

This PDF is a selection from a published volume from the National Bureau of Economic Research

Volume Title: Risk Topography: Systemic Risk and Macro Modeling

Volume Author/Editor: Markus Brunnermeier and Arvind Krishnamurthy, editors

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-07773-X (cloth); 978-0-226-07773-4 (cloth); 978-0-226-09264-5 (eISBN)

Volume URL: <http://www.nber.org/books/brun11-1>

Conference Date: April 28, 2011

Publication Date: August 2014

Chapter Title: Front matter, table of contents, acknowledgments

Chapter Author(s): Markus Brunnermeier, Arvind Krishnamurthy

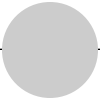
Chapter URL: <http://www.nber.org/chapters/c12505>

Chapter pages in book: (p. i - xii)

Risk Topography



**A National Bureau of
Economic Research
Conference Report**



Risk Topography **Systemic Risk and** **Macro Modeling**

Edited by

Markus Brunnermeier and
Arvind Krishnamurthy

The University of Chicago Press

Chicago and London

MARKUS BRUNNERMEIER is the Edwards S. Sanford Professor of Economics at Princeton University and a research associate of the National Bureau of Economic Research. ARVIND KRISHNAMURTHY is the Harold L. Stuart Professor of Finance in the Kellogg School of Management at Northwestern University and a research associate of the National Bureau of Economic Research.

The University of Chicago Press, Chicago 60637
The University of Chicago Press, Ltd., London
© 2014 by the National Bureau of Economic Research
All rights reserved. Published 2014.
Printed in the United States of America

23 22 21 20 19 18 17 16 15 14 1 2 3 4 5

ISBN-13: 978-0-226-07773-4 (cloth)
ISBN-13: 978-0-226-09264-5 (e-book)
DOI: 10.7208/chicago/9780226092645.001.0001

Library of Congress Cataloging-in-Publication Data

Risk topography : systemic risk and macro modeling / edited by
Markus Brunnermeier and Arvind Krishnamurthy.
pages cm. — (National Bureau of Economic Research
conference report)

Contains selection of the papers of two National Bureau
of Economic Research (NBER) conferences on systemic risk
measurement held in October 2010 in New York and in April 2011
in Chicago.

Includes bibliographical references and index.

ISBN 978-0-226-07773-4 (cloth : alk. paper) — ISBN
978-0-226-09264-5 (e-book) 1. Risk—Congresses. 2. Financial risk
management—Congresses. 3. Macroeconomics—Econometric
models—Congresses. I. Brunnermeier, Markus Konrad, editor of
compilation. II. Krishnamurthy, Arvind, editor of compilation.
III. Series: National Bureau of Economic Research conference
report.

HB615.R5575 2014
338.5—dc23

2013040582

© This paper meets the requirements of ANSI/NISO Z39.48-1992
(Permanence of Paper).

National Bureau of Economic Research

Officers

Kathleen B. Cooper, *chairman*
Martin B. Zimmerman, *vice chairman*
James M. Poterba, *president and chief
executive officer*
Robert Mednick, *treasurer*

Kelly Horak, *controller and assistant
corporate secretary*
Alterra Milone, *corporate secretary*
Gerardine Johnson, *assistant corporate
secretary*

Directors at Large

Peter C. Aldrich
Elizabeth E. Bailey
John H. Biggs
John S. Clarkeson
Don R. Conlan
Kathleen B. Cooper
Charles H. Dallara
George C. Eads
Jessica P. Einhorn

Mohamed El-Erian
Linda Ewing
Jacob A. Frenkel
Judith M. Gueron
Robert S. Hamada
Peter Blair Henry
Karen N. Horn
John Lipsky
Laurence H. Meyer

Michael H. Moskow
Alicia H. Munnell
Robert T. Parry
James M. Poterba
John S. Reed
Marina v. N. Whitman
Martin B. Zimmerman

Directors by University Appointment

George Akerlof, *California, Berkeley*
Jagdish Bhagwati, *Columbia*
Timothy Bresnahan, *Stanford*
Alan V. Deardorff, *Michigan*
Ray C. Fair, *Yale*
Edward Foster, *Minnesota*
John P. Gould, *Chicago*
Mark Grinblatt, *California, Los Angeles*

Bruce Hansen, *Wisconsin–Madison*
Marjorie B. McElroy, *Duke*
Joel Mokyr, *Northwestern*
Andrew Postlewaite, *Pennsylvania*
Uwe E. Reinhardt, *Princeton*
Richard L. Schmalensee, *Massachusetts
Institute of Technology*
David B. Yoffie, *Harvard*

Directors by Appointment of Other Organizations

Bart van Ark, *The Conference Board*
Jean-Paul Chavas, *Agricultural and Applied
Economics Association*
Martin Gruber, *American Finance
Association*
Ellen L. Hughes-Cromwick, *National
Association for Business Economics*
Thea Lee, *American Federation of Labor
and Congress of Industrial Organizations*
William W. Lewis, *Committee for Economic
Development*

Robert Mednick, *American Institute of
Certified Public Accountants*
Alan L. Olmstead, *Economic History
Association*
Peter L. Rousseau, *American Economic
Association*
Gregor W. Smith, *Canadian Economics
Association*

Directors Emeriti

Glen G. Cain
Carl F. Christ
Franklin Fisher
George Hatsopoulos

Saul H. Hymans
Rudolph A. Oswald
Peter G. Peterson
Nathan Rosenberg

John J. Siegfried
Craig Swan

Relation of the Directors to the Work and Publications of the National Bureau of Economic Research

1. The object of the NBER is to ascertain and present to the economics profession, and to the public more generally, important economic facts and their interpretation in a scientific manner without policy recommendations. The Board of Directors is charged with the responsibility of ensuring that the work of the NBER is carried on in strict conformity with this object.

2. The President shall establish an internal review process to ensure that book manuscripts proposed for publication DO NOT contain policy recommendations. This shall apply both to the proceedings of conferences and to manuscripts by a single author or by one or more co-authors but shall not apply to authors of comments at NBER conferences who are not NBER affiliates.

3. No book manuscript reporting research shall be published by the NBER until the President has sent to each member of the Board a notice that a manuscript is recommended for publication and that in the President's opinion it is suitable for publication in accordance with the above principles of the NBER. Such notification will include a table of contents and an abstract or summary of the manuscript's content, a list of contributors if applicable, and a response form for use by Directors who desire a copy of the manuscript for review. Each manuscript shall contain a summary drawing attention to the nature and treatment of the problem studied and the main conclusions reached.

4. No volume shall be published until forty-five days have elapsed from the above notification of intention to publish it. During this period a copy shall be sent to any Director requesting it, and if any Director objects to publication on the grounds that the manuscript contains policy recommendations, the objection will be presented to the author(s) or editor(s). In case of dispute, all members of the Board shall be notified, and the President shall appoint an ad hoc committee of the Board to decide the matter; thirty days additional shall be granted for this purpose.

5. The President shall present annually to the Board a report describing the internal manuscript review process, any objections made by Directors before publication or by anyone after publication, any disputes about such matters, and how they were handled.

6. Publications of the NBER issued for informational purposes concerning the work of the Bureau, or issued to inform the public of the activities at the Bureau, including but not limited to the NBER Digest and Reporter, shall be consistent with the object stated in paragraph 1. They shall contain a specific disclaimer noting that they have not passed through the review procedures required in this resolution. The Executive Committee of the Board is charged with the review of all such publications from time to time.

7. NBER working papers and manuscripts distributed on the Bureau's web site are not deemed to be publications for the purpose of this resolution, but they shall be consistent with the object stated in paragraph 1. Working papers shall contain a specific disclaimer noting that they have not passed through the review procedures required in this resolution. The NBER's web site shall contain a similar disclaimer. The President shall establish an internal review process to ensure that the working papers and the web site do not contain policy recommendations, and shall report annually to the Board on this process and any concerns raised in connection with it.

8. Unless otherwise determined by the Board or exempted by the terms of paragraphs 6 and 7, a copy of this resolution shall be printed in each NBER publication as described in paragraph 2 above.

Contents

Acknowledgments	xi
Introduction	1
Markus Brunnermeier and Arvind Krishnamurthy	
I. MEASUREMENT AND DISCLOSURE	
1. Challenges in Identifying and Measuring Systemic Risk	15
Lars Peter Hansen	
2. Regulating Systemic Risk through Transparency: Trade-Offs in Making Data Public	31
Augustin Landier and David Thesmar	
II. RISK EXPOSURES	
3. Systemic Risk Exposures: A 10-by-10-by-10 Approach	47
Darrell Duffie	
4. Remapping the Flow of Funds	57
Juliane Begenau, Monika Piazzesi, and Martin Schneider	
5. Measuring Margin	65
Robert L. McDonald	

6. A Transparency Standard for Derivatives	83
Viral V. Acharya	
III. LIQUIDITY AND LEVERAGE	
7. Liquidity Mismatch Measurement	99
Markus Brunnermeier, Gary Gorton, and Arvind Krishnamurthy	
8. Monitoring Leverage	113
John Geanakoplos and Lasse Heje Pedersen	
IV. FINANCIAL INTERMEDIATION AND CREDIT	
9. Repo and Securities Lending	131
Tobias Adrian, Brian Begalle, Adam Copeland, and Antoine Martin	
10. Improving Our Ability to Monitor Bank Lending	149
William F. Bassett, Simon Gilchrist, Gretchen C. Weinbach, and Egon Zakrajšek	
11. The Case for a Credit Registry	163
Atif Mian	
V. HOUSEHOLD SECTOR	
12. Monitoring the Financial Condition and Expenditures of Households	175
Robert E. Hall	
13. LEADS on Macroeconomic Risks to and from the Household Sector	183
Jonathan A. Parker	
14. Detecting “Bad” Leverage	205
Amir Sufi	
VI. CORPORATE SECTOR	
15. A Macroeconomist’s Wish List of Financial Data	215
V. V. Chari	

VII. INTERNATIONAL SECTOR

16. Systemic Risks in Global Banking: What Available Data Can Tell Us and What More Data Are Needed?	235
Eugenio Cerutti, Stijn Claessens, and Patrick McGuire	
Contributors	261
Author Index	265
Subject Index	269

Acknowledgments

This volume grew out of two National Bureau of Economic Research (NBER) conferences on systemic risk measurement held in October 2010 in New York and in April 2011 in Chicago. The project was funded through the generous support of the Sloan Foundation, the Zell Center for Risk Research at the Kellogg School of Management, and the Julis-Rabinowitz Center at Princeton University.

We are grateful for the participation and comments of many people at these conferences, only some of whom are represented in the chapters in this book. For their formal but unpublished presentations at the conferences we thank Lewis Alexander, Richard Berner, Claudio Borio, Antonella Foglia, Michael Gibson, Francis Gross, Philipp Hartmann, Ing Haw Cheng, Anil Kashyap, Andrei Kirilenko, Don Kohn, Joe Langsam, John Liechty, Adam Lavier, Michael Palumbo, Mattias Persson, H el ene Rey, Jesus Saurina Salas, Til Schuermann, and Wei Xiong.

We also thank Carl Beck, Lita Kimble, and the NBER staff for helping with the logistical arrangements for the conference, and Helena Fitz-Patrick for her help with the publication process.

