## **Beyond Mechanical Markets**

ASSET PRICE SWINGS, RISK, AND THE ROLE OF THE STATE

Roman Frydman and Michael D. Goldberg

PRINCETON UNIVERSITY PRESS • PRINCETON AND OXFORD

Frydman.front.indd iii 12/22/10 10:43 AM

## Contents

Acknowledgments	xiii
What Went Wrong and What We Can Do about It	1
The Fatal Flaw 1	
Assuming Away What Matters Most 2	
The Imperfect Knowledge Alternative 6	
Fishermen and Financial Markets 7	
The Survival of the Rational Market Myth 8	
Opening Economics and Finance to Nonroutine Change and Imperfect Knowledge 11	
Imperfect Knowledge Economics and Its Implications 1	2
A New Understanding of Asset-Price Swings, Risk, and the Role of the State 14	
PART I	
THE CRITIQUE	
1.	
The Invention of Mechanical Markets	21
Economists' Rationality or Markets? 22	
Was Milton Friedman Really Unconcerned about Assumptions? 24	
The Post-Crisis Life of Interacting Robots 28	

Frydman.front.indd vii 12/22/10 10:43 AM

## viii contents

Missing the Point in the Economists' Debate 35	
The Distorted Language of Economic Discourse 38	
2.	
The Folly of Fully Predetermined History	41
The Fatal Conceit Revisited 43	
The Pretense of Exact Knowledge 46	
The Economist as Engineer 47	
Staying the Course in the Face of Reason 50	
3.	
The Orwellian World of "Rational Expectations"	55
Muth's Warning Ignored 59	
The Rational Expectations Revolution:  Model Consistency as a Standard of Rationality 61	
The Spurious Narrative of Rational Expectations 62	
A World of Stasis and Thought Uniformity 63	
Economists' Rationality and Socialist Planning 66	
4.	
The Figment of the "Rational Market"	71
Pseudo-Diversity in the "Rational Market" 73	
The Irrelevance of the "Rational Market" 76	
Beware of Rational Expectations Models 77	
The Fatal Conceit of the Rational Expectations Hypothesis 79	
5.	
Castles in the Air: The Efficient Market Hypothesis	81
The Market Metaphor 82	
Imagining Markets in a Fully Predetermined World 84	

Frydman.front.indd viii 12/22/10 10:43 AM

CONTENTS ix

Samuelson's Doubts 89	
The Illusory Stability of the "Rational Market" 92	
Efficient Market Hypothesis and Asset-Price Swings 96	
6.	
The Fable of Price Swings as Bubbles	103
Reinventing Irrationality 104	
Bubbles in a World of Rational Expectations:  Mechanizing Crowd Psychology 105	
A Seductive Narrative of Behavioral Bubbles 109	
Limits to Arbitrage: An Artifact of Mechanistic Theory 111	
The Trouble with Behavioral Bubbles 112	
Forgotten Fundamentals 114	
PART II AN ALTERNATIVE	
7.	
Keynes and Fundamentals	117
Was Keynes a Behavioral Economist? 120	
Imperfect Knowledge and Fundamentals 122	
Are Fundamentals Really Irrelevant in the Beauty Contest?	124
Fundamentals and Equity-Price Movements: Evidence from Bloomberg's Market Stories 128	
8.	
Speculation and the Allocative Performance of Financial Markets	149
Short-Term and Value Speculators 154	
How Short-Term Speculation Facilitates Value Speculation	156
Speculation and Economic Dynamism 160	

Frydman.front.indd ix 12/22/10 10:43 AM

## X CONTENTS

9.	
Fundamentals and Psychology in Price Swings	163
Bulls, Bears, and Individual Forecasting 166	
Persistent Trends in Fundamentals 168	
Guardedly Moderate Revisions 169	
Price Swings in Individual Stocks and the Market 172	
Price Swings, Genuine Diversity, and Rationality 173	
Sustained Reversals 173	
10	
10.  Rounded Instability Linking Dick and Asset Drice Swings	175
Bounded Instability: Linking Risk and Asset-Price Swings	1/5
The Indispensable Role of Asset-Price Swings in Allocating Capital 177	
Historical Benchmarks as Gauges of Longer-Term Prospects 179	
The Unfolding of Excessive Price Swings 182	
Linking Risk to Distance from Benchmark Levels 187	
How Markets Ultimately Self-Correct 189	
The Return of Fundamentals 192	
11.	105
Contingency and Markets	195
Contingent Market Hypothesis 198	
Contingency and Instability of Economic Structures 199	
The Fleeting Profitability of Mechanical Trading Rules 205	
Temporary Profit Opportunities 212	
An Intermediate View of Markets and a New Framework for Prudential Policy 214	

Frydman.front.indd x 12/22/10 10:43 AM

CONTENTS	xi
12.	
Restoring the Market-State Balance	217
The Importance of Policy Reform for	
Financial Markets 218	
Rationale for Active State Intervention in	
Financial Markets 227	
Excess-Dampening Measures and Guidance Ranges 229	
Active Excess-Dampening Measures 237	
Excessive Price Swings and the Banking System 243	
Imperfect Knowledge and Credit Ratings 246	
Epilogue	249
What Can Economists Know? 249	217
The Search for Omniscience 250	
Sharp versus Contingent Predictions 252	
Recognizing Our Own Imperfect Knowledge 253	
Imperfect Knowledge Economics as the Boundary of Macroeconomic Theory 255	
References	257
Index	273

Frydman.front.indd xi 12/22/10 10:43 AM