THE NEW
PALGRAVE
DICTIONARY OF
MONEY
& FINANCE

THE NEW

PALGRAVE DICTIONARY OF MONEY & FINANCE

EDITED BY
PETER NEWMAN · MURRAY MILGATE
JOHN EATWELL

 $\frac{1}{\mathbf{A} - \mathbf{E}}$

M

THE MACMILLAN PRESS LIMITED, LONDON THE STOCKTON PRESS, NEW YORK

© The Macmillan Press Limited, 1992

All reserved reserved.

No part of this publication may be reproduced or transmitted, in any form or by any means, without permission.

The New Palgrave Dictionary of Money and Finance
Edited by Peter Newman, Murray Milgate and John Eatwell
in three volumes, 1992

Published in the United Kingdom by THE MACMILLAN PRESS LIMITED, 1992

London and Basingstoke

Associated companies in Auckland, Delhi, Dublin, Gaborone, Hamburg, Harare, Hong Kong, Johannesburg, Kuala Lumpur, Lagos, Manzini, Melbourne, Mexico City, Nairobi, New York, Singapore, Tokyo.

Published in the United States of America and Canada by THE STOCKTON PRESS,1992 257 Park Avenue South, New York, NY 10010, USA

The New Palgrave is a trademark of the The Macmillan Press Limited

Library of Congress Cataloging-in-Publication Data

A Catalog record for this book is available from The Library of Congress ISBN 1-56159-041-X

British Library cataloguing in Publication Data
The new Palgrave dictionary of money and finance
I. Newman, Peter K. 1928 – II. Milgate, Murray,
III. Eatwell, John
332.03
ISBN 0-333-52722-4

THE EDITORS

Peter Newman Emeritus Professor of Economics, The Johns Hopkins University

Murray Milgate John L. Loeb Associate Professor of the Social Sciences, Harvard University

John Eatwell Fellow and Director of Studies in Economics at Trinity College, Cambridge

ADVISORY BOARD

Kenneth J. Arrow Joan Kenney Professor of Economics and Professor of Operations Research, Stanford University; Nobel Laureate in Economics, 1972

Pascal Bridel Professor of Economics, Université de Lausanne

Alan Budd Chief Economic Adviser to the Treasury, London

Giancarlo Gandolfo Professor of Economics, Università di Roma, La Sapienza

Charles A. Goodhart Norman Sosnow Professor of Banking and Finance, London School of Economics and Political
Science

Koichi Hamada Professor of Economics, Yale University

Pedro-Pablo Kuczynski Chairman, First Boston International, New York

David Laidler Professor of Economics, University of Western Ontario

Jacques de Larosière Governor, Banque de France, Paris

Donald N. McCloskey John F. Murray Professor of Economics and Professor of History, University of Iowa

Robert C. Merton George Fisher Baker Professor of Business Administration, Graduate School of Business Administration, Harvard University

Merton H. Miller Robert R. McCormick Distinguished Service Professor of Finance, Graduate School of Business, University of Chicago; Nobel Laureate in Economics, 1990

Domenico Mario Nuti Commission of the European Communities, Brussels

Maurice Obstfeld Professor of Economics, University of California, Berkeley

M. Hashem Pesaran Professor of Economics, University of Cambridge

Richard Roll Allstate Professor of Finance, Graduate School of Management, University of California, Los Angeles

Stephen A. Ross Sterling Professor of Economics and Finance, Yale School of Organization and Management

Norbert Walter Chief Economist, Deutschebank, Frankfurt am Main

Geoffrey Whittington Price Waterhouse Professor of Financial Accounting, University of Cambridge

PREFACE

The last twenty years have seen unprecedented change in the world's financial markets. Sustained and rapid progress in electronic data-processing has led to sharp falls in transaction costs and these in turn have brought about massive innovation in financial systems and products. Simultaneous with this process, and interwoven with it, extensive changes in regulation and taxation have themselves spurred major innovation in financial instruments. In particular, widespread deregulation has increasingly blurred traditional distinctions between financial institutions. In North America and Britain, for example, it seems doubtful whether retail banks will continue to play the central role in intermediation that they have in the past.

These profound changes in the monetary and financial environment have taken place at great speed and often without full anticipation of their consequences. It is more than ever desirable, therefore, that practitioners and policy-makers should be aware of modern theoretical advances, and that academic researchers should know more about how modern capital markets and credit institutions actually work. In each case this Dictionary should provide an authoritative base from which to begin the acquisition of such knowledge.

I

Traditionally, university study of the subject 'money' has been located in departments of economics in faculties of arts or social sciences, whereas the subject 'finance' is to be found in the university's professional business or management school, usually in a department bearing that title. These differences in organization have corresponded in part to differences of scope and methodological approach. Painting with a very broad brush, one can label monetary economics as a subject that employs aggregative general equilibrium analysis to concentrate on the whole economy, and financial economics as one which uses disaggregative partial equilibrium analysis to study individual financial markets and agents.

Fortunately, over time these strategic differences between the two subjects have lessened substantially. Work by economic theorists has greatly strengthened major areas of financial economics which had been analytically weak (such as corporate finance), while in recent years monetary theory has itself been strongly influenced by finance-theoretic discussions of efficient markets. Increasingly, the two subjects have come to be based on similar foundations in modern economic and statistical theory.

Such convergence, however, has not yet proceeded to perfect union. Indeed, it is one useful consequence of this Dictionary that, in presenting so many essays on monetary and financial economics and thus bringing out similarities and differences in approach, style and technique, it may contribute to the process of *rapprochement* between them. At the least it should help in making financial economics more important in the training of general economists. It cannot of course create synthesis where none exists but it can lay all the cards of each side on the table, as it were, and see where they match and where they do not.

The distinction between 'money' and 'finance' is not the only one running through these three volumes. Another is the fruitful interplay between theoretical and applied work, with the latter taken to mean not only empirical inference but also policy analysis and institutional description. In monetary economics and even more in financial economics there is often a relative abundance of quantitative information available, and because of this both monetary and financial theory have always kept much closer company with the data than is the case, for example, with most branches of microeconomic analysis.

Even here, however, the data are still usually too few and too inappropriate to overcome that most pervasive of problems for economics, that the information one has is seldom plentiful or precise enough to allow definitive testing of alternative theories. For lack of such decisive empirical rejection, quite different explanations of the same phenomena may continue to compete on the market for ideas. This explains why *Money and Finance* sometimes has

two or three or even more essays on what is essentially the same theoretical subject, under different titles to which the reader is guided by the several cross-references that follow almost every essay.

Multiple essays will also be found on some of the applied topics in the Dictionary, again under different titles, since their authors may again have quite distinct points of view. The source of such difference can sometimes be mere geography – differing perspectives from the US and the UK, for example. But analysts may also use differing proportions of deductive theory and empirical inference in their treatment of an applied problem; or have varying balance between positive and normative aspects; or differ simply in their choice of the appropriate level of analytical difficulty. 'Duplication' of treatment in disciplines like economics is seldom a waste of space, and when occasionally it truly does occur is a small price to pay for variety of perspective.

П

This Dictionary is a companion work to *The New Palgrave: A Dictionary of Economics* (hereafter, *The New Palgrave*), which was published in four volumes by Macmillan in London and Stockton Press in New York in 1987, and was itself a modern reincarnation of the *Dictionary of Political Economy* edited by R.H. Inglis Palgrave (1827–1919) and published in three volumes by Macmillan in 1894, 1896 and 1899.

It is very appropriate that this companion work should be on money and finance, since Palgrave was himself primarily a distinguished analyst of banking and a lifelong practitioner of the art. He began his career at the age of sixteen in Gurney & Co.'s bank in Great Yarmouth Norfolk and worked his way up to a partnership. He was financial editor of *The Economist* and after Bagehot's death its editor, as well as editor at various times of the *Banking Almanac* and *The Banker's Magazine*. In 1882, and with Jevons's blessing, his many writings on monetary and financial questions earned him a Fellowship of the Royal Society.

Money and Finance is an essentially new work, with 80 percent of its essays newly commissioned and all but one of its other essays drawn from The New Palgrave. All the contributors of the latter essays were asked to revise their earlier work if they so wished and in many cases, and to varying degrees, they accepted that invitation. Manuscripts of all the essays were received during the period from May 1990 to May 1992, with most arriving in the second twelve months.

While it is composed in the same scholarly spirit as *The New Palgrave* there are several differences between that more general work and the present Dictionary. In large part these occur precisely because the former was quite general in its scope while the latter covers a smaller range much more intensively. Thus in *The New Palgrave* there were almost 2000 essays (700 of them biographical) from over 900 contributors, while in *Money and Finance* there are over 1000 essays (none of them biographical) written by over 800 contributors.

A major difference is that whereas the essays in *The New Palgrave* were predominantly on theory and doctrine, in the present work there are several hundred essays concerned with more empirical matters, such as institutional analysis and description, monetary history, and problems of financial regulation. Discussions of practical matters can of course rapidly become outdated; extreme examples of this are the cataclysmic changes in monetary organization in Eastern Europe, of which any account now would only be written on the wind. We have tried throughout to maintain a reasonable balance between topicality and the long view.

Because this Dictionary is more specialized than *The New Palgrave* it is intrinsically less self-contained. On the empirical side this has been met in part by adding some 70 brief glossarial items, which give definitions of technical terms employed in the essays as well as descriptions of institutions referred to there. Similarly, a list of over 100 of the acronyms used in the essays appears at the beginning of each volume. On the side of theory and technique, Groups IX–XII of the Subject Classification placed at the end of Volume 3 list more than 200 essays in this Dictionary which are on those parts of microeconomics, macroeconomics, public finance and quantitative methods that are of most relevance to it.

Even so, there remain many important concepts of modern economic analysis (e.g. Nash equilibrium in non-cooperative game theory) which are frequently used in money and finance but which of necessity cannot be covered in this work without extending its scope unrealistically. If the reader encounters an unfamiliar concept of this kind he or she should consult *The New Palgrave*. Similarly, for those interested in exploring further the work of a particularly important monetary theorist (such as Hume or Thornton, Friedman or Keynes) their biographies will be found in that dictionary.

Even though it is not as self-contained as the larger work, within its chosen fields *Money and Finance* has a much denser structure than *The New Palgrave*. With its essay titles and glossary items supplemented by over 400 'external' cross-references which send the reader to relevant essays elsewhere in these volumes, the Dictionary's headword list comprises 1500 entries that cover a relatively narrow range. Moreover, the extensive Subject Classification and the cross-references at the end of most essays make that coverage even more complete. It is for these reasons that there is no separate index to the present work.

A full treatment of the historical and geographical aspects of money and finance would require the Dictionary to be extended to quite unmanageable length. While it has many essays on various branches of monetary and financial history, including the history of theory, even this substantial number can only be a sample of the whole wide sweep of the world's monetary history. Similarly, although serious efforts have been made to provide coverage of the monetary and financial systems of some 30 countries (with substantially more than that for France, Germany and Japan) still the main geographical focus of this Dictionary is North America and Britain. Two-thirds of its contributors come from the former region and 20 percent from the latter.

Finally, although about 80 percent of those from whom we requested essays did accept our invitation, that left a number of people who for one reason or another declined. In addition, several authors accepted the original commission but eventually provided either no draft at all or an unusable one; sometimes this happened too late to recommission the essay. Hence, it is dangerous to infer the editors' actual preferences regarding authors and topics from the final outcome of the Dictionary itself. If your favourite author is missing, he or she might well have been asked but could not oblige. If your prize hobby horse is not here it may well have been under starter's orders but unhappily fell at the last fence. It took over 200 years from the time of Davenant and King for economists to realize that normally one cannot identify a demand schedule (and still less a preference map) simply from observation of outcomes of the interaction between supply and demand functions. Such hard-won knowledge applies here too.

Ш

Acknowledgements are due first and mainly to the many hundreds of individual contributors to *Money and Finance*, who were always courteous and helpful and usually punctual as well. Their unfailing enthusiasm greatly leavened the job of editing the Dictionary. Thanks are due also to the distinguished members of the Advisory Board, who always responded promptly and usefully to our requests for assistance.

At Macmillan, Margot Levy's work as managing editor was even more central and highly valued than it was with *The New Palgrave*. Among several other workers at Macmillan we especially thank Alastair Levy for his acute discernment of subtle errors that had slipped past our scrutiny. Finally, we are grateful to Donna Althoff and Jenny Newman for secretarial assistance, and to the latter especially for her thorough and persistent checking of authors' bibliographies.

May 1992 Peter Newman

Murray Milgate

John Eatwell

ACKNOWLEDGEMENTS

The contributors of the following articles acknowledge support from public bodies or permission to reprint copyright material:

arbitrage pricing theory (Gur Huberman), support from the National Science Foundation and the Center for Research in Security Prices; autoregressive and moving average time series processes (Marc Nerlove and Francis X. Diebold), financial support from the National Science Foundation; Bayesian inference in time series (Mark F. I. Steel), research fellowship from the Royal Netherlands Academy of Arts and Sciences (K.N.A.W.); dynamic programming (William T. Ziemba and Hong Chen), research support from the Natural Sciences and Engineering and Social Sciences Research Councils of Canada; exchange (Robert Wilson), support from Stanford University; research support from the National Science Foundation (SES8308723) and the Office of Naval Research (N00014-79C0685); gold markets (Raj Aggarwal), research support from the Mellen Foundation and the John Carroll University School of Business; market for corporate control (Michael C. Jensen), research support from Harvard Business School; money markets (I.S.G. Wilson), published in part in Studies in Money Markets, London: Routledge, 1992; money markets in India (J.S.G. Wilson), based on 'The Indian money market' in Banca Nazionale del Lavoro Quarterly Review 63, December 1987; neutrality of money (Don Patinkin), support from the Central Research Fund of the Hebrew University; overlapping-generations model and monetary economics (Karl Shell and Bruce D. Smith), research support from National Science Foundation grant SES9012780 and the Center for Analytic Economics at Cornell University; regulation of international banking (Richard Dale), based on The Regulation of International Banking, New York: Woodhead-Faulkner, 1984; Ricardian equivalence theorem (Andrew B. Abel), financial support from the Amoco Foundation Term Professorship in Finance, the National Science Foundation and the Sloan Foundation; risk (Mark J. Machina), published in part in The Economic Theory of Individual Behavior toward Risk: Theory, Evidence and New Directions, Cambridge: Cambridge University Press, 1987; Soviet monetary system (John Williamson), © 1992, Institute for International Economics, Washington DC; all rights reserved; stock market crash of October 1929 (Stephen G. Cecchetti), financial support from the National Science Foundation: stock market crash of October 1987 (G. William Schwert), support from the Bradley Center for Research in Government Policy and Business at the University of Rochester; sunspot equilibrium (Karl Shell and Bruce D. Smith), research support from the National Science Foundation grant SES9012780 and the Center for Analytic Economics at Cornell University; syndicates (F. Douglas Foster), research support from the Isle Maligne Fund at Duke University; target zones for exchange rates (John Williamson), © 1991, Institute for International Economics, Washington DC; all rights reserved; Tokyo Stock Exchange (Yasushi Hamao), support from the Batterymarch Fellowship and Mitsubishi Trust and Banking Professorship; Walras's Law (Don Patinkin), support from the Basic Research Foundation administered by the Israel Academy of Sciences and Humanities.

All essays in these volumes represent the views of the authors, which are not necessarily those of the organizations to which they are affiliated.

USING THE DICTIONARY

The Dictionary includes 1008 essays, arranged in a single alphabetical sequence. In addition, the main sequence includes 70 short glossarial entries defining particular terms.

Several methods of signposting have been devised to make best use of the wide range of material included in the three volumes.

Cross-references. Throughout the alphabetical sequence, there are 420 cross-references which direct the reader to the essay where a particular topic is discussed: for example,

gold reserves. See RESERVE CURRENCY. put options, See OPTION PRICING THEORY.

These cross-references have been selected with a view to anticipating the terms that users of the Dictionary might wish to see explained; the cross-reference will lead to the relevant essay in the book, where that topic is treated as part of a larger entry.

In addition, cross-references at the end of the essays point to the treatment of related subjects elsewhere in the volumes. Every essay in the Dictionary ends with an average of seven such references, so that by following all the signposts in a succession of entries the reader can trace the entire treatment of a broad subject area. To gain the broadest understanding of a topic and make best use of the Dictionary, all the cross-references to related entries should be followed through.

A complete List of Entries, including cross-references, is printed at the beginning of each volume.

The Subject Classification at the end of Volume III lists the 1008 entries in the Dictionary under 12 groups, which are in turn divided under 104 subheadings. A given essay may well occur more than once in this classification, so that for any subheading or group the list is fully comprehensive.

Abbreviations are only used in the text for acronyms in common parlance (e.g. IMF, EMS, GATT). In the bibliographies, all journal titles are spelled out in full.

Acronyms. Frequently used acronyms are defined in the *List of Acronyms* printed in each volume. With the exception of those very common terms mentioned above, acronyms are not used in the text without explanation.

Alphabetization. Entries are listed in alphabetical order by letter, not by word. This is illustrated in the following sequence:

bank failure
Bank for International Settlement
bank holding companies
banking acquisitions
Banking Act of 1933
Banking Act of 1935
banking crises

banking supervision bank mergers Bank of Canada Bank of England

Bank rate bank regulation bank runs bankruptcy

. . .

banks, retail and wholesale bank surveillance, etc.

Exceptions are made in a few cases, where an account of theory precedes that of applied work: for example, 'hyperinflation: theory' appears before 'hyperinflation: experience'.

Authors. Each essay in the Dictionary is signed by its author or authors, in the form chosen by the contributors. For glossarial entries, the authors' names appear as initials only.

A List of Contributors, showing their affiliation at the time of writing and the titles of the essays they have written, will be found at the end of Volume III.

Reprints. Ten short essays were originally published in *Palgrave's Dictionary of Political Economy* (1894–99). These carry a by-line explaining their provenance and the author's name is printed in square brackets, for example [F.Y. Edgeworth].

Editorial style. Although the text has been standardized to follow British usage in spelling and punctuation, no attempt has been made to impose a false stylistic uniformity on the diverse entries that comprise the Dictionary. Only the names of individuals and institutions are capitalized (thus 'European Community' but 'ecu'); italics are used sparingly, and only to avoid ambiguity (thus 'a priori' but 'et al.').

Bibliographies. Almost all essays in the Dictionary are followed by bibliographies. These give details of works referred to in the text and provide additional information on studies which the authors have drawn on, as well as recommended further reading. The bibliographies are in author/date form and always give the date of original publication with further editions or translations cited where appropriate.

Bibliographies are arranged alphabetically by author/editor and chronologically under the authors'/editors' names. Publications with joint authors are cited under the name of the first author, following the list of works with single authorship. Where publications have been issued by an institution, the name of the institution is regarded as the author.

All bibliographies are intended to be integral; that is, no other bibliography need be consulted to explain the references given in a particular essay.

The style used in citations is self-explanatory, but it may be helpful to outline the main principles. For books that have appeared in several editions, information is given pertaining to the original date of publication and to further editions. Publication details are provided for translations into English; no translation is provided for titles originally published in French, German, Spanish or Italian; titles in less familiar languages are translated.

Where page references in the text of an essay refer to a reprint or translation, the original date of publication is given in square brackets, followed by the date of the reprint and the appropriate pagination.

For journal articles, the title of the article is given in roman type, followed by the title of the periodical, the volume (and fascicle number where appropriate), month of publication (where known) and the page span.

Dissertations, working papers, discussion documents and other unpublished works are cited with the name of the appropriate institution.

Every effort has been made to provide full bibliographical references, including page spans for journal articles. Where information is incomplete (e.g. for journal articles forthcoming), the Editors and Publishers would welcome further information that would allow them to update and improve the bibliographies in the future.

M.L.

LIST OF ENTRIES A-Z

One-line cross-references are shown in italics, glossarial entries in roman type, and essays in bold.

absolute priority rule absorption approach to the balance of payments acceptability, means of payment and media of exchange acceptances accepting houses accounting and finance acquisition and purchase accounting acquisitions active portfolio management actuarial methods in finance adaptive expectations adjustable rate mortgages adjustment costs adverse selection ageing populations, financial implications of agency agency costs agio agricultural credit in developing countries agricultural finance agricultural price support schemes all-in cost of funds alpha, beta, gamma and delta stocks American banking legislation, recent American Depository Receipt American financial markets, deregulation of American options American Stock Exchange amortization Amsterdam Stock Exchange animal spirits announcement effects annuities annuity markets anomalies arbitrage arbitrage, information theft and insider trading arbitrage pricing theory ARCH models Argentina: monetary and financial system ARMA model

Arrow-Debreu model of general

equilibrium

Arrow-Pratt measure of risk aversion art and artefacts Asian dollar market asset allocation asset and liability management asset price bubbles asset pricing models, empirical testing of asset stripping assignats assurance asymmetric information at the money auctioneer auction rings auctions Australia: monetary and financial Austria: monetary and financial system automated clearing house automated payments systems automated trade execution autoregressive and moving average time series processes backwardation Baker and Brady plans **Balanced Budget Amendment** balance of payments balance sheets of financial intermediaries **Baltic Mercantile and Shipping** Exchange bancor bank capital Bank Charter Act of 1844 bank charters bank credit and information in capital markets bank equity bank failure **Bank for International Settlements** bank holding companies banking acquisitions Banking Act of 1933 Banking Act of 1935 banking crises banking deregulation and monetary policy banking firm banking holidays banking in socialist countries

banking output banking panics Banking School, Currency School, Free Banking School banking structure and competition banking supervision bank mergers Bank of Canada Bank of England Bank of England's daily money market operations Bank of France Bank of Japan Bank rate bank regulation bank runs bankruptcy bankruptcy and capital structure bankruptcy costs bankruptcy liquidation bankruptcy reorganization banks, retail and wholesale bank surveillance Banque de France bargain hunters bargain size **Baring Crisis** barriers to entry in financial markets barter base drift base rate basis point basis risk Basle Committee on banking supervision Bayesian decision theory Bayesian inference in time series bear markets beggar-thy-neighbour Belgium: monetary and financial system Berne Union heta betting bid-ask spreads bidding **Big Bang** bilateral clearing (netting)

bill of exchange

bill on London

capital flows bimetallism co-insurance capital gains and losses cointegrated economic variables Black-Scholes pricing model for options capital gains taxation collared issues block trading Board of Trade Clearing Corporation capitalization of inflation risk callars boards of directors capital markets collateral bogev portfolio capital markets and capitalism in collateralized mortgage obligation bond covenants Britain and continental Europe colonial and state issues of paper before 1914 bond indentures currency in North America bond markets cabs commandite system bond ratings cartels in banking commercial banking bond refunding cash commercial crises bonds cash balances commercial paper book entry transfers cash flow commitments borrowers, evaluation of cash-in-advance economy commodity agreements bottom fisher central bank independence commodity currency bottomry, loan on central banking Commodity Exchange, Inc. (Comex) central banking in developing bounded rationality commodity futures Bourse, Paris countries **Commodity Futures Trading** branch banking central banking institutions in the Commission United Kingdom and the United brands, accounting for commodity markets Brazil: monetary and financial States commodity money **CEOs** system commodity reserve currency break-up value certainty equivalent Common Agricultural Policy **Bretton Woods System** certificates of deposit common knowledge and financial bridge loan markets British banking legislation, recent Chapter 7 bankruptcy common stock repurchase broad market Chapter 11 bankruptcy co-movements charitable trusts and nonprofit brokerage commissions company failure brokerage services institutions competing currencies bubbles chartist analysis Competition and Credit Control budgetary policy chartists' language competitive depreciation budget deficits: problems of cheap money competitive moneys measurement cheap talk about monetary policy competitiveness in banking budget projections check complexity and chaos in finance building societies cheque Comptroller of the Currency building societies: evolution into Chicago Board of Trade computer trading Chicago Board Options Exchange concentration in banking and other bull and bear markets in the United Chicago Mercantile Exchange financial services States chief executive officers conditionality bulldog bonds China: monetary and financial confidence **Bullionist Controversy** system Congressional Budget Office Bundesbank Chinese walls conjectural guarantee burden of the debt churning consignment stock business cycles c.i.f. and f.o.b. consols buybacks cigarette currencies consumer credit buying in circuit-breakers consumer loans buyouts City of London consumer loans and the life cycle callable bonds classical dichotomy consumer spending and housing call loan rate classical theory of money call markets clearing banks consumption-based asset pricing model call money market clearing house associations consumption betas call options clearing house automated payments consumption function call risk system (CHAPS) contango Cambridge quantity equation clearing house interbank payments contingent claims analysis Canada: monetary and financial system (CHIPS) contingent commodities system clearing houses continuous and discrete time capital, credit and money markets clearing houses in futures markets models capital adequacy clearing systems continuous time stochastic models capital asset pricing model clearing unions continuous time stochastic capital-assets ratio clientele effect processes capital budgeting clipped money contrarians capital controls closed-end mutual funds convertible bonds capital export closure rule convertible securities capital flight

coinage, development of

Cooke Committee

cooperative banking groups coordinated central bank intervention coordination of national policies core capital core deposits cornering the market corporate borrowing corporate control, market for corporate failure corporate finance corporate governance corporate mergers corporate ownership and management corporate raiders corporate restructuring corporate takeovers corporate taxation corporate treasury management correction correspondent banking corridors corset cost of capital cost of carry cost of corporate capital in Japan cost-push inflation costs of bankruptcy costs of equity issuance Council for Mutual Economic Assistance counterparty risk countertrade country banks and banking country risk coupon covenants covered interest parity crashes crawling peg creative accounting credibility Creditanstalt credit cards credit controls credit creation credit crunch credit cycle Crédit Foncier credit market debt credit markets in developing countries Crédit Mobilier credit rating agencies credit rationing credit risk credit screening credit unions cross-equation restrictions cross hedging cross of gold crowding out

cumulative processes

Cunliffe Committee currencies currency areas currency baskets currency boards currency options **Currency Principle** currency reform currency risk Currency School currency substitution currency smabs current account of the balance of payments: normative theory daily money market operations of the Bank of England daily settlement daylight credit dealers in securities dear money debasement of the coinage debentures debit cards débouchés, théorie des debt and default: corporate vs. sovereign debt crisis debt-eauity ratio debt-equity swaps debt-export ratios debt exposure debt forgiveness debt moratorium debt renegotiation debt restructuring debt retirement deep pockets default premia default risk deficit financing defining money deflation delivery structure of futures contracts demand and supply functions in macroeconomics demand for money: theoretical studies demand for money: empirical studies demand management demand-pull inflation Denmark: monetary and financial system dependent economy model of the balance of payments deposit insurance depository institutions depreciation deregulation deregulation of American financial markets deregulation of European financial markets

deregulation of Japanese financial markets derivative deposit theory of banking derivative products design of securities Deutschemark Deutsche Terminhörse devaluation development banks development bonds development of financial institutions development of stock markets differences of opinion diffusion processes in finance dilution direct investment directors dirty floating discount brokers discounted cash flow model discount houses discount market discount rate discount window disinflationary policies disintermediation divestment divestment and sell-off dividend announcements dividend capture dividend policy dividend puzzle dollar dollarization domestic credit expansion dominant and dependent currencies double-entry bookkeeping Dow Jones indicators of stock prices downtick draining liquidity dual exchange rates dual system of banking due diligence duration and immunization dynamic hedging dynamic programming dynamic programming and Markov decision processes dynamic spanning **Economic and Monetary Union of** the European Community economies of scale in financial activities ecu ecu bond market education, financial aspects of effective exchange rates efficiency of sports and lottery betting markets efficiency wages

efficient market hypothesis elasticities approach to the balance of payments electronic funds transfer emerging stock markets empirical testing of asset pricing models employee ownership **Employer Retirement Income** Security Act endogenous and exogenous money energy price shocks equity assets ratio equity derivatives equity markets equity of financial intermediaries equity premium equity premium puzzle erga omnes principle ergodic theory ethical investment ethics in finance eurobond market eurocurrency markets eurodollars euromarkets **European Bank for Reconstruction** and Development European Central Bank **European Community** European currency unit European Economic Area European financial futures exchanges European financial markets, deregulation **European Free Trade Association European Investment Bank European Monetary System** European Monetary Union European options **European Options Exchange European Payments Union** event risk event studies excess reserves exchange exchange control exchange-for-physical exchange rate dynamics exchange rate exposure Exchange Rate Mechanism of the **European Monetary System** Exchange Rate Mechanism of the European Monetary System, problems of the exchange rate pass-through exchange rate regime choice exchange rates exchange risk exchange stabilization accounts ex-dividend stock price behaviour executive stock options

exercise price exit bonds exotic currencies expectations expectations and real interest rates expectations hypothesis expected utility hypothesis experimental asset markets export finance factoring failure of financial markets Fannie Maes fast market federal agricultural finance agencies Federal Deposit Insurance Corporation federal funds market federal funds rate Federal Home Loan Bank System federal housing finance agencies Federal National Mortgage Association Federal Open-Market Committee Federal Reserve Board Federal Reserve System Federal Savings and Loan Insurance Corporation **Fedwire** fiat money fictitious capital fiduciary fiduciary issue filter rule tests finance finance capital finance subsidiaries financial aspects of education financial contracting financial crises financial crises and credit cycles financial deregulation and credit controls financial deregulation and reregulation financial engineering financial free lunches financial implications of ageing populations financial innovation and money financial innovation and regulation in the United States financial instability hypothesis financial institutions, development of Financial Institutions Reform, Recovery, and Enforcement Act of 1989 financial intermediaries financial journalism financial markets, stability of financial press financial repression financial secrecy Financial Services Act of 1986

financial services industry financial structure and economic development financial supermarkets financial theory and propertyliability insurance Financial Times indexes financial usage in Britain and the United States financial zoos First and Second Banks of the United States fiscal and monetary policies in developing countries fiscal impulse fiscal policy in open economies fiscal stance Fisher effect Fisher's Law Fisher's Separation Theorem fixed exchange rates fixed-income markets flexible exchange rates flight to quality float floating exchange rates floating rate notes floor brokers and traders floors flow of funds flow trading forced currency forced saving forecasting foreign aid foreign debt foreign direct investment foreign exchange auctions foreign exchange market intervention foreign exchange markets foreign exchange markets: history foreign exchange options foreign exchange reserves foreign exchange risk premia foreign exchange swaps foreign investment foreign portfolio investment foreign takeovers foreign trade multiplier forex markets forfaiting forward and futures contracts forward markets fourth market fractional currency fractional reserve banking framing hypothesis France: monetary and financial system franchising franc zone Frankfurt Stock Exchange fraud

free banking free banking: theory free banking: history free cash flow free lunch free reserves fringe banks front running Fuggers full employment full employment budget surplus fundamental analysts fundamental disequilibrium fund management fungibility futures clearinghouse futures clearing houses futures markets, hedging and speculation futures trading gains from trade in monetary economies gambling game theory in finance Garn-St Germain Act gearing Genoese exchange fairs German Monetary Unification Germany: monetary and financial system Gibson paradox gilt-edged market Ginnie Maes giro banks Glass-Steagall Act global financial markets going private going public Gold and Silver Commission golden parachute gold exchange standard gold markets gold mining gold points gold reserves goldsmiths gold standard gold standard: theory gold sterilization gold supply goodwill government bonds government debt government deficits Government National Mortgage Association Gramm-Rudman-Hollings **Balanced Budget Act**

Gramm-Rudman-Hollings
Balanced Budget Act
Granger causality
gravedancer
Great Crash of 1929
Greece: monetary and financial
system
greenbacks

green currencies greenmail Gresham's Law: history Gresham's Law: theory Group of Seven (G7) hard ecu harmonization of taxes on capital income hedging Herstatt crisis hidden actions, moral hazard and contract theory hidden reserves highly confident letter high-powered money and the monetary base historical cost accounting hoarding holding companies home loans Hong Kong: monetary and financial Hong Kong Stock Exchange hostile takeovers hot money House of Rothschild housing and mortgage markets housing finance hubris hypothesis hyperinflation: theory hyperinflation: experience idiosyncratic risk idle balances illegal demand for currency immunization inadequacy of bank capital incentive compatibility incentive constraints incentive contracts in labour markets income income-expenditure analysis incomes policies income velocity incomplete contracts incomplete financial markets incomplete markets indentures index arbitrage indexation indexed assets index futures index numbers India: monetary and financial

indexation
indexed assets
index futures
index numbers
India: monetary and financial
system
indicators
Individual Retirement Accounts
industrial banking
industrial organization of banking
infinite regress in expectations
inflation, measures of
inflation accounting
inflationary expectations

inflationary gap inflation hedges inflation risk inflation tax informationally efficient markets informational role of futures markets information theft initial public offerings inland bill of exchange inner reserves innovation, finance of innovation in financial products innovation in retail banking inside and outside money inside and outside spreads inside information insider trading insolvency and bankruptcy instalment credit institutional investors in-substance defeasance insurance insurance companies insurance markets insured deposits integrated circuit card integrated time series interbank markets interest rate ceilings interest rate futures interest rate hedges interest rate options interest rate risk interest rates interest rate swaps intermediation internal rate of return International Bank for Economic Cooperation International Bank for Reconstruction and Development international capital flows international capital market integration International Clearing Union international currency international finance international financial stability international income comparisons international indebtedness **International Investment Bank** international liquidity International Monetary Fund international monetary institutions international monetary policy international policy coordination: game-theoretic perspectives International Stock Exchange international transmission of inflation and deflation

interstate banking

asset pricing

intertemporal portfolio theory and

liquidation, voluntary market timing intervention liauidity market valuation in the money liquidity and markets market value intrafirm transactions liquidity preference market value accounting inventories liquidity premium market volatility inventory cycles liquidity ratio marking to market investment listing Marshallian K investment banking Llovd's of London Marshall Plan investment companies investment decision criteria: loanable funds martingales private decisions loan commitments matching investment decision criteria: public loan contracts maturity date loan loss reserves on Third World maturity transformation decisions investment trusts McFadden Act invisible trade local banks mean reversion Ireland: monetary and financial lock-in effect means of payment Lombard rate mean-variance analysis system Islamic banking Lombards measures of inflation Israel: monetary and financial Lombard Street measures of the money stock system London Baltic Exchange mechanism design and incentive Italy: monetary and financial London Interbank Offered Rate constraints London International Financial Futures system medium of exchange Ito's Lemma and Options Exchange medium-term financial policy January effect London Metal Exchange menu costs Japanese financial markets, deregulation of **London Stock Exchange** merchant banking London Traded Options Market Japanese property market mergers Japan: monetary and financial lotteries mergers of financial intermediaries system Louvre Accord metallic standard I-curve Lucas critique Mexico: monetary and financial iobbers Luxembourg: monetary and system Joint Economic Committee of the US financial system mezzanine financing $M0, M1, M2, M3, \dots$ Congress Middle East: monetary and ioint stock banks Macaulay duration financial system junk bonds Macmillan Committee mining finance macroeconometric models Mississippi Company Kalman filter macroeconomics: relations with Modigliani-Miller Theorem key currency microeconomics Monday blues killer bees main bank system in Japan monetarism kiting managed exchange rates monetary approach to the balance **Knights Templar** management buyouts of payments management buyouts from the Laffer curve monetary base land-backed currency public sector monetary constitutions managerial incentives laundering monetary cranks manipulation of financial markets law of one price monetary disequilibrium and law of reflux marché à terme international de France market clearing laving off marginal efficiency of capital monetary heresies lead banks margin requirements and stock monetary policy leads and lags trading monetary policy coordination and lead underwriter margin trading monetary convergence leaning against the wind Maria Theresa dollar monetary policy in Japan leasing mark monetary reform legal restrictions theory market and environmental monetary system of socialist legal tender uncertainty economic integration lender of last resort market anomalies monetary targeting letter of credit market capitalization monetary transmission letter stock mechanisms market clearing leverage market failure monetary unions leveraged buyouts market for corporate control monetary veil leverage effect market impact money liability management market liquidity money, credit and trust lifeboat market makers money and bond markets in Hong life cycle hypothesis market myopia life insurance market resiliency money and general equilibrium limited liability, development of market risk theory liquidation markets with adverse selection money at call and short notice

money brokers money centre banks money creation money illusion money in the utility function money laundering moneylenders in developing countries money managers money market funds money market operations money markets money markets in India money multiplier money supply money supply announcements Money Trust monitoring of financial institutions monometallism moral hazard mortgage-backed securities mortgage lending mortgage markets in Britain mortgage service contracts multinationals multiple exchange rates multivariate time series models municipal bonds mutual funds mutual savings institutions national accounting and financial flows National Association of Securities Dealers Automated Quotations national debt National Market System natural rate and market rate natural rate hypothesis near money negotiable certificates of deposit negotiated order of withdrawal neoclassical synthesis neo-structuralist views of inflation Netherlands: monetary and financial system netting, multilateral net worth neutrality of money new classical macroeconomics new issues new monetary economics New View of banking New York Futures Exchange New York Mercantile Exchange **New York Stock Exchange** noise trading noisy data and monetary policy nominal exchange rates nominal rate non-accelerating-inflation rate of unemployment non-clearing markets in monetary economies

nonexpected utility theory

non-performing loans non-price competition in banking non-trading effect normal backwardation normal market size Norway: monetary and financial system note issuance facilities note issue notes notional bonds NOW accounts Office of Management and Budget Office of Thrift Supervision offshore banking offshore bond market off-the-balance-sheet activities oil price shocks open economy macroeconomics open-end mutual funds Open Market Committee of the Federal Reserve System open-market operations open outcry optimum currency areas optimum quantity of money option pricing theory options options markets orange juice orderly markets Organization for Economic Cooperation and Development Organization of Petroleum Exporting Countries organized product markets out of the money outside money overdrafts Overend Gurney crisis overfunding and the full fund rule overissue of currency overlapping-generations model and monetary economics overnight repurchase agreement overshooting over-the-counter market OzPac-Man defence panics paper paper currency paper money parallel currencies parallel markets Paris Bourse Paris Club parity, prewar partnerships par value relation passive portfolio management pass-through security pawnbroking pay-off period

pegged exchange rates pension funds pensions performance evaluation performance-related fees permanent floating rate notes permanent income hypothesis personal bankruptcy personal credit markets peso problem petrodollars Phillips curve *blacements* placing playing card currency Plaza Agreement point of sale poison pill policy coordination Ponzi games pooling and separating equilibria pooling of interests, and mergers portfolio analysis portfolio insurance Portugal: monetary and financial system postal banks pound sterling precautionary motives for holding assets precious metals, distribution of predation and financial resources prediction prediction of bankruptcy pre-emptive rights preferred habitat preferred stock present value prevention of money laundering: the case of Luxembourg prewar parity price discrimination and monetary assets price-earnings ratios price indices price level adjusted mortgages price revolution primary markets prime rate primitive money principal and agent Prisoner's Dilemma private corporate funding private currencies private equity issues private information private placements privatization privatization and institutional change in Eastern Europe privatization of financial institutions profit and loss statement programme trading