

WORLDWIDE BESTSELLER

# AGAINST THE GODS

THE REMARKABLE STORY OF RISK

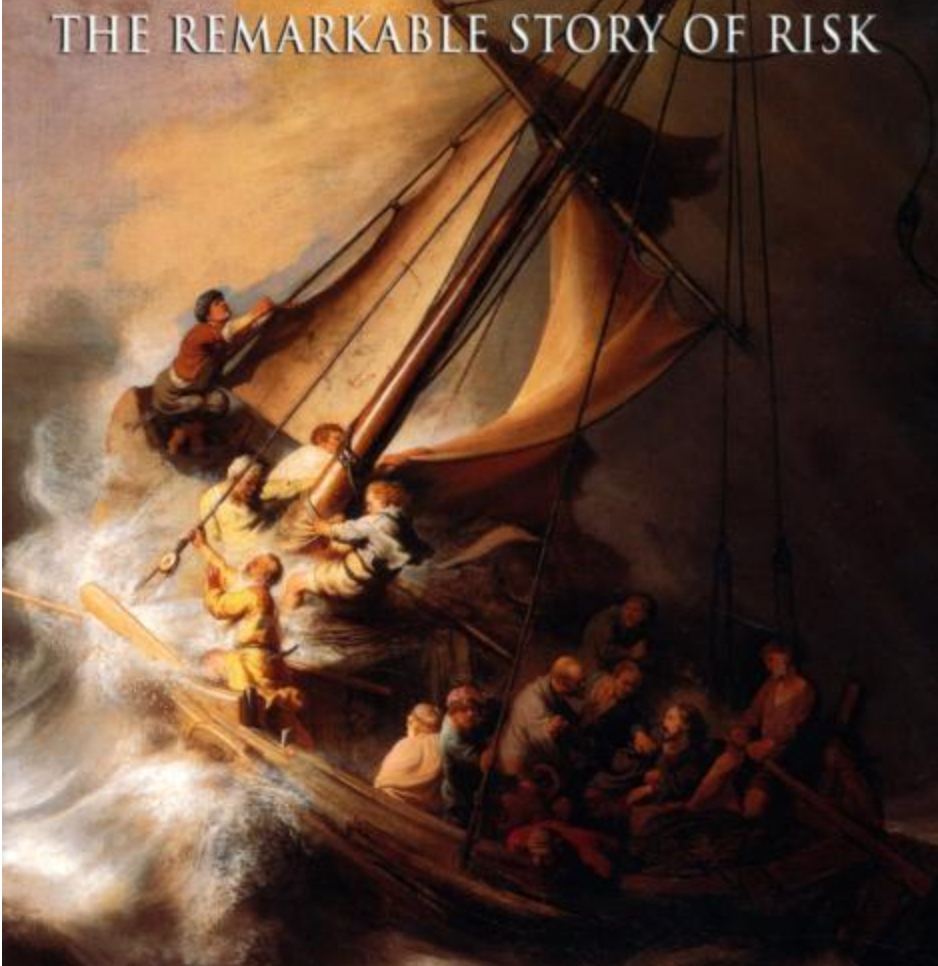


PETER L. BERNSTEIN

WORLDWIDE BESTSELLER

# AGAINST THE GODS

THE REMARKABLE STORY OF RISK



PETER L. BERNSTEIN

In this unique exploration of the role of risk in our society, Peter Bernstein argues that the notion of bringing risk under control is one of the central ideas that distinguishes modern times from the distant past. *Against the Gods* chronicles the remarkable intellectual adventure that liberated humanity from oracles and soothsayers by means of the powerful tools of risk management that are available to us today.



“An extremely readable history of risk.”

—*Barron's*

“Fascinating . . . this challenging volume will help you understand the uncertainties that every investor must face.”

—*Money*

“A singular achievement.”

—*Times Literary Supplement*

“There’s a growing market for savants who can render the recondite intelligibly—witness Stephen Jay Gould (natural history), Oliver Sacks (disease), Richard Dawkins (heredity), James Gleick (physics), Paul Krugman (economics)—and Bernstein would mingle well in their company.”

—*The Australian*

**AGAINST**

# THE GODS

**AGAINST**

# THE GODS

THE REMARKABLE STORY OF RISK

PETER L. BERNSTEIN



**JOHN WILEY & SONS, INC.**

**New York • Chichester • Weinheim • Brisbane • Singapore • Toronto**

This text is printed on acid-free paper. ∞

Copyright © 1996, 1998 by Peter L. Bernstein. All rights reserved.

Published by John Wiley & Sons, Inc.

Published simultaneously in Canada.

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, (978) 750-8400, fax (978) 750-4744. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 605 Third Avenue, New York, NY 10158-0012, (212) 850-6011, fax (212) 850-6008, E-Mail: PERMREQ @ WILEY.COM.

This publication is designed to provide accurate and authoritative information in regard to the subject matter covered. It is sold with the understanding that the publisher is not engaged in rendering professional services. If professional advice or other expert assistance is required, the services of a competent professional person should be sought.

*Library of Congress Cataloging-in-Publication Data:*

Bernstein, Peter L.

Against the gods: The remarkable story of risk/Peter L. Bernstein.

p. cm.

Includes bibliographical references and index.

ISBN 0-471-29563-9 (paper)

1. Risk Management. 2. Decision-making. I. Title.

HD61.B4666 1996

368—dc20

96-33861

Printed in the United States of America

10

For

Peter Brodsky

# Contents

[Acknowledgments](#) ix

[Introduction](#) 1

TO 1200: BEGINNINGS

[1. The Winds of the Greeks and the Role of the Dice](#) 11

[2. As Easy as I, II, III](#) 23

1200-1700: A THOUSAND OUTSTANDING FACTS

[3. The Renaissance Gambler](#) 39

[4. The French Connection](#) 57

[5. The Remarkable Notions of the Remarkable Notions Man](#) 73

1700-1900: MEASUREMENT UNLIMITED

[6. Considering the Nature of Man](#) 99

[7. The Search for Moral Certainty](#) 116

[8. The Supreme Law of Unreason](#) 135

[9. The Man with the Sprained Brain](#) 152

[10. Peapods and Perils](#) 172

[11. The Fabric of Felicity](#) 187

1900-1960: CLOUDS OF VAGUENESS AND THE DEMAND FOR PRECISION

[12. The Measure of Our Ignorance](#) 197

[13. The Radically Distinct Notion](#) 215

[14. The Man Who Counted Everything Except Calories](#) 231

[15. The Strange Case of the Anonymous Stockbroker](#) 247

DEGREES OF BELIEF: EXPLORING UNCERTAINTY

<a href="#"><u>16. The Failure of Invariance</u></a>	269
<a href="#"><u>17. The Theory Police</u></a>	284
<a href="#"><u>18. The Fantastic System of Side Bets</u></a>	304
<a href="#"><u>19. Awaiting the Wildness</u></a>	329
<a href="#"><u>Notes</u></a>	339
<a href="#"><u>Bibliography</u></a>	353
<a href="#"><u>Name Index</u></a>	365
<a href="#"><u>Subject Index</u></a>	369