


# **Getting It Wrong**

**How Faulty Monetary Statistics Undermine the Fed, the  
Financial System, and the Economy**

**William A. Barnett**



**The MIT Press  
Cambridge, Massachusetts  
London, England**

# Contents

Foreword: Macroeconomics as a Science   xiii  
Apostolos Serletis

Preface   xxiii

Acknowledgments   xxxiii

## I   **The Facts without the Math**

### 1   **Introduction   3**

1.1   Whose Greed?   4

1.1.1   Ponzi Games, Transversality, and the Fraud  
Explosion   6

1.1.2   Conditional Expectations   8

1.1.3   Regulation in History and in Theory   9

1.2   The Great Moderation   11

1.3   The Maestro   12

1.4   Paradoxes   17

1.5   Conclusion   19

### 2   **Monetary Aggregation Theory   21**

2.1   Adding Apples and Oranges   21

2.2   Dual Price Aggregation   25

2.3   Financial Aggregation   27

2.4   The Commerce Department and the Department of  
Labor   33

2.5   The Major Academic Players   35

2.5.1   Irving Fisher   36

2.5.2   François Divisia   38

2.5.3   Henri Theil   41

2.5.4   Dale Jorgenson   42

2.5.5	Milton Friedman	43
2.5.6	W. Erwin Diewert	46
2.5.7	James Poterba and Julio Rotemberg	48
2.6	Banks throughout the World	51
2.6.1	Federal Reserve Board	52
2.6.2	The Bank of Japan	54
2.6.3	The St. Louis Federal Reserve Bank	57
2.6.4	The Bank of England	62
2.6.5	The European Central Bank	63
2.6.6	The International Monetary Fund	64
2.7	Mechanism Design: Why Is the Fed Getting It Wrong?	66
2.7.1	The Theory	66
2.7.2	NASA's Space Program	68
2.7.3	The Locked Office	71
2.7.4	The Relationship between the Board's Staff, the Governors, the FOMC, and the Regional Banks	72
2.7.5	The Right and the Wrong Kinds of Reform	74
2.7.6	The Office of Financial Research	84
2.7.7	A Quiz: Answer True or False	86
2.8	Conclusion	89
<b>3</b>	<b>The History</b>	<b>91</b>
3.1	The 1960s and 1970s	91
3.2	The Monetarist Experiment: October 1979 to September 1982	102
3.3	The End of the Monetarist Experiment: 1983 to 1984	107
3.4	The Rise of Risk Adjustment Concerns: 1984 to 1993	111
3.5	The Y2K Computer Bug: 1999 to 2000	119
3.6	Conclusion	121
<b>4</b>	<b>Current Policy Problems</b>	<b>123</b>
4.1	European ECB Data	123
4.2	The Most Recent Data: Would You Believe This?	126
4.3	The Current Crisis	133
4.3.1	Prior to April 14, 2006	133
4.3.2	Subsequent to April 14, 2006	136
4.3.3	The Revised MSI Data	140
4.4	Conclusion	143
<b>5</b>	<b>Summary and Conclusion</b>	<b>145</b>

## II Mathematical Appendixes

<b>A</b>	<b>Monetary Aggregation Theory under Perfect Certainty</b>	<b>159</b>
A.1	Introduction	159
A.2	Consumer Demand for Monetary Assets	161
A.2.1	Finite Planning Horizon	161
A.2.2	Infinite Planning Horizon	163
A.2.3	Income Taxes	165
A.3	Supply of Monetary Assets by Financial Intermediaries	165
A.3.1	Properties of the Model	169
A.3.2	Separability of Technology	170
A.4	Demand for Monetary Assets by Manufacturing Firms	171
A.4.1	Separability of Technology	173
A.5	Aggregation Theory under Homogeneity	174
A.5.1	The Consumer	174
A.5.2	The Manufacturing Firm	177
A.5.3	The Financial Intermediary	183
A.5.4	Summary of Aggregator Functions	185
A.5.5	Subaggregation	185
A.6	Index-Number Theory under Homogeneity	186
A.6.1	The Consumer and the Manufacturing Firm	187
A.6.2	The Financial Intermediary	189
A.7	Aggregation Theory without Homogeneity	191
A.7.1	The Consumer and the Manufacturing Firm	192
A.7.2	The Financial Intermediary	196
A.8	Index-Number Theory under Nonhomogeneity	197
A.8.1	The Consumer and the Manufacturing Firm	197
A.8.2	The Financial Intermediary	199
A.8.3	Subaggregation	199
A.9	Aggregation over Consumers and Firms	200
A.10	Technological Change	202
A.11	Value Added	204
A.12	Macroeconomic and General Equilibrium Theory	206
A.12.1	The Utility Production Function	210
A.12.2	Velocity Function	210
A.13	Aggregation Error from Simple Sum Aggregation	213
A.14	Conclusion	215

- B Discounted Capital Stock of Money with Risk Neutrality 217**
  - B.1 Introduction 217
  - B.2 Economic Stock of Money (ESM) under Perfect Foresight 218
  - B.3 Extension to Risk 220
  - B.4 CE and Simple Sum as Special Cases of the ESM 221
    - B.4.1 The CE Index 221
    - B.4.2 The Simple-Sum (SSI) Index 222
  - B.5 Measurement of the Economic Stock of Money 223
  
- C Multilateral Aggregation within a Multicountry Economic Union 225**
  - C.1 Introduction 225
  - C.2 Definition of Variables 227
  - C.3 Aggregation within Countries 230
  - C.4 Aggregation over Countries 231
  - C.5 Special Cases 238
    - C.5.1 Purchasing Power Parity 238
    - C.5.2 Multilateral Representative Agent over the Economic Union 239
    - C.5.3 Multilateral Representative Agent with Heterogeneous Tastes 239
    - C.5.4 Multilateral Representative Agent with Homogeneous Tastes 247
    - C.5.5 Unilateral Representative Agent over the Economic Union 250
  - C.6 Interest Rate Aggregation 252
  - C.7 Divisia Second Moments 253
  - C.8 Conclusion 254
  
- D Extension to Risk Aversion 257**
  - D.1 Introduction 257
  - D.2 Consumer Demand for Monetary Assets 260
    - D.2.1 The Decision 260
    - D.2.2 Existence of a Monetary Aggregate for the Consumer 262
  - D.3 The Perfect-Certainty Case 263
  - D.4 The New Generalized Divisia Index 263
    - D.4.1 The User Cost of Money under Risk Aversion 263
    - D.4.2 The Generalized Divisia Index under Risk Aversion 267

D.5	The CCAPM Special Case	269
D.6	The Magnitude of the Adjustment	273
D.7	Intertemporal Nonseparability	273
D.8	Consumer's Nonseparable Optimization Problem	275
D.9	Extended Risk-Adjusted User Cost of Monetary Assets	277
	D.9.1 The Theory	277
	D.9.2 Approximation to the Theory	283
D.10	Conclusion	288
<b>E</b>	<b>The Middle Ground: Understanding Divisia Aggregation</b>	<b>289</b>
E.1	Introduction	289
E.2	The Divisia Index	290
E.3	The Weights	292
E.4	Is It a Quantity or Price Index?	295
E.5	Stocks versus Flows	297
E.6	Conclusion	298
	References	299
	Index	313