

Tim S. Campbell

FINANCIAL
INSTITUTIONS,
MARKETS,
AND ECONOMIC
ACTIVITY



Tim S. Campbell

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PREFACE

In recent years a course in financial markets has not often been a key part of the finance curriculum. There seem to be at least two reasons for this. One reason is that until relatively recently the explosive progress in developing an analytical theory of finance largely left behind financial institutions and, therefore, much of the material of a financial markets course. In the minds of many, the financial institutions area became a weak sister to portfolio theory and corporate finance. At the same time, a territorial dispute between "finance" and "money and banking" has persisted which has often left financial markets classes at loose ends. The task of developing the background material on markets which is important for financial and investment decision making has often been left to the money and banking class, but this material has often been only tangentially related to the more traditional of these classes.

The tide may now be turning for the financial markets course. There is growing appreciation of the idea that if the individual decision-making skills emphasized in corporate finance are to be fully developed, the student needs a more thorough understanding of the operation and structure of financial markets than has often been available in the past. Moreover, in the

past few years there has been a substantial increase in academic research which approaches the issues pertaining to financial institutions from the vantage point of financial theory. This complements the traditional literature on financial institutions which is grounded in macroeconomics. In fact, there has been a considerable integration of macroeconomics and finance in the literature. However, these contributions have not yet been presented in a way that is easily accessible to the student or to the professor who is not intimately familiar with this literature but who is interested in restructuring his or her course. At the same time, an increasing number of those who teach courses in money and banking have become dissatisfied with the almost exclusive preoccupation of that course with commercial banks and the Federal Reserve System. They are gradually beginning to think of the issues addressed in money and banking as logically fitting into a broader outline which treats a more diversified package of issues concerning the operation of financial markets.

This book is directed toward filling this gap. The analysis developed here has clear foundations in neoclassical price theory, the theory of finance, and macroeconomics. The book is intended to serve for a course in financial markets which easily integrates with courses in corporate finance, investments, and capital market theory or for a course in money and banking which is not too narrowly focused on macroeconomic issues and monetary policy. The course and the book might be used in almost any sequence with these other courses. The book may be best suited for hybrid course labeled "Financial Markets and Economic Activity" which draws from the theory of finance, traditional money and banking, and the economics of regulation. Hopefully, the logical appeal of this organization and approach will make the hybrid course the course of the future.

The principal purpose of the book is to bring modern economic and financial theory to bear on the organization and behavior of financial markets and institutions. Its purpose is institutional, but it draws heavily on theory. Every effort is made to present theory which is useful in terms of the insight it offers and to develop it in a concise and direct manner. The only prerequisite for the student to understand the material is an introductory-level treatment of economics, particularly microeconomics. The book is oriented toward teaching the student to understand applied price theory and to be able to examine the financial world with the tools it affords.

This book is divided into five parts. The first develops the microeconomic foundations of financial markets and explains the determination of the value of real and financial assets in capital markets. After an introductory chapter which explains some basic price-theoretic concepts about value and markets, there is a chapter which develops the impact of time on the value of assets. This chapter contains much traditional material on present value. The emphasis in the present value material is not on computational skill but on the conceptual problem of valuing returns distributed over time. The next two chapters deal with uncertainty and the value of assets. The first of these

chapters examines how investment decisions should be made under uncertainty. Initially, the discussion concentrates on choices between mutually exclusive investments. Then it shows how diversification affects the risk and return on a portfolio of assets. The next chapter explains the rudiments of the capital asset pricing model. The chapter also contains a critique and appraisal of the usefulness of this model which is designed to prepare the reader for an encounter (from some other source) with alternative models, such as the arbitrage pricing model. This division of the material makes it possible to introduce the reader to the valuation of risky investment and the role of diversification, without having to deal with the capital asset pricing model. The final chapter in Part I deals with value determination when information about returns is costly. Recent insights into the role of heterogeneous expectations and asymmetric information in financial markets are explained here. In addition, the topic of market efficiency is introduced. This chapter provides a foundation for some of the later material on the behavior and regulation of financial markets and intermediaries.

Part II develops the theory of the determination of market yields. It begins with a chapter which explains the determinants of the real interest rate and the flow of funds in the economy. The chapter integrates flow of funds analysis with a development of the Fisherian theory of real and nominal interest rates. After this foundation in the theory of interest, attention is directed toward the determination of specific nominal interest rates in the next chapter. The emphasis here is on explaining the distinctions between observed nominal rates and the underlying real rate. This chapter also distinguishes between the segmentation and substitution views of interest-rate determination. Specific determinants of yield spreads are examined and some empirical evidence is reviewed. The segmentation as opposed to substitution theme is carried into the next chapter on the term structure of interest rates. This chapter explains and illustrates the computation of forward rates and then develops the expectations (perfect substitution), as opposed to the segmentation and preferred habitat theories of the term structure of interest rates. The segmentation-substitution approach provides an integrated explanation of the differences in prices of assets which differ by maturity, as well as by other distinguishing characteristics. In addition this section emphasizes rational expectations in explaining the forecasts of inflation rates incorporated in nominal interest rates and forecasts of short-term rates incorporated in long-term rates. It also explains the role of futures markets.

Part III provides a survey of the major types of financial markets and securities in the U.S. economy and develops material on alternative ways in which financial markets are organized. The first chapter analyzes the operation of auction and over-the-counter markets, while the second chapter focuses on the functions of financial intermediaries. The chapter on intermediaries emphasizes the reasons why financial intermediaries play such an important role in our contemporary economy. The final three chapters in this

section provide a survey of the markets for consumer, corporate and government borrowing and lending, and the securities issued in these markets. The emphasis here is on explaining the institutional environment and some of the basic trends observable from recent data on these markets. In addition, this section applies the theoretical material developed in the preceding two sections.

Part IV deals with government regulation of financial markets. The first chapter lays the foundation for the detailed analysis of regulation of financial intermediaries as well as auction and over-the-counter markets which is presented in the subsequent four chapters. This chapter explores rationales for regulation based on the desire to promote competition and avoid problems stemming from an imperfect distribution of information. The second chapter of Part IV deals with the regulation of securities markets, with particular emphasis on price competition on the New York Stock Exchange, the evolution of a national market system, and disclosure regulation. The third chapter analyzes the regulation of commercial banks. This chapter seeks to explain why commercial banks have historically been subject to instability and shows how regulation, beginning in the mid-nineteenth century, changed the fundamental nature of the financial contract between a bank and its depositors. In the next chapter the regulatory system governing non-bank financial intermediaries is examined. This chapter covers depository thrift institutions as well as insurance companies and pension funds. Finally, the last chapter analyzes Federal Reserve control of the money supply as an integral part of the regulatory system for financial markets. Part IV seeks to place the recent changes in the regulation of depository institutions in context with the historical evolution of regulation in the United States. It also seeks to explain a theory of regulation, or a logical basis for regulation, as a response to problems in the operation of a competitive market. This makes it possible to evaluate why regulation may or may not be necessary.

Part V deals with financial markets and aggregate economic activity. The first chapter develops the monetarist or the portfolio-adjustment approach to explaining the impact of financial markets on the real economy. This chapter relies heavily on Milton Friedman's arguments about monetary policy and the economy. The next chapter characterizes what has been labeled the post-Keynesian view of the impact of financial markets on the economy as essentially reflecting the cost of credit. The distinctions between the competing theories of financial markets and economic activity are synthesized as depending largely on the degree of efficiency and segmentation in markets. The last chapter of this section examines financial markets and monetary policy in an inflationary economy. Competing theories of inflation and the impact of monetary policy are examined and the role of inflation as a tax is developed. Finally, the performance of debt and equity markets in an inflationary economy is examined. The selectivity of topics exercised in designing this section reflects the view that many of the topics covered in the

traditional money and banking course are more logically developed in a macroeconomics class, but that the links between financial markets and aggregate economic activity logically belong to a course in financial markets.

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Writing a first book is a painful experience. And while any number of people told me this would be the case before I started, I chose not to listen. With hindsight I have come to believe that those who are inclined to take such warnings seriously are surely the ones who choose not to write their first book. A certain amount of naive self-confidence is essential for a first-time author. But I also discovered that writing a book was a tremendously enlightening and even pleasant experience. Above all else, you acquire a new perspective and insight into your subject matter. But you also learn a tremendous amount about yourself—you find out whether you like the role of commentator but not necessarily whether you are good at it. If you do like it, the pain is probably worthwhile. If you do not, you will not write your second book. I suppose I have learned that I like the role of commentator—after all I am referring to this as my first book.

I want to thank all those people who warned me about the pain, though I will not list all their names. I also want to thank those people who helped me with the manuscript and provided support in other ways once I decided to ignore the words of caution. The first person who shared any of my thoughts about this book was Paul Boltz. His early encouragement was especially valuable. My student at that time, and more recently coauthor, William Kracaw also provided very valuable early encouragement as well as numerous helpful suggestions as the manuscript emerged. A number of other individuals read early chapters, provided stiff criticism, but encouraged me to proceed. They include Richard Bookstaber, David Glenn, Ronald Lease, and John McConnell. It was at this point that I actually swallowed the hook.

As the project got underway a number of reviewers began to carefully appraise the entire manuscript. One individual in particular, who was not known to me at the outset, became an invaluable critic. His comments and suggestions were always helpful and insightful. As time went on I learned his identity and have been able to thank him personally. His name is Kim Dietrich. A number of other individuals provided additional valuable commentary. They include Robert Edmister, University of Maryland; Owen Gregory, University of Illinois Chicago Circle Campus; Robert Johnston, George Mason University; Paul Nadler, Rutgers University; Arnold Sametz, New York University; Charlene Sullivan, Purdue University; and Raymond Torto, University of Massachusetts.

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Tim S. Campbell

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