

CONTENTS

<i>Table of European Cases</i>	xxvii
<i>Table of International Cases</i>	lxxiii
<i>Table of Legislation</i>	lxxv
<i>Table of European and International Treaties, Conventions, and Charters</i>	xc
<i>Bibliography</i>	xcv
<i>List of Abbreviations</i>	xcvii

1. INTRODUCTION TO COMPETITION LAW	1
1. Central Issues	1
2. Introduction	2
3. The Economics of Competition Law	4
A. Basic Concepts of Welfare Economics	4
B. Perfect Competition and Efficiency	7
C. Monopoly	9
D. Oligopoly	10
E. Perfect Competition, Monopoly, Market Power, and Competition in the Real World	11
F. The Concept of Welfare: Total (Social) Welfare, Consumer Welfare, and Efficiency Trade-offs	11
G. Dynamic Competition and Schumpeterian Rivalry	13
4. Schools of Competition Analysis and Theories and Concepts Relevant to Competition Law	14
A. The Structure → Conduct → Performance Paradigm and the Harvard School	14
B. The Chicago School, Post-Chicago, and Neo-Chicago	15
C. Game Theory	23
D. Behavioural Antitrust	23
E. Raising Rivals' Costs	24
F. Transaction Cost Economics	24
G. Workable Competition	25
H. Contestable Markets Theory	25
I. The Austrian School	26
J. Effective Competition	26
5. Ordoliberalism	27
6. The Possible Goals and Values of Competition Law	28
A. General	28
B. Economic Efficiency and Welfare	28
C. Protection of Economic Freedom and the Dispersal of Economic Power	30

D.	Protecting the Competitive Process or Protecting Competition	31
E.	Protecting Competitors	31
F.	Fairness	31
G.	Equality and Redistribution	33
H.	Other Public Policies, and the 'Public Interest'	34
I.	The EU Dimension of the Single Market	34
J.	Conclusion	34
7.	US Antitrust Law	35
A.	General	35
B.	Differences Between US and EU Law	38
8.	EU Competition Law	40
A.	The Objectives of the EU and the Role of the Competition Rules	40
B.	The Objectives of EU Competition Law	42
9.	The Application of EU Competition Law	54
A.	Form, Effects, Presumptions, and Theories of Harm	54
B.	Over- and Under-Enforcement: Type 1 and Type 2 Errors	55
C.	The Use of Economic Analysis	56
10.	The Digital Economy	57
A.	General	57
B.	Features of Digital Economy Markets	60
C.	Challenges in Applying Competition Law to the Digital Economy	62
D.	The Role of Competition Law in Respect of the Digital Economy	65
11.	EU Competition Law and Regulation	66
12.	Competition Law and the International Context	69
13.	Conclusions	69
14.	Further Reading	70
2.	THE COMPETITION LAW AND INSTITUTIONS OF THE EUROPEAN UNION	75
1.	Central Issues	75
2.	Introduction	76
3.	Introduction to the European Union	76
A.	The European Union and the European Community	76
B.	The EU Treaties	77
C.	The Non-Judicial EU Institutions	77
D.	EU Legislative and Other Acts	81
E.	The EU Courts	81
F.	General Principles of EU Law and Fundamental (Human) Rights	84
4.	The Competition Provisions	84
A.	General	84
B.	The Substantive Competition Provisions of the TFEU	90

C.	The Procedural Provisions	91
D.	The European Merger Regulation (EUMR)	93
E.	Other Relevant Treaty Provisions	93
5.	Communications and Notices	93
6.	The Competition Rules and the European Economic Area	94
7.	Modernisation	95
8.	Conclusions	95
9.	Further Reading	96
3.	MARKET POWER, MARKET DEFINITION, AND BARRIERS TO ENTRY	97
1.	Central Issues	97
2.	Introduction	98
3.	Market Power	98
4.	Market Definition and EU Competition Law	100
A.	The Purpose of Market Definition	100
B.	The Definition of the Relevant Market	101
C.	The Commission Notice on the Definition of the Relevant Market for the Purposes of EU Competition Law	103
D.	Demand and Supply Substitution	104
E.	Demand Substitution	105
F.	Supply Substitution	114
G.	Particular Issues in Market Definition	116
H.	The Geographic Market	122
I.	The Temporal Market	125
5.	Barriers to Entry and Expansion	125
A.	The Role of Barriers to Entry	125
B.	Types of Barrier to Entry	128
6.	Conclusions	134
7.	Further Reading	135
4.	ARTICLE 101 TFEU: THE ELEMENTS	137
1.	Central Issues	137
2.	Introduction	137
3.	The Text and Scheme of Article 101	138
A.	The Three Paragraphs	138
B.	The Consequences of Infringement	140
C.	Burden and Standard of Proof	140
4.	The Interpretation and Application of Article 101(1)	141
A.	'Undertaking' and 'Associations of Undertakings'	141
B.	The Meaning of 'Agreement', 'Decision', and 'Concerted Practice'	165

C.	Object or Effect of the Prevention, Restriction, or Distortion of Competition	195
D.	An Appreciable Effect on Competition and Trade	196
E.	An Appreciable Effect on Trade Between Member States	197
F.	Agreements Required by National Legislation or Encouraged by National Governments	202
G.	Commission Notices	203
H.	Extraterritoriality	204
5.	Article 101(2)	204
6.	Exclusions	204
7.	Conclusions	205
8.	Further Reading	206
5.	ARTICLE 101 TFEU: SUBSTANTIVE APPRAISAL	207
1.	Central Issues	207
2.	Introduction and Background	207
A.	Article 101(1) and Article 101(3)	207
B.	Possible Ways of Reconciling Article 101(1) and Article 101(3)	208
C.	The Interpretation of 'Object or Effect is the Prevention, Restriction, or Distortion of Competition'—The Early Approach	209
D.	Section 1 of the Sherman Act	211
E.	Modernisation	212
3.	Article 101(1), Agreements Which Have as Their Object or Effect the Prevention, Restriction, or Distortion of Competition	218
A.	Object or Effect	218
B.	Agreements that Restrict Competition by Object: Restraints Which Reveal a Sufficiently Deleterious Impact on Competition	219
C.	Agreements That Do Not Restrict Competition by Object: Analysing Their Effects	239
D.	Conclusions and Reflections on Article 101(1) Analysis	259
4.	Article 101(3)	261
A.	Application of Article 101(3)	261
B.	Burden and Standard of Proof	261
C.	Any Agreement May in Principle Benefit from Article 101(3)	262
D.	The Article 101(3) Criteria	263
E.	Block Exemptions	272
F.	Unilateral Action and Article 101(3)	275
5.	Conclusions	275
6.	Further Reading	276
6.	ARTICLE 102 TFEU: INTRODUCTION AND DOMINANT POSITION	277
1.	Central Issues	277
2.	Introduction	278

3. The Text and Scheme of Article 102	279
A. The Prohibition	279
B. The Enforcement of Article 102	281
4. Interpretation and application of Article 102	283
A. The Meaning of One or More Undertakings	283
B. A Dominant Position	287
C. A Dominant Position Within a Substantial Part of the Internal Market	287
D. Abuse	289
E. An Effect on Trade Between Member States	290
5. The Review of Article 102	293
A. The Inauguration of the Review	293
B. The Staff Discussion Paper	293
C. The Guidance Paper	294
6. The Relationship Between Article 102 and Article 101	299
7. The Concept of Dominance	300
A. The Definition of a Dominant Position in the Case Law	301
B. Dominant Position in the Guidance Paper	303
C. Effects-based Analysis and the Concept of Dominance	304
D. Establishing Dominance: A Two-stage Approach	306
8. Market Definition in Article 102 Cases	306
A. General	306
B. The Product Market	307
C. The Geographic Market	328
D. The Temporal Market	331
9. Assessing Market Power	331
A. General	331
B. Market Shares	332
C. Other Factors Indicating Dominance and Barriers to Entry	340
D. Countervailing Buyer Power	354
10. Conclusions	355
11. Further Reading	356
 7. ARTICLE 102 TFEU: CONDUCT WHICH CAN BE AN ABUSE	 359
1. Central Issues	359
2. Introduction	360
3. The Meaning of Abuse	361
A. General	361
B. Types of Abuse Covered by Article 102 TFEU	361
C. Article 102 Covers Exploitative and Exclusionary Abuses	362
D. The Broad Nature of the Concept of Abuse	366

E. Exclusionary Abuses: Distinguishing Illegitimate from Legitimate Conduct	371
F. Form- and Effects-Based Analysis	375
G. Appreciability	378
4. The Commission's Approach to Exclusionary Abuses in the Guidance Paper: The 'Anti-Competitive Foreclosure' Concept	379
5. Objective Justification, Efficiency, and Other Defences	382
A. General	382
B. Objective Justification in <i>Post Danmark I</i>	382
C. Objective Necessity	383
D. Efficiencies	385
E. The Burden of Proof	386
F. The Difficulties of the Efficiency Defence	387
G. Protecting the Undertaking's Own Commercial Interests	388
H. The 'Meeting Competition' Defence	389
6. Dominance and Abuse on Different Markets: 'Leveraging' of Market Power as a Theory of Harm	390
7. General Issues in Respect of Abuses Concerning Prices	392
A. Exploitative and Exclusionary Pricing Policies	392
B. Price Discrimination	393
C. Costs Levels	394
D. The General Approach in the Guidance Paper to Price-based Exclusionary Conduct: The 'As Efficient Competitor' Standard	395
E. The General Approach of the EU Courts to Pricing Abuses	397
8. Predatory Pricing	397
A. General	397
B. The Areeda–Turner Test	399
C. The Test Laid Down in <i>AKZO</i>	399
D. The <i>Post Danmark I</i> Case	404
E. The 'Meeting Competition' Defence and Predatory Pricing	406
F. Recoupment	407
G. Predatory Pricing in the Guidance Paper and the Sacrifice Principle	409
H. Predatory Pricing in New and Digital Economy Markets	412
I. Selective Above-cost Pricing	413
9. Margin Squeeze	416
A. General	416
B. The Case Law	417
C. Margin Squeeze in the Guidance Paper	427
D. US Law on Margin Squeeze	428
E. Comment	428
10. Exclusive Dealing: Exclusive Purchasing and Loyalty (-Inducing) Rebates	431
A. General	431

B.	Exclusive Dealing: An Abuse 'By Object' or 'By Effect'?	432
C.	Exclusive Purchasing	446
D.	Exclusive Distribution	448
E.	Exclusivity and Loyalty (-Inducing) Rebates	448
F.	Naked Restrictions	461
11.	Tying and Bundling	463
A.	General	463
B.	The Commercial Rationale for Tying and Bundling	464
C.	The Economic Arguments over Tying and Bundling	464
D.	Tying and Bundling and Article 102	466
E.	The Case Law	466
F.	Tying and Bundling in the Guidance Paper	481
12.	Refusal to Supply	484
A.	General	484
B.	The Exclusion of Competitors from Downstream Markets	485
C.	The <i>Brunner</i> Criteria and Their Evolution	491
D.	Refusal to Supply and Intellectual Property Rights	503
E.	Refusal to Supply and Interoperability—The <i>Microsoft</i> Case	510
F.	Refusal to Supply 'Big Data'	519
G.	Refusal to Supply in Situations Not Involving Upstream/Downstream Markets	520
H.	Refusal to Supply in the Guidance Paper	522
I.	Refusal to Supply and the 'Essential Facilities' Doctrine in US Law	524
13.	'Self-preferencing'	527
A.	General	527
B.	Self-preferencing and the <i>Google Search (Shopping)</i> Decision	527
C.	Self-preferencing: In Search of a Theory of Harm	531
14.	Other Exclusionary Practices	533
A.	General	533
B.	Pursuit of Legal Proceedings, Vexatious Litigation, and Enforcing Legal Rights	534
C.	'Regulatory Gaming'	536
D.	'Forced Free-riding'	547
E.	The Acquisition of Intellectual Property Rights and/or Competing Technologies	549
F.	Obstructing of Development and Distribution of Competing Products: <i>Google (Android)</i>	549
G.	Vertical and Horizontal Integration	550
15.	Secondary Line Discrimination	550
A.	Introduction to Article 102(c)	550
B.	Exclusionary Practices under Article 102(c)	551
C.	Discrimination on Grounds of Nationality or Geographic Location	552
D.	Secondary Line Discrimination and 'Competitive Disadvantage'	555

16. Exploitative Abuses	559
A. Unfairly High or Low Pricing	559
B. Imposing Unfair Trading Conditions and Entering into Restrictive Agreements	566
C. Inefficiency and Limiting Production	568
D. Non-compliance with Data Protection Obligations	569
17. Conduct Hindering Inter-Member State Trade	570
18. Abuse and Collective Dominance	576
19. Conclusions	576
20. Further Reading	577
 8. COMPETITION, THE STATE, AND PUBLIC UNDERTAKINGS: ARTICLE 106 TFEU	 582
1. Central Issues	582
2. Introduction	583
3. Article 4(3) TEU	585
4. Article 106	588
A. The Objectives of Article 106	588
B. The Format of Article 106	589
5. Article 106(1)	590
A. Definitions	590
B. Measures Forbidden by Article 106(1)	593
C. Summary of the Situations Which Infringe Article 106(1) in Conjunction with Article 102	613
6. Article 106(2)	616
A. The Institutional Setting of Services of General Economic Interest	616
B. The Concepts and Terminology of 'Services of General Economic Interest' and 'Services of General Interest'	617
C. The Purpose of Article 106(2)	619
D. Undertakings Having the Character of a Revenue-Producing Monopoly	619
E. Undertakings Entrusted with the Operation of Services of General Economic Interest	620
F. No Effect on Trade Contrary to the Interests of the Union	634
7. Services of General Economic Interest and State Aid	635
8. The Direct Effect of Article 106(1) and (2)	636
A. Article 106(1)	636
B. Article 106(2)	636
9. Article 106(3)	637
A. The Ambit of the Provision	637
B. Decisions	637
C. Directives	638
10. Conclusions	639
11. Further Reading	640

9. HORIZONTAL AGREEMENTS—CARTELS AND COLLUSION	642
1. Central Issues	642
2. Introduction	643
A. General	643
B. Cartels and Collusion—Explicit and Tacit	643
C. Competition Law and Collusion (Explicit and Tacit)	653
3. Cartels	654
A. Substantive Analysis under Article 101	654
B. Proving a Breach	662
4. Characterisation—Is it a Cartel?	673
A. Price and Output Restraints Ancillary or Necessary to Beneficial Collaboration?	673
B. Information-sharing Agreements	679
C. Restrictions on Non-price Trading Conditions, Advertising, and Promotion	688
5. Oligopoly and the Problem of Tacit Collusion	691
A. The Oligopoly Problem and Article 101	691
B. Oligopoly and Article 102	691
C. Alternative Methods for Dealing with Oligopolistic Markets Under EU Law	699
6. Conclusions	700
7. Further Reading	701
10. HORIZONTAL COOPERATION AGREEMENTS	703
1. Central Issues	703
2. Introduction	703
3. Appraisal of Horizontal Cooperation and Joint Ventures: Evolution of Policy	705
A. Appraisal under the EU Merger Regulation or Article 101?	705
B. The Development of the Commission's Approach to the Assessment of Horizontal Cooperation Under Article 101	707
4. Research and Development Agreements	715
A. The Application of Article 101(1)	715
B. The Application of Article 101(3)	715
5. Production Agreements	719
A. General	719
B. The Application of Article 101(1)	719
C. The Application of Article 101(3)	720
6. Purchasing Agreements	722
A. The Nature of Joint Purchasing and its Treatment in the Guidelines	722
B. Cases on Joint Purchasing	723
7. Commercialisation Agreements	725
A. General	725
B. The Application of Article 101(1)	725
C. The Application of Article 101(3)	726

8.	Standardisation Agreements	727
A.	Standardisation and Standard-setting	727
B.	Standardisation Agreements with Environmental Benefits	730
C.	Standard Terms	730
9.	Agreements in Particular Sectors	731
A.	General	731
B.	Insurance	731
C.	Payment Services	731
D.	Sport	732
10.	Conclusions	734
11.	Further Reading	735
11.	VERTICAL AGREEMENTS	736
1.	Central Issues	736
2.	Introduction	737
A.	General	737
B.	Methods of Distribution	738
C.	Competition Rules and Distribution	742
3.	The EU Approach to Vertical Agreements—An Overview	754
A.	The Background: The Single Market Project and Restrictions on Economic Freedom	754
B.	The Approach Since 1999: The Block Exemption and Reform	755
C.	Methodology	756
4.	Vertical Agreements and Article 101(1) of the Treaty	758
A.	Restrictions by Object	758
B.	Analysing the Restrictive ‘Effect’ of Vertical Agreements	769
5.	Article 101(3)	785
A.	General	785
B.	The Old Block Exemptions	785
C.	The Verticals Regulation—Regulation 330/2010	786
D.	The Motor Vehicle Distribution Block Exemption	800
E.	Article 101(3)—Individual Assessment	800
6.	Subcontracting Agreements	805
7.	Article 102 and Distribution	806
8.	Conclusions	806
9.	Further Reading	807
12.	LICENSING AGREEMENTS AND OTHER AGREEMENTS INVOLVING INTELLECTUAL PROPERTY RIGHTS	809
1.	Central Issues	809
2.	Introduction	809
A.	General	809
B.	Types of Intellectual Property Rights	811

C.	The Relationship Between Intellectual Property Rights and Competition Law	813
D.	The Relationship Between Intellectual Property Rights and the Free Movement Rules	816
3.	Exploiting Intellectual Property Rights by Licensing	817
A.	General	817
B.	Commercial Considerations in Licences	818
C.	Development of Competition Policy Towards Licensing of Intellectual Property Rights	821
D.	The 2014 TTBER and the Technology Transfer Guidelines	832
4.	Regulation 316/2014, the Technology Transfer Block Exemption	836
A.	General	836
B.	The Scheme of the TTBER	837
C.	Principal Features of the TTBER	837
D.	Scope of the TTBER	838
E.	Safe Harbour: The Market Share Thresholds	840
F.	Hardcore Restrictions	844
G.	Excluded Restrictions	848
H.	Withdrawal and Disapplication of the Block Exemption	850
5.	The Application of Article 101 to Licensing Agreements Falling Outside the TTBER	851
A.	General Principles	851
B.	Specific Provisions	852
6.	Trade Mark Licences	864
A.	General	864
B.	The <i>Campari</i> Decision and <i>Moosehead/Whitbread</i> Decisions	865
C.	The Current Position	866
7.	Trade Mark Delimitation Agreements	866
8.	Copyright (Other Than Software) Licences	867
A.	General	867
B.	Broadcasting Licences and Performance Copyright	867
C.	Collective Licensing of Copyright	869
9.	The Application of Article 102 to Intellectual Property Rights	870
10.	Conclusions	870
11.	Further Reading	871
13.	PUBLIC ENFORCEMENT BY THE COMMISSION AND THE NATIONAL COMPETITION AUTHORITIES OF THE ANTITRUST PROVISIONS	872
1.	Central Issues	872
2.	Introduction	873
3.	Overview of the EU Enforcement Regime from May 2004	873
4.	Modernisation and Regulation 1/2003	874
A.	The Old Enforcement Regime Under Regulation 17	874
B.	The Modernisation White Paper	875
C.	Regulation 1/2003 and the Modernisation 'Package'	876

5.	The European Competition Network	879
6.	The Best Practices Notice and the Manual of Procedures	879
7.	Enforcement by the Commission	880
A.	General	880
B.	Fundamental Human Rights	882
C.	Complaints	888
D.	The Investigation Stage of the Administrative Procedure: Fact-Finding by the Commission	895
E.	The Second, 'Inter Partes' or 'Adversarial', Stage of the Procedure	920
F.	Commission Decisions	931
G.	The Settlement Procedure in Cartel Cases	946
H.	Informal Settlements	950
I.	Fines and Periodic Penalty Payments	951
J.	Sector Inquiries	982
K.	The Powers of the Commission and Due Process	982
8.	Proceedings Before the Court of Justice of the European Union	983
A.	Judicial Review	983
B.	Actions for Damages Under Article 340 TFEU	1002
9.	Enforcement by the National Competition Authorities Within the European Competition Network	1003
A.	General	1003
B.	Enforcement Powers of the National Competition Authorities	1004
C.	Division of Work	1005
D.	Consistent Application of Articles 101 and 102	1009
10.	The Relationship Between EU and National Competition Law	1010
11.	Criminalisation and Sanctions Against Individuals	1012
12.	Conclusions	1014
13.	Further Reading	1015
14.	PRIVATE ENFORCEMENT	1019
1.	Central Issues	1019
2.	Introduction	1020
3.	The Role of Private Antitrust Litigation, its Relationship with Public Enforcement, and the Experience in the US	1023
4.	Private Enforcement in the EU	1027
A.	Overview: Effective Judicial Protection and the Principle of National Procedural Autonomy	1027
B.	Uniform and Concurrent Application of Articles 101 and 102	1029
C.	The Enforceability of Agreements Infringing Article 101 or 102	1031
D.	Remedies: Injunctions and Damages	1032
5.	Conclusions	1055
6.	Further Reading	1056

15. MERGERS	1058
1. Central Issues	1058
2. Introduction	1059
A. What is a Merger?	1059
B. The Purposes of Merger Control	1059
C. The History of the European Merger Control Regulation	1066
D. Scheme of the European Union Merger Regulation	1070
3. Jurisdiction	1071
A. Concentrations	1071
B. EU Dimension	1078
C. Concentrations with an EU Dimension: A One-Stop Shop?	1084
D. Concentrations without an EU Dimension	1094
E. A Residual Role for Articles 101 and 102 of the Treaty	1097
4. Procedure	1098
A. Notification	1098
B. Reasoned Submissions	1100
C. Suspension	1101
D. Phase I Investigation	1103
E. Phase II	1104
F. Conduct of Merger Investigations	1105
G. Summary	1106
5. Substantive Appraisal of Concentrations Under the EU Merger Regulation	1107
A. Background	1107
B. Reform and the New Substantive Test	1108
C. Burden and Standard of Proof and Counterfactual	1110
D. A Significant Impediment to Effective Competition	1113
E. Article 2(4), (5), Joint Ventures	1171
F. Restrictions Directly Related and Necessary to the Concentration	1172
G. Commitments or Remedies	1174
6. EUMR Statistics	1179
7. Judicial Review and Other Proceedings Before the EU Courts	1181
8. International Issues	1182
A. The Long Arm of the EUMR	1182
B. Reciprocity	1184
9. Conclusions	1184
10. Further Reading	1185
16. INTERNATIONAL ASPECTS	1186
1. Central Issues	1186
2. Introduction	1186
3. International Law	1187

4.	US Law	1188
	A. General	1188
	B. The Effects Doctrine	1189
	C. Enforcement and the Reactions of Other States	1192
	D. Foreign Plaintiffs in US Courts	1193
	E. The Effects Doctrine and Foreign Conduct Affecting Exports	1196
5.	EU Law	1197
	A. General	1197
	B. The Single Economic Entity Doctrine	1197
	C. The Implementation Doctrine	1199
	D. The Qualified Effects Doctrine	1201
	E. Jurisdiction and Private Litigation	1209
	F. Enforcement Jurisdiction	1210
6.	International Cooperation	1210
	A. General	1210
	B. EU Bilateral Agreements	1211
	C. Multilateral Cooperation	1214
7.	Conclusions	1216
8.	Further Reading	1217
	Index	1221