PEIJIE WANG

The Economics of Foreign Exchange and Global Finance

Second Edition





The Economics of Foreign Exchange and Global Finance

Second Edition

Peijie Wang

The Economics of Foreign Exchange and Global Finance

Second Edition



Professor Peijie Wang University of Hull Business School Cottingham Road Hull HU6 7RX United Kingdom p.wang@hull.ac.uk

ISBN 978-3-642-00106-2

e-ISBN 978-3-642-00100-0

DOI 10.1007/978-3-642-00100-0

Library of Congress Control Number: 2009922087

© Springer-Verlag Berlin Heidelberg 2005, 2009

This work is subject to copyright. All rights are reserved, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilm or in any other way, and storage in data banks. Duplication of this publication or parts thereof is permitted only under the provisions of the German Copyright Law of September 9, 1965, in its current version, and permission for use must always be obtained from Springer. Violations are liable to prosecution under the German Copyright Law.

The use of general descriptive names, registered names, trademarks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

Cover design: WMX Design, Heidelberg

Printed on acid-free paper

9 8 7 6 5 4 3 2 1

springer.com

In memory of my beloved parents

Preface to the Second Edition

The book is designed to integrate the theory of foreign exchange rate determination and the practice of global finance in a single volume, which demonstrates how theory guides practice, and practice motivates theory, in this important area of scholarly work and commercial operation in an era when the global market has become increasingly integrated.

The book presents all major subjects in international monetary theory, foreign exchange markets, international financial management and investment analysis. The book is relevant to real world problems in the sense that it provides guidance on how to solve policy issues as well as practical management tasks. This in turn helps the reader to gain an understanding of the theory and refines the framework.

This new edition of the book incorporates two new chapters, together with updating most chapters in the first edition, integrating new materials, data, and/or the recent developments in the areas. A new chapter on the portfolio balance approach to exchange rate determination is included, in addition to the major models included in the first edition: the Mundell-Fleming model, the flexible price monetary model, the sticky price monetary model featured by the Dornbusch model and the real interest rate differential model. This makes the book inclusive in exchange rate theories. A second new chapter included is on issues in balance of payments or international transactions and their interactions with exchange rates, changes in exchange rates and exchange rate policies. Rather than presenting the rival approaches alone, the pertinent literature attempting to synthesise them is offered also. Moreover, the approaches arising from the need to address balance of payments issues in a changed international investment environment are developed in the chapter.

Various topics are interlinked so the book adopts a systematic treatment of integrated materials relating different theories under various circumstances and combining theory with practice. The text examines issues in international monetary policy and financial management in a practical way, focusing on the identification of the factors and players in foreign exchange markets and the international finance arena.

The book can be used in graduate and advanced undergraduate programmes in international finance or global finance, international monetary economics, and international financial management. It can also be used as doctorate research methodology materials and by individual researchers interested in international finance or global finance, foreign exchange markets and foreign exchange rate determination, foreign exchange risk management, and international investment analysis.

Peijie Wang, December 2008

Preface to the First Edition

The book is designed to integrate the theory of foreign exchange rate determination and the practice of global finance in a single volume, which demonstrates how theory guides practice, and practice motivates theory, in this important area of scholarly work and commercial operation in an era when the global market has become increasingly integrated.

The book presents all major subjects in international monetary theory, foreign exchange markets, international financial management and investment analysis. The book is relevant to real world problems in the sense that it provides guidance on how to solve policy issues as well as practical management tasks. This in turn helps the reader to gain an understanding of the theory and refines the framework.

Various topics are interlinked so the book adopts a systematic treatment of integrated materials relating different theories under various circumstances and combining theory with practice. The text examines issues in international monetary policy and financial management in a practical way, focusing on the identification of the factors and players in foreign exchange markets and the international finance arena.

The book can be used in graduate and advanced undergraduate programmes in international finance or global finance, international monetary economics, and international financial management. It can also be used as doctorate research methodology materials and by individual researchers interested in international finance or global finance, foreign exchange markets and foreign exchange rate determination, foreign exchange risk management, and international investment analysis.

Peijie Wang, May 2005

Contents

1	For	eign Exchange Markets and Foreign Exchange Rates	1
	1.1	Foreign Exchange Rate Quotations and Arbitrage	2
		1.1.1 Foreign Exchange Quotations	
		1.1.2 Cross Rates and Arbitrage	
	1.2	Foreign Exchange Transactions	5
		1.2.1 The Bid-Ask Spread	5
		1.2.2 Transaction Costs and Arbitrage Opportunities	7
	1.3	Spot and Forward Exchange Rates	10
	1.4	Effective Exchange Rates	12
	1.5	Other Currency Markets	14
2	Exc	hange Rate Regimes and International Monetary Systems	17
		Exchange Rate Regimes	
	2.2	A Brief History of International Monetary Systems	21
		The European Single Currency	
3	International Parity Conditions		
	3.1	Purchasing Power Parity	
		3.1.1 Absolute Purchasing Power Parity	32
		3.1.2 Real Exchange Rates	
		3.1.3 Relative Purchasing Power Parity	
		3.1.4 Factors Contributing to the Departure from PPP	
		3.1.5 Empirical Tests and Evidence on PPP	42
	3.2	Interest Rate Parities	
		3.2.1 Covered Interest Rate Parity	
		3.2.2 CIRP and Arbitrage in the Presence of Transaction Costs	
		3.2.3 Uncovered Interest Rate Parity	
	3.3	International Fisher Effect	
	3.4	Links Between the Parities: a Summary	61
4	Bal	ance of Payments and International Investment Positions	63
	4.1	Balance of Payments	64
		4.1.1 Balance of Payments Accounts and Classification	65

		4.1.2 Balance of Payments Entries and Recording	69
		4.1.3 The Balance of Payment Identity	
	4.2	International Investment Position Statements and Analysis	81
5	Ope	n Economy Macroeconomics	
-	5.1	The Balance of Payments, National Accounts	
		and International Economic Linkages	91
		5.1.1 National Accounts with an External Sector	
		5.1.2 International Economic Linkages	
	5.2	IS-LM in Open Economy Macroeconomics	
	0.2	5.2.1 IS–LM Analysis	
		5.2.2 IS–LM–BP Analysis	
	5.3	Aggregate Supply and Assumptions on Price Attributes	
6	Bala	ance of Payments Issues and Exchange Rate Movements	
	6.1	The Elasticity Approach	
	6.2	The Absorption Approach	
	6.3	The Monetary Approach	
	6.4	DIPI Analysis and DIDI Analysis	
7	The	Mundell-Fleming Model	
	7.1	•	
		– Perfect Capital Mobility	
		7.1.1 Monetary Expansion - Perfect Capital Mobility,	
		Flexible Exchange Rates	
		7.1.2 Fiscal Expansion - Perfect Capital Mobility,	
		Flexible Exchange Rates	
		7.1.3 Monetary Expansion - Perfect Capital Mobility,	
		Fixed Exchange Rates	
		7.1.4 Fiscal Expansion - Perfect Capital Mobility,	
		Fixed Exchange Rates	
	7.2	Effects and Effectiveness of Monetary Policy and Fiscal Policy	
		– Imperfect Capital Mobility	
		7.2.1 Monetary Expansion - Imperfect Capital Mobility,	
		Flexible Exchange Rates.	
		7.2.2 Fiscal Expansion - Imperfect Capital Mobility,	
		Flexible Exchange Rates	
		7.2.3 Monetary Expansion - Imperfect Capital Mobility,	
		Fixed Exchange Rates	157
		7.2.4 Fiscal Expansion - Imperfect Capital Mobility,	
		Fixed Exchange Rates	160
	7.3	Monetary Policy Versus Fiscal Policy	
	1.5	7.3.1 Effect on Income	
		7.3.2 Effects on the Exchange Rate and Official Reserves	
		7.3.3 Effect on the Balance of Payments Current Account	
		1.5.5 Effect on the Datance of Layments Current Account	