Proper conduct of monetary policy requires understanding the monetary transmission mechanism, to monitor the economy, make decisions on the stance of policy and explain the policy actions to the public. An urgent task now for the European Central Bank is to gather and analyze evidence on the euro-zone. This book presents the results of the first ever research project on the monetary transmission mechanism in the euro area. The findings are drawn from a multi-year collaborative project by the European Central Bank and the other Eurosystem central banks. The Monetary Transmission Network research team analyzed both macro- and micro-economic data for the area as a whole and for individual countries. The results described in country case studies and overview essays by central bank economists, along with a discussion chapter by eminent academics, provide an essential contribution to the latest research.


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Monetary Policy Transmission in the Euro Area

_A Study by the Eurosystem Monetary Transmission Network_

Edited by
Ignazio Angeloni, Anil K Kashyap and Benoit Mojon
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Foreword

This book presents to the community of central bankers and academics, and to the public at large, the results of the research project undertaken by the Eurosystem Monetary Transmission Network (MTN) on the transmission of monetary policy in the euro area. This is the first comprehensive research project completed jointly by the European Central Bank (ECB) and by the euro area National Central Banks (NCBs) after the introduction, in 1999, of the new single European currency, the euro.

The choice of monetary policy transmission as the topic for this study was a logical and almost a necessary one. The transmission process is a central issue for every central banker. It figures prominently in the preparation, decision-making and communication of monetary policy. Good analysis is needed to get information on the transmission mechanism and to make it systematic and soundly based on economic theory and data evidence. This task was assigned, shortly after the onset of the single European monetary policy, to the Monetary Transmission Network, a team of Eurosystem economists with the proper mix of expertise. Their work lasted some two years. Preliminary results of this research were presented, even before its completion, to a number of academic and policy-making audiences on both sides of the Atlantic. Disseminating in-house research, particularly when the topic is of such policy relevance, is an integral part of central bank communication. This book is part of this communication effort.

Monetary transmission is a difficult subject, for a variety of reasons. It is broad, covering economics almost in its entirety. It crucially hinges on unobservable factors, most notably market expectations. It is even more difficult in this case because the focus is the euro area, a new entity, partly unexplored and not yet richly endowed with statistical information. All this considered, the task assigned to the Monetary Transmission Network was a very challenging one; I am glad to see that the group was able to deliver such impressive results in a relatively short period of time. The experience of the Monetary Transmission Network sets an excellent
O. Issing

example of productive cooperation among research staff in a system of central banks.

The success of this effort is owed first to its participants, whose names appear in the introduction of the book and in the individual chapters. All of them contributed with competence and dedication. The Eurosystem research areas – and the Group of Heads of Research, chaired by Vítor Gaspar – contributed with their support and by securing the necessary resources. Finally, a special mention should go to Ignazio Angeloni, who directed the project, Anil Kashyap, who provided relentless stimulus and guidance, and Benoît Mojon, who directed the Network Secretariat. The success of this project owes much to their commitment and determination.

Otmar Issing

ECB Chief Economist and Member of the Executive Board
Frankfurt am Main, November 2002
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As editors of this book, our gratitude goes first to all the members of the Monetary Transmission Network, each of whom contributed to creating a stimulating environment in which our collective work could develop. We have learned a lot during the course of this project, and, equally important, we have enjoyed it.

For encouragement and support we, and the whole Monetary Transmission Network, are grateful to Professor Otmar Issing, Chief Economist and Executive Board member of the ECB, and to Vitor Gaspar, ECB Director General for Research and Chairman of the Eurosystem Heads of Research Group. The Heads of Research of the Eurosystem were most supportive in providing staff resources. The ECB Governing Council and the ECB President, Wim Duisenberg, provided comments and encouragement on the occasion of a special Governing Council seminar held in April 2002, where the results of the project were presented.

We also thank, without involving them, all those who provided comments and advice during the course of the work and at the concluding conference of December 2001. The list includes: Ernst Baltensperger, Charlie Bean, Ben Bernanke, Steve Bond, Gabe de Bondt, Claudio Borio, Fabio Canova, Bob Chirinko, Rich Clarida, Jean Dermine, Xavier Freixas, Ben Friedman, Jordi Gali, Vitor Gaspar, Luigi Guiso, Jurgen von Hagen, Skander van den Heuvel, Gert Jan Hogeweg, Ken Kuttner, Otmar Issing, Jens Larsen, Jean Charles Rochet, Plutarchos Sakellaris, Christopher Sims and Axel Weber. Our gratitude goes also to the Federal Reserve Board staff, for comments, and especially to Flint Brayton, who conducted the simulations reported in chapter 24. We also thank the Bank of England (Charlie Bean, Jens Larsen and Kalin Nikolov) for their contribution to the conference (chapter 6).

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Any errors should be attributed to us, first and foremost, and to the other authors of this book.
## Abbreviations

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<tbody>
<tr>
<td>AT</td>
<td>Austria</td>
</tr>
<tr>
<td>AWM</td>
<td>Area-wide model of the euro area, developed and used by the ECB</td>
</tr>
<tr>
<td>BE</td>
<td>Belgium</td>
</tr>
<tr>
<td>BIS</td>
<td>Bank for International Settlements</td>
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<tr>
<td>CPI</td>
<td>Consumer price index</td>
</tr>
<tr>
<td>DE</td>
<td>Germany</td>
</tr>
<tr>
<td>ECB</td>
<td>European Central Bank</td>
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<tr>
<td>EMS</td>
<td>European Monetary System</td>
</tr>
<tr>
<td>EMU</td>
<td>Economic and monetary unification of Europe</td>
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<tr>
<td>ES</td>
<td>Spain</td>
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<td>FI</td>
<td>Finland</td>
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<td>FR</td>
<td>France</td>
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<tr>
<td>FRB</td>
<td>Board of Governors of the Federal Reserve System</td>
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<tr>
<td>FRB-US</td>
<td>Quarterly econometric model of the US economy, developed and used by the FRB</td>
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<tr>
<td>GDP</td>
<td>Gross domestic product</td>
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<tr>
<td>GR</td>
<td>Greece</td>
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<tr>
<td>IC</td>
<td>Investment contribution to the GDP (or aggregate domestic demand) effect of a monetary policy shock</td>
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<tr>
<td>IE</td>
<td>Ireland</td>
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<tr>
<td>IRC</td>
<td>Interest rate channel of monetary policy</td>
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<td>IT</td>
<td>Italy</td>
</tr>
<tr>
<td>LU</td>
<td>Luxembourg</td>
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<tr>
<td>MTN</td>
<td>(Eurosystem) Monetary transmission network</td>
</tr>
<tr>
<td>NCBs</td>
<td>National Central Banks. Together with the ECB, the NCBs of the euro area form the Eurosystem</td>
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<tr>
<td>NIGEM</td>
<td>National institute global econometric model, developed by the National Institute for Economic and Social Research</td>
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<tr>
<td>NL</td>
<td>Netherlands</td>
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<td>PT</td>
<td>Portugal</td>
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<tr>
<td>VAR(s)</td>
<td>Vector auto-regressive model(s)</td>
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<tr>
<td>WGEM</td>
<td>Working Group on Econometric Modelling</td>
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