

CONTENTS

<i>Preface</i>	v
<i>List of Abbreviations</i>	xv
<i>Table of Cases</i>	xvii
<i>Introduction</i>	xxv

PART 1: ECONOMIC FOUNDATIONS

1. Efficiency Concepts in Economic Theory	3
I. Allocative Efficiency	3
II. Productive Efficiency	8
III. Dynamic Efficiency	9
2. Competition and Efficiency	11
I. Perfect Competition	11
II. Monopoly	17
III. A Dominant Firm with Competitive Fringe	23
IV. Monopolistic Competition	24
V. Oligopoly	26
1. Basic concepts of game theory	27
2. Equilibria in oligopolistic markets	29
VI. Monopsony and Oligopsony	36

PART 2: MARKET POWER, MARKET DOMINANCE, AND MARKET DEFINITION

3. Market Power and Price Elasticities	41
I. Introduction—The Price Elasticity of Demand	41
II. Market Power and the Lerner Index Under Different Market Forms	45
III. Market Power in the Case of Differentiated Goods	47
IV. Market Power in Two-sided Markets	47

4. Market Power, Market Dominance, and Effective Competition— Economic and Legal Aspects	51
5. Determining Market Power and Market Dominance	57
I. Determining Market Power Directly	57
II. Determining Market Power Indirectly	59
1. Market definition—economic market concepts	60
a) Concept of consumers' wants	61
b) The hypothetical monopoly test	63
c) Major aspects of market delineation	66
α) Demand-side substitution	66
β) Supply-side substitution	68
γ) Simultaneous definition of the relevant product and geographical markets	70
δ) Market definition in the case of differentiated goods	71
ε) Chains of substitution	72
ζ) Market definition in the presence of price discrimination	73
η) Aftermarkets	73
θ) Innovation markets	74
ι) Two-sided markets	75
κ) The Cellophane fallacy	76
λ) Conclusions	77
2. Empirical methods of market definition	78
a) The price elasticity of demand, critical elasticities, and critical loss	79
b) Cross-price elasticities and diversion ratios	82
c) Price tests	82
d) Other methods of defining the relevant geographical market	85
e) Conclusions	86
3. Basic concepts in practice	87
a) Concept of consumers' wants	87
b) Hypothetical monopoly test	98
4. Practical application of econometric and empirical methods	106
a) Price elasticity analyses	106
b) Absolute and relative price differences	108
α) Price differences as a basis for defining the relevant product market	108
β) Definition of the relevant geographical market on the basis of price differences	111

c) Price correlation	112
α) Use of price correlation analyses to define product markets	112
β) Use of price correlation analyses to define geographical markets	114
d) Price discrimination/other customer differentiation	115
e) Switching costs	117
f) Shock analyses	118
g) Distribution channels	119
h) Complementary products	121
i) Market for free products or services?	122
j) Substitution chains	122
5. Determining market shares	125
a) Economic concepts used to determine market shares	125
α) Sales-based market shares	125
β) Revenue-based market shares	126
γ) Capacity-based market shares and other reference parameters	126
b) Determination of market shares in practice	127
α) Sales volume as the basis for calculation	127
β) Sales value as the basis for calculation	127
γ) Capacity as the basis for calculation	129
δ) Alternative methods of calculation	129
6. Relevance of market shares and other factors	130
a) Absolute market shares and market-share thresholds under European law	130
α) Acceptable market shares	131
β) Market shares indicating a need for an examination of market power	132
b) Factors influencing the relevance of market shares	134
α) Markets with differentiated products	134
β) Dynamic markets	136
γ) Bidding markets—competition for the market	137
δ) Historical development of market shares	140
ε) Dependency of the market share on single contracts	141
ζ) Position of current competitors	141
η) Potential competition and barriers to entry	143
θ) Buyer power	153
c) Particular features of German law	155
α) Statutory basis	155
β) Relevance of the market share	158
III. Conclusion	162

PART 3: EFFECTS OF CHANGES IN MARKET STRUCTURE

6. Introduction	167
7. Single Dominance	169
I. Economic Foundations	169
II. Single Dominance in Practice	169
8. Non-coordinated Effects	175
I. Different Effects Resulting from Different Forms of Competition	175
1. Price competition with a homogeneous good	175
2. Quantity competition with a homogeneous good	176
3. Price competition with differentiated goods	177
4. Quantity competition with differentiated goods	180
II. Determining Non-coordinated Effects by Means of the Dominance and SIEC Test?	181
1. The first sign: the planned <i>Heinz/Beech-Nut</i> concentration	181
2. Legal developments in EU merger control	183
III. Methods of Determining Non-coordinated Effects	191
1. Simulation models	192
2. Structural methods	195
3. Conclusions with respect to the choice of method	200
IV. Simulation Models and Structural Methods in Practice	201
1. Recent developments	201
2. Case decisions	205
9. Coordinated Effects and Collective Dominance	221
I. Economic Foundations of Collective Dominance	223
II. Legal Classification	227
III. Basic Conditions for Collective Dominance	228
1. Repeated interaction	228
2. The discount factor	230
3. Credible retaliation mechanisms	231
4. Market transparency	233
a) Transparency with respect to coordination mechanism	235
b) Market transparency as a factor stabilising coordination	237

IV. Criteria Relating to the Firms and Concentration	239
1. The number of firms	239
a) The number of competitors and supply-side concentration	240
b) Threshold for intervention—number of suppliers	241
c) Relevance of the concentration rate	243
2. ‘Symmetry’ of the firms	245
a) Technology and costs	246
b) Market shares	247
c) The product range	249
d) Organisational and corporate structure	249
3. Excess capacities and inventory stock	251
4. Structural links between market participants	253
V. Market-related Criteria	255
1. Market entry	255
2. The price elasticity of demand	257
3. Typical transactions	259
4. Homogeneous and differentiated products	259
5. Buyer power	262
6. Multi-market contacts	263
7. Growing markets	265
8. Innovations	266
9. Fluctuations in economic activity	268
10. Geographical allocation of economic activities	270
VI. Achieving Agreement on the Terms of Coordination	271
1. Coordination parameter	271
2. Relevance of past competitive behaviour	272
3. Means of coordinating behaviour	274
a) Explicit agreements	274
b) Information exchange and price leadership	275
c) Pricing rules	278
d) Other means of coordinating behaviour	281
VII. Adoption of the Findings of Economic Theory in Practice	281
VIII. Establishing Coordinated Effects	283
1. Establishing coordinated effects in practice	283
a) Community law	283
b) Particular features of German law	288
2. Theoretical problems to predict coordinated effects	302
IX. The Assessment of Coordinated Effects	306

10. Other Factors Relevant to the Assessment of Mergers	311
I. Mergers in Two-sided Markets	311
II. Takeover of a Particularly Dynamic Competitor ('Maverick')	313
III. Acquisition of a Potential Competitor	314
IV. Catch-up Mergers	316
V. Rescue Mergers	317
VI. Efficiency Gains	318
1. Economic aspects of efficiency gains	318
a) Gains from rationalisation and increasing returns to scale	320
b) Economies of scope	321
c) Advantages on procurement markets	321
d) Improved means of raising capital	321
e) Reducing slack and X-inefficiencies	322
f) Improved transfer of know-how	322
g) Technological progress	322
2. Efficiency gains under Regulation No 4064/29	323
a) Views taken on the literature	324
b) Commission practice and the case-law of the Community courts	327
3. Efficiency gains under Merger Regulation No 139/2004	330
4. The relevant welfare standard	334
a) Introduction	334
b) Problems associated with the welfare standards	335
5. Requirements in the Guidelines on the assessment of efficiencies	337
6. What type of efficiency gains satisfy the requirements laid down in the Guidelines?	344
7. Assessment of efficiency gains on a case-by-case basis from the perspective of institutional economics	348
a) Costs and benefits of a rule-of-reason approach	349
b) Costs and benefits of a general presumption approach	352
c) Conclusion	353
11. Vertical and Conglomerate Mergers	357
I. Vertical Mergers	358
1. Pro-competitive effects of vertical mergers	358
a) Double marginalisation	358
b) Single monopoly profit	361
c) Reducing transaction costs	361
2. Anti-competitive effects of vertical mergers	362
a) Input foreclosure	363

b) Customer foreclosure	370
c) Coordinated effects of vertical mergers	372
3. Effects of vertical mergers on competition	375
II. Conglomerate Mergers	375
1. Pro-competitive effects of conglomerate mergers	376
a) Economies of scope	376
b) Improved coordination	376
c) Cournot effect	377
d) Efficiency effects of tying and bundling	378
e) Price discrimination	379
f) Single monopoly profit	380
2. Anti-competitive effects of conglomerate mergers	381
a) Anti-competitive effects of tying and bundling	381
α) Tying	381
β) Bundling	383
γ) Effects of tying and bundling on competition	386
b) Portfolio effects	386
c) Financial market predation	387
d) Coordinated effects of conglomerate mergers	388
3. Effects of conglomerate mergers on competition	389
III. Legal Aspects of Vertical and Conglomerate Mergers	390
1. Predicting anti-competitive behaviour	390
2. Guidelines on the assessment of non-horizontal mergers	394
3. Practical application of economic methods	396
12. Conclusion	399
<i>References</i>	407
<i>Index</i>	439

INTRODUCTION

This work is divided into three parts. Part 1 introduces the various economic concepts of efficiency and places them in the context of various market forms such as perfect competition, monopoly, and oligopoly. Moreover, it considers the concepts of game theory essential to investigations of, in particular, oligopolies.

Part 2 addresses the relationship between the economic concept of market power and the legal concept of dominance. It explains both direct and indirect methods of determining market power and dominance and discusses the notions of market definition. The approaches taken in practice to define the relevant market and establish dominance are analysed in detail and reviewed in terms of their consistency with the concepts of economic theory.

Part 3 deals with the impact on competition of changes in the market structure. The examination of possible merger effects begins with the creation or strengthening of a dominant position of a single undertaking (single dominance). The following section is devoted to those effects of mergers on oligopolistic markets referred to in the literature as non-coordinated effects and addresses the question whether such effects can be better identified by the dominance test or a different test. Finally, the notions relating to collective dominance and the coordinated effects of a merger leading to the creation or strengthening of such a market position are explained. This is followed by a discussion of other factors relevant to the assessment of merger effects. Particular attention is given to the question of whether and how potential efficiencies should be considered in the context of merger control. The next section deals with vertical and conglomerate mergers, the specific characteristics of which have recently received increased attention.

The analysis of each of the above points includes an examination of the practice of the European Commission and the Community courts. Where appropriate, the practice in Germany is also examined. The decisions cited in the various sections were selected on account of their application of the economic methods of analysis discussed in the study.