Subject Index

A	Altman Z-Score (Z-Score), 126, 133,
Abu Dhabi Investment Council, 523 Abuse of dominance, 115, 118 data protection law, violation of behaviour/market dominance, causal links, 183–185 by object, 177, 180–183 theories of harm, 185–187 trading conditions, 178–180 data-related, 173–176 exclusionary, 173–174 exploitative, 175 Abusive contractual conditions, 210 ACM. See Authority for Consumers & Markets (ACM) Active pharmaceutical ingredient (API), 324 AD. See Alzheimer's disease (AD) Adverse selection process, 37 Advertising markets. See also Online advertising ancillary market vs., 202–206 and competition for data, 201–204 working, 201–202 Advocate General (AG), 10–11, 15, 18 Airtours case, 351, 354, 364–366 AKKA-LAA case, 16–19, 27	138–144 Alzheimer's disease (AD), 309, 313, 318, 320, 323, 326 Ancillary collusion, 63–64 Ancillary market, 200, 202–206 Ancillary restraints doctrine, 60–64 Andreas Schwab's interview, DMA, 249–259 Anti-competitive collusion, 103 Anticompetitive effects, brand bidding restraints harm infra-marginal consumers, 391–392 information and search costs, 392 over-investment in promotional services, 390–391 retailers' cost, dual distribution, 395–396 search cost-based price discrimination, 392–394 Anti-competitive innovation, 228 Antitrust application, challenges of, 188–191 counter-revolution and Biden Administration, 494–495 genesis and interventionism, 490–491 investigation, 7
Algorithms, 65–66, 70 All India Online Vendors Association (AIOVA) v. CCI and Ors, 119	proxy wars, 291 revolution, 491–493 Areeda-Turner test, 112, 114

'Subject Index'. World Competition 44, no. 4 (2021): 533–548. © 2021 Kluwer Law International BV, The Netherlands

Article 2 of Regulation 139/2004 in 'gap' cases adoption of, 347–348 appreciability and efficiencies, 354–357 Article 101(1) TFEU, 357–359 challenge of defining boundaries, 353–354 complex economic assessments, 349, 360–363 de facto discretion in <i>Airtours</i> and <i>CK</i>	Assessment of inability-to-pay cases, 137–138 Altman Z score, 139–141 data analysis, 141–144 Asset, personal data, 170 Asymmetric information, 45 Australian Competition and Consumer Commission (ACCC), 446 Authority for Consumers & Markets (ACM), 155, 165, 167, 374, 376
Telecoms, 364–366 economic analysis, 354 impact of transactions, 349	Average variable cost (AVC), 114
quantitative analysis, 369–370	В
risk of de facto discretion, 359–363 SIEC test, 366–369 substantive test, 350–353 theoretical and practical challenges, 348 Article 7 (4) GDPR, 48	Behaviour dominance, causal links, 183–185 Benchmark methods, 7, 15–19 BGH. <i>See Bundesgerichtshof</i> (BGH) Biden antitrust EO, 495
Article 19a GWB, 193	changes, probability and proposed
Article 101(1) TFEU, 357–359	responses, 496–500
Article 101(3) TFEU countervailing benefits, emergence, 160–161 EC guidance, 156–158 environmental benefits, 160 EU competition rules, 165–166 in-market efficiencies, 158–160 out-of-market, 153 preliminary observations, 148–151 to R&D agreement, 157 under Regulation 1/2003, 154–156 under Regulation 17, 151–154 Article 101 and 102 TFEU, 54–56, 218 ancillary restraints doctrine role, 60–63 traditional construal, 57, 66 Article 102(a) TFEU, 6–8, 28	CPA, 502–504 federal judiciary, 505 policy implementation, 500–502 whole-of-government competition policy, 487 Big data, 270 BKartA. See Bundeskartellamt (BKartA) Brand bidding restraints anticompetitive effects harm infra-marginal consumers, 391–392 information and search costs, 392 over-investment in promotional services, 390–391 retailers' cost, dual distribution, 395–396
assumptions, 7 CJEU case law on, 26 EU competition law, 172 unfair royalty rates, 13–14	search cost-based price discrimination, 392–394 economic and legal analysis, 376 economic evidence, 375
Artificial Intelligence, 334	effects-based analysis

anticompetitive effects, 399-400	enforcement, 128
broad brand bidding restraints, 398	fines, 128–129
CMA's 2017 Digital Comparisons	with ITP application, 130-131
Tools Market Study Paper E, 397	prohibition, 54-60, 66-68, 70, 73,
competition authorities, 399	77–78
cumulative effect, 400	SGL Carbon AG, 129
determination of competitive harm,	Causality, standard for, 210-211
399	Causal links, 209
negative matching agreements,	behaviour dominance, 183-185
398–399	consequences, 221-222
online advertising restraints, 400-401	exclusionary abuse, 213-214
externalities	exploitation dominance, 220-221
horizontal, 383-386	market dominance, 183-185, 220-221
vertical, 381–383	normative, 211
online search advertising	CCI. See Competition Commission of
Asics and Guess cases, 378–380	India (CCI)
display and search, 377-378	Chairwoman of the Spanish National
price discrimination	Commission of Markets and Competition
high and low value consumers, 388-	(CNMC), 333–345
389	Chicago school, 109-110
procompetitive rationales, 389-390	CJEU. See Court of Justice of the
vertical restraints, 386–388	European Union (CJEU)
British Aerospace (BAe), 411	CK Telecoms
Broad brand bidding restraints, 398	Commission's approach, 363, 371
Brooke Group v. Brown & Williamson	de facto discretion in Airtours and,
Tobacco Corp, 114	364–366
Bundesgerichtshof (BGH), 35, 39, 42-47	quantitative analysis, 369, 371
Bundeskartellamt (BKartA), 29, 32-33, 35,	Clayton Act of 1914, 491
43, 48, 50–51	Climate-change abatement plan
big bang of, 39	Article 101(3), 165–166
causality criterion, 40-42	comfort letters, 165-166
decision, 34, 38, 44, 47	EU competition rules, 165-167
GDPR rules, 34	EUMR, 166–167
	guidance letters, 166
C	CMA. See Competition and Markets
	Authority (CMA)
Cani Fernández's interview, CNMC	CNMC. See Chairwoman of the Spanish
European Union, 341-343	National Commission of Markets and
external/national, 337-341	Competition (CNMC)
internal, 333–337	Collusion
international, 343-345	algorithmic, 70–71
Cartel	ancillary, 63–64
agreement, 68, 72–73	anti-competitive, 103

equilibrium, 56, 63, 65–67, 75–75	GWB, 194
explicit, 55-64, 71-72	interpretations, 50
tacit, 55, 66, 70–75	limits of, 39–40
as unilateral informational signals, 75-77	privacy and
Collusive paradigm, 103–106	data collection, competition
COMESA (Common Market for Eastern	enforcement, 172-173
and Southern Africa), 471	dominance, data-related abuse,
Commission. See European Commission	173–176
(EC)	Facebook in Germany, 176-178
Communication, modes of, 271	public enterprises
Competing firms, 242–243	differentiation model, 510-517
Competition Act, 98, 115–116, 240	equality model, 509-510
Competition agency, 14–21	to regulated market problems, 288–292
challenges, 27	remedies, 190
European Commission, 23	Competition Law Review Committee
SEP holder to, 25	(Committee) of India, 236–237
Competition and Markets Authority	Competition system, 84–88
(CMA), 166–167, 203, 344, 397, 452	Complex economic assessments, 349,
Competition Appellate Tribunal	360–363
(COMPAT), 117, 238	Concentration-competition-welfare, 230
Competition authority, 23, 52, 91, 100,	Concerted practices, notion of, 64–70
102, 127, 183, 188–190	Concurrent application, 289–290
antitrust cases, 190	Congressional Research Service report,
cartels, 96, 99	241
CCE, 98, 102	Conseil Européen de la Construction
CJEU, 188	d'Appareils Domestiques (CECED),
perception, 101	152–153, 167
Competition Commission of India (CCI),	Consent, data sharing, 47-48
116, 237–238, 240	Consultations mechanism, GPP, 483-485
Competition Council, 98	Consumer-facing markets, 205
Competition law, 30, 32. See also	Consumer Financial Protection Bureau
European Union (EU) competition	(CFPB), 502
law	Consumer harm, 214–215
assessment, 292	Consumer protection law, 171, 191-193
economic and legal context,	Consumer sovereignty, 227, 240
293–296	Consumer welfare, 78-79, 189, 229
on merits, 296–300	Contract law, 31, 48, 50
in big data, 208–209	Corporate political activity (CPA),
concurrent application of, 289-290	502-504
effectiveness, 306	Court of Justice of the European Union
enforcement, 171-173, 191, 200, 291	(CJEU), 5, 7, 10–12, 170, 174, 177,
equality in, 507	182
goals of, gulf countries, 517-520	in AKKA-LAA, 18–19, 27

benchmark methods, 15–17 in <i>Post Danmark I</i> , 20 two-tier test, 14–15 COVID-19 pandemic, 307–308, 327, 333, 377, 406–408, 418, 420–422, 426, 427	telecommunication sector, 513–514 UAEs Competition Law, 511–512 water and power project, 510 Digital Content Directive, 175 Digital economy, 32, 53, 170, 280, 284 Digital ecosystems, 53–80, 268
Croatian Chamber of Economy (CCE), 98–102	Digital markets, 30-32
Croatian Competition Act 1995, 91	Facebook case, 33–36 GWB, revisions, 32–33
Cultural dimensions, 85–86	inter-platform competition in, 267
.	Digital Markets Act (DMA), 172, 194–195, 199, 225, 261, 341–343, 438,
D	442, 446, 448, 451
Data analysis, 141–144	amendments, 278
Data collection, 172-173	binary mode, 272, 274–276
abuse of excessive, 216-217	competition policy, 264
policies, 187	as digital sovereignty, 272–274
Data policy	in European Parliament, 249–259
gathering data, 225–226	provisions of, 264
take-it-or-leave-it, 210, 215, 217–219,	qualitative features, 276–277
221	quantitative specification, 277
unfair trading conditions to, 218–220	Digital platforms
Data protection, 204	ancillary collusion on, 63–64 cartel prohibition in, 54–60, 66–68, 70,
abuse of dominance by object, 180–183 law, 51, 171	73, 77–78
Data security, 30–31, 39	challenges, 55
Decision-making autonomy, 297	with conspiracy, 57–58
Delivery Hero, 516–517	defining collusion, 75–77
Designation, models of, 274–280	ecosystems by, 53–80
Deterrence-based prevention, 439–440	explicit collusion, 57-64
DHRC. See Düsseldorf Higher Regional	tacit collusion with, 70–75
Court (DHRC)	idiosyncrasies, 71
Differentiation model, SOEs	legal basis for, 60-63
airline companies, 514	network effects, 54
Article 106 TFEU, 514–515	overview, 53–57
fundamental sectors, 512	potentially ambivalent welfare effects,
Gulf States, 510	58–63
killer acquisition concept, 512	problems, 64–70
Kuwaiti Competition Laws, 512	specifying concept, 77–80
NCA, 517	Digital Services Act (DSA), 264, 281–282
OECD, 515, 525	Digital sovereignty, 265–266
and private companies, 516	DMA as, 272–274
state action defence, 516	EU competition law, 269–271

interrelated vectors, 270	potential competitors in technology
vocabulary, 271	markets, 418
DIP. See Downwards innovation pressure	2008 financial crash, 409-414
(DIP)	US antitrust, 415-417
Discredited theory, 115	Economists' view, 4, 8-10
Display advertising, 202	Economy of favours, 89
Dissent Order, 117, 119	Effectiveness, principle of, 289
DMA. See Digital Markets Act (DMA)	Effects-based approach, 44, 208-214, 217
Dominance	Efficiency defence, 20-21, 161-162, 164,
abuse of, 115, 118	356
analysis, 118	Egalitarian syndrome, 86
behaviour/market, 183-185	Eighth Review Conference, GPP
data-related abuse of, 173-176	adoption, 469–470
in digital market, 238	Environmental Action Programme (EAP),
entity, 118	149
firms, 40–42, 301	Environmental agreements, 153
national culture, 84–88	Environmental-damage agreements, 165
position, 233–234	EO. See Executive order (EO)
Downwards innovation pressure (DIP),	Equality model, 509-510
311, 312, 326	Equity test, 219, 222
Draft DMA, 194-195. See also Digital	Essential facility doctrine, 174
Markets Act (DMA)	Essentiality, 14, 16-17
Draft Parliamentary Committee, 278	EU competition law. See European Union
Düsseldorf Higher Regional Court	(EU) competition law
(DHRC), 177, 181, 183–185	EU competition policy
	Covid-19 pandemic recession, 406
T.	economic recovery
E	anticompetitive behaviour and
EC. See European Commission (EC)	mergers, 417
ECN. See European Competition	Covid-19 pandemic, 407, 408
Network (ECN)	Great Depression, 408–409
E-commerce platforms, 120	potential competitors in technology
Economic approach, 43–47	markets, 418
Economic context, 135–136, 293–296	2008 financial crash, 409-414
Economic Intelligence Unit (EIU), 334	US antitrust laws, 415-417
Economic privacy equilibrium, 204–205	industrial and trade policies
Economic protectionism, 269	avoiding protectionism, 428-429
Economic recovery and EU competition	'bigger is better,' 422–424
policy	collective security and strategic trade
anticompetitive behaviour and mergers,	initiatives, 426–428
417	globalization and supply chains,
Covid-19 pandemic, 407, 408	424–426
Great Depression, 408–409	market adaptation, 431
1 /	_

protectionism and isolationism, 405	Article 102(a) TFEU, 172
state aid, 418–422	climate-change abatement, 165-167
EU merger control, 347–350	consumer protection law application,
'gap' cases	191–193
assessment, structured framework,	data abuse under, 217–226
364–370	data privacy law, 298-299
horizontal mergers, 359-364	digital sovereignty, 269-271
Regulation 139/2004, market power	DMA proposal, 194–195
and 'gap' cases, 350-359	environmental policy, 150
EU Merger Regulation (EUMR), 148	EUMR, 161–164
climate-change abatement, 166-167	GWB, amendment, 193-194
efficiencies and criterions, 163-164	overview, 147-148, 287-288
preliminary observations, 161-162	predatory pricing in, 114–115
EUMR. See EU Merger Regulation	protect privacy, 187-195
(EUMR)	to regulated market problems, 288-305
Eurobonds, 421	Ex-ante regulation, preventive effect, 438-
European Central Bank (ECB), 413	439, 445–447
European Commission (EC), 7, 18, 22,	Excessive pricing cases, 8–10, 22, 175
125, 148	Exclusionary abuse, 173–174, 213–214
assessesment, 133–135	on exploitative conduct, 223
behavioural remedies, 127	GDPR as, 224–225
competition agency, 23	objective concept, 223
guidance on Article 101(3), 156–158	self-evident in, 223
Horizontal Cooperation Guidelines,	unfair trading conditions as, 222
156–157, 165	Executive order (EO)
investigative approach, 133-137	Biden antitrust, 495–505
Rambus in, 8	implications for business, 488-489
reviewing process, 127–137	US economy and challenges, 506
social and economic context, 135–136	whole-of-government competition
twofold analysis, 134	policy, 487
European Competition Network (ECN),	Exemplary analysis, 59
261–262, 342, 343, 407	Explicit collusion, 55–64, 71–72
European Court of Justice (ECJ), 220,	Exploitation dominance, 220–221
223, 225	Exploitative abuse, 31, 175–176, 212,
European Economic Community (EEC),	218–222
149	
European Green Deal (EGD), 147	F
Europeanization process, 103–106	
European Union (EU) competition law, 6,	Facebook, 29-30, 33-36, 40. See also
9–10, 185	German Facebook saga
antitrust application challenges, 188–	competitive advantage, 213
191	data policy, 207
Article 101(3) TFEU, 148–161	data protection, 180

in Germany, 176-178	G
indispensable, 186	
social network, 207	Game theory, 72–73, 110
surveys, 44	GCA. See German Competition Authority
Facebook Business Tools, 176, 207	(GCA)
Fair, Reasonable and Non-Discriminatory	GCC. See Gulf Cooperation Council
(FRAND), 3–7, 13	(GCC)
Fairness, notion of, 178	GDPR. See General Data Protection
Fair royalty rate, 4–5	Regulation (GDPR)
FAS. See Federal Antimonopoly Service	General Data Protection Regulation
(FAS)	(GDPR), 34–35, 39–40, 47, 170
Federal Antimonopoly Service (FAS),	abusive contractual conditions, 210
466–469, 471, 472, 474, 477	Article 6 (1a), 210
Federal Cartel Office (FCO), 176-178,	Article 7 (4), 48
181, 374, 379, 390	data protection law, 51, 171
Federal Court of Justice (FCJ), 177, 181,	as exclusionary abuse, 224–225
184, 186	exemptions in, 210
Federal German Cartel Office, 29	market power, 215
Federal Trade Commission (FTC), 114,	violation, 211, 215, 221, 224, 226
415, 448, 449, 488, 489, 493, 495,	General vs. specific deterrence, 127-131
500-502, 504, 506	German Competition Authority (GCA),
Financial crisis of 2008, 409-414	123, 179–180, 185, 188, 200, 202,
Fine reduction, ITP, 128	224
conditions, 132	decision, 206–208
general vs. specific deterrence, 127-131	effects-based reasoning, 212-214
granting, 137	exclusionary abuse, 174
guidelines, 131-133	formal approach by, 209–211
investigative approach, Commission,	theory of harm, 212
133–137	German competition law, 30, 32–33, 183,
Fining Guidelines, ITP, 131–133	193, 206
Firm-level R&D investment, 325	causality in, 210–211
5G technology, 4	steps of, 209
Foreign Direct Investements (FDI), 520,	German Facebook saga
522	analysis on
Formal-based approach, 208-214, 217	abuse of dominance, 178–187
Former centralised system, 151-152	EU competition law protect privacy,
FRAND. See Fair, Reasonable and Non-	187–195
Discriminatory (FRAND)	overview, 169–172
Freemium model, 112	privacy and competition law,
French Competition Authority, 167, 182,	172–178
235	competition law, limits of, 39–40
FTC. See Federal Trade Commission	competition watchdog, 33, 39
(FTC)	decision analysing, 206–208

critique and weaknesses, 214–217 formal/effects-based approach, 208– 214 economic approach, 43–47 Facebook case, 33–36 GWB, revisions, 32–33	other frameworks, 480–483 political effects, 474 strengthen co-operation, 478–480 Gulf Cooperation Council (GCC), 508– 509, 514, 517–522, 524, 525
overturning causality, 40–43 overview, 29–32	Н
social media, function, 47–51 zero price markets, 36–38 German Federal Antitrust Authority, 51 German NCA, 177–178, 180, 188, 193–194	Hampering innovation, 10–11 High entry barriers, 9–10, 12–14 Horizontal Cooperation Guidelines, 156–157, 165 Horizontal Merger Guidelines, 161, 167
Gesetz gegen Wettbewerbsbeschränkungen	Huawei v. ZTE, 5
(GWB), 30, 32–33, 193–194	I
Glass-Steagall Act of 1933, 412, 430–431 Google AdWords, 374, 378, 379, 383, 386	ION C. I 1.C
GPP. See Guiding Policies and Procedures	ICN. See International Competition Network (ICN)
(GPP)	IFT (Instituto Federal de
Great Depression, 408–409	Telecomunicaciones, México), 345
Group of 77 (G77), 462	IGE. See Intergovernmental Group of
Guiding Policies and Procedures (GPP)	Experts (IGE)
adoption	Important Projects of Common European
Discussion Group and survey, 467–	Interest (IPCEI), 419, 429
468	Inability to pay (ITP), 126
Eighth Review Conference, 469–	applications, 130–131
470	assessment, 137–138
GA session, 472 IGE follow-up, 468–469	Altman Z score, 139–141
nineteenth IGE session, 470–472	data analysis, 141–144
run-up, 465–467	fine reduction, 128 conditions, 132
UNCTAD, enforcement co- operation, 464–465	general <i>vs.</i> specific deterrence, 127–131
competition authorities, 475	granting, 137
confidentiality, 475	guidelines, 131–133
consultations mechanism, 483–485 follow-up action, 485–486	investigative approach, Commission, 133–137
guiding principles, toolkit and unctad's	hypotheses, 126
role, 476–477	overview, 125–127
legal effects, 473	India, predatory pricing in, 115–119
linkage to set, 472–473	Indian Competition Act, 115
OECD view-point, 477–478	Indian jurisprudence, 111

Indispensability test, 219, 222, 296	R&D expenditure, 312
Individualism/Collectivism (IDV), 85-86	steal business, 311-312
Industrial and trade policies	theory of harm, 311, 313
avoiding protectionism, 428-429	'traditional' approach, 310
'bigger is better,' 422–424	UPP, 311
collective security and strategic trade	level of investment, 324
initiatives, 426–428	multiple-firm patent race, technical
globalization and supply chains,	derivation, 327–330
424–426	NDD, 309
Informal governance, post-socialist	one-off or regular intake medicine,
economy, 81-83	318–320
competition system and dominant	patent race, competition model, 323-32
national culture, 84-88	presence of existing drugs, 320-323
europeanization process ν . collusive	preventive and therapeutic drug
paradigm, 103-106	AD and PD, 318
and formal, post-transitional period,	dynamic considerations, 315
92–103	ex ante and ex post, 314-315
transitional capitalist states, 88-91	information asymmetry, 316-318
Informal institutions, 89–90	replacement effect, 320-323
Informal practices, 88-91	Insolvency risk, 134, 138
Informant, 118	Intellectual Property Rights (IPRs),
Informational self-determination, 170-171	229–230, 232, 241–242
Informational signal approach, 76-77	Intelligence Economic Unit, 334
Information and Communication	Intergovernmental Group of Experts
Technology (ICT), 111, 113	(IGE)
Information asymmetry, 36-37, 171, 192,	Discussion Group, 468-469
221	FAS, 466, 471
in digital markets, 30	Review Conferences, 464, 476
game theory, 110	UNCTAD, 464–465, 472, 482, 485
in zero price markets, 31	UN Set, 463–464
Information Note, 132–133	Interim measures, adoption, 24
In-market efficiencies, 156, 158-160, 203	International Competition Network
Innovation, 227	(ICN), 343–344, 459, 467, 469, 471
legal recognition of predatory, 239-243	472, 475, 477, 478, 481, 485
market structure & incentives, 229-233	International Forum of Sovereign Wealth
overview, 227–229	Funds, 523
predatory, 233–239	International Monetary Fund (IMF), 450,
Innovation incentives	522
COVID-19 pandemic, 307-308	Internet of Things (IoT) technology, 4,
economics literature	281
DIP, 311, 312	Interoperability, 3-4, 234-237
monopolist, 313	Inter-platform competition, DSA/DMA
price coordination, 311	proposals on

designation, models of, 274-280 digital sovereignty in EU competition law, 269-271 as factor influencing, 271-274 direct beneficiaries, 269 importance, 267-269 overview, 261-266 supportive elements, 281 transparency, shades of, 280-285 Interrelated markets, 202 Interstate Circuit v. United States, 58 Intra-platform competition, 264, 267-268 IoT. See Internet of Things (IoT) technology IPCEI. See Important Projects of Common European Interest (IPCEI) IPRs. See Intellectual Property Rights (IPRs) Italian Competition Authority, 345 Italian NCA, 191-192, 196 ITP. See Inability to pay (ITP)

K

King Midas problem, 266 Kuwaiti Competition Laws, 512 Kuwait Investment Authority (KIA), 512 Kuwait's Public Institution for Social Security, 512 Kuwait Vision 2035, New Kuwait, 520

L

Latin American Forum of
Telecommunications Regulators
(REGULATEL), 345
Legal context, 293–296
Legal enforcement mechanism, 97
Legitimate objectives, 80
Liberalisation of Passenger Transport
Services, 336
Licensing agreements, 16–17, 23
Loss of control, Facebook, 215

M

Machine learning, 65 Market dominance, 183-185, 220-221 Marketing authorization (MA), 300 Marketing funnel, 203 Market power, harmfulness of, 435-437 Markets. See also Advertising markets ancillary, 200, 202-206 consumer-facing, 205 digital, 30-32 Facebook case, 33-36 GWB, revisions, 32-33 dominance, 205 causal links, 183-185 interrelated, 202 manifestation, 210-211 power, 230-231, 233 GDPR violation and, 215 regulation competition assessment in, 292-300 competition enforcement, 300-305 competition law to, 288-292 structure, 229-233 zero-price, 36-38, 200-201 Matrimony.com Ltd. v. Google LLC, 238 MCX Stock Exchange v. National Stock Exchange (MCX v. NSE), 116, 118-119 Meru Travels Solutions (P) Ltd. v. CCI, 238 Monopolistic and Restrictive Trade Practice (MRTP) Act, 115 MTC Vodafone Bahrain, 514

N

National Company Law Appellate Tribunal (NCLAT), 119 National Competition Authorities (NCAs), 8, 14–16, 18–19, 21–28, 83, 172, 194, 196, 337, 342–344, 508, 511, 517, 519

National Industrial Recovery Act (NIRA), 408, 409	exclusionary abuse, 222–226 exploitative abuse, 217–222
National law, violation of, 182	data access in, 201
NDD. See Neurodegenerative diseases	advertising markets, 201–204
(NDD)	ancillary to advertising market, 204–206
Necessary notion, 61	German Facebook decision, 206–208
Negotiation power, 220–221	critique and weaknesses, 214–217
Neurodegenerative diseases (NDD), 309,	formal/effects-based approach,
318	208–214
New Competition Law, 511	overview, 199–201
NIRA. See National Industrial Recovery	relevant good for, 203–204
Act (NIRA)	Online platforms, 175, 187, 284
Non bis in idem principle, 188	Online search advertising
Non-competing firms, 242–243	Asics and Guess cases, 378–380
Non-cooperative games, 72–73	display and search, 377–378
Non-Governmental Advisors (NGAs), 344	Open display, 202
Non-personal data, 170	Operability, 235
Non-price parameter, privacy as, 173	Original Equipment Manufacturers
Non-price strategy, 241	(OEMs), 25
Non-rivalrous good, 175	Out-of-market efficiencies, 153, 158–159
Non-transitory entry barriers, 9	out of marine emercials, fee, fee fee
Normative causality, 183, 211, 216, 221, 223	P
	D 1: , 1: (DD) 200 212 210
	Parkinson's disease (PD), 309, 313, 318,
0	Parkinson's disease (PD), 309, 313, 318, 320, 323, 326
О	320, 323, 326
	320, 323, 326 Patent ambush, 8
Oberlandesgericht Düsseldorf (OLG), 34–35,	320, 323, 326 Patent ambush, 8 Patent Assertion Entities (PAEs), 4
Oberlandesgericht Düsseldorf (OLG), 34–35, 41–42, 48	320, 323, 326 Patent ambush, 8 Patent Assertion Entities (PAEs), 4 Patent production, 15
Oberlandesgericht Düsseldorf (OLG), 34–35,	320, 323, 326 Patent ambush, 8 Patent Assertion Entities (PAEs), 4
Oberlandesgericht Düsseldorf (OLG), 34–35, 41–42, 48 OECD, 68, 69, 406, 447, 462, 465, 467,	320, 323, 326 Patent ambush, 8 Patent Assertion Entities (PAEs), 4 Patent production, 15 Patent thicket, 326
Oberlandesgericht Düsseldorf (OLG), 34–35, 41–42, 48 OECD, 68, 69, 406, 447, 462, 465, 467, 471, 472, 475–482, 485, 509, 515, 525 Off-Facebook data, 33, 35, 47–48, 200,	320, 323, 326 Patent ambush, 8 Patent Assertion Entities (PAEs), 4 Patent production, 15 Patent thicket, 326 PD. See Parkinson's disease (PD) Personal data, 170 Personal protective equipment (PPE),
Oberlandesgericht Düsseldorf (OLG), 34–35, 41–42, 48 OECD, 68, 69, 406, 447, 462, 465, 467, 471, 472, 475–482, 485, 509, 515, 525 Off-Facebook data, 33, 35, 47–48, 200, 206, 208, 216, 219	320, 323, 326 Patent ambush, 8 Patent Assertion Entities (PAEs), 4 Patent production, 15 Patent thicket, 326 PD. See Parkinson's disease (PD) Personal data, 170 Personal protective equipment (PPE), 426–428, 430
Oberlandesgericht Düsseldorf (OLG), 34–35, 41–42, 48 OECD, 68, 69, 406, 447, 462, 465, 467, 471, 472, 475–482, 485, 509, 515, 525 Off-Facebook data, 33, 35, 47–48, 200, 206, 208, 216, 219 Office of Fair Trading (OFT), 19, 413	320, 323, 326 Patent ambush, 8 Patent Assertion Entities (PAEs), 4 Patent production, 15 Patent thicket, 326 PD. See Parkinson's disease (PD) Personal data, 170 Personal protective equipment (PPE), 426–428, 430 Planned economy legacy, 92–96
Oberlandesgericht Düsseldorf (OLG), 34–35, 41–42, 48 OECD, 68, 69, 406, 447, 462, 465, 467, 471, 472, 475–482, 485, 509, 515, 525 Off-Facebook data, 33, 35, 47–48, 200, 206, 208, 216, 219 Office of Fair Trading (OFT), 19, 413 OIA. See Oman Investment Authority	320, 323, 326 Patent ambush, 8 Patent Assertion Entities (PAEs), 4 Patent production, 15 Patent thicket, 326 PD. See Parkinson's disease (PD) Personal data, 170 Personal protective equipment (PPE), 426–428, 430 Planned economy legacy, 92–96 Platforms, 63–65. See also Digital
Oberlandesgericht Düsseldorf (OLG), 34–35, 41–42, 48 OECD, 68, 69, 406, 447, 462, 465, 467, 471, 472, 475–482, 485, 509, 515, 525 Off-Facebook data, 33, 35, 47–48, 200, 206, 208, 216, 219 Office of Fair Trading (OFT), 19, 413 OIA. See Oman Investment Authority (OIA)	320, 323, 326 Patent ambush, 8 Patent Assertion Entities (PAEs), 4 Patent production, 15 Patent thicket, 326 PD. See Parkinson's disease (PD) Personal data, 170 Personal protective equipment (PPE), 426–428, 430 Planned economy legacy, 92–96 Platforms, 63–65. See also Digital platforms; Online advertising
Oberlandesgericht Düsseldorf (OLG), 34–35, 41–42, 48 OECD, 68, 69, 406, 447, 462, 465, 467, 471, 472, 475–482, 485, 509, 515, 525 Off-Facebook data, 33, 35, 47–48, 200, 206, 208, 216, 219 Office of Fair Trading (OFT), 19, 413 OIA. See Oman Investment Authority (OIA) Oligopoly model, 66, 79	320, 323, 326 Patent ambush, 8 Patent Assertion Entities (PAEs), 4 Patent production, 15 Patent thicket, 326 PD. See Parkinson's disease (PD) Personal data, 170 Personal protective equipment (PPE), 426–428, 430 Planned economy legacy, 92–96 Platforms, 63–65. See also Digital platforms; Online advertising e-commerce, 120
Oberlandesgericht Düsseldorf (OLG), 34–35, 41–42, 48 OECD, 68, 69, 406, 447, 462, 465, 467, 471, 472, 475–482, 485, 509, 515, 525 Off-Facebook data, 33, 35, 47–48, 200, 206, 208, 216, 219 Office of Fair Trading (OFT), 19, 413 OIA. See Oman Investment Authority (OIA)	320, 323, 326 Patent ambush, 8 Patent Assertion Entities (PAEs), 4 Patent production, 15 Patent thicket, 326 PD. See Parkinson's disease (PD) Personal data, 170 Personal protective equipment (PPE), 426–428, 430 Planned economy legacy, 92–96 Platforms, 63–65. See also Digital platforms; Online advertising e-commerce, 120 ICT based, 111
Oberlandesgericht Düsseldorf (OLG), 34–35, 41–42, 48 OECD, 68, 69, 406, 447, 462, 465, 467, 471, 472, 475–482, 485, 509, 515, 525 Off-Facebook data, 33, 35, 47–48, 200, 206, 208, 216, 219 Office of Fair Trading (OFT), 19, 413 OIA. See Oman Investment Authority (OIA) Oligopoly model, 66, 79 Oman Investment Authority (OIA), 523–524	320, 323, 326 Patent ambush, 8 Patent Assertion Entities (PAEs), 4 Patent production, 15 Patent thicket, 326 PD. See Parkinson's disease (PD) Personal data, 170 Personal protective equipment (PPE), 426–428, 430 Planned economy legacy, 92–96 Platforms, 63–65. See also Digital platforms; Online advertising e-commerce, 120 ICT based, 111 social media, 32, 36, 203
Oberlandesgericht Düsseldorf (OLG), 34–35, 41–42, 48 OECD, 68, 69, 406, 447, 462, 465, 467, 471, 472, 475–482, 485, 509, 515, 525 Off-Facebook data, 33, 35, 47–48, 200, 206, 208, 216, 219 Office of Fair Trading (OFT), 19, 413 OIA. See Oman Investment Authority (OIA) Oligopoly model, 66, 79 Oman Investment Authority (OIA), 523–524 On-Facebook data, 34, 47	320, 323, 326 Patent ambush, 8 Patent Assertion Entities (PAEs), 4 Patent production, 15 Patent thicket, 326 PD. See Parkinson's disease (PD) Personal data, 170 Personal protective equipment (PPE), 426–428, 430 Planned economy legacy, 92–96 Platforms, 63–65. See also Digital platforms; Online advertising e-commerce, 120 ICT based, 111 social media, 32, 36, 203 two-sided, 111–114
Oberlandesgericht Düsseldorf (OLG), 34–35, 41–42, 48 OECD, 68, 69, 406, 447, 462, 465, 467, 471, 472, 475–482, 485, 509, 515, 525 Off-Facebook data, 33, 35, 47–48, 200, 206, 208, 216, 219 Office of Fair Trading (OFT), 19, 413 OIA. See Oman Investment Authority (OIA) Oligopoly model, 66, 79 Oman Investment Authority (OIA), 523–524	320, 323, 326 Patent ambush, 8 Patent Assertion Entities (PAEs), 4 Patent production, 15 Patent thicket, 326 PD. See Parkinson's disease (PD) Personal data, 170 Personal protective equipment (PPE), 426–428, 430 Planned economy legacy, 92–96 Platforms, 63–65. See also Digital platforms; Online advertising e-commerce, 120 ICT based, 111 social media, 32, 36, 203

Post-socialist economy, informal	structural interventions, 447-449
governance, 81	Price discrimination, brand bidding
competition system, 84-88	restraints
dominant national culture, 84-88	economic analysis, 394
Europeanization process vs. collusive	high and low value consumers, 388-389
paradigm, 103–106	procompetitive rationales, 389-390
informal practices, 88-91	search cost-based, 392-394
overview, 81–83	vertical restraints, 386-388
post-transitional period, 92	Pricing information, 76
planned economy legacy, 92-96	Privacy, 170
trade association roles, 97-103	competition law and
Power Distance (PDI), 85	data collection in competition
PPE. See Personal protective equipment	enforcement, 172–173
(PPE)	dominance, data-related abuse,
Practical cooperation, 58, 66, 68-71, 75,	173–176
77, 79–80	Facebook in Germany, 176-178
Precautionary principle, 150-151	concerns, 170
Predatory innovation, 228, 243	paradox, 171, 205
legal recognition, 239-243	protection, 30-31, 37, 39
making for, 233–239	Privatization process, 91, 93
Predatory Innovation Doctrine, 228	Problem-solving mechanism
Predatory pricing, 109	harmfulness of market power, 435-437
CCI analysis, 116	macroeconomic effects, 434
in EU, 114–115	prevention in competition law, 438–452
in India, 115–119	service-providing agencies, 433
issue of, 119	Product hopping, 242
overview, 109–111	Product Innovation, 230
test for, 117	Proportionate notion, 61–62
traditional, 112	Public Investment Fund (PIF), 522
two-sided platforms, economics,	
111–114	Q
in US, 114–115	
Prevention in competition law	Qatar Airways, 514
ex-post intervention	Qatar Petroleum (QP), 513
deterrence, 439–440	Q-learning algorithms, 65–66, 68
and ex-ante regulation, 438–439	Quality-adjusted life years (QALYs), 322
limitations of, 441–444	
maximum level	R
ex-post to ex-ante regulation, 445–447	D 1 0 1 145 400
extension of ex-post deterrence,	Raghavan Committee, 115, 120
451–452	Rambus case, 8, 12, 23
market participants and winning market competition, 449–451	RBPs. See Restrictive business practices
market competition, 777 751	(RBPs)

R&D. See Research and development	function, 47–51
(R&D)	platforms, 32, 36, 203
Real-time bidding, 201	privacy protection for, 37
Recoupment, 114–115, 117	websites, 111, 113
Regulation 139/2004. See Article 2 of	Social network, 207. See also Facebook
Regulation 139/2004 in 'gap' cases	Social norms, 97
Regulatory complementarity, 289	SOEs. See State-owned enterprises (SOEs)
Regulatory gaming, 300–301	Standard contract term, 49
Rentier countries, 521	Standard Development Organization
Resale price maintenance (RPM), 375,	(SDO), 3, 12–13
382	Standard Essential Patents (SEPs), 3,
Research and development (R&D), 15,	12–15, 22, 28
20–21, 229–231, 243	State action doctrine, 288
expenditure, 312	State aid modernization (SAM), 419
firm-level investment, 325	State-owned enterprises (SOEs), 92
investment cost in, 323, 324	differentiation model
Restrictive business practices (RBPs), 456,	airline companies, 514
458, 460–465, 483–485	Article 106 TFEU, 514–515
Retailers' cost, dual distribution, 395-396	fundamental sectors, 512
Right to informational self-determination,	Gulf States, 510
186	killer acquisition concept, 512
Robinson-Patman Act, 114	Kuwaiti Competition Laws, 512
	NCA, 517
_	OECD, 515, 525
Š	and private companies, 516
Sanctioning regime, 188	state action defence, 516
Saudi Arabia Vision 2030, 520	telecommunication sector, 513–514
	UAEs Competition Law, 511–512
Saudi Competition Law, 520	water and power project, 510
Self-assessments, 154 Sharman Act. 67, 72, 75, 114, 448, 490	equality model, 509–510
Sherman Act, 67, 72, 75, 114, 448, 490,	in Gulf States
491, 501	FDI, 522
Significant impediment to effective	Foreign Investment Law, 523
competition (SIEC) test, 161–163,	foreign ownership of EU companies
351	524
administration of, 359	GCC's economies, 521
adoption of, 352	QIA, 523–524
efficiency defence, 356, 359	
important competitive force, 366	Substantive test in Regulation 139/2004, 350–353
under Regulation 139/2004,	
conditions, 366–369	Super-dominance position, 9–10, 12–14
Sisvel v. Haier, 5	Supplementary-data, 214
Smartphones war, 4	Supplementary patent certificates (SPCs), 302
Social media, 31, 38–39, 44	Systematic irrational behaviour, 37–38

T	UNCTAD. See United Nations
	Conference on Trade and
Tacit collusion, 55, 66, 70–75	Development (UNCTAD)
Take-it-or-leave-it data policy, 210, 215,	Unfair commercial practices law, 48-49
217–219, 221	Unfair contract term, 45
Technical progress, 165	Unfair royalty rate, SEP holder
Temporary State Aid Framework, 407,	assessing, 14–16
420–422	benchmark methods to, 16-19
Theory of harm, 185–187, 212–213, 301	CJEU view, 10–12
Third-party data gathering, 225–226	competition policy vis-à-vis, 12-14
Trade association roles, 97–103	economists' view, 8-10
Trading conditions, 178–180	efficiency defence, 20–21
Traffic stealing effect, 382	entry barriers, 22
Transitional economies, 82	objectives, 6–8
Transparency, shades of, 280–285	overview, 3–6
Treaty of Rome (1958), 149	remedies, 21–26
Treaty of the Functioning of the European	Unfair trading conditions, 218, 226
Union (TFEU), 6, 54	to data policy, 218–220
Article 101(3)	exclusionary abuse, 222-226
countervailing benefits, emergence,	GDPR violation, 221-222
160–161	two-step analysis, market
EC guidance, 156–158	dominance, 220–221
in-market efficiencies, 158–160	elements of, 219
preliminary observations, 148–151	indispensability test, 219
under Regulation 1/2003, 154–156	United Arab Emirates (UAE), 508, 512,
under Regulation 17, 151–154	514, 522–524
Article 101 and 102, 54–56	United Brands v. Benchmarking, 7, 14–16,
Article 102(a), 6–8, 28	26
assumptions, 7	United Nations Conference on Trade and
CJEU case law on, 26	Development (UNCTAD), 456, 463,
unfair royalty rates, 13–14	476–477, 482, 485
Two-sided platforms, economics of,	COFECE, 468
111–114	competition authorities, 474, 479-480
Type I errors, 36	G77, 462
	ICN and, 468
U	Member States' recognition of, 459
TIATE CONT. LA LES CONTRACTO	OECD and ICN frameworks, 477, 478,
UAE. See United Arab Emirates (UAE)	481
UAEs Competition Law, 511–512	RBP legislation, 462
Uber v. CCI, 117–119	Review Conference and, 472
UK Enterprise Act, 166	role in enforcement co-operation,
Umar Javeed v. Google, 237	464–465
Uncertainty Avoidance (UAI), 85-86	United States, predatory pricing in, 114–115

UN Set
extrinsic legal effects, 458
GPP
adoption, 464-472
analysis of, 472-477
value, 477–486
international measures
institutional mechanisms, 463-464
Section F consultations, 461-463
intrinsic legal effects, 457-458
legally binding, 457
norms for states, 461
political effects, 458-459
RBPs, 456
structure of, 459-460
treatment of exemptions under national
laws, 460-461
Unwired Planet case, 5-6
UPP. See Upwards pricing pressure (UPP)

Upwards pricing pressure (UPP), 311, 369, 370
US antitrust laws, 415–417
antitrust genesis and interventionism, 490–491
antitrust revolution, 491–493

\mathbf{v}

Vertical Block Exemption Regulation (VBER), 374–376, 380, 397, 402, 403 Vertical restraints, 381–383 Very large online platforms (VLOPs), 275, 282–283

7

Zero-price market, 36–38, 200–201, 212 Z-Score. See Altman Z-Score (Z-Score)