

Contents

Acknowledgments xi

1 Introduction 1

- Real business from virtual goods 3
- A new tool for digital design 4
- The economics of virtual spaces 6
- What virtual economy design can achieve 8
- Overview of this book 20

2 Theories of Human Behavior 23

- Rational choice 23
- Amendments and alternatives to rational choice 32
- Theory of play 36

3 Goods: Material, Digital, Virtual 41

- Types of goods 41
- Goods are used as social markers 45
- Goods provide personal meaning and pleasure 51
- Goods fulfill needs and solve problems 52
- The value of virtual goods 53

4 Supply and Demand 57

- Supply 58
- Demand 61
- Equilibrium 64
- What happens when things change? 72
- Modeling fun 78

5 Regulating Markets 83

- Why regulate markets? 83
- Market structures for fun 86
- Market structures for monetization 92
- Market or no market 97

6	Market Power and Pricing	101
	What is market power?	101
	Building market power	103
	Fighting against market power	108
	Using market power to price virtual goods	109
7	Methods of Exchange	121
	Common exchange mechanisms	121
	Choosing an exchange mechanism	128
	Limits of market design: Unsanctioned markets	133
8	Externalities and Secondary Market Trade	137
	<i>Introduction to secondary market trade</i>	137
	Theory of externalities	143
	Negative externalities in secondary market trade	145
	Dealing with negative externalities	149
9	Institutions and Nonmarket Allocation	155
	What are institutions?	155
	Groups and corporations	157
	Trust and justice	160
	Redistribution	166
	Charity and gift giving	168
	Crime	171
10	Money	177
	The fundamentals of money	177
	What makes money valuable?	184
	Designing money for a virtual economy	192
11	Macroeconomic Design	197
	Macroeconomic metaphors: Wheels and pipes	197
	Constructing the wheel	199
	Constructing the pipes: Faucets and sinks	203
	<i>Assembling a virtual macroeconomy</i>	212
12	Macroeconomic Management	215
	Performance management	215
	Monetary policy	220
	Production and economic growth	227
	Inequality	234
	Experience	237
	Data collection and analysis	240
13	Policymaking	247
	How policy differs from design	247
	Problems of interest aggregation	248

Policy process	253
Policy implementation	254
Policy assessment	255
Policy and game testing	260
14 Why the Real World Needs Virtual Economy Design	261
Economic institutions as consumable goods	262
Know what you measure	265
The end of materialism?	267
How the virtual informs the real	270
Fundamentals don't change	270
References	273
Index	281