

SUBJECT INDEX

- access prices 1562
- accounting profit rate 1739
- adapters 2051
- add-on pricing 2274–2277
- administrative law judge 2391
- adverse selection 1564
- advertising dynamics 1948
- advertising equilibrium 1770, 1771
- advertising intensity 1716, 1729, 1730, 1734–1741, 1750, 1819
- advertising scale economies 1715, 1731–1733
- advertising–concentration relationship 1734
- advertising–sales ratio 2308
- aftermarkets 1978
- agency problems 2382
- aggregate surplus standard, *see also* welfare standards 2374, 2402
- aircraft industry 2342
- AM stereo standards 2010
- anonymity 1894
- applications 1943
- applications barrier to entry 2010
- applied Markov perfect equilibrium 1932
- approximate independence 2348
- approximation methods 1919
- artificial intelligence algorithms 1919
- asset value 1923
- asymmetric industry structures 1947
- asymmetric information 1880, 1959
- asynchronous 1927
- AT&T divestiture 2149
- audits 1582
- average revenue regulation 1609
- average-cost pricing 1635
- awareness advertising 1949

- backward compatible 2010
- backward induction 2031
- backward solution 1908
- backward solution algorithm 1935
- bandwagon 2028
- “bandwagon” standardization 2027
- bargain-then-ripoff 1972, 2037
- bargaining power 1562
- barriers to entry 1714, 1715, 1742, 2307
- Battle of the Sexes 2026
- behavioral economics 1821, 1825, 1826, 1828
- Bellman equation 1923
- Bertrand–Edgeworth product market game 1905
- best-response asymmetry 2234, 2239, 2242–2244, 2246, 2263, 2283
- best-response symmetry 2234, 2238, 2239, 2241, 2246, 2247, 2263
- bid rigging 2078, 2079, 2122, 2125, 2129
- bidders 1882
- biodiversity 2033
- bottleneck, *see also* essential facility 1670, 2148
- boundary points 1932
- bounds approach 1871, 2304, 2344
- bounds estimation 2331
- brand loyalty, *see* switching costs 1981
- browser war 1955
- bundling 1996, 2225, 2228, 2246, 2259, 2281–2286
- bundling, *see also* tying, tie-ins 2150
- button auction 2083, 2084, 2086, 2087, 2092–2094, 2105, 2118
- bypass 2156

- capability 2334, 2362
- capacity accumulation 1947
- capacity investment 2389
- capacity limitations 2396
- captive consumers 1763, 1766
- capture 1564
- catastrophe theory 2038
- cease and desist orders 2391
- cement industry 1946
- cheap talk 2025, 2026
- Chicago critique 2155
- chicken-and-egg problem 2018
- churning 2356
- Clayton Act 2390
- coalition-proof 2023
- Coase conjecture 2037

- collusion 1937, 1952, 1955, 2078, 2079, 2083, 2098, 2117, 2122, 2123, 2127–2133, 2136, 2138, 2372
- collusion-proof 1585
- combative advertising 1724, 1726–1728, 1762, 1768, 1812
- combative role 1708
- commercial aircraft market 1953
- commitment 1561, 1772, 2153
- committee standardization 2027
- common carrier 2154
- common knowledge of plans 2023
- common values 2080–2082, 2084, 2085, 2090, 2093, 2102–2106, 2109, 2113, 2118, 2125, 2126, 2134
- community dimension 2397
- compatibility 1971
- compatibility, *see* network effects 1977
- compatible products 1976
- competition
 - with network effects 2043–2046
- Competition Directorate General 2397
- competition for the market 1972
- competition policy 1977, 1979
- competitive fringe 1651
- complementary advertising 1706, 1720, 1721, 1723, 1724, 1751, 1758
- complementary goods 2148
- complements to a “platform” 2008
- computational algorithms 1900
- computational burden 1915, 1918, 1929
- computational time 1934
- computationally efficient test 1936
- computers 2011
- computing equilibria 1908
- concentration 1714, 1718, 1735–1737, 1814, 1815, 1817, 1819, 1820, 2307, 2394
- concentration changes 2394
- concentration effect 1713, 1731
- confusion 2022
- consensus standard 1975, 2023, 2026, 2033, 2049, 2053
- consent decree 2391
- constitution 1635
- constructive role 1708
- consumer poaching, *see* customer poaching 2250
- consumer protection 1976
- consumer surplus standard 2374, 2402
- consumer survey methods 2410
- contingent contracts 2039
- continuation value 1899
- continuous-time “contraction factor” 1926
- continuous-time model 1918
- continuous-time stochastic games 1920
- continuum of states 1938
- contract theory 2041
- contracting difficulties 1983
- contraction 1912
- contractual costs 1977, 1992, 2001
- convenience and non-convenience goods 1738
- convergence 1914
- convergence factor 1913
- convergence of the stochastic algorithm 1933
- converters 2002, 2050, 2051
- cooperative game theory 2040
- coordinated effects 2383
- coordinated switch 2013
- coordination 1971, 2153
 - delays 2031
 - failure 2024, 2198
 - leadership 2023
 - problem 2170
 - with network effects 2021–2028
 - wrong equilibrium 2024
- cost effect 1710
- cost-increasing distortion 1777
- cost-plus regulation 1629
- cost-reducing distortion 1800
- countervailing incentives 1569
- counting measures 1895
- Court of First Instance 2399
- cream-skimming 1653
- credit cards 2011
- criminal penalties 2390
- critical loss analysis 2410
- critical mass 2030, 2038
- curse of dimensionality 1883, 1918, 1921
- customer poaching 2249, 2257–2259
- dampening 1914
- deadweight loss 2038
- death spiral 2025
- decree 2391
- demand inertia 1980
- demand uncertainty 2225, 2226, 2228, 2286–2291
- demand-increasing distortion 1801
- demand-reducing distortion 1801
- Department of Justice 2390
- DG Comp 2397
- differential equations 1941

- differentiated products 1896
- displacement ratio 1674
- dissipative advertising 1777–1782, 1786
- diversification 1637
- diversion ratio 2376
- divestiture 2149
- dominance 2399
- dominant firm 2148
- durable 1960
- durable goods 2149, 2387
 - monopolist 2156
- Duverger's Law 2027
- Dvorak keyboard 2012
- dynamic consumers 1960
- 'dynamic games' framework 2354
- dynamic model 1884
- dynamic stochastic game 1890, 1892

- early adoption 2028–2034, 2045
- ease of entry 2396
- ease of sustaining collusion 2395
- econometric analysis 2405
- economies of scale 2007, 2024, 2149, 2190
- economies of scope 1971, 2149, 2190
- economy of scale in advertising 1709
- efficiencies 2373, 2433
- efficiency defenses 2200
- efficiency improvement 2402
- efficient component pricing rule (ECPR) 1674, 2152
- elasticity and scale effects 1752
- elasticity effect 1710, 1761
- empirical work 1944
- empirics 1945
- endogeneity 1803, 2406
- endogeneity concern 1716, 1717, 1725, 1738, 1741
- endogeneity of concentration 2412
- endogenous mergers 2388
- endogenous participation 2273
- endogenous sunk costs 1815, 1818, 1820, 1821, 2342, 2358
- endogenous switching costs 2250, 2257–2259
- endogenous timing 1958
- enforcement experience 2404
- English auction 2077, 2083–2085, 2089, 2092–2094, 2105, 2109, 2116, 2117, 2119, 2127, 2130
- entrepreneur 2025
- entry 1848, 1855, 1892, 1893, 2153, 2387
 - and switching costs 1998–2001
 - deterrence 2154
 - with network effects 2032, 2033
- entry and exit decisions 1849
- entry assistance 1658
- entry barriers 1714, 1715
- entry thresholds 1857–1859
- entry-deterrence effect 1710, 1792, 1793, 1798, 1801, 1808, 1812, 1813, 1820
- entry-deterrence effect of advertising 1741, 1803
- entry-deterrence strategies 1742
- entry and exit decisions 1906
- equilibria in repeated games 1943
- equilibrium configurations 2318
- equilibrium selection 1916
- equitable relief 2391
- ergodicity 1904
- escalation and shakeout 2342
- escalation effect 2342
- escalation mechanism 2321
- essential facility 2148
- estimation 1891
- European Commission 2397
- European Court of Justice 2399
- European film ('movie') industry 2342
- European Union 2332
- event study approach 2421
- excess early power 1975, 2033, 2045
- excess entry 1660
- excess inertia 1975, 2029
- excess momentum 1975, 2030
- excess power 1976
- exclusion 2004, 2032, 2150, 2154, 2372
- existence 1709, 1902
- exit 1848, 1892, 1893
- exogenous sunk cost industries 1814, 1818, 1819
- exogenous switching costs 2249, 2251, 2254, 2256, 2259
- expectations track quality 2042
- expectations track surplus 2041
- expected discounted value 1900
- experience goods 1718, 1960, 1978
- expropriation 1596
- external effect 2379

- fax 2023
- Federal Trade Commission 2390
- Federal Trade Commission Act 2390
- finite state Markov chain 1904
- firm-specific depreciation shocks 1898
- first price sealed bid 2108, 2109, 2130

- first-degree price discrimination 2227–2230
- fixed costs 1849, 1851, 1853, 1857, 1862, 1864, 2359
- “follow-on” goods 1973, 1978, 1984
- fragmented market structure 1817
- franchise bidding 1562
- free-entry model 1984
- free-rider problem 2030, 2200
- “frequent-flyer” programs 1977
- function approximation techniques 1937

- Gambit 1943
- Gauss–Jacobi 1913, 1924
- Gauss–Seidel 1913, 1924
- Gaussian algorithms 1934
- Gaussian methods 1908
- Gibrat’s Law 1948, 2343
- goodwill 1725–1728, 1739, 1740, 1792–1794, 1802, 1949
- gradual switch 2013

- hardware–software paradigm 1954, 2008
- Hart–Scott–Rodino Act of 1976 2391
- hazard rate 1921, 1922
- hedonic approach 2015
- herding 2030
- Herfindahl–Hirschman index 2394
- hidden action 1564
- hidden information 1564
- high-definition television standards 2010
- hold-up problem 1973
- hold-out problem 2388
- homogeneity index 2337
- homogeneous products 1896
- homotopy algorithm 1939, 1942
- homotopy method 1939, 1941
- horizontal foreclosure 2153
- Horizontal Merger Guidelines 2392
- “horses” problem 2029
- hospital industry 1945
- household brand purchase 1803, 1804
- household exposure to brand advertising 1805
- hybrid mechanism 2027

- IBM 2011
- identification 1856, 1877
- identified set 1872
- imperfect information 1877
- incentive compatibility constraints 1576
- incentive-pricing dichotomy 1571
- incompatibility 1972
- increasing externalities 2019
- increasing returns 2358
- incumbent 1899
- independence effects 2348
- independence of irrelevant alternatives (IIA) property 2408
- indirect network effects 2007
- industrialization 2025
- industry structure 1894
- industry-wide demand shocks 1897
- influential adopters 2038
- informational goodwill effect 1793–1796
- informative advertising 1709, 1716, 1717, 1724, 1751, 1752, 1761, 1762, 1764, 1803, 1807, 1808
- informed 1784
- informed consumers 1770
- initial conditions 1909
- innovation 2154, 2389
- instability 2034
- installed base 2048
- instant messaging 2048
- institutions
 - choice of 2049–2051
- instruments 2406
- integrated production 1661
- integration 2039
- intellectual property 2050
- intellectual property rights 2006
- interconnection 1681, 2009, 2055
- interline agreements 2048
- international trade 2051
- interpersonal price discrimination 2260
- intrapersonal price discrimination 2225, 2227, 2228, 2237, 2259–2262
- introductory offers 1982
- investment 1892
- investment process 1959

- keyboard designs 2012

- languages 2014
- leadership 2028
- learning 1919, 1929, 2356
- learning costs 1977, 1994
- learning process 1960
- learning-by-doing 1952, 1953
- least-cost separating equilibrium 1776, 1781, 1800, 1801
- leveling 2047
- licensing 2037
- life-cycle contracts 1972

- life-cycle costs 2045
- life-cycle pricing 1979
 - 2 period model 1981–1983
 - examples of 1981–1983
 - inefficiency 1982, 1983
- limited liability 1604
- linear–quadratic games 1949
- liquidated damages 2005
- liquidity 2015
- lock-in 2034
- lock-in, *see also* switching costs 1988
- logit model 1806, 2408
- long-run aspects of competition 2389
- Lorenz curve 2348
- loss leader 1743, 1746, 1772, 1826, 1973, 1979, 1994
- loyalty contracts 1977
- lysine cartel 1956

- manufacture advertising 1743, 1744, 1746
- manufacturers' domination 1713
- margin squeeze 2152
- marginal-cost prices 1563
- mark-up 1860
- market concentration 1848
- market definition 2393
- market foreclosure 2148
- market leadership 2361
- market power 1850
- market share 1971, 2361
 - competition for 1996–1998
- market size 1814, 1815, 1817, 1819
- market tipping 1975, 2034, 2035, 2047, 2048
 - and entering costs 1986, 1987
- market-share stability 1718, 1729, 1730
- Markov matrix 1930
- Markov perfect equilibrium 1890, 1901, 1902, 1961
- Markov perfect equilibrium policies 1931
- Markov transition kernel 1903
- Markovian strategy 1921
- match-products-to-buyers effect 1719, 1783, 1824
- maximal equilibrium 2025
- media markets 1821–1824, 1828
- memory requirements 1916
- memory-activation process 1779
- memory-activation role 1747, 1825
- menu approach 1810, 1811
- merger game 1951
- merger simulation 2415
- merger waves 1951
- mergers 1950, 2361
- Microsoft 2010
- “mix-and-match” models 1995, 2003, 2033, 2048
- modern standards 2010, 2023
- modularity 2048
- monopolistic competition 1708, 1709
- moral hazard 1564
- most favored customer 2163
- motor vehicle insurance 2352
- multi-homing 2009, 2032, 2051
- multi-stage budgeting procedure 2408
- multimarket contact 2389
- multinomial logit model 1804
- multiple adoption equilibria 2022
- multiple equilibria 1864, 1867, 1872, 1873, 1876, 1891, 1905, 1939, 1954, 2031, 2038, 2039

- natural experiments 2341
- NEIO 1814
- NEIO advertising 1813
- NEIO analysis 1813
- NEIO studies 1811
- net present value 1899
- network competition 2041–2046
- network effects 1952, 1954, 1971, 1972, 1974–1977, 2007–2055
 - adoption inertia 2028–2036
 - and externalities 2020, 2021
 - anti-trust 2052–2055
 - choosing how to compete 2047–2051
 - classic 2007
 - commitment strategies 2038, 2039
 - coordination problems 2021–2028
 - early power 2033, 2034
 - econometric approaches 2015, 2016
 - empirical evidence 2009–2016
 - entry 2032, 2033
 - indirect 2007
 - inertia 2028–2036
 - horizontal differentiation 2048
 - monopoly price 2037, 2038
 - policy 2052–2055
 - pricing 2036–2046
 - pricing with competition 2043–2046
 - sequential adoption 2030–2032
 - strong 2017
 - total and marginal effects 2019
 - types 2007–2009
 - underadoption 2016–2020

- network externalities 2020, 2021
- neuroeconomics 1821, 1825–1828
- new empirical industrial organization (NEIO) 1810
- New Hampshire Theorem 2034
- new product development 2389
- new-firm bias 2044
- niches 2046
- no sales equilibrium 1985, 1988
 - dynamics 1986, 1987
 - profitability 1987, 1988
- noise effect 1798, 1803
- non-convergence theorem 2323, 2330
- non-discrimination 2152
- non-existence 1864
- non-linear price 2278
- non-linear pricing 2036, 2225–2227, 2262, 2264, 2266–2268, 2270–2272, 2274, 2275, 2277, 2279–2281, 2287, 2288
- non-parametric test 1945
- non-price advertising 1745, 1769, 1770, 1772, 1774
- non-uniqueness 1864
- number of iterations 1916
- number of potential entrants 1957
- number of states 1915
- numerical analysis 1891
- off the equilibrium path 1956
- oligopolistic industry 1890
- one-way access pricing 1669
- open networks 2037
- operating systems 2010
- opportunity cost 1671
- optimal investment decision 1923
- option value 2035
- ordered dependent variable 1853
- ordered probit 1853
- organizational forgetting 1952, 1953
- Pakes and McGuire (1994) algorithm 1917
- parametric path 1941
- participation constraints 1576
- passive beliefs 2165
- passive conjectures 2161
- path dependence 2015
- patterns of trans-shipment 2410
- pay consumers to switch 2249, 2250, 2254
- payoff relevant 1892
- pecuniary network effects 2020
- penalty for breach 2195
- penetration pricing 1971, 1975, 1982, 1997, 2036
- “penguins” problem 2029
- perfect information 1877
- perfect price discrimination 2227–2230, 2260
- persuasive advertising 1705, 1710, 1714, 1717, 1724, 1736, 1751, 1753, 1757, 1761, 1827
- pharmaceutical research 1959
- Phase II investigation 2398
- photographic film 2341
- PIMS data set 2331
- pivotal customers 2033, 2041
- policy change 1918
- pooling 1580
- pre-emption 2036
- preannouncements 2014, 2052
- precedent effects 2422
- precision 1929
- precomputed addresses 1925
- predation 2052, 2053
- predatory pricing 2005
- preemption race 1948
- price advertising 1765
- price cap regulation 1561
- price competition 1947
- price correlations 2410
- price discrimination 1683, 1983, 1991–1993, 2150
 - and switching 1991, 1992
 - firm specialization 1984
 - free-entry model 1984
 - pricing 1988, 1989
 - profitability 1987
- price discrimination and entry 2224, 2230, 2232, 2244–2246, 2262
- price effects 2425
- price information 1709, 1762
- price rigidities 2225, 2228, 2286–2288, 2290, 2291
- price squeeze 1681
- price wars 1955
- price-decreasing advertising 1757
- price-decreasing and price-maintaining advertising 1758
- price-increasing advertising 1757–1759, 1761
- price-maintaining 1757
- price-path 2001
- pricing
 - with network effects 2036–2046
- primary demand 1728, 1729
- principle of optimality 1921

- private values 2080–2082, 2085, 2086, 2090, 2092, 2094–2097, 2103, 2105–2109, 2117, 2118, 2123, 2127
- pro-competitive justifications 2396
- product differentiation 1988–1990
- product line 1973
- product market competition 1895, 1906
- production reshuffling 2374
- profit function 1892
- profitability 2307
- projection techniques 1938
- pronouncements 1975
- publicly accessible code 1914
- pulsing 1950
- purchase history 2225, 2228, 2249–2251, 2257, 2258
- pure strategy equilibrium 1902
- pure waste 1621
- quadrasonic sound 2023
- quality 1636, 2313
- quality ladder 1896, 1925
- quality-assuring price 1789
- quality-guarantee effect 1712, 1774, 1787, 1791
- quality-guaranteeing price 1790, 1791
- quantal response 1879
- quantity competition 1947
- QWERTY keyboard 1975, 2011–2013
- R&D 1898, 2389
- R&D vs concentration 2333
- R&D/sales ratio 2308
- Ramsey pricing 1563, 2036
- random equilibrium 1770, 1771
- rate-of-return regulation 1607
- rational expectations 1907
- reciprocal cancellation effect 1729
- recurrent class 1904, 1929, 1930
- reduced form estimates 1806, 2411
- reduced-form approach 1808
- referral process 2398
- refusal to deal 2148
- regulation 2372
- regulatory lag 1625
- relevant market 2405
- remedies 2151
- renegotiation 1593
- rent-reducing benefit 1640
- repeat-business effect 1719, 1779, 1780, 1782
- repeated interaction 2383
- reputation effects 1711, 1715, 1726, 1796, 1803, 1898, 2039, 2156
- reserve price 2077–2079, 2084, 2086–2091, 2094–2100, 2103–2107, 2111–2114, 2116, 2118–2120, 2124, 2125, 2129, 2130, 2137
- residual demand estimation 2418
- results of actual mergers 2424
- retail advertising 1745, 1746
- retail banking 2352
- retail prices 1745
- revelation principle 1567
- “reverse” signaling-efficiency effect 1780
- risk-averse firm 1601
- risk-neutral firm 1600
- sales 1973, 1985
 - and learning costs 1985
 - and leaving costs 1984
- sampling benefit 1640
- scale economies 1709
- scale economies (in production and advertising) 1710
- scale effects 1710, 1761, 1771
- SCPP 1813
- scrap values 1893
- search 1718
- search costs 1978, 1998
- second price sealed bid 2077, 2090
- second request 2392
- second sourcing 1650
- second-degree price-discriminating 2263
- second-order condition 1911
- secret contracts 2160
- selective 1763, 1766
- selective demand 1728
- self-confirming equilibrium 1961
- self-sustaining equilibria 2024–2026
- selling costs 1709, 1711, 1738
- semiconductor industry 1946
- separating equilibrium 1775, 1781, 1799, 1801
- separation property 1647
- sequential adoption 2027
- sequential entry 1868
- set identification 1871, 1872
- setup cost 1893
- shakeouts 2356
- Sherman Act 2390
- shopping costs 1973, 1979, 1994
- shrouded attributes 1825
- side payments 2021, 2049
- signaling theory 1773

- signaling-efficiency effect 1719, 1771, 1773
- Simon model 2345
- simulated maximum likelihood estimator 1869
- single agent optimization problem 1900, 1910
- single industry studies 2360
- size distribution 2344, 2349, 2361
- size of the market 1856, 1857
- size thresholds 2397
- social cost of public funds 1563
- software 1914
- software packages 1943
- specification test 2406
- splintered equilibria 2022–2024, 2026
- splintering 1975, 2022, 2031, 2052
- sponsored pricing 2041
- SSNIP test 2393
- stagewise uniqueness 1907
- standardization 2014
- standards, *see also* network effects 2055
- “state-space” approach 1812
- state-to-state transitions 1897
- states 1893
- static Nash pricing 1956
- “static–dynamic” breakdown 1944
- stochastic algorithm 1919, 1927, 1934, 1935, 1937
- stochastic models of firm growth 2343
- stock price reactions 2421
- stopping rules 1911, 1930
- structure–conduct–performance paradigm 1810, 2306, 2411
- subgame perfect equilibrium 1902
- submarkets 2333
- submitted bids 2089
- subsidies 2025
- substantially to lessen competition 2390
- substitution parameter 2335
- substitution patterns 2395
- sunk costs 1814, 1849, 2359
- sunspot equilibria 2025
- supermarkets 1946, 2353
- supermodularity 2019, 2376
- supply-side linkages 2339
- Surface Transportation Board 2412
- switching costs 1971–2006, 2045, 2250–2254
 - and efficiency 1993, 1994
 - and entry 1998–2001
 - and profitability 1986–1988
 - empirical evidence 1980, 1981
 - endogenous 2001–2005
 - policy 2005, 2006
- types of 1977–1979
- “synchronous” algorithm 1909
- synergies 2378
- tacit collusion 2383
- target 1765
- targeted advertising 1824
- tariff basket regulation 1609
- tax savings 2382
- technical integration 2148
- technological choice 2001
- telecommunications 2009, 2048, 2341
- television 2051, 2342
- testing 1945
- thicker markets 2007
- third-degree price discrimination 2225–2228, 2230–2236, 2238, 2248, 2250, 2260, 2262, 2263, 2268, 2291
- tie-ins 2153
- time per state 1915
- timing of decisions 1958
- tipping, *see also* market tipping 2034
- TIVO 1824
- tougher price competition 1818
- toughness of price competition 1814, 1815, 1820
- transactional costs 1977
- transition probabilities 1897
- treble damages 2391
- true profit rate 1739
- turbulence 2356, 2361
- two-sided markets 1822–1824, 1828
- two-system models 1826, 1827
- two-way access pricing 1681
- tying 2282, 2284, 2285
- tying, *see also* bundling, tie-ins 2149
- U.S. merger laws 2390
- U.S. Steel mergers 1950
- uncommitted entrants 2394
- unidirectional movements 1907
- unilateral effects 2375
- uninformed 1763, 1766
- uninformed consumers 1770, 1784
- unique investment choice 1903
- universal service 1672, 2203
- Unix 2024
- unsponsored standards 2044
- updating 1909
- used and useful 1632
- variable profits 1857

variance of growth rates 2360

VCR 2013, 2014

vertical

– foreclosure 2153

– integration 2148

vested interest 2026

wait to see 2024

war of attrition 1906, 2027

welfare 1863

welfare standards 2401

Williamson trade-off 2373

winner's curse 2082, 2090, 2104, 2106, 2107,
2109–2111, 2114, 2115, 2117–2119, 2125,
2132

Wintel 2011

yardstick competition 1562