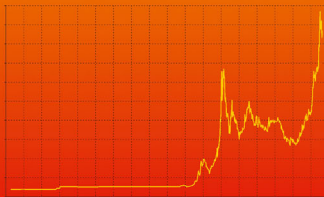


ANSGAR BELKE
THORSTEN POLLEIT

Monetary Economics in Globalised Financial Markets



 Springer

Monetary Economics in Globalised Financial Markets

Ansgar Belke · Thorsten Polleit

Monetary Economics in Globalised Financial Markets

 Springer

Prof. Dr. Ansgar Belke
University Duisburg-Essen
Faculty of Economics
and Business Administration
Chair for Macroeconomics
Universitätsstr. 12
45117 Essen
Germany
ansgar.belke@uni-due.de

Honorary Prof. Dr. Thorsten Polleit
Frankfurt School of Finance & Management
Sonnemannstr. 9-11
60314 Frankfurt am Main
Germany
info@frankfurt-school.de

ISBN 978-3-540-71002-8 e-ISBN 978-3-540-71003-5
DOI 10.1007/978-3-540-71003-5
Springer Dordrecht Heidelberg London New York

Library of Congress Control Number: 2009920050

© Springer-Verlag Berlin Heidelberg 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: WMXDesign GmbH, Heidelberg

Printed on acid-free paper

Springer is part of Springer Science+Business Media (www.springer.com)

*To our parents
Ursula and Winfried Belke
Anita and Horst Polleit*

Preface

An old song has it that *money makes the world go round*. Indeed, money, the universally accepted means of exchange, plays a pivotal role in turning the wheels of an increasingly globalized world economy, characterised by increasing cross-border trade in goods and services and financial transactions. Given the undeniable importance of money for domestic and international economic dispositions, we therefore do not heed the old saying *The best advice about money is not to talk about it* in this book. On the contrary, we will talk about money quite extensively.

At the time of writing, the global monetary architecture experiences an unprecedented credit market turmoil, which started in the US subprime mortgage market in July/August 2007 and spread to virtually all major financial markets. The ultimate consequences of this financial earthquake are hard to predict in terms of their impact on the global economy and its monetary order in the years to come. Nevertheless, throughout our book the reader will find plenty of analyses of the factors and events which may have sown the seeds of the current crisis.

With this book we want to provide students with an integrated overview about the major building blocks of monetary economics – that are monetary theory, capital market theory and monetary policy theory. In doing so, we will draw heavily on the work of many leading scholars. On top of that, we will provide numerous graphs and econometric examples, which may help illustrating, and thereby improving the understanding of, the theoretical issues under review.

We also want to show that one can address nearly all the core issues in monetary economics with a systematic modern approach which does not neglect econometrics but that also pays attention to the nuances of micro foundations. The book is aimed at second- and third-year undergraduate and graduate courses in monetary economics and international finance.

We would like to thank Professor Dr. Dieter Gerdesmeier and the colleagues at the Frankfurt School of Finance & Management, Frankfurt, Daniel Gros, PhD, Director Centre for European Policy Studies, Brussels, Dr. Eduard Hochreiter, The Joint Vienna Institute, Vienna, Professor Dr. Wim Kösters, University of Bochum, and Professor Dr. Martin Leschke, University of Bayreuth for many fruitful discussions and invaluable support. We are also grateful for financial and intellectual support from the Oesterreichische Nationalbank (OeNB) where the first author stayed as a research professor when the first drafts of this book were written. The quality

of the book profited most from the feedback by our students at the Universities of Vienna, Stuttgart, Bayreuth, Frankfurt, Stuttgart-Hohenheim, Duisburg-Essen Berlin and Saarbrücken. Technical assistance by students from the Universities of Duisburg-Essen and Hohenheim, especially from Kai Müller-Berner and Markus Ortel is gratefully acknowledged as well. Needless to say, we take full responsibility for any remaining shortcomings and errors.

Frankfurt and Berlin
April 2009

Ansgar Belke
Thorsten Polleit

Contents

| | |
|--|----|
| 1 Money and Credit Supply | 1 |
| 1.1 Money Definition, Functions, Kinds and Origin..... | 1 |
| 1.1.1 Definition and Functions | 1 |
| 1.1.2 Kinds of Money | 6 |
| 1.1.3 Origin of Money | 8 |
| 1.2 From the Gold to the Paper Money Standard | 11 |
| 1.2.1 The Gold Standard | 11 |
| 1.2.2 Gold Standard and the Price Level | 14 |
| 1.2.3 Trade, Gold Movements, Prices and Income | 14 |
| 1.2.4 Pros and Cons of the Gold Standard | 16 |
| 1.2.5 The End of the Gold Standard | 18 |
| 1.3 Money and Credit Creation..... | 19 |
| 1.3.1 Base Money Supply | 19 |
| 1.3.2 Central Bank Balance Sheet | 22 |
| 1.3.3 The US Federal Reserve | 23 |
| 1.3.4 The Eurosystem | 27 |
| 1.3.5 Credit and Money Creation | 29 |
| 1.3.6 Multiple Credit and Money Creation | 30 |
| 1.3.7 The Tinbergen Approach to the Money Multiplier | 34 |
| 1.3.8 Open Market Operations | 38 |
| 1.3.9 A Closer Look at the Demand for Base Money..... | 45 |
| 1.3.10 Supply of and Demand for Base Money | 49 |
| 1.3.11 Impact of Short- on Long-Term Rates | 53 |
| 1.3.12 Exogenous Versus Endogenous Money Supply..... | 55 |
| 1.4 Money Aggregates | 58 |
| 1.4.1 International Definitions of Money Aggregates..... | 58 |
| <i>Digression: Divisia Monetary Aggregates</i> | 66 |
| 1.5 Impact of Portfolio Shifts on Money | 71 |
| 1.5.1 Autonomous Bank Refinancing | 71 |
| 1.5.2 Bank Refinancing Via Selling Assets | 72 |
| 1.5.3 Disintermediation | 73 |
| 1.5.4 Inversion of the Yield Curve | 74 |
| 1.6 A Look at “Global Liquidity” | 76 |