance trade with the U.S.S.R., was to play an important role in financing U.S. exports of capital goods and was a critical institution in U.S.-Latin American economic relations. In the 1950s and even more in the 1960s, the original Fabian/New Deal flavor of the Bretton Woods institutions was diluted, but they continued to reflect a theoretical and practical eclecticism absent from the pre-1929 international financial order.

Early in the postwar period, a new practical orthodoxy appeared regarding capital movements. It became common to hear advice aimed at peripheral countries regarding the importance of maintaining a favorable climate for direct foreign investments from the North. Before 1929, especially before the First World War, portfolio investments had dominated those of a direct nature, and a good investment climate involved mainly the punctual servicing of debt. In the 1950s and 1960s, however, direct foreign investment, suppliers' credits, and official development assistance of various sorts made up the bulk of capital inflows into the periphery. All these forms of finance implied a complex and fairly intimate relationship between lenders and borrowers.

At least during the late 1940s and 1950s, both national and international financial intermediation received low priority. The ultra-Keynesian notion that "money does not matter" could easily be extended to "financial intermediation does not matter." It was not until the late 1950s that Europe abandoned rigorous exchange controls; the United Kingdom maintained them

⁴ Today such a statement would probably be branded "emotional third-world rhetoric" by the U.S. Secretary of the Treasury. Indeed, the first influential president of the World Bank and his advisers are reported to have been skeptical of much of the idealism of Bretton Woods and of "Morgenthau and all those clucks" (Sampson, 1981, p. 72).

until 1979. Balance-of-payments analysis focused on the current account, with private capital flows regarded mostly as exogenous variables.

Academic orthodoxy had surprisingly little to say about the benefits and costs of the postwar structure of capital flows between North and South. There was a tendency to add up all forms of capital flows into one aggregate necessary to finance the "foreign-exchange gap." A common attitude was that the greater this aggregate flow, the better all around. This academic complacency was first punctured by peripheral (and Australian, Canadian, and European) criticism of some of the consequences of direct foreign investment and of multinational corporations. Some aspects of official development assistance also came under closer scrutiny, leading to more sophisticated evaluations of the grant element involved in such flows.

As noted earlier, the IMF and the World Bank began in the 1950s to depart from the bold vision of at least some of their founding fathers. The World Bank would go no further than to finance specific projects, avoiding program lending. It also refused to lend to state oil enterprises, arguing that there were plenty of private oil corporations willing to invest. The IMF staff increasingly favored rigid exchange rates, with sporadic but massive adjustments, buttressed by rigorous credit policies, in a pattern similar to the pre-1929 rules of the game. In its dealings with peripheral countries given to heterodoxy, such as several Latin American countries, the IMF missions revived the spirit of Montagu and Niemeyer, advocating stiff stabilization plans. It could be argued that, at least during the 1950s, the leverage of the IMF missions was no smaller than the leverage of Montagu and Niemeyer, as international credit sources in the 1950s were few and tended to follow the leadership of the IMF (and the U.S. Treasury). The consequences of the practical orthodoxy of the IMF were frequently similar to those of the Montagu Mission.

As late as the 1960s, those advocating greater resource transfers from North to South would call for more official development assistance under various forms. Regional development banks were created, adding new official financial intermediaries. New aid relationships were sought. Hopes were also expressed for a new spirit in direct foreign investment.

In the meantime, the great postwar economic expansion which culminated in the early 1970s was creating new conditions that eroded the postwar practical orthodoxy. Almost accidentally, an international capital market emerged in the mid-1960s, in the form of Eurocurrency credits.

The Eurodollar market, based on dollar deposits in banks outside the United States, arose from the desire of demanders and suppliers of those deposits to avoid actual or potential U.S. banking regulations. The Soviets were among the first depositors of dollars in European banks; they feared that accounts opened in the United States might be attached by U.S. citi-

zens who had claims against the U.S.S.R. During tight credit conditions in 1968 and 1969, U.S. commercial banks bid for dollars in the Eurodollar market by offering yields above those permitted in the United States. Banks based in London and other European financial centers found that accepting dollar deposits and extending dollar loans was profitable. Those deposits were not subject to official reserve requirements, although tacit approval of such operations by central banks was necessary. The practice of accepting deposits in currencies other than that used locally spread to sterling, Deutsche marks, Swiss francs, and others. Banks outside Europe also joined the market, which now encompasses agents in Singapore, the Caribbean, and elsewhere.

Growing macroeconomic disharmonies among the industrialized countries in the late 1960s, the U.S. involvement in Vietnam, and increased capital mobility put enormous pressure on fixed parities. These circumstances led to the abandonment by the United States of gold convertibility in August 1971 and to the generalized floating of key currencies in early 1973. This *Annus Mirabilis* culminated in the sharp rise in oil prices, putting an end to the postwar era of cheap energy.

Pax Arabica?

The period from 1973 to 1981 has been highly unusual in the history of international finance. A new type of capital exporter has emerged that has no historical counterpart. Consider the following contrast between OPEC capital exporters (primarily those in the Persian Gulf) and those of earlier eras:

1. The military power of major OPEC countries is trivial, certainly insufficient to enforce financial contracts against recalcitrant debtors. Mendelsohn (1980, p. 55) argues that every lender ultimately needs bailiffs at his back. OPEC does not have bailiffs of its own.

2. OPEC countries lack capital-goods industries, or indeed an extensive industrial base, to supply most commodities ultimately desired by foreign-exchange-constrained capital importers. OPEC's technological base is weak. It is difficult to imagine an OPEC equivalent to British exports of railway equipment or to U.S. direct foreign investment. Oil is not one, because it is a nonrenewable asset for OPEC but a current input for importers.

3. OPEC capital exporters had only limited financial institutions of their own during 1973-1981. Although this situation is rapidly changing, they still rely heavily on financial intermediaries of industrialized countries.

4. OPEC national currencies are used only marginally as reserve or vehicle currencies. The influence of OPEC over international monetary arrangements is growing but still modest.

5. The major component of OPEC wealth is a nonrenewable resource. If

investments in financial or real assets yield low rates of return, OPEC countries can adjust by decreasing their oil output, that is, by "investing" in oil underground. Thus, part of OPEC's "home investment" could *decrease* the world's aggregate supply of goods in the short and medium term.

These considerations imply a good deal of bilateral dependence between the old and new capital exporters, involving both economic and political aspects. These aspects have become highly visible since 1973, in contrast with previous years when the commercial, financial, and political links between major oil exporters and industrialized countries could be discreetly hidden under the general rubric of global interdependence. Yet the network of trade flows has also become more complex and multilateral, involving greater triangularity among old and new capital exporters and the third world.

The Eurocurrency market and international banking, already vigorous before 1973, have turned out to be (on the whole) flexible and efficacious instruments to accommodate the new capital exporters and the major semi-industrialized capital importers. A closer look at the Eurocurrency market and its links with the OPEC surplus is warranted.

Many transactions in the Eurocurrency market are between banks, and they produce only a limited amount of maturity transformation. International corporations also engage in considerable borrowing and lending in that market. Depending on circumstances, economic agents switch back and forth between the national financial markets of OECD countries and the Eurocurrency market. Using an old analogy, the Eurocurrency market, international banking, and OECD financial markets may be viewed generally as a giant bathtub within which much churning (gross financial intermediation) takes place, and where ripples in one segment are quickly transmitted to other segments.

Net inflows into and net outflows out of this bathtub can be defined in a number of ways, depending on one's analytical focus, including desired level of aggregation. In this essay, we will be interested mainly in the roles of financial markets as providers of net balance-of-payments financing to large groups of LDCs and as receivers of net inflows from OPEC.

It should be clear that the Eurocurrency market has a life and a financial role that are independent of OPEC surpluses, just as its coming into being was not caused by the U.S. balance-of-payments deficits of the 1960s. The gross stocks of assets and liabilities in this market are only marginally influenced in a given year by net balance-of-payment flows. Even if all countries were to be in balance-of-payments equilibrium from now on, one could expect the Eurocurrency market to continue to grow, because it would still serve as a financial intermediary among the various agents participating in international trade and finance. The irruption of a new kind of capital exporter no doubt influenced many specific features of the evolution of finan-

capital markets during the 1970s. But even without OPEC, international capital markets would have expanded significantly during the 1970s.

While the performance of international banks as financial intermediaries was remarkably good during 1973-81, present arrangements remain historically anomalous and vulnerable in several ways. Besides the contrasts already noted between new and old capital exporters, consider the following points:

1. The level of OPEC capital exports depends heavily on the real price of oil, at least during a longish short run, rather than on traditional long-term saving and investment propensities. During 1974 through 1977, OPEC surpluses were large, but they tended to decrease until 1978, when they practically disappeared, before rising sharply once again in 1979. Although the investment record was good for many LDCs in the 1970s (Sachs, 1981), it is unclear for some importers of both oil and capital whether the inflows are adding to productive capacity or simply maintaining consumption above levels sustainable in the long run, assuming the persistence of high real energy prices. Contrary to much historical experience in the periphery, worsening terms of trade accompany the capital inflow.

2. The 1973-80 recycling was aided by "money mirage" on the part of capital exporters. *Ex post* real yields on dollar-denominated financial assets were low, certainly lower than the yield on oil in the ground. This situation changed with a vengeance during 1980-81. Even if real interest rates on dollar-denominated financial assets decline from their freakish 1981 levels (on which more below), insistence by capital exporters on a "normal" positive real rate of return on their financial assets equaling the expected secular growth rate of real oil prices may impose impossible burdens on some capital importers.

3. Political relations between old and new capital exporters are far from harmonious. Tensions between Iran and the United States, leading to the freeze in 1979 of Iranian assets in U.S.-owned banks, had important negative repercussions in the Eurocurrency market. Although international banking emerged quite well from that crisis, catastrophic scenarios are much too easily imagined.

The historical anomalies presented by the emergence of OPEC as the major capital exporter deserve closer empirical scrutiny. The next section describes the structural features of international financial flows and stocks from 1973 to 1981, emphasizing those of special interest to the periphery.

3 Stylized Facts and Trends in the 1970s

In this section, global balance-of-payments patterns are reviewed first, with emphasis on LDC and Latin American current-account deficits. Recent LDC financing arrangements are discussed and compared with the postwar ex-

perience. The analysis of financial flow leads to a consideration of debt magnitudes and the burden of debt servicing, which are placed in historical perspective. A discussion of international private banking and a comparative look at official and other lenders follow. The section closes with a brief look at savings and investment trends in LDCs.

Global Patterns

The global pattern of current-account deficits and surpluses since 1973, expressed in dollars of constant value, is summarized in Table 1. It may be seen that net capital flows fluctuated considerably from year to year; the OPEC surplus was only \$3 billion in 1978 but reached \$70 billion (at 1975 prices) in 1980. It remains to be seen whether indexing of oil prices, if it takes place, and more prudent and steadier OPEC development plans will lead to a more stable pattern during the 1980s than in the 1970s, when the real OPEC surplus declined sharply between 1974 and 1978. Whatever happens to the OPEC surplus, the LDC deficit can be called structural in the sense that it could not be eliminated within a reasonable time span just by changes in exchange rates and macroeconomic policies.

Non-oil LDCs can be expected to be net capital importers, but it is important to examine how the deficits were financed and whether the inflow was accompanied by the maintenance of domestic investment and savings efforts. Given dollar inflation and economic growth, it is also of interest to establish the magnitude of financing needs relative to other macroeconomic magnitudes.

Here are the current-account deficits of non-oil Western Hemisphere countries⁵—expressed as percentages of merchandise exports:

1950-54	9	1970-73	29
1955-59	16	1974-76	44
1960-62	28	1977-79	27
1963-66	11	1980-81	42
1967-69	21		

These deficits resulted from short-term fluctuations in commodity prices and domestic outputs, as well as from the interaction of demand and supply for long-term capital. One may conjecture that the deficits for 1960-62 (the heyday of the Alliance for Progress) and 1970-73, on the order of 30 per cent of merchandise exports, represent reasonable approximations to desired long-run capital inflows. The low numbers for the 1950s reflect poor supply conditions in world capital markets, while the extraordinary deficits for 1974-76 indicate special circumstances unlikely to be sustainable over

⁵ Data since 1973 are from IMF (1981a, p. 127); earlier data are from Naciones Unidas (1979, Table 4). There are differences in coverage between "non-oil Western Hemisphere" and "Latin America excluding oil exporters," but they are minor.

TABLE 1
GLOBAL PATTERNS OF CURRENT ACCOUNTS, 1973-81
(in billions of dollars at 1975 prices)

Date	Industrial Countries	Major Oil-Exporting Countries ^a	Non-Oil LDCs		Socialist Countries and Errors and Omissions
			Total	Western Hemisphere	
1973	\$27	\$ 9	-\$16	-\$ 7	-\$20
1974	-14	75	-41	-15	-20
1975	17	35	-47	-17	-5
1976	-2	40	-33	-12	-5
1977	-5	29	-27	-8	3
1978	24	3	-30	-10	3
1979	-8	48	-40	-15	0
1980	-28	70	-50	-21	8
1981 ^b	-18	60	-60	-25	18
Averages:					
1974-78	4	36	-36	-12	-4
1979-81 ^b	-18	59	-50	-20	9

^a Overlaps closely, but not exactly, with OPEC. This minor difference is ignored in the text.

^b Data for 1981 are rough estimates.

NOTE: Negative signs imply deficits in current account.

SOURCE: Adapted from IMF (1981a, Table 14, Appendix B, p. 123). Data in current dollars were deflated by the indices of dollar unit values for industrial countries' exports, as published in IMF, *International Financial Statistics*.

the long run. By 1977-79, the deficit was around 1967-72 levels, but it rose again in 1980-81.

Two remarks may be made about the relative magnitudes of pre- and post-1973 Latin American deficits, one making recent deficits look more alarming, another making them less so. On the one hand, the growth rate of gross domestic product accompanying post-1973 deficits was lower than in 1967-73. The earlier years registered a growth rate of 7 per cent per annum, while annual growth since 1973 has averaged 5 per cent. On the other hand, world inflation leads to an overestimation of the magnitudes of external savings. Under present institutional arrangements, the allocation of debt service between interest and amortization is distorted in favor of interest by dollar inflation, thus increasing the apparent magnitude of current-account deficits.

A numerical example clarifies this last point. Suppose that net debt at the start of a year is \$1,000, that nominal amortization remittances during the year are 0, and that the nominal rate of interest is 15 per cent per

annum. Dollar inflation, affecting the debtor-country export and import prices, is 10 per cent per annum. Consequently, the real value of net debt at the end of the year is \$900. Of the \$150 interest paid out, \$50 is real interest and \$100 is real debt amortization. Ordinary balance-of-payments accounting registers a \$150 outflow on current account and a 0 outflow on capital account. Inflation-proof accounting would register \$50 in service payments and \$100 in debt amortization, the latter being a capital-account item. Real domestic savings is \$100 higher and real foreign savings \$100 lower than indicated by ordinary accounting procedures. In the case of Brazil, for example, it has been estimated that using inflation-proof accounting methods, the current-account deficit for 1978 was 2.1 per cent of GDP instead of the 3.1 per cent given by uncorrected data. By 1979, the contrast is even stronger: 2.2 per cent vs. 4.0 per cent (see Almonacid and Pinotti, 1980, p. 84; also Freedman, 1979). Given the investment rate, estimates for domestic savings would have to be adjusted upward correspondingly.

In the Brazilian study just mentioned, inflation in the United States was used to deflate debt figures. Other debt deflators have been proposed: dollar export prices of the country in question, terms of trade, and the consumer-expenditure deflator adjusted for exchange-rate changes (see Massad and Zahler, 1977, and Dornbusch, 1980). Deflating solely by the terms of trade would lead to the peculiar result that a hypothetical hyperinflation in international dollar prices would lead to no change in the presumed real value of the debt as long as import and export prices increased proportionally. The use of the consumer-expenditure deflator adjusted for exchange-rate changes is likely to run into practical data difficulties and result in erratic yearly changes. The theory of shadow exchange rates and practical considerations strongly suggest a deflator that is a weighted sum of dollar export and import prices, with the weights reflecting the marginal shares of exports and imports in the adjustment process. It cannot be presumed that such an ideal index will always be approximated by U.S. indices containing nontraded goods and services.

LDC Financing Arrangements

Net financing needs during the 1970s went beyond those indicated by current-account deficits. Dollar inflation, real trade growth, and a more uncertain international environment led to a predictable increase in the demand for reserves. Few LDCs can rely on perfectly flexible exchange rates to do away with the need for reserves. Thus, Table 2 includes net reserve accumulation together with current-account deficits to obtain the net financial needs of all non-oil LDCs expressed in current dollar prices. As measured by traditional indicators, the reserve accumulation shown in Table 2 does not appear excessive and may be deemed to reflect the increase in

TABLE 2
FINANCIAL NEEDS AND SOURCES FOR ALL NON-OIL LDCs, 1973-81
(annual averages in billions of current dollars)

	1973	1974-76	1977-79	1980-81 ^a
Net financial needs:				
Current-account deficit	\$11.5	\$38.7	\$41.2	\$89.8
Net reserve accumulation	9.7	4.6	13.2	1.5
	\$21.2	\$43.3	\$54.4	\$91.3
Sources of finance:				
Net transfers received by governments	\$ 5.6	\$ 7.2	\$ 8.8	\$11.3
Net direct investment	4.4	5.2	6.6	9.2
Net long-term borrowing:				
From official sources	5.7	10.8	13.8	22.6
From private financial institutions	9.0	13.9	24.2	25.0
From other private lenders	1.4	2.0	2.9	4.0
Net IMF credit and use of other reserve-related facilities	0	2.5	-0.3	5.3
Net short-term borrowing, other resid- ual flows, errors and omissions	-4.9	1.8	-1.6	13.9

^a Rough estimates and projections.

SOURCE: Adapted from IMF (1981a, Table 22, p. 129).

desired reserves. For all non-oil LDCs, gross reserves amounted to 28 per cent of imports of goods and services during 1967-72. This ratio moved down to 21 per cent during 1974-76, recovered to 25 per cent during 1977-79, and fell again to 17 per cent during 1980-81 (IMF, 1981a, Table 25, p. 131). The corresponding figures for non-oil Western Hemisphere LDCs give a somewhat different picture: 22 per cent for 1967-72, 22 per cent for 1974-76, and a jump to 34 per cent during 1977-79. This bulge, however, was reduced sharply during 1980-81, when the ratio fell to the 1967-72 average. Many LDCs contracted debt when conditions were favorable during the 1970s, producing fluctuations in undisbursed debt or in their reserves.

Table 2 shows that two traditional sources of finance, grants and direct foreign investment, reduced their relative contributions after 1973 for all non-oil LDCs. Net long-term borrowing from official sources, such as the World Bank and regional banks and from private financial institutions, mainly banks, made up the bulk of the expansion of external finance. Bond issues and suppliers' credits from nonofficial sources remained relatively small contributors of net finance.

These trends are sharper for Latin America. Grants have been a very minor part of external finance since the early 1960s. Other forms of public

resources also declined in importance during the 1970s. Private direct investment, which provided nearly one-third of all long-term external resources during the 1960s, accounted for little more than one-sixth by 1977-78. Private banks and other private financial institutions became the major suppliers of external finance.

Debt Accumulation and Servicing

The summation of net yearly borrowing flows yields the increase in non-OPEC third-world debt. Thus, according to Table 2, long-term debt to all official and private creditors must have increased by about \$203 billion between the end of 1973 and the end of 1979. The summation of net direct-investment flows yields the increment in foreign equity in the capital stock located within non-oil LDCs, ignoring capital gains and losses. Such equity has no predetermined repayment schedule, as debt has under present institutional arrangements, although it generates outflows of profit remittances just as debt generates outflows of interest payments.

Debt figures are often presented in a manner intended more to shock than to enlighten. Authors do not always explain the coverage of their data. One source of discrepancy among estimates is whether short-term (less than one year) debt is or is not included. At any one point, there is a large float of normal short-term credits that finance LDC imports; this stock grows with the increase of trade values, but it can be expected to provide little help in financing current-account deficits over the long run. Liquidity problems and short-term policy headaches may arise if normal commercial credits are suddenly curtailed, but this is not what most observers have in mind when discussing the "debt problem." Some countries, owing to legislative restrictions on long-term borrowing, may expand their short-term liabilities beyond normal trade requirements, but except for some spectacular cases, such as Venezuela, that practice does not seem to be widespread. On the other hand, estimates of long-term debt can be inflated by the inclusion of undisbursed portions of contracted loans.

A second major source of difference in reported debt figures is whether or not they include items other than those owed by official LDC borrowers and those which are officially guaranteed. The IMF *World Economic Outlook* of May 1980, for example, covered only official and officially guaranteed debt; the *Outlook* of June 1981 included a substantial amount (\$68 billion for 1980 and nearly \$80 billion for 1981) of private debt incurred without a guarantee from authorities in non-oil LDCs (see IMF, 1981a, p. 57). The summation of balance-of-payments data should give net increases in debt, whether or not officially guaranteed, but available stock data are not always fully consistent with the summation of balance-of-payments flows.

A third difference comes about from definitions of "net." Suppose, for

example, that all accumulated long-term borrowing from private financial institutions shown in Table 2 for 1974-79 (\$114 billion) came from banks that also held the accumulated increase of non-oil LDC reserves (\$53 billion). Reported *net* debt to those banks could then be said to have increased by \$61 billion. Data on private-bank positions vis-à-vis LDCs are frequently "netted" in this fashion.

Other differences may arise from geographical or other coverage. There has been a proliferation of ways of grouping third-world countries, even within old geographical units. The IMF has a category of "net oil exporters" within the group of "non-oil developing countries," and the "non-oil Western Hemisphere developing countries" are not the same as what used to be meant by "Latin America." Behind these confusions lies the growing heterogeneity of the third world. Aggregation, especially in the area of debt, has only a limited usefulness and can yield misleading or meaningless numbers.

The total outstanding long-term external debt of all non-oil developing countries, including unguaranteed private debt, rose from \$97 billion at the end of 1973 to \$323 billion at the end of 1979 (IMF, 1981a, p. 132), an increase roughly in line with the data in Table 2. That debt is calculated to have reached \$425 billion at the end of 1981. Private unguaranteed debt was 22 per cent of total long-term debt in 1973 and hovered around 19 per cent in 1979 and 1981. The corresponding figures for total long-term debt of non-oil Western Hemisphere developing countries are \$37 billion for 1973, \$134 billion for 1979, and \$175 billion for 1981. About half the total debt of all non-oil LDCs was owed to private creditors in 1973; that share had risen to 58 per cent by the end of 1981.

Debt has grown, but so have price levels, exports, and production. For all non-oil LDCs, the ratio of all long-term external debt to gross domestic product rose from 17 per cent in 1973 to a peak of 24 per cent in 1978; for 1981 it is estimated at 21 per cent (IMF, 1981a, p. 133). Relative to exports of goods and services, the debt was 89 per cent in 1973, 110 per cent in 1978, and 96 per cent in 1981. Viewed in this light, the growth of LDC debt appears significant but less terrifying. These ratios emphasize the obvious (but often forgotten) point that so long as output and exports continue to expand *pari passu* with debt, debt servicing should not generate major anxieties. It is noteworthy that for the group "major exporters of manufactures," accounting for nearly 40 per cent of all LDC long-term debt, the ratio of debt to exports of goods and services in 1980 was below the 1973 figure. Note also that around 1910 the Argentine public external debt amounted to 184 per cent of her merchandise exports, a figure compatible with the excellent credit rating enjoyed by Argentina (Beveraggi-Allende, 1954, pp. 51 and 60; see also Lewis, 1979, p. 26).

A longer and broader perspective on the burden to Latin America of servicing all accumulated capital inflows is presented in Table 3. Latin America came out of the 1930s and 1940s with little debt and some direct investment by residents of foreign countries. Pre-1929 debts and direct investment were sharply reduced relative to GNP and exports by defaults, renegotiations, nationalizations, inflation, and war-induced European liquidations. During 1950-54, profit remittances to direct foreign investors exceeded debt-service charges. Since then the latter have expanded steadily, even as a fraction of exports of goods and services. Profit remittances also tended to grow relative to exports until 1965-69; since then they have undergone a little-noticed but important decline. In 1974-76, profit remittances represented a lower percentage of exports of goods and services than during 1950-54. During 1977-79, that percentage rose again but remained below 1970-73 levels.

Under present institutional arrangements, as noted earlier, dollar inflation increases interest payments relative to amortization in the servicing of a given loan. Inflation may also shorten the average maturity of all debt, which will also be shortened as a result of a greater share of borrowing from private sources. Both of these factors can increase amortization relative to both exports and interest payments. Table 3 indicates a decline in amorti-

TABLE 3
NET FINANCIAL-SERVICE CHARGES TO NON-OIL LATIN AMERICA AS PERCENTAGES OF
EXPORTS OF GOODS AND SERVICES, 1950-79

<i>Period</i>	<i>Interest</i>	<i>Profits^a</i>	<i>Interest + Profits^b</i>	<i>Amortization^c</i>
1950-54	1.3%	5.9%	7.2%	2.8%
1955-59	2.3	5.2	7.5	7.2
1960-64	4.0	6.5	10.5	10.9
1965-69	5.5	8.8	14.3	13.7
1970-73	7.4	7.1	14.5	17.2
1974-76	11.1	5.5	16.6	19.1
1977-79	12.0	6.8	18.9	28.1 ^d

^a Includes earnings of direct investments by residents of foreign countries net of taxes, whether remitted abroad or reinvested domestically.

^b Interest and profits received by Latin American residents are netted from the payments made under these rubrics. For example, interest earned by Latin American central banks on their holdings of international reserves are deducted from interest payments on the external debt.

^c Covers amortization for both private and public debt of more than one year, but data on amortization of private debt *not* officially guaranteed are shaky for most countries.

^d Refers to 1977-78 only.

SOURCE: Naciones Unidas (1979, Table 4), kindly updated by Andres Bianchi.

zation relative to interest payments from 1955-59 until 1974-76; in the most recent years this trend was reversed.

The sum of interest and profits as a percentage of exports shown in Table 3 may be compared with the corresponding figures for "countries of recent settlement" before the Great Depression. During 1900-14, the corresponding figures were 39 per cent for Argentina, 22 per cent for Australia, and 24 per cent for Canada. During 1921-29, these three countries had somewhat lower ratios: 19 per cent for Argentina, 21 per cent for Australia, and 19 per cent for Canada. All of these historical percentages refer to interest and profits relative to merchandise exports (whose statistics are more comparable). For the countries shown in Table 3, merchandise exports were about 82 per cent of exports of goods and services. Even after adjusting for this fact, the interest and profit share in exports shown in Table 3 for 1977-79 is roughly comparable to those of pre-1929 "countries of recent settlement."⁶ These comparisons emphasize that the increase in LDC profit and interest remittances relative to exports registered during the last thirty years, particularly in the fastest growing LDCs, represents largely a readjustment by creditworthy borrowers to an international capital market reborn after the catastrophes of the 1930s and 1940s.

Private Banking

Private banks owned mainly by residents of industrialized countries proved to be the most dynamic agents in international capital markets during 1973-81. Those banks may be located in the country owning them, lending mainly in their own currency, or they may be located offshore, lending in their own and other currencies. The close interconnection among major national and international financial centers makes the distinction of only limited economic interest, although important for the implementation of possible controls and for jurisdictional disputes. Most of the banks engaged in international lending now report to the Bank for International Settlements (BIS), whose publications demonstrate the importance of major oil-exporting countries (mainly OPEC) and of other developing countries for international banking.

BIS reports also show the concentration of bank lending to a few countries. Brazil and Mexico together accounted for more than one-third of the banks' claims on non-oil LDCs at the end of 1980. Those two countries accounted for 56 per cent of the *net* claims of the banks on non-oil devel-

⁶ Argentine data were obtained from Beveraggi-Allende (1954, pp. 76 and 97). Australian data came from Butlin (1962, pp. 436-437). The percentages given refer to 1904 through 1913, and to 1920/21 through 1928/29. Canadian data came from Urquhart and Buckley, eds. (1965, p. 159). The Canadian averages refer to 1900 through 1913, and to 1920 through 1926. In all cases, data refer to net payments of interest and profits.

oping countries at the end of 1980. Other important non-oil LDC net borrowers include Argentina, Chile, Ecuador, Ivory Coast, Morocco, Peru, the Philippines, South Korea, and Thailand. On the other hand, a large number of LDCs, including those with very low per capita incomes, are net creditors of the international banks: their reserves deposited with those banks exceed the loans received. International banking has no more regard for interregional or interpersonal equity than has national banking.

The credit provided by banks is medium-term, that is, for seven years or so. Typically, interest is adjusted every six months; the borrower is committed to pay the fluctuating London interbank offered rate (LIBOR) *plus* a margin, the "spread," usually fixed for the full life of the loan. Some loans provide for an increase in spreads during the latter years to compensate for longer maturities and to allow for inflation. During 1981, the U.S. prime rate began to play an increasingly important role in the pricing of Eurocredits. Eurocredits to LDCs have been provided almost totally in dollars. Besides LIBOR (or the U.S. prime rate) and spreads, the borrower pays management and commitment fees. Some loan agreements also require borrowers to maintain compensating balances with the lending banks, but this is said to be unusual (see Mendelsohn, 1980, pp. 71-72).

Some indicators of lending conditions in the Eurocurrency market are presented in Table 4. It may be seen that LIBOR and the spreads fluctuate considerably from year to year. Maturities also fluctuate: they average 9 years and 3 months on new credits during the second quarter of 1979, falling to 7 years and 6 months during the third quarter of 1980 (IMF, 1981b, p. 42). At any one time, the spreads can be quite different across countries and across borrowers from the same country. (Spreads have been regularly published in *Euromoney* and the World Bank's *Borrowing in International Capital Markets*.) There have been several attempts to explain statistically differences in spreads across borrowing countries, without clear or definitive results so far. Spreads increase with the ratio of debt to gross national product or to exports (or with the debt-service ratio); spreads decline the higher per capita income, average loan size, length of the loan's maturity, and ratio of international reserves to imports. Centrally planned economies benefited from lower spreads until 1981. Subjective country ratings published by periodicals such as *Institutional Investor* also appear to have explanatory power. Sachs (1981, p. 245) has obtained an interesting negative link between spreads and the ratio of investment to gross domestic product. Authors involved in these pioneering researches emphasize the tentative nature of their results and the need for further work.⁷ It may also

⁷ Most of the work summarized in this paragraph is still unpublished. Authors include Ignazio Angeloni and Brock K. Short of the IMF and Cyrille Biancon of the Marine Midland Bank. A comparison of contemporary spreads with those registered in New York and London bond markets during the 1920s (and earlier) would be fascinating.

TABLE 4
INDICATORS OF LENDING CONDITIONS IN THE EUROCURRENCY MARKET, 1974-80
(in per cent)

Date	LIBOR	Spreads		
		France	All LDCs	Brazil
1974	11.32%	0.58%	1.13%	1.23% ^a
1975	7.74	1.42	1.68	1.70
1976	6.26	1.09	1.72	1.91
1977	6.54	0.92	1.55	1.96
1978	9.48	0.63	1.20	1.59
1979	12.12	0.39	0.87	1.08
1980	14.28	0.39	0.80	1.18

^a Refers to the last three quarters of the year only.

SOURCES: First three columns from World Bank (1980, p. 27). Brazilian data from Baptista (1980). Revised 1979 and 1980 data from IMF (1981b, p. 42) and World Bank (1981b, pp. 9 and 109).

be noted that besides country-specific characteristics, spreads are influenced by general market conditions such as degree of "confidence," as shown by the jump from 1974 to 1975.

Data on fees are more difficult to obtain than on spreads. Management fees are usually a flat percentage of the loan, ranging from 0.375 to 0.75 per cent, paid only at the time the credit arrangement is signed. Besides this "front end" fee, the borrower is usually committed to pay a facility fee at an annual rate on the undrawn portion of the credit that may range from 0.25 to 0.75 per cent. It is said that some borrowers trade off higher front-end fees for lower spreads, for the sake of prestige.

Do LIBOR, spreads, and fees clear the credit market in the same way that spot prices clear the markets for apples and blankets? There are both theoretical and institutional reasons to doubt it. If interest rates and other charges alone were used to allocate credit, those intending to default (expecting to get around legal penalties) would borrow as much as possible regardless of interest rates; this is the adverse-selection market imperfection. Banks try to protect themselves against dishonest borrowers both by investigating all customers and by limiting exposure to any one of them. In international lending, adverse selection is compounded by sovereign or country risk, because national bankruptcy laws and penalties do not apply (see Buiter, 1980, and Eaton and Gersovitz, 1981). Banks will prefer to discourage or limit some potential borrowers rather than charge them unusually high spreads or fees; in this sense, imperfect information leads to credit rationing. Large international banks also appear to have business interests going beyond purely financial transactions. This may partly explain

why banks charge spreads and fees on loans to certain countries that some observers regard as irrationally low on the basis of purely financial criteria; "moral hazard" imperfections may also contribute to such behavior, as discussed below.

Even with the addition of fees, the charges shown in Table 4 appear *ex post* quite attractive for average LDC borrowers. Bear in mind that dollar unit values for non-oil LDC exports rose during 1972-80 at an average annual rate of nearly 15 per cent, while those for LDC imports rose at more than 16 per cent per annum (IMF, 1981a, p. 115). Note, however, that the price increases were highly irregular from year to year, and across commodities and countries. These *ex post* results also compare quite favorably with interest charges of around 5 per cent on the Argentine external debt of 1900-14, at a time when international inflation averaged less than 2 per cent per annum. The *ex post* average borrowing costs for 1974-80 also compare favorably with reasonable estimates of the real return to investment in LDCs.

About two-thirds of non-oil Western Hemisphere LDC debt is owed to private creditors, mainly banks, and is subject to service charges and conditions similar to those described in Table 4 and in previous paragraphs. It is not surprising that fluctuations in LIBOR and spreads have joined variations in the prices of oil and export staples as front-page news in those countries. LIBOR fluctuations are followed by some LDC monetary authorities for another reason: a good share of their international reserves are deposited in international banks paying interest around LIBOR. For those countries, the cost of holding reserves is thus given approximately by spreads. Given the secrecy surrounding reserve management, it is not known how many countries follow such relatively bold policy, but their number is said to have grown throughout the 1970s (see "The LDCs Get Cash-wise," *Business Week*, Sept. 14, 1981, p. 100).

Ten banks are said to have arranged half of all publicized Eurocredits in 1976 and 1977, providing about one-quarter of the money themselves; twenty banks arranged two-thirds of the total while providing one-third of the money (Mendelsohn, 1980, p. 66 and pp. 81-82). Similar estimates for all international bank lending are not available. During 1978 and 1979, contradictory trends influenced the competitiveness of international banking. On the one hand, the freeze of Iranian assets deposited in U.S.-owned banks (regardless of the banks' location) and the resulting legal complications frightened smaller banks away from international lending. On the other hand, rivalry among banks of different nationalities increased. There was a sharp rise in the market share of banks not owned by U.S. residents. For Argentina, Brazil, Chile, Colombia, and Mexico, U.S. banks provided only 11 per cent of the net increase in lending between December 1977 and June 1979. For

all LDCs, including oil exporters, the corresponding share is somewhat smaller (near 10 per cent). Japanese and Italian banks are reported to have experienced an acceleration in their international lending; French, Dutch, Swiss, Canadian, British, and German banks also expanded their lending to LDCs. OPEC has been exploring the financial linkages generated by its staple; banks owned by major oil-producing nations appear to be expanding fast. During the first nine months of 1981, nearly one-third of all publicized Eurocurrency bank credits to non-OPEC LDCs came from Arab-led syndications (Morgan Guaranty Trust Company of New York, 1981, p. 13). Following its demands for more of a share in refining oil, OPEC strives now to do more of the "refining" of its petrodollars.⁸ Even banks owned by residents of non-oil LDCs appear to have increased their international activities.

The financial press has reported that rescheduling the large Polish debt in 1981 involved about 460 private banks; even rescheduling the Bolivian debt involved about 130 banks. It is true that the number of influential actors on both sides of the market is much smaller, so there is a considerable presence of "customer relationships." Major lenders appear to consult each other regarding such matters as expected (or desired) Brazilian economic policy. Syndicated lending provides a framework for consultation among banks and the establishment of oligopolistic leadership and hierarchy. But actual and potential new entrants, of a variety of nationalities, hovering at the fringes of the market have helped to maintain competitive pressures that many bankers and bank regulators regard as excessive.

Other Lenders

Important shares of the debt of non-oil Western Hemisphere LDCs are still held by foreign governments and international lending agencies, as well as by private creditors other than financial institutions. These private creditors include bondholders and others who lent at fixed interest rates. Typically, the servicing conditions of the official lenders are more favorable, with longer maturities and lower and fixed interest rates.

It was seen earlier that even floating interest rates did not on average keep up with inflation during the 1970s. Beyond this, debt negotiated at fixed interest rates before inflationary expectations became widespread (say, before 1974) generated capital gains for borrowers. Countries like Colombia obtained significant benefits from a debt structure heavy with fixed-interest obligations to institutions such as the World Bank. A share of such debt,

⁸ See "Arab Banks Grow: A Tool to Control the World's Capital," *Business Week*, Oct. 6, 1980, pp. 70-84. The title and tone of this article produced a spirited response from the Secretary General of the Arab Bankers Association, printed in the *Business Week* issue of Nov. 10, 1980, p. 6.

however, was negotiated in currencies other than U.S. dollars, and effective interest rates on that share will be influenced by fluctuations in, say, dollar/Deutsche mark exchange rates. Even if both purchasing-power and interest-rate parities hold between the United States and Germany over the long run, short- and medium-term uncertainties regarding debt-service magnitudes will not subside.

Average interest and amortization charges for a given country will then depend on the exact mix of debt—how much is old and how much new, how much is public and how much private. Average debt maturity could shorten even as Eurocurrency lenders to a country extend the maturities of their loans. A rough idea of average interest and maturity conditions for the whole debt of non-oil Western Hemisphere countries can be obtained by comparing interest and amortization payments to the stock of outstanding debt. For Latin America as a group, the average interest charges are of course more favorable than those shown in Table 4.

During 1974-80 as a whole, average interest rates on the Latin American debt were no higher than plausible estimates for annual increases in dollar prices for the region's exports and imports. This indicates that inflation-proof accounting would include at least all registered interest payments as amortizations in the capital account of the balance of payments. Excluding all interest payments from the current account would yield much lower estimates of the deficit of non-oil Latin America as a percentage of profits. For example, in 1979 the actual current-account deficit was 34 per cent of merchandise exports; excluding net interest payments, the corresponding figure would be 22 per cent.

The nature and conditions of loans from multilateral official sources have also evolved during the 1970s, although more slowly than those from private sources. The World Bank and regional banks have devised new ways of associating their loans to private capital, whether from banks or private direct investors. The forms of association range from parallel lending to formal cofinancing. In politically sensitive areas, such as energy and mineral projects, this association may grow in the future. The World Bank could move toward program lending, perhaps in combination with the IMF, whose modest participation in financing LDC deficits from 1973 to 1980 is reflected in Table 2. These trends respond to pressures on the international financial system generated not only by OPEC but also by changes in bargaining power between LDCs and foreign investors. But before turning to an examination of these systemic issues, a few words are needed regarding trends in LDC savings and investments.

Borrowing gives flexibility today, but if the funds are unwisely managed, it will decrease flexibility tomorrow. The management and instrumentation of LDC borrowings have been highly diverse, so one can expect variety in

the impact of the opening of international financial markets during the 1970s on individual economies and societies. Earlier, we noted the relatively good export performance of major LDC borrowers during 1973-80. Here we limit our discussion to their savings and investment performance.

Data on LDC savings and investments are much weaker than those on exports, and they are available with a longer lag. Such as they are, available estimates indicate that gross domestic investment in oil-importing middle-income LDCs grew during the 1970s at a median rate exceeding that of private consumption, although below the expansion of public consumption (see World Bank, 1981a, p. 140). Growth of gross domestic product for these countries during 1970-79 averaged 5.5 per cent per annum, also ahead of the growth of private consumption but below that of public consumption.

Aggregate savings rates for major Latin American countries are presented in the 1979 Report of the Inter-American Development Bank (p. 63). Only three countries show a decline in savings rates relative to the late 1960s. In view of the fact that domestic savings are probably underestimated because balance-of-payments accounting was not inflation-proof, the savings performance of these countries seems adequate. Sachs (1981, pp. 243-244) hypothesizes that the increased LDC current-account deficits since 1973 fundamentally reflect rising investment rates in excess of rising or stable savings rates. Data limitations make it impossible to confirm this hypothesis, or to evaluate the quality of such investments, but there is much less support for the competing pessimistic conjecture that most LDC borrowing has gone to finance unsupportable consumption levels.

4 Systemic Issues for the 1980s

Even before the 1979-80 oil-price increase, criticism was leveled at the volume, direction, and mechanisms of international financial intermediation, casting doubts on their soundness and durability. These doubts and criticisms became sharper as the new oil-price increase placed additional demands on capital markets. This section first sketches how circumstances after 1973 induced changes in academic and practical orthodoxies and heterodoxies. It then outlines major criticisms of international financial markets as they operated from 1973 to 1980. An evaluation follows of the probable importance of capital-markets imperfections during the 1980s and of possible changes in the roster of gainers and losers resulting from those flaws. Some proposals to correct key distortions are also discussed.

Shifting Orthodoxies and Heterodoxies

The expansion of international capital markets, the adoption of floating exchange rates, and the macroeconomic difficulties of many industrialized

countries have encouraged the reexamination of academic and practical orthodoxies, as well as of some Southern heterodoxies. As early as the late 1950s, Northern academic centers witnessed a rebirth of interest in monetary and financial topics. Northern macroeconomic and monetary theories were sharply debated during the 1960s, leading to a surge of neomonetarist and neoclassical interpretations in the 1970s. There is no longer a monolithic Northern academic or even practical orthodoxy on such issues as the desirability of flexible exchange rates, optimal controls over capital movements, the correct strategy to combat inflation, or the necessity to regulate the Eurocurrency market or even national banking systems. In these matters there is a "great disorder under heaven." So one may hear Raul Prebisch castigate the evils of international inflation with greater vigor than James Tobin and find that Robert Mundell defends fixed exchange rates with greater ardor than Antonio Delfim Netto. Many Northern economists discuss both inflation and balance-of-payments deficits using structural approaches similar to those emanating from Latin America during the 1950s. Supply-side economics is invoked in favor of more conservative policies in the North and of easier IMF lending conditions for LDC borrowers. At a more practical level, it is not unusual to find Southern exporters, together with Northern bankers, worrying about debt service and singing the praises of freer world trade, while Northern trade unionists, together with some "progressive" academic advisers, rediscover all sorts of heterodox arguments for protection.

Financial intermediation rose to preeminence in some Latin American countries with the blossoming of international capital markets. A practical orthodoxy developed that preached "the more financial intermediation the better." Gurley and Shaw (1967) popularized correlation measures between the degree of financial modernization and indices of economic development. McKinnon (1973) argued vigorously against "financial repression." In the 1970s, a new breed of technocrats rose to policy-making positions in Argentina, Chile, and Uruguay and started implementing policies of financial liberalization. Brazil and Mexico followed more pragmatic policy courses, but in both countries foreign finance strongly influenced the rhythm of economic activity and the nature of government policy-making during the 1970s.

A substantial increase in the share of financial intermediation, as well as a tendency toward the centralization of capital, in the hands of economic groups with a banking basis seems to have occurred in Latin America. "Old" industrialists lost economic power to "new" financiers. Some Latin American economists feared that the banking sector would go through a process of denationalization, as multinational banks benefited from deregulation to enter a market where previously only domestic residents were allowed.

However, domestic economic groups proved to be more active than these economists anticipated; financial liberalization apparently took place by means of new forms of association between domestic and foreign capital rather than by a massive takeover of the former by the latter.

Openness to international financial markets caused a progressive loss of government control over monetary aggregates that confused policy-makers and economic analysts alike. Old-style monetarists had to recycle themselves to get rid of their preoccupation with active monetary policy, reluctantly accepting the idea of an endogenous money supply. Structuralist economists, on the other hand, had to wrestle with their old support for passive money to become partisans of sterilization policies in the context of a financially open economy.

In Argentina, Chile, and Uruguay, the "new Chicago" eventually prevailed over the "old Chicago," and policy-makers there, while furthering the processes of trade and financial liberalization, started seeking fixed nominal exchange rates as well as lower budget deficits. Pragmatism continued to characterize Brazilian and Colombian policy-making. With varying degrees of success, these countries attempted to stick with a crawling peg without explicit targets and to maintain sovereignty over the monetary base by restricting access by domestic residents to international financial markets. Mexico wanted to follow a similar path, but its geographical and economic proximity to the United States made the task of avoiding currency substitution much more difficult there than in Brazil or Colombia.

Financial Markets in the 1970s: Sound or Flawed? Heroes or Villains?

Because Eurocurrency banks can create credit by the beep of a computer and are not subject to official reserve requirements, fears of explosive credit multipliers originating in those banks were often expressed during the 1970s. Closer analysis has shown that leaks from Eurocurrency markets to national credit systems sharply limit the aggregate credit-creating potential. The Eurocurrency market can be said to have increased the efficiency of worldwide financial intermediation, so that by making possible a more efficient use of a given world monetary base it does add to international liquidity. But it is now generally concluded that estimates of world money supply with and without a Eurocurrency market differ by only a few percentage points. Therefore, proposals for macroeconomic controls over bank lending, such as a universal reserve requirement, have been downplayed recently (see Swoboda, 1980).

Financial panics during the 1930s led many industrialized countries, notably the United States, to insure depositors at modest charges against the consequences of bank failures. This policy was intended to prevent the chain effects of runs on banks and consequent credit collapses. National

central banks, as the ultimate insurers of deposits and as lenders of last resort, began in turn to inspect and regulate the lending activities of private banks. This made good sense; private banks would otherwise have tended to run excessive risks, relying on the security provided by the new policies. The aim was to make the financial system less prone to massive failures while maintaining discipline and lending standards, or what in the literature is known as limiting the problem of "moral hazard" intrinsic in any insurance scheme. Some observers have argued that insurance charges have been too low and regulation too lax, on balance encouraging excessive risk-taking, some of it in foreign lending. Others have noted that even when deposit insurance is not explicitly present, as in the case of banks in the Eurocurrency market, there is a widespread feeling that Northern governments (and the U.S.S.R.) will rescue important large borrowers and lenders in serious trouble, a feeling that reduces discipline in financial intermediation. Gloomier critics have alleged that, in the absence of explicit rules about who should act as lender of last resort at times of acute financial stress, overlending by overconfident banks could lead to a major financial crash.

Note that market failures arising from moral hazard offset lending restrictions generated by the adverse-selection and country-risk problems. A given borrowing country may benefit or suffer more from one than the other. Whether the two combined net out to "too much" or "too little" aggregate international lending is moot. It is also debatable whether the U.S. government is more or less likely to "bail out" the bank debts of Chrysler Corporation and New York City than those of Turkey or South Korea. Yet the fact remains that during the 1970s there was less supervision over Eurocurrency lending than over domestic lending, and no major disaster resulted.

During the 1970s, international markets financed long-term investments with short- or medium-term loans whose average real maturities were, as a result of inflation, even shorter than nominal maturities. The markets therefore witnessed substantial rolling over of credits, and LDC finance ministers spent a good deal of their time nervously programing gross financial flows. The process was, on the whole, managed well, but it created feelings of vulnerability and instability. Private banks cannot be expected to stray far from profit-maximizing behavior and limited risk-taking, and their preference for short horizons has been reinforced by persistent and erratic inflation in the central currency used for international payments. Therefore, the maturity transformation that banks can be expected to perform will remain limited. While financing long-term investments with short-term credits is hardly without historical precedent, it cannot be said to be optimal.

Views differ on whether the rolling over of international credits should be regarded as being nearly automatic or subject to a range of decisions up to and including abrupt cessation by the banks. Some observers fear that the former attitude would imperceptibly shade into tolerating automatic rescheduling of bad loans, which would reduce the liquidity of banks and limit new borrowers. Bank regulators will have to treat refinancing differently from rescheduling, charged as they are with the thankless task of unambiguously telling them apart. But certainly in the aggregate, and very likely for most countries, the rolling over of bank credits to LDCs must be viewed as an expected and normal process for many years, barring depressions and wars, including economic wars.

It was noted earlier that the bulk of credit mobilized during the 1970s by international capital markets went to a handful of dynamic semi-industrialized countries. The poorest LDCs were not regarded as creditworthy, so they received very few of the funds made available by international banking. The Brandt Commission has further argued that private financial markets have a number of important gaps that limit their usefulness even to semi-industrialized countries (Independent Commission on International Development, 1980, Chaps. 14 and 15).

In spite of their imperfections and gaps, the Eurocurrency market and international bank lending during the 1970s displayed a number of features that compare favorably with earlier capital-market arrangements from the viewpoint of at least some important semi-industrialized countries, as well as several socialist countries. Probably no international capital market in history enjoyed a lower degree of political interference, to the dismay of cold warriors and "strategic minds" like Henry Kissinger's. As already noted, competition among banks was keen, and *ex post* interest rates and charges were not unreasonable. At the same time, the enterprise and risk-taking of private bankers was rewarded; their businesses expanded and no one went bankrupt lending to the LDCs. In contrast with the pre-1929 Brazilian experience in the New York market, members of the "Bogotá group," which combined major coffee producers, borrowed freely to finance their price-stabilization operations (Perry *et al.*, 1981). Officials in several semi-industrialized countries ignored IMF advice without seeing their external credit lines dry up. Several oil-importing LDCs were able to avoid abrupt and deflationary adjustment to post-1973 circumstances, a type of adjustment of doubtful desirability from either their national or an international viewpoint. Without the credit resources made available by international financial markets, this policy option would have been less feasible. Most funds lent by international banks, in contrast with those available under either concessional finance or suppliers' credits, were untied to either goods or countries. The more transparent and unpackaged nature of these bank loans

may have reduced frictions and recriminations between debtor and creditor countries.

We conclude that, on balance, semi-industrialized countries were helped during the 1970s by the emergence and expansion of private international financial markets. True enough, private credits were more costly and shorter-term than official bilateral or multilateral finance. However, volumes were larger, procedures were more expeditious, and looser strings were attached, both at the political and at the economic-policy levels. Of course, the opportunities created by the new international capital markets may not generate welfare gains in every borrowing country. Funds may be raised cheaply but spent so foolishly as to create repayment problems, and the availability of external finance can lead to lower domestic savings. By changing the nature of external economic incentives and penalties, the fluid international financial market nudged Latin American and other LDC economies into a new mold during the 1970s. In principle, it extended the range of options opened to economic policy-making, providing new opportunities for economic gain. But it also shaped the system of economic incentives in particular directions and induced some shifts of relative economic power within countries. In this context, the rules of access established by domestic policy-makers seem to have been a basic determinant of the short- to medium-term economic and social consequences of financial openness.

The 1980s: Hangover, Penance, and Purges?

The 1970s witnessed a long-delayed return to a more open international capital market. During that decade, several countries with attractive capital-formation possibilities and underutilized debt capacity were "catching up" to their natural status as large borrowers. In the late 1960s, private lenders in industrialized countries with an international horizon had very unbalanced portfolios, with too little LDC debt; they, also, were ripe for catching up. The oil-price increase of 1973-74 may be viewed more as catalyst than cause of the acceleration in international financial intermediation. OPEC's catalytic role may have had less to do with increasing the world's propensity to save than with reallocating liquid funds toward financial intermediaries whose unregulated status gave them a particularly internationalist outlook. It may also be conjectured that oil-price increases tilted the relative profitability of new investments in favor of some middle-income LDCs and against industrialized countries.

Stock adjustments are once-and-for-all affairs, but only *ex post* can one be sure that they have been completed. The process of portfolio adjustment has been untidy and undertaken in the midst of turbulent international economic circumstances. Even before the new strains introduced by the 1979-80 oil-price increases, it appeared likely that international financial

intermediation during the 1980s was bound to differ in volume, instruments, and geographical patterns from the 1970s performance and that some institutional tidying up would be undertaken. Projecting major international economic variables into the 1980s is a highly speculative game without solid procedures for deciding on the most likely outcome, so we will not attempt to forecast real oil prices, the degree of OECD protectionism, or OECD and LDC gross national products. Instead, we will discuss some major areas of LDC concern regarding international financial intermediation in the 1980s, assuming neither boom nor catastrophe in those key variables.

A major uncertainty for LDC borrowers looking at the 1980s is whether the low or even negative real rates of interest prevailing during the 1970s will return. Some long-term theories of interest rates would indicate that the 1970s situation was anomalous, the result of unexpected inflation. This view is strengthened by noting that OPEC countries may prefer to leave oil underground, where it could earn a positive real rate of return, unless they can obtain similar rates of return on their financial investments. Recognition of OPEC calculations plus a desire to control inflation, to check balance-of-payments deficits, and to maintain the position of the dollar as the dominant international currency induced a political atmosphere in the United States supportive of tighter credit policies in 1980 and 1981. Given the high degree of international capital mobility, major industrialized countries have been under pressure to follow similar policies; some complain loudly about the need to do so, including some that advocated those policies during the 1970s. Up until recently, most LDC borrowing was denominated in dollars; had it been denominated in Deutsche marks, *ex post* real interest rates during the 1970s would have been higher. The argument is that during the 1980s LDC borrowing conditions will tighten, either because more of the borrowing will be denominated in currencies likely to strengthen against the dollar or because U.S. monetary policy will be more restrictive than it was in the 1970s. Finally, Chinese and Indian borrowing during the 1980s could add substantial demand pressure on financial markets.

Will the extravagant real rates of interest registered during 1981 persist during the rest of the decade? Or, even if they decline, will positive real rates be the rule during the 1980s? Perhaps. Negative real rates of interest, especially after tax, have managed to reappear and persist for long periods in many countries. Macroeconomic disturbances may call for negative interest rates as part of the adjustment mechanism, contrary to long-run considerations. Such macroeconomic short runs, put back to back, can stretch out for many years. Some of those making OPEC production decisions may be maximizing family wealth placed in London or Zurich rather than their

country's social wealth and may not keep oil in the ground to benefit future generations. Political considerations will place lower as well as upper bounds on oil production. Consider the famous scenario in which low returns on financial surpluses induce OPEC to cut oil output, leading to price increases, which, given inelastic demand, raise investible financial surpluses, motivating further production cutbacks and so on. It is unlikely that such a sequence could proceed very far without political repercussions.

While economic history, particularly in the United States, provides a well-documented negative correlation between the level of current-period inflation and real interest rates, careful tests of theories about real interest rates caution against generalizing from this correlation. The hypothesis that real interest rates are governed only by their own past history, with no separate influence coming from money or prices, cannot be rejected (Litterman and Weiss, 1981). One may conclude that there is a presumption that real interest rates will be higher during the 1980s than during the 1970s, but, given the state of macroeconomic art, the uncertainty regarding this forecast is substantial.

Higher spreads over prime rates for LDC borrowers are also foreseen by some. The argument is that major international banks have already allocated what they or their regulators regard as high shares of their portfolios to LDC debt, so any further increase (if forthcoming at all) has to be compensated by higher rewards for risk-taking. During the last two years, the financial press and some authorities have called attention to the deteriorating capital-asset ratios of some banks engaged in international lending. Typically, it is concluded that higher spreads and profit margins are needed to expand banking capital.

These considerations appear to assume that the entry of new banks into international lending is slow, and that banking capital cannot grow by means other than the reinvestment of profit. These assumptions are debatable. During the 1970s, the entry of Japanese banks gave a significant impetus to Eurocurrency lending. As indicated earlier, a sharp increase in the presence of Arab banks seems to be on the way in the early 1980s.

The microeconomic rationale for rigid rules of thumb about capital-asset ratios or ceilings on portfolio shares is obscure at best. In practice, U.S. and non-U.S. banks have very different ceilings and ratios; even within the United States, there are substantial differences in the capital-asset ratios of money-center banks and other banks (see Wallich, 1980, pp. 2, 3, and 13, and IMF, 1981b, p. 13). In the rapidly changing international banking industry, banks following, or being forced to follow, rigid rules of thumb are more likely to lose market shares than to influence spreads decisively. Yet, in the short run, considerable inconvenience may be inflicted on some borrowers by the existence of such rules. The Managing Director of the IMF

has warned that prudential regulations or balance-of-payments measures in industrialized countries should avoid disrupting international financial intermediation (de Larosière, 1980). He also observed that there has been no serious decline in average capital ratios for banks in major financial centers in recent years; that the share in banks' gross external assets represented by loans to non-oil LDCs did not rise significantly during the last decade (remaining at around 17 per cent); that the loan-loss experience in lending to LDCs has been as good as or better than that of domestic lending; and that the safeguards to the underlying stability of the financial system seem stronger today than a decade ago. Each borrowing country can expect, of course, that fluctuating spreads and fees will help to match the banks' desired portfolio shares to its debt plans.

The 1980 war between Iraq and Iran highlighted the vulnerability of economic forecasts to the delicate political situation in the Middle East. A number of ideas have been put forward in recent years to increase the resilience of the international financial system to such shocks. The variety of motivations and specifics is large; here it will be enough to focus on some possibilities that give special cause for concern to major LDC borrowers.

It is remarkable, at first sight, how some private bankers, complaining that "the market is out of (their) control," plead for more official lending to LDCs (i.e. seek actions that can take business away from them) and argue in favor of greater bureaucratic supervision, such as a larger IMF role in the lending process. Often the same bankers will maintain that central banks should stay out of the foreign-exchange markets. One may contrast this puzzle with the one generated by OPEC exhorting its customers to conserve oil. What some private bankers appear to seek is a "rationalization" of lending under IMF planning to reduce "cutthroat" competition. Note that this has already been achieved for state-subsidized and insured export credits in OECD countries, where the countries agree to guidelines on interest floors, maximum credit periods, and minimum cash payments. These controlled credits, tied to the sale of each OECD country's products, are expected by some observers to grow during the 1980s at a faster rate than untied private bank loans.

Other Northern observers have also suddenly begun noticing externalities and distortions in international financial intermediation, imperfections which of course have been there, and in many other international markets, all along. From this ferment, proposals may emerge to regulate private financial flows to non-oil LDCs (and *a fortiori* to Socialist countries), possibly under the IMF and World Bank umbrellas and including in the regulating coalition the OPEC members with the largest financial surpluses. OPEC participants would obtain "sound and renumeration financial assets," while Northern private banks would enjoy "orderly market conditions" in

which higher interest costs and spreads could be passed on to borrowers with nowhere else to go. Industrial countries would obtain steadier oil flows as OPEC traded oil that it would have kept underground for the safe financial asset. The poorest LDCs could be induced, with modest side payments, to give an appearance of legitimacy to such a reestablishment of centralized Northern control over international financial flows. Note that part of the motivation for the proposed Substitution Account at the IMF was to meet OPEC's dissatisfaction with available financial assets. This scenario would be the counterpart of the coalition between OPEC and the traditional oil multinationals, which operates with great tensions and frictions but has been enormously profitable for both sides so far.

Unless a major international political crisis threatens to induce an old-fashioned financial panic, a thoroughgoing cartelization of capital markets is unlikely to be realized. As with transnational corporations, banks of different nationalities maintain rivalries that are not easily reconciled. Episodes like the one in 1974 involving the Herstatt Bank of Cologne established the precedent that the authorities in each country would take care of the problems of banks owned by its citizens, no matter where those banks are located. This approach does not provide a fail-proof lender of last resort at the international level, but it eliminates the most salient brittleness of international banking. Naturally, this commitment has been accompanied by closer supervision of the portfolios of private banks and the stipulation that banks provide consolidated balance sheets covering all their worldwide operations.

During the late 1970s, the IMF was on the whole an ineffective bystander in the process of recycling oil surpluses to major LDC borrowers. Years of obtuse and dogmatic IMF staff work, especially in its Western Hemisphere department, induced key LDCs to stay away. Only countries without options sought resources from the Fund, and such adverse selection reinforced that institution's wicked-witch image. One important side effect of the 1970s expansion of international financial markets was to put pressure on the bureaucracy of the IMF (and to a lesser extent on the bureaucracies of the World Bank and regional banks) to rethink rigid policies, under pain of losing their legitimacy by having no dealings with some of the most important LDCs. It is debatable whether Brazil and India need the IMF more than the IMF needs them.

During 1980, the IMF undertook to adopt more flexible lending conditions and to enlarge its lending capacity by borrowing from Saudi Arabia and possibly from private markets. The emergence of this new IMF was slowed down in 1981 by the magical practical orthodoxy emanating from the White House. The systemic need for a strong IMF to act as lender of last resort for national central banks, even as these banks act as lenders of

last resort for banks of their nationality, will probably lead to an eventual continuation of the trend started in 1980. Similar considerations apply to proposals for expanding lending mechanisms at the World Bank and regional banks.

As long as these trends do not significantly limit the options opened to LDC borrowers by private international financial markets (i.e. threaten to move in the direction of an international credit cartel, or crowd semi-industrialized borrowers out of those markets), LDCs could benefit from them. The major benefit would probably derive from the insurance LDCs could obtain against widespread financial panics and from the influence such insurance could exert on the supply price of credit. Uncertainties surrounding the process of rolling over the debt to private banks, one of the key preoccupations of LDC borrowers, could be alleviated. The poorest LDCs, many of which are likely to remain uncreditworthy in private markets during the 1980s, could greatly benefit from enlarged lending capacity in the World Bank and regional banks, as well as from a more flexible IMF. Semi-industrialized countries may marginally benefit from mechanisms in the World Bank and regional banks that fill the gaps likely to remain even in well-developed financial markets.

The process of setting the rules of the game for international financial intermediation during the 1980s will involve old and new capital exporters and could also be heavily influenced by major borrowers. Countries like Argentina, Brazil, Mexico, Spain, and Venezuela are not quite small price-takers in international capital markets. As a result of their "borrowing power," they could have much to say, especially if they acted together, regarding not only the evolution of the IMF and the World Bank during the 1980s but also the regulations under which private international banks will operate.

5 Conclusions

The tone of this essay reflects an economic and financial outlook for LDCs that is moderately optimistic relative to catastrophic scenarios and moderately pessimistic relative to repeating the favorable performance of the 1970s. Major LDC borrowers will face less auspicious borrowing conditions, and the net capital inflows they will obtain will be smaller relative to their gross national products. Developing countries whose indebtedness remained modest during the 1970s, however, could expand their borrowing faster in the future. The growth rates of the gross national products of major semi-industrialized borrowers could decline, even relative to those of 1973-80, while pressure to expand exports and restrain imports will continue. Regardless of financial considerations, the adjustment to higher real energy

prices will involve significant costs. The outlook for the poorest LDCs remains somber and their need for concessional finance great.

The structure of international financial intermediation that evolved during the 1970s is quite different from systems witnessed earlier in the history of the international economy. It reflects both the absence of an undisputed political authority and unprecedented economic circumstances such as persistent and variable inflation. Under these conditions, the intrinsic informational imperfections of any capital market, whether in an Indian village or in London, become aggravated. Yet, as often happens, proposals to correct market imperfections may make matters worse, at least for some. This essay has argued that semi-industrialized LDCs may prefer capital markets as they have been to many of the alternative reform scenarios.

Evolutionary changes in international financial markets will of course continue during the 1980s. Much room remains in those markets, especially in bond markets, for innovation and experimentation. Persistent international inflation and instability in key exchange rates could lead to financial claims that are somehow indexed and denominated in currency baskets. Initiatives and experiments in these areas are probably best left to individual borrowers and private financial agents rather than to official international ones. Troubled macroeconomic circumstances are likely to persist during the 1980s, and neither LDC borrowers nor most other countries are likely to benefit over the long term if creditors are given an assurance of a substantial positive real rate of interest, backed by the international community represented by the IMF or the World Bank. The World Bank and regional banks, however, could profitably innovate to fill gaps in international capital markets, as do institutions such as the Export-Import Bank and the Small Business Administration in the United States.

Unexpected shocks jeopardizing the servicing of debt have been clumsily handled by international financial markets throughout their history. Few debt contracts have had enough built-in flexibility in repayment and interest schedules to handle unforeseen contingencies. Even the most impartial observers seeking causes for default have often had difficulty sorting out sheer incapacity to pay from bad faith, bad luck from perfidy, and *ex ante* good investments from bad ones. Defaulters suspected by international lenders of bad faith, and worse, have included not only Latin American republics but the states of Mississippi and Pennsylvania (see Sampson, 1981, pp. 48-50). The rescheduling system that has evolved during the 1970s and early 1980s contains a number of weaknesses, yet on the whole it has avoided traumatic defaults and repudiations. Attempts to lay down universal and explicit rules for rescheduling debt, such as requiring an IMF presence in all circumstances, appear misguided under present conditions. Note that some delicate rescheduling exercises, like that involving Nicaraguan debt

as it stood in July 1979, were concluded to the satisfaction of debtors and creditors without an IMF presence.

National laws and practices regulating the operations of banks differ greatly across countries, and the 1980s are likely to witness a convergence of fine tuning of those regulations in industrialized countries. There may be further clarification of lender-of-last-resort responsibilities, although moral-hazard considerations will inevitably limit their explicitness. Beyond these trends, a major overhaul in the regulatory machinery seems neither warranted nor desirable from the viewpoint of borrowing LDCs.

Could matters become much worse for major LDC borrowers? What if OECD countries allow steep declines in their gross national products, turn to 1930s-style protectionism, or refuse to allow their banks even to roll over or reschedule LDC debts, perhaps as a spillover from a rebirth of East-West economic warfare? In the spirit of the "scarce currency clause" of the IMF Articles of Agreement, LDCs would have little choice under those circumstances but to suspend the servicing of their debt, subject to negotiations, and to follow more inward-oriented policies, perhaps revitalizing third-world integration schemes. Gains from international specialization would decline, but even then many LDCs could maintain reasonable growth rates. The largest semi-industrialized countries would be in a better position to handle such a shock than the smaller LDCs, although the specific energy situation of each country would also heavily influence its performance. Even under those circumstances, most LDC debtors would want to maintain substantial commercial, financial, and technological links with Northern economies, which would discourage them from repudiating their debt. Schemes for re-funding the LDC debt, such as that proposed by Fishlow (1978, pp. 67-68) would then become very attractive.

References

- Almonacid, Rubén, and Mariã Cristina R. Pinotti, "A inflação internacional distorce os dados do balanço de pagamentos do Brasil," *Conjuntura Econômica*, 34 (January 1980), pp. 80-84.
- Baptista, Paulo Nogueira, Jr., "Dívida externa brasileira," *Conjuntura Econômica*, 34 (April 1980), pp. 86-92.
- Beveraggi-Allende, Walter M., *El servicio del capital extranjero y el control de cambios*, Mexico City, Fondo de Cultura Económica, 1954.
- Buiter, Willem H., "Implications for the Adjustment Process of International Asset Risks: Exchange Controls, Intervention and Policy Risk, and Sovereign Risk," Cambridge, Mass., National Bureau of Economic Research Working Paper No. 516, July 1980.

- Butlin, N. G., *Australian Domestic Product, Investment and Foreign Borrowing, 1861-1938/39*, Cambridge, England, Cambridge University Press, 1962.
- de Larosière, J., "Recycling Needs and the Capital Markets," *IMF Survey* (Nov. 10, 1980), pp. 346-351.
- de Paiva Abreu, Marcelo, "A Missão Niemeyer," *Revista de Administração de Empresas*, Rio de Janeiro (July/August 1974).
- , "O Brasil e a economia mundial 1929-1945," Rio de Janeiro, 1980, processed.
- Dornbusch, Rudiger, "Consumption, Opportunities and the Real Value of the External Debt," Cambridge, Mass., Massachusetts Institute of Technology, Sept. 1980, processed.
- Eaton, Jonathan, and Mark Gersovitz, *Poor-Country Borrowing in Private Financial Markets and the Repudiation Issue*, Princeton Studies in International Finance No. 47, Princeton, N.J., Princeton University, International Finance Section, June 1981.
- Fishlow, Albert, "A New International Economic Order: What Kind?" in A. Fishlow et al., *Rich and Poor Nations in the World Economy*, New York, McGraw-Hill, 1978.
- Freedman, Charles, "A Note on Net Interest Payments to Foreigners under Inflationary Conditions," *Canadian Journal of Economics*, 12 (May 1979), pp. 291-299.
- Frisch, Winston, "1924," *ANPEC VII Encontro Nacional de Economia*, Atibaia, São Paulo, December 1979, Vol. 2, pp. 673-732.
- Furtado, Celso, *Economic Development in Latin America: A Survey from Colonial Times to the Cuban Revolution*, Cambridge, England, Cambridge University Press, 1970.
- Gardner, Richard N. *Sterling-Dollar Diplomacy in Current Perspective: The Origins and the Prospects of Our International Economic Order*, New York, Columbia University Press, 1980.
- Gerschenkron, Alexander, *Economic Backwardness in Historical Perspective: A Book of Essays*, Cambridge, Mass., Harvard University Press, 1962.
- Gurley, John, and Edward Shaw, "Financial Structure and Economic Development," *Economic Development and Cultural Change*, 15 (April 1967), pp. 257-268.
- Independent Commission on International Development, *North-South: A Programme for Survival*, London, Pan Books, 1980.
- Inter-American Development Bank, *Economic and Social Progress in Latin America, 1979 Report*, Washington, D.C., 1979.
- International Monetary Fund, *World Economic Outlook: A Survey by the Staff of the International Monetary Fund*, Washington, D.C., June 1981a.
- , *International Capital Markets: Recent Developments and Short-Term Prospects*, Washington, D.C., August 1981b.
- Keynes, John M., "National Self-Sufficiency," *Yale Review* (June 1933), pp. 755-769. (Also published in *Studies*, Dublin, 1933, pp. 177-193.)
- , *The General Theory of Employment, Interest, and Money*, London, Macmillan, 1936.

- Kindleberger, Charles P., *Manias, Panics and Crashes: A History of Financial Crises*, New York, Basic Books, 1978.
- , "The Cyclical Pattern of Long-Term Lending," Cambridge, Mass., Massachusetts Institute of Technology, 1980, processed.
- Lewis, Arthur, "The Less Developed Countries and Stable Exchange Rates," *Third World Quarterly*, 1 (January 1979), pp. 18-29.
- Litterman, Robert B., and Lawrence Weiss, "Money, Real Interest Rates and Output," Federal Reserve Bank of Minneapolis, September 1981, processed.
- McKinnon, Ronald, *Money and Capital in Economic Development*, Washington, D.C., the Brookings Institution, 1973.
- Massad, Carlos, and Roberto Zahler, *Dos estudios sobre endeudamiento externo*, Santiago de Chile, Naciones Unidas, 1977, pp. 43-60.
- Mendelsohn, M. S., *Money on the Move: The Modern International Capital Market*, New York, McGraw-Hill, 1980.
- Morgan Guaranty Trust Company of New York, *World Financial Markets*, September 1981.
- Naciones Unidas, *El balance de pagos de América Latina 1950-1977*, Santiago de Chile, 1979.
- Perry, Guillermo, Roberto Junguito, and Nohora Junguito, "Endeudamiento externo en Colombia en la década de los setenta," New York, CIEPLAN and Ford Foundation, Project on External Financial Relations and Their Impact on the Latin American Economies, 1981, processed.
- Sachs, Jeffrey D., "The Current Account and Macroeconomic Adjustment in the 1970s," *Brookings Papers on Economic Activity* No. 1, 1981, pp. 201-268.
- Sampson, Anthony, *The Money Lenders*, London, Hodder and Stoughton, 1981.
- Svedberg, Peter, "The Portfolio-Direct Composition of Private Foreign Investment in 1914 Revisited," *The Economic Journal*, 88 (December 1978), pp. 763-777.
- Swoboda, Alexander K., *Credit Creation in the Euromarket: Alternative Theories and Implications for Control*, New York, Group of Thirty, 1980.
- Thomas, Hugh, *Cuba, or the Pursuit of Freedom*, London, Eyre and Spottiswoode, 1971.
- Urquhart, M. C., and K.A.H. Buckley, eds., *Historical Statistics of Canada*, Cambridge, England, Cambridge University Press, 1965.
- Wallich, Henry C., "The Future of Latin American Dollar Bonds," *American Economic Review*, 33 (June 1943), pp. 321-335.
- , "American Banks during the 1970s and Beyond," Washington, D.C., Board of Governors of the Federal Reserve System, September 1980, processed.
- World Bank, *World Development Report, 1980*, Washington, D.C., August 1980.
- , *World Development Report, 1981*, Washington, D.C., August 1981a.
- , *Borrowing in International Capital Markets*, Washington, D.C., May 1981b.

PUBLICATIONS OF THE INTERNATIONAL FINANCE SECTION

Notice to Contributors

The International Finance Section publishes at irregular intervals papers in four series: ESSAYS IN INTERNATIONAL FINANCE, PRINCETON STUDIES IN INTERNATIONAL FINANCE, SPECIAL PAPERS IN INTERNATIONAL ECONOMICS, and REPRINTS IN INTERNATIONAL FINANCE. ESSAYS and STUDIES are confined to subjects in international finance. SPECIAL PAPERS are surveys of the literature suitable for courses in colleges and universities.

An ESSAY should be a lucid exposition of a theme, accessible not only to the professional economist but to other interested readers. It should therefore avoid technical terms, should eschew mathematics and statistical tables (except when essential for an understanding of the text), and should rarely have footnotes.

A STUDY or SPECIAL PAPER may be more technical. It may include statistics and algebra and may have many footnotes. STUDIES and SPECIAL PAPERS may also be longer than ESSAYS; indeed, these two series are meant to accommodate manuscripts too long for journal articles and too short for books.

To facilitate prompt evaluation, please submit three copies of your manuscript. Retain one for your files. The manuscript should be typed on one side of 8½ by 11 strong white paper. All material should be double-spaced—text, excerpts, footnotes, tables, references, and figure legends. For more complete guidance, prospective contributors should send for the Section's style guide before preparing their manuscripts.

How to Obtain Publications

A mailing list is maintained for free distribution of all new publications to college, university, and public libraries and nongovernmental, nonprofit research institutions.

Individuals and organizations not qualifying for free distribution can obtain ESSAYS and REPRINTS as issued and announcements of new STUDIES and SPECIAL PAPERS by paying a fee of \$10 (within U.S.) or \$12 (outside U.S.) to cover the period January 1 through December 31, 1982. Alternatively, for \$25 they can receive all publications automatically—SPECIAL PAPERS and STUDIES as well as ESSAYS and REPRINTS.

ESSAYS and REPRINTS can also be ordered from the Section at \$2.50 per copy, and STUDIES and SPECIAL PAPERS at \$4.50. Payment MUST be included with the order and MUST be made in U.S. dollars. PLEASE INCLUDE \$.80 FOR POSTAGE AND HANDLING. (These charges are waived on orders from persons or organizations in countries whose foreign-exchange regulations prohibit such remittances.) For air-mail delivery outside U.S., Canada, and Mexico, there is an additional charge of \$1. In London, the Economists' Bookshop will usually have Section publications in stock but does not accept mail orders.

All manuscripts, correspondence, and orders should be addressed to:

International Finance Section
Department of Economics, Dickinson Hall
Princeton University
Princeton, New Jersey 08544

Subscribers should notify the Section promptly of a change of address, giving the old address as well as the new one.

List of Recent Publications

Some earlier issues are still in print. Write the Section for information.

ESSAYS IN INTERNATIONAL FINANCE

111. Gerald A. Pollack, *Are the Oil-Payments Deficits Manageable?* (June 1975)
112. Wilfred Ethier and Arthur I. Bloomfield, *Managing the Managed Float.* (Oct. 1975)
113. Thomas D. Willett, *The Oil-Transfer Problem and International Economic Stability.* (Dec. 1975)
114. Joseph Aschheim and Y. S. Park, *Artificial Currency Units: The Formation of Functional Currency Areas.* (April 1976)
- *115. Edward M. Bernstein *et al.*, *Reflections on Jamaica.* (April 1976)
116. Weir M. Brown, *World Afloat: National Policies Ruling the Waves.* (May 1976)
117. Herbert G. Grubel, *Domestic Origins of the Monetary Approach to the Balance of Payments.* (June 1976)
118. Alexandre Kafka, *The International Monetary Fund: Reform without Reconstruction?* (Oct. 1976)
119. Stanley W. Black, *Exchange Policies for Less Developed Countries in a World of Floating Rates.* (Nov. 1976)
120. George N. Halm, *Jamaica and the Par-Value System.* (March 1977)
121. Marina v. N. Whitman, *Sustaining the International Economic System: Issues for U.S. Policy.* (June 1977)
122. Otmar Emminger, *The D-Mark in the Conflict between Internal and External Equilibrium, 1948-75.* (June 1977)
123. Robert M. Stern, Charles F. Schwartz, Robert Triffin, Edward M. Bernstein, and Walther Lederer, *The Presentation of the Balance of Payments: A Symposium.* (Aug. 1977)
- *124. Harry G. Johnson, *Money, Balance-of-Payments Theory, and the International Monetary Problem.* (Nov. 1977)
- *125. Ronald I. McKinnon, *The Eurocurrency Market.* (Dec. 1977)
126. Paula A. Tosini, *Leaning Against the Wind: A Standard for Managed Floating.* (Dec. 1977)
127. Jacques R. Artus and Andrew D. Crockett, *Floating Exchange Rates and the Need for Surveillance.* (May 1978)
128. K. Alec Chrystal, *International Money and the Future of the SDR.* (June 1978)
129. Charles P. Kindleberger, *Government and International Trade.* (July 1978)
130. Franco Modigliani and Tommaso Padoa-Schioppa, *The Management of an Open Economy with "100% Plus" Wage Indexation.* (Dec. 1978)
131. H. Robert Heller and Malcolm Knight, *Reserve-Currency Preferences of Central Banks.* (Dec. 1978)
132. Robert Triffin, *Gold and the Dollar Crisis: Yesterday and Tomorrow.* (Dec. 1978)

* Out of print. Available on demand in xerographic paperback or library-bound copies from University Microfilms International, Box 1467, Ann Arbor, Michigan 48106, United States, and 30-32 Mortimer St., London, W1N 7RA, England. Paperback reprints are usually \$20. Microfilm of all Essays by year is also available from University Microfilms. Photocopied sheets of out-of-print titles are available on demand from the Section at \$6 per Essay and \$8 per Study or Special Paper.

133. Herbert G. Grubel, *A Proposal for the Establishment of an International Deposit Insurance Corporation*. (July 1979)
134. Bertil Ohlin, *Some Insufficiencies in the Theories of International Economic Relations*. (Sept. 1979)
135. Frank A. Southard, Jr., *The Evolution of the International Monetary Fund*. (Dec. 1979)
136. Niels Thygesen, *Exchange-Rate Experiences and Policies of Small Countries: Some European Examples in the 1970s*. (Dec. 1979)
137. Robert M. Dunn, Jr., *Exchange Rates, Payments Adjustments, and OPEC: Why Oil Deficits Persist*. (Dec. 1979)
138. Tom de Vries, *On the Meaning and Future of the European Monetary System*. (Sept. 1980)
139. Deepak Lal, *A Liberal International Economic Order: The International Monetary System and Economic Development*. (Oct. 1980)
140. Pieter Korteweg, *Exchange-Rate Policy, Monetary Policy, and Real Exchange-Rate Variability*. (Dec. 1980)
141. Bela Balassa, *The Process of Industrial Development and Alternative Development Strategies*. (Dec. 1980)
142. Benjamin J. Cohen, *The European Monetary System: An Outsider's View*. (June 1981)
143. Marina v. N. Whitman, *International Trade and Investment: Two Perspectives*. (July 1981)
144. Sidney Dell, *On Being Grandmotherly: The Evolution of IMF Conditionality*. (Oct. 1981)
145. Ronald I. McKinnon and Donald J. Mathieson, *How to Manage a Repressed Economy*. (Dec. 1981)
146. Bahram Nowzad, *The IMF and Its Critics*. (Dec. 1981)
147. Edmar Lisboa Bacha and Carlos F. Díaz Alejandro, *International Financial Intermediation: A Long and Tropical View*. (May 1982)

PRINCETON STUDIES IN INTERNATIONAL FINANCE

31. The German Council of Economic Experts, *Towards a New Basis for International Monetary Policy*. (Oct. 1972)
- *32. Stanley W. Black, *International Money Markets and Flexible Exchange Rates*. (March 1973)
33. Stephen V. O. Clarke, *The Reconstruction of the International Monetary System: The Attempts of 1922 and 1933*. (Nov. 1973)
- *34. Richard D. Marston, *American Monetary Policy and the Structure of the Eurodollar Market*. (March 1974)
35. F. Steb Hipple, *The Disturbances Approach to the Demand for International Reserves*. (May 1974)
36. Charles P. Kindleberger, *The Formation of Financial Centers: A Study in Comparative Economic History*. (Nov. 1974)
37. Margaret L. Greene, *Waiting Time: A Factor in Export Demand for Manufactures*. (April 1975)
- *38. Polly Reynolds Allen, *Organization and Administration of a Monetary Union*. (June 1976)
- *39. Peter B. Kenen, *Capital Mobility and Financial Integration: A Survey*. (Dec. 1976)

40. Anne O. Krueger, *Growth, Distortions, and Patterns of Trade among Many Countries*. (Feb. 1977)
41. Stephen V. O. Clarke, *Exchange-Rate Stabilization in the Mid-1930s: Negotiating the Tripartite Agreement*. (Sept. 1977)
42. Peter Isard, *Exchange-Rate Determination: A Survey of Popular Views and Recent Models*. (May 1978)
- *43. Mordechai E. Kreinin and Lawrence H. Officer, *The Monetary Approach to the Balance of Payments: A Survey*. (Nov. 1978)
44. Clas Wihlborg, *Currency Risks in International Financial Markets*. (Dec. 1978)
45. Ian M. Drummond, *London, Washington, and the Management of the Franc, 1936-39*. (Nov. 1979)
46. Susan Howson, *Sterling's Managed Float: The Operations of the Exchange Equalisation Account, 1932-39*. (Nov. 1980)
47. Jonathan Eaton and Mark Gersovitz, *Poor-Country Borrowing in Private Financial Markets and the Repudiation Issue*. (June 1981)
48. Barry J. Eichengreen, *Sterling and the Tariff, 1929-32*. (Sept. 1981)

SPECIAL PAPERS IN INTERNATIONAL ECONOMICS

8. Jagdish Bhagwati, *The Theory and Practice of Commercial Policy: Departures from Unified Exchange Rates*. (Jan. 1968)
9. Marina von Neumann Whitman, *Policies for Internal and External Balance*. (Dec. 1970)
10. Richard E. Caves, *International Trade, International Investment, and Imperfect Markets*. (Nov. 1974)
- *11. Edward Tower and Thomas D. Willett, *The Theory of Optimum Currency Areas and Exchange-Rate Flexibility*. (May 1976)
12. Ronald W. Jones, "Two-ness" in Trade Theory: Costs and Benefits. (April 1977)
13. Louka T. Katseli-Papaefstratiou, *The Reemergence of the Purchasing Power Parity Doctrine in the 1970s*. (Dec. 1979)
14. Morris Goldstein, *Have Flexible Exchange Rates Handicapped Macroeconomic Policy?* (June 1980)

REPRINTS IN INTERNATIONAL FINANCE

18. Peter B. Kenen, *Floats, Glides and Indicators: A Comparison of Methods for Changing Exchange Rates*. [Reprinted from *Journal of International Economics*, 5 (May 1975).] (June 1975)
19. Polly R. Allen and Peter B. Kenen, *The Balance of Payments, Exchange Rates, and Economic Policy: A Survey and Synthesis of Recent Developments*. [Reprinted from Center of Planning and Economic Research, Occasional Paper 33, Athens, Greece, 1978.] (April 1979)
20. William H. Branson, *Asset Markets and Relative Prices in Exchange Rate Determination*. [Reprinted from *Sozialwissenschaftliche Annalen*, Vol. 1, 1977.] (June 1980)
21. Peter B. Kenen, *The Analytics of a Substitution Account*. [Reprinted from *Banca Nazionale del Lavoro Quarterly Review*, No. 139 (Dec. 1981).] (Dec. 1981)



