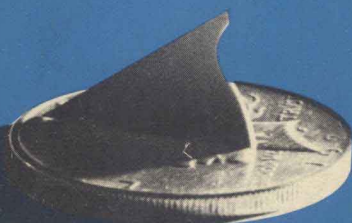


The International Money Market

**Gunter Dufey
Ian H. Giddy**



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The International Money Market

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TO
Our Parents

Editor's Note

The subject matter of financial management is in the process of rapid change. A growing analytical content, virtually nonexistent ten years ago, has displaced the earlier descriptive treatment as the center of emphasis in the field.

These developments have created problems for both teachers and students. On the one hand, recent and current thinking, which is addressed to basic questions that cut across traditional divisions of the subject matter, do not fit neatly into the older structure of academic courses and texts in corporate finance. On the other hand, the new developments have not yet stabilized and as a result have not yet reached the degree of certainty, lucidity, and freedom from controversy that would permit all of them to be captured within a single, straightforward treatment at the textbook level. Indeed, given the present rate of change, it will be years before such a development can be expected.

One solution to the problem, which the present Foundations of Finance Series tries to provide, is to cover the major components of the subject through short independent studies. These individual essays provide a vehicle through which the writer can concentrate on a single sequence of ideas and thus communicate some of the excitement of current thinking and controversy. For the teacher and student, the separate self-contained books provide a flexible up-to-date survey of current thinking on each subarea covered and at the same time permit maximum flexibility in course and curriculum design.

EZRA SOLOMON

Preface

This book is about the external credit markets and their linkages with domestic money markets. The Euromarkets, as they are popularly termed, do not exist in isolation. They parallel and are rooted both in domestic markets and in the traditional international financial markets. As such they are of interest not only in their own right, but also as the link between different national financial markets. The nature of these linkages, and of those that exist between the Eurocurrency markets and their domestic counterparts, forms a major theme of this book.

The content reflects in part our own research of the past several years into the Eurocurrency and foreign exchange markets. Most of the ideas and findings reported here, however, result from our many discussions with bankers, corporate treasurers, and academic specialists, supplemented by a review of the burgeoning literature on the subject. To a large extent our task has been to organize existing ideas within a consistent framework.

The authors were prompted to write this book, first, because the rapid growth of these markets has represented one of the most innovative developments in the international financial system during the past 20 years; and second, because the markets continue to appear to be an enigma even to those who operate in them continually. The aura of mystery that surrounds the markets will remain as long as observers continue to hold differing views. Nevertheless we have found it possible to analyze, in a straightforward way, almost all aspects of the international money market by bringing the concepts of financial intermediation, competition among different institutions, risk, and expectations to bear on the issues that most concern financial executives, bankers, government officials, and other decision makers. The material here is consequently organized around those topics—such as the determination of international interest rates, the growth of the markets and availability of funds, government regulation, and borrowing and lending practices—which are of interest to decision makers.

Since the book is intended for readers with different backgrounds, we have chosen to use certain techniques of exposition not usually found in this series.

The material in the appendices will be of particular interest to academic specialists in the field. Those needing reminders of the basics of money and banking will be helped by the information enclosed in boxes. The bulk of the work is designed to enable readers familiar with the principles of financial markets to acquire a comprehensive knowledge about the function and functioning of the international money market. Because some readers may wish to learn about only one particular issue, we have sought to make each chapter largely self-sufficient.

In the task of writing this book we have benefited greatly from the advice and counsel of colleagues and acquaintances. An initial intellectual debt is owed to Dr. Helmut Mayer (Bank for International Settlements), whose early publications and seminars on the market were influential in shaping our basic views. He also provided valuable criticism on difficult points, particularly on the issue of central bank depositing.

Helpful advice on particular issues was given to us by Professors Charles N. Henning and John H. Makin (both of the University of Washington), Richard Herring (University of Pennsylvania), Robert Z. Aliber (University of Chicago), Douglas A. Hayes (University of Michigan), and by Fred H. Klopstock (Federal Reserve Bank of New York). In addition, a number of bankers were generous enough to spend time answering our questions or commenting on portions of early drafts. Among them we would like to mention specifically Marshall Jeanes and Nancy Shaw (Morgan Guaranty Trust), Geoffrey Bell (Schroders Trust & Co., Ltd.), Stephen Harris (First National Bank of Chicago), and Ramachandra Bhagavatula (Citibank). Professors Robert G. Hawkins (New York University) and Fred R. Kaen (University of New Hampshire) reviewed the complete manuscript. We considered their advice as well as the suggestions offered by others with care, but did not always agree. We take full responsibility for the final work.

Both in presentation and content the book has been enriched by feedback from our MBA students and the work done by several doctoral students who have assisted us. Among the latter, special mention must be made of Sangkee Min whose perceptive comments prompted us to refine our discussion of a number of issues.

Mrs. Doris Jamron and Joanne Porter typed many of the innumerable drafts; we are indebted to them.

Gunter Dufey *Ann Arbor*
Ian H. Giddy *New York*

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Introduction

It has become commonplace to say that the world is getting smaller and that countries are becoming more interdependent. Technological advance has made international communications, travel, and exchange easy, and almost all statistics on international transactions show impressive rates of growth. When we examine economic interdependence we find that the ratio of trade to national product has increased significantly for practically all countries. The expansion of direct investment and of the activities of multinational firms has surpassed even the growth rates of the more traditional international economic exchanges of real goods and services.

International financial transactions—that is, financial investing and borrowing between countries—have grown apace with international trade and direct investment. But the decades of the 1960s and 1970s have witnessed a unique phenomenon that has altered both the nature and the volume of international financial transactions. This phenomenon is the emergence of external financial markets that at first grew alongside, and soon outpaced, the traditional international and domestic capital market. The external financial markets differ in regulation, institutional structure, interest-rate determination, and in the way in which funds reach the market and are made available to borrowers. These markets have often been identified by the prefix “Euro-,” reflecting the geographical location of their beginnings, but this is quite misleading. Indeed, as we shall see, these markets are outside, or parallel to, the traditional markets based in national

financial centers. As such, they have developed a competitiveness and resilience that has earned them a central place in private and even public international finance. Although the measurement and comparison of the size of financial markets pose technical issues that are beyond the purview of this introduction, data in Table 1-1 suggest that by the mid-1970s the Euromarkets had become larger than all but the U.S. domestic financial market (and even this exception is subject to dispute).

TABLE 1-1 Relative Size of the Eurocurrency Market
(billions of dollar equivalents)^a

<i>End of period</i>	<i>Eurocurrency market (net)</i>	<i>U.S. bank TDs</i>	<i>Japan TDs</i>	<i>Germany TDs</i>	<i>U.K. TDs</i>	<i>France TDs</i>
1965	17	141	42	30	18	6
1970	65	226	92	69	38	21
1975	250	435	247	183	51	77

^aComparative data such as these are to be used cautiously, because they do not show the structure of the money market. Whereas time deposits are essentially the only financial asset in the Eurocurrency market, in a number of national markets, especially the U.S. and U.K. markets, a large volume of available money market instruments serve functions similar to time deposits. On the other hand, many small "savings deposits" are not equivalent to the competitive market in large deposits found in the Eurocurrency market. Thus, if one considers only large, negotiable time deposits (CDs) as truly equivalent, the Eurodollar portion of the Eurocurrency market is larger than its domestic equivalent, narrowly defined.

Source: Eurocurrency Market: Appendix A, "Measuring the Size of the Eurocurrency Market," National Markets: International Monetary Fund, *International Financial Statistics*, May 1976.

The size of the external, or Eurofinancial, markets is matched only by the aura of mystery and controversy they have generated. The growth of the largest segment of these markets, the Eurodollar market, has been attributed alternatively to U.S. balance-of-payments deficits, a "bookkeeper's pen," international interest-rate differentials, plain uncertainty, and for those who revel in international intrigue, the financial machinations of the Russians.

What are the wider ramifications of these markets? They have been blamed for worldwide inflation and disorder in foreign exchange markets. The existence and growth of the Euromarkets have, according to some critics, undermined the power of central banks to defend the integrity of their respective national currencies. Finally, it has been implied that self-respecting bankers, normally sworn to conservative and sound lending practices, when operating in these markets suddenly begin to put their entrusted funds into the most questionable loans at rates similar to those charged by governmental agencies to flood victims, drought-stricken farmers, and indigent home buyers.

On the other hand, defenders of these markets claim that they have contributed significantly to the spectacular growth in world trade and investment, that

business firms engaged in international operations could hardly function without the financial flexibility offered by these markets, and that they are a real blessing to growing countries who must raise funds for development. Most recently, the markets have been given credit for “recycling” efficiently and with a minimum of disruptive effects the huge volume of funds transferred by the oil-importing countries to the members of the OPEC cartel.

All this has raised many questions regarding the nature, the effect, and the detailed workings of these markets. There is no shortage of literature; different interpretations abound and many aspects of the market have been extensively analyzed. Given the nature of the subject matter and the volume of the literature available, the reader will find few ideas that are absolutely new. We believe that almost all the issues arising in the context of the Euromarkets can be resolved by reference to relatively few concepts. As a result, the major intention of the book is to enable the reader to apply these concepts to such issues as: What determines interest rates? What determines the growth, and therefore the availability, of funds? What are the justifications for, and possibilities of, governmental control or regulation of these markets? And what is the nature and origin of practices specific to these markets? These are the kinds of questions that a financial executive who contemplates using these markets would raise, and therefore describe the agenda of this book. But the framework we provide will, we hope, prove applicable to many issues not discussed here.

II. Purpose and Plan of Book

This volume is written for readers reasonably familiar with the domestic money market and banking system. Among those who may find it useful are the executive who wishes to learn more about international aspects of financial markets, and the lending officer in a financial institution who has moved over to the international side of the business. Those interested in the public policy implications of markets that escape domestic regulation may also find the arguments and conclusions presented here of interest. In addition, the book is designed to be used by anyone seeking an introduction to the international aspects of finance, banking, and financial markets.

Those whose knowledge of theory has become a little rusty will find the special sections (“boxes”) helpful. In these, certain concepts relevant for an understanding of the material are presented in some detail. On occasion, this form of presentation is also used to explore special issues that arise in the course of our general analysis of the subject. To the extent that such issues require technical and detailed analysis, they are relegated to appendixes that specialists may find useful.

In this introductory chapter we shall present a classification system for the institutions, terms, and concepts applied in our analysis of international money markets. In Chapter Two we analyze the determinants of interest rates in the