Index

abuse of a dominant position
European Commission’s approach to 263, 267–76, 277, 279, 341
German NRA’s power to act on 220
Accent 236, 242
access pricing
cost plus principle 228, 229, 277–8, 279
in Germany 219, 228, 229, 272–3, 277
in the Netherlands 221, 228, 229
PCR and 12–14
retail-minus principle 228, 229, 277–8, 279
in Spain 224, 228, 229
strategies to deter (inefficient) bypass 125–31, 132–3
Third Postal Directive and 276–9, 346
in UK 226, 227, 228, 229, 230, 277–8
accounting and cost
accounting implications of the EU’s Third Postal Directive 338–50
data requirements for cost accounting in the mail communication system 370–83
economies of scale in mail processing 315–35
tradeoffs in product costing 352–65
Africa see Sub-Saharan Africa, postal services in
age, customers’
and demand for mail 78, 82–3, 84
and service quality demanded 110, 112, 117
Aghion, P. 76
AKZO case 341
Albion Water Limited v Water Services Regulation Authority 278
Alesina, Alberto 76, 85
allocative efficiency 6
Ambrosini, X. 30, 47, 108
Amerlync, B. 168, 171
Ansón, J. 295, 296, 306
antitrust legislation 6, 253
Aoki, Masahiko 22
Arellano, M. 295, 303, 304, 309, 311
Armstrong, Mark 136, 137, 295, 301, 302
Arthur D. Little, Inc. 45
Article 82 (EC) 263, 269, 272, 273, 275, 277, 279, 341
Atheraces v British Horseracing Board 272
auditing requirements 342–3
Australia, post offices in 37
Austria and Austrian Post
automated sorting in 132
company turnover and demand for mail in 98
post offices in 37
privatization in 11
automobile navigation systems 189
average variable costs, pricing below 268, 341
Awerbuch, S. 372
BAA (London Airports) 241, 242
bakeries 49, 50, 54
Balogh, T. 234, 242
Bank of America NSA 213
Bank One/Chase NSA 200–201, 206–8
changing circumstances affecting 209–11
marketing campaigns and 212
banks
accessibility in France 49, 50, 52–3, 54, 57
distribution in Italy 43–5
mail sent by 26–7, 136, 141
mergers 206–8, 209–11
public infrastructure investments financed by 40
self-delivery and collection by 300
Banque Postale 49, 52
bar codes 379
Barro, R.J. 76
Baumol, William J. 8
Belgium
post offices in 37
service quality incentives in 242
Bénabou, R. 76
Bernard, S. 30, 345
Bertrand equilibrium prices 129
Billette de Villemeur, Étienne 16, 127
binary choice problems 111
Blinder, A.S. 78
Bloch, Francis 125, 127, 134, 182
Boldron, F. 30, 31, 167, 168, 171
Bolton, P. 76
Bond, S. 295, 303, 304, 309, 311
Bosch, Christian 92, 98
Bourguignon, H. 244
Bozzo, A.T. 316, 318, 319, 321, 326, 335, 375, 381
Bradley, M.D. 335, 372, 373
Braeutigam, Ronald R. 7–8
brand loyalty 121
Brealey, R. 244, 245
British Airways plc v Commission 263, 269–70, 271
British Telecom 7, 242, 243
broadband 95, 121, 347
BT 7, 242, 243
Bulgaria, licensing regime in 284, 290
bulk mail
companies focusing on 222, 226, 227
competition in 45, 225, 227, 228, 252
equivalent terms of access for 277
USO and 347
VAT on 220, 222
zonal pricing for 345
Bundeskartellamt 219
Bundesnetzagentur 196, 198, 219, 220, 221
Burns, P. 121
Bush, George W. 249, 253
business cycles 96, 102
Business-to-Business (B2B) mail flows
demand for
company turnover and 98
economic and demographic dispersion and 74–6, 79–84
own price elasticity of demand 96–7
substitution by electronic communications 91, 93, 94, 95–8, 103, 104
trends in 75, 89, 90, 95
and network externalities 301–2
parcel business lost by USPS 5
Business-to-Consumer (B2C) mail flows
companies focusing on 222–3, 227, 229
demand for
economic and demographic dispersion and 74–6, 79–83
own price elasticity of demand 99–100
substitution by electronic communications 91–2, 93, 94, 98–101, 103, 104, 264
trends in 75, 89, 90, 95, 98, 263
network externalities in Sub-Saharan Africa 301, 303, 306
Businesspost 222, 223
bypass
prices, volume and welfare with entry through 155–60, 166
pricing and investment strategies to deter 125–34
route-cost profiles and outcome of FMO in bypass model 169–82
C-licences 220
C2C mail flows see consumers, mail sent by
CAA see Civil Aviation Authority (CAA)
call externality 28, 33, 34
Calzada, J. 16, 244
capital asset pricing model (CAPM) 233, 237–8
CAPM alpha risk 239–40, 244
CAPM beta risk 238–9, 244
Capital One NSA 199, 200, 203–4, 209
carrier identification 289
cash on delivery (COD) 108–9
Cassa Depositi e Prestiti 40
Castronovo, V. 40
cavallari 39
Cazals, C. 233
Cazenave, T. 244
CEN/TS 15523 (2006) 381, 382
CERP see Committee of European Postal Regulators (CERP)
Chronopost case (2003) 347
Chu, E. 335
Citipost 220
City Mail case 274
Civil Aviation Authority (CAA) 241, 245
Civil Service Retirement System (CSRS) 255
Clements, M.P. 64, 69
club goods 190, 191, 192
two-sided markets analysis and club effects 300–303
Coase, R. 46
Coasian bargain 40–41
Cobb–Douglas model 376
Cohen, Robert H. 49, 57, 335, 348, 372
co-location strategies of competing services 53
Collin, J. 335, 372
Combs, P.P. 47
commercial services networks
accessibility in France 48–54
Commission for Energy Regulation 242
Commission of the European Communities 189
Committee of European Postal Regulators (CERP) 291, 339, 340, 343
common costs, allocation of 339–42, 346, 348
common pool resources 190, 191
compensation to customers 234, 243–4
competition fund 167
competitive fringe 134, 152
competitive products 251, 252–3, 257
complaints 258, 285, 288, 289
conflict of interest 266–7
conjoint analysis 108
consistency principle 339
consolidation services 218
constrained access (deferred bypass) 129–31
investment incentives under 132–3
convenience stores, mail collection from 109, 110
conveyance and delivery obligations 287
coordination costs 378
Correos y Telégrafos 224, 225
Correspondence Delivery Law (2003) 118
‘correspondence’ mail, proportion of 380–81
cost accounting
data requirements for, in the mail
communication system 370–83
requirements in EU 339–42, 345, 346, 348–9
see also product costing, tradeoffs in
cost causality principle 339, 340
cost elasticities of cost pools 353, 356–63, 364, 365, 367
cost-of-service regulation 7
cost plus principle 228, 229, 277–8, 279
cost pools 353, 354
Council of European Energy Regulators 242
Council of Ministers 167, 275, 279
counter services 36–7
courier services 287, 291
courthouses 49, 50, 53, 54
CRA 373
credit/debit cards 27–8, 137, 138, 210, 218
Cremer, H. 30, 35, 45, 134, 244
Critelli, Michael 89
cross-border mail 273, 274
accounting systems for 345–6
cross-elasticity of demand
discount elasticity of first class and
Standard Mail 202, 204, 206, 208, 211–12
incumbent’s letter price and demand faced by entrant 126
cross-subsidies
EU competition law approach to 267–9
from low-cost to high-cost customers 4, 5, 26–7, 29, 32–3, 180–81
PCR and incentives for 7, 8, 9, 11
in two-sided markets 28, 137–9, 145, 146, 147, 307
Cusack, Thomas 76
customer complaints 258, 285, 288, 298
customer direct access (CDA) 226, 228
d’Alcantara, G. 168, 171
D-licences 219, 220, 221, 286
damaged items 243
data protection 283, 285
De Donder, Philippe 16, 125, 150, 151, 154, 161, 162, 171, 233
De Rycke, Marc 100, 112
delivery costs
cost accounting for 375, 377
fixed 127, 128–9, 131, 171–2
per unit 127, 128–9, 131, 174–6
route-cost profiles and market entry under
FMO 167–82
delivery flat rate 139, 140, 141, 145
delivery frequency
demand related to 28, 108, 109–10, 118, 119
in EU member states 346–7
licensing requirements for 290
USO constraint on 169, 170
delivery mode, demand related to 108
delivery scheduling 333
delivery speed
demand related to 108, 109, 110, 111, 112, 117, 118, 119
see also next-day delivery
Delivery Stop Point Density 169, 172–3
Deloitte 225
demand externalities 57–8
demand for mail
country-specific fixed effects and 79
demand analysis of small package market in
Japan 107–20
derived from utility of a representative
sender 171, 183
forecast uncertainty in dynamic models
63–70
impact of economic and demographic
dispersion on aggregate mail volumes
74–85
substitution of letter mail for different
sender–receiver segments 89–104
Denmark
ethnic diversity in 78
post offices in 37
Dense Stop Point route profile 168, 171, 172, 173, 174, 176, 178, 179–80, 181
Deutsche Post AG (DPAG)
access to network of 219, 272–3, 277
acquisitions by 223, 225
European Commission cases against 219, 267–8, 272–3, 277
exempt from VAT 220
and licensing regime 286
and postcode system 195–6
Royal Mail agreement with 277
scope economies exploited by 5
DHL/Deutsche Post 272
DHL Global Mail 225, 228
Dietl, Helmut M. 148, 216–17, 218, 222, 230
Digital case 275
direct mail
growth rate in EU 264
licensing regime applicable to 286
physical return to sender 139
electronic notification in lieu of 199, 200, 204, 205, 210–11
selective discounts to 275–6
sender pays postage on 136, 138
share of German mail market 221
treated as printed matter 221
volume discounts for see volume discounts in regulated posts
Discover NSA 200, 204–6, 209
displacement ratio 155, 164, 171, 181
Distribution Bar Code Sorting (DBCS) machines 316
document exchange services 217
examples in EU countries 220, 227
licensing regime for 220, 286
Dual route-cost profile 168, 172–3, 175, 176, 177, 178, 180–81
Dutch Ministry of Economic Affairs 222
Dutch Postal Act 221
new 222
DX Network Services 227
E-Communications Network 371
EC Treaty
Article 82 (EC) 263, 269, 272, 273, 275, 277, 279, 341
derogations contained in 288
economies of scale see scale economies
economies of scope see scope economies
ECORYS 216, 219, 225, 230, 291, 293
ECOSOC 296
Efficient Component Pricing 252, 258
El Pais 224
elasticity of demand for mail see price elasticity
electronic Address Correction Service (ACS) returns 199, 200, 204, 205, 210–11
electronic communications penetration of 93, 95, 98, 101, 103
substitution for letter mail 23, 107, 222
for different sender–receiver segments 89–104, 264
see also email, substitution for letter mail; Internet; mobile phone text messages; telefax; telephone communications
ELF index 78
Elkelä, Kari 91, 102
Elsenbast, W. 108
email, substitution for letter mail 23, 89–90, 222
for different sender–receiver segments 91, 93–104
email addresses 99, 103
English Court of Appeal 272
Entrega en Mano 225
entry barriers 3, 129, 131, 291, 342
equi-proportional mark-up (EPMU)
regulation of mail network operator (MNO) only 150–51, 153, 154, 157, 158–60, 165–6
regulation of PO as a whole 150, 153, 155–6, 164
Ericsson, N.R. 64, 70
Estache, A. 295
Estavez-Abe, Margarita 76
EU Directives
First Postal Directive (97/67/EC)
accounting implications of 338–9, 350
avoided costs principle in 278
licensing regimes under 282–3, 288, 289
accounting implications of 339, 345–6
no requirement to grant access under 278
non-discriminatory access required by 278
Third Postal Directive (approved July 11, 2007)
accounting implications of 338–50
content of 265–7, 274
licensing regimes under 282, 283–4, 291
and postcode systems 189
pricing of access to postal services network 276–9, 346
removal of prohibition on cross-subsidies 267–9
and scope of competition legislation 279–80
subsidies payable from regulator to USP under 170
Euro Mail Group 223
European Commission 47, 372
Postal Directives see EU Directives
Postal Notice (1998) 342, 350
proportionality principle of 288–91
and VAT 220
European Court of First Instance 267, 268, 269, 272, 277
European Court of Justice 263, 266, 269, 283, 288, 289, 341
European Parliament 3, 167, 275, 279, 341, 350
European Regional Development Fund 47
European Union
Directives see EU Directives
and application of competition law 263–80
see also Full Market Opening (FMO)
excludability 190
  in use of postcodes 191, 192
exemption from penalties 241
exigent case 255–6
Express Mail 252
express services 252, 287, 291
fair competition 7–8, 252–3, 257
fake destinations 196
FEDEX 5
Felisberto, Cátia 137, 139
Fenster, L. 383
Fève, Frederique 97, 100, 301
FiCom 95
fidelity rebates 268
financial exposure limit 241–2
financial services offered by post offices 40, 45, 46
financial stability of USPS 250–51, 254–5
Financieel Dagblad 223
fines 220, 226, 234
  limits on 241–2
Finland
  econometric models used in 63
  licensing regime in 285, 290
  pay-or play mechanism in 181
  post offices in 37
  reserved area in 264
Finland Post 63
first class mail
  cross-elasticity of demand in relation to Standard Mail 202, 204, 206, 208, 211–12
  cross elasticity of demand in relation to telecommunications prices 96
  own price elasticity of demand for 99–100, 102, 201, 202, 204, 205–6, 208, 211
  predicting demand volumes for 65–6, 68
  for volume discounts 200, 201–3, 209–12
  price stability of 251
  service standards for 252, 257
  volume discounts on marketing mail 199–213
  volume shifts between Standard Mail and 203–4, 205, 207, 259
  willingness-to-pay for service quality improvements 242
First Handling Pieces (FHP), data on 374–5
First Postal Directive (97/67/EC) see EU Directives
flats sorting
  ML estimate of translog production function 328–9
  production function for 321–3
  returns to density and scale 324–5
FMO see Full Market Opening (FMO)
forecast uncertainty in dynamic models, applied to demand for mail 63–70
France
  accessibility of public services and commercial services networks in 48–54
  definition of USO in 24
  government’s general expenditure in 75
  licensing regime in 285–6, 293
  post offices in 37, 47
France Télécom S.A., formerly Wanadoo Interactive S.A. v Commission 268
franchises 37, 41, 225
French Competition Council 270
Friedli, Beat 137, 139
Fromançois case 288
Full Market Opening (FMO)
  funding the USO under 4–6, 125
  implementing PCR under 11–14
  post-FMO pricing 128–9, 170, 173, 179, 184–5
  pre-FMO pricing 127–8, 170, 173, 184
  regulatory accounting requirements following 338–50
  role of regulation under 6–11
Fuller, W. 38
Fundenberg, Drew 126
gas distribution 242, 243
gas stations 49, 50, 54
gas suppliers 243
Gautier, Axel 125, 127, 134, 182
GB-Inno-BM 266
gender, customers’, and service quality demanded 110, 112, 117
geographic postcodes 191, 192, 193, 195, 196, 197, 198
German Ministry of Economics and Labour 220
German Postal Law 219, 267, 272, 277
Germany
  access pricing in 219, 228, 229, 272–3, 277
  definition of USO in 24
  full liberalization of postal market in 219, 220
  licensing regime in 219, 220, 221, 286, 291–2, 293
  post offices in 37
  postcode system in 192, 195–7
  service quality factors in 108
  VAT regime in 220
GINI coefficient 77, 80–81, 83–4
Gleazer, Edward L. 85
Gleiman, Edward 250
global price caps 13–14, 127
Goethe, J.W. 370
Goicoechea, M.A. 295
Goldfeld, S.M. 335
Gori, S. 372
Government Planning and Results Act (GPRA) (1993) 259
grey death spiral 178
Greater London 345
Greece, post offices in 37
GDP gross domestic product (GDP)
and demand for mail 74, 77, 80, 89, 96, 99, 238–9
and public services provided 57
stock market index and changes in 239
in Sub-Saharan African countries 296
Grossekettler, H. 190
Grossman, Martin 74, 148
Grouping Index 167, 169, 171
GSK v Commission 272
Gupta, S.N. 335
Hall, Peter A. 76
Hamilton, J.D. 335
Harding, Matthew C. 74, 77, 83, 92, 97, 100, 102
Hartley, M. 335
Hatfield derailment 242
Hays Management Services SA 273
Hearn, John 341
Heino, Aulikki 91, 92, 93, 94, 95, 96
Hendry, D.F. 64, 69, 70
Hermanos 225
Hicks, J.R. 15
Hill, Rowland 5, 39, 136, 139, 300, 306–7
Hoffman La Roche v Commission 270
Holt, L. 242, 244
hospitals 49, 50, 54
Hotelling’s law 53, 141, 143
households, number of, and demand for mail 79
HSBC NSA 200, 209
Hungary, licensing regime in 286–7, 290
hybrid mail 264
Ida, T. 121
Ilots 48
income inequality and demand for mail
baseline panel data model 78–80, 83–4
differences across developed countries 75
industrial action 241
industrial engineering models 365
inputs, mail products as 26–7
INSEE 48
Instrumental Variables (IV) estimator 319, 320, 374
insurance 240
integrated mail logistics service 286
Intelligent Mail 252, 375
interconnection rates 145
interest rates 200
internal benchmarking 376
Internet Market 264, 338, 348
International Accounting Standards (IAS) 343
Internet 30, 45, 79, 80, 91, 92, 137, 138, 196, 378
Internet access services 268
Internet search engines 137, 138
investment
direct incentives for 126, 132, 133, 134
inequality and 76
service quality and 232, 237–40, 244
strategic incentives for 126, 132–3, 134
strategies to deter bypass 126, 131–4
Ireland
post offices in 37
service quality incentives in 242
Irish Sugar 271
Israel, satellite free P.O. boxes in 307
Italy
ethnic diversity in 78
post offices in 36–7, 39–41
comparison of distribution of post offices and banks 43–5
service quality incentives in 242
Iversen, Torben 76
Jaag, Christian 148
Japan
liberalization of postal sector in 117–18, 119, 120
post offices in 37
service quality in small package market 107–20
Japan Post
privatization of 107, 118, 119
share of small package market 108
Japanese Ministry of Internal Affairs and Communications (MIC) 117–18, 119, 121
Japanese Ministry of Land, Infrastructure and Transport (MLIT) 121
Jimenez, L. 78, 82, 92
John, R. 45
Jones, S. 244
Joskow, P. 232
Judge, G.G. 320, 335, 336
Kappel Commission 45
Karlsson, Peter 342
Kay, J. 70
Kennedy, B.P. 77
Kleindorfer, Paul R. 7, 11, 13, 15, 16, 18, 21, 22, 30, 48, 125, 127, 134, 150, 168, 178, 237, 300, 306, 335, 365, 372
Kolbe, A. 244, 245
Koppe, Peter 92, 98
Kraus, A. 237
Kunz, Pieter 230
Kuroda, T. 121
Kuznets, S. 76

La Poste
- conflict of interest within 266–7
- partnerships with commercial storekeepers 58
- retail network and news-stands network of 51

Labour Distribution Code (LDC) 319

Laffont, Jean-Jacques 13, 16, 127, 136, 140, 141, 142, 143

Laspeyres Index 11–12

leakage discounts 201, 205, 206, 207

LECG 343, 372, 373, 376–7

‘less restrictive alternative’ test 288, 289

letter mail
- continuing monopoly in US 249, 251, 253
- own price elasticity of demand for 96–7, 99–100, 102, 171
- sorting
  - production function for 321–3
  - returns to density and scale 324
- substitution by electronic communications 23, 107, 222
- for different sender–receiver segments 89–104, 264

see also Business-to-Business (B2B) mail flows; Business-to-Consumer (B2C) mail flows;
- consumers, mail sent by; first class mail; second class mail

letter price
- stability of 251, 255–6
- strategies to deter (inefficient) bypass 125–31, 132–3
- level playing field 3, 7, 222, 223, 252–3, 257, 292

libraries 49, 50, 54

licences
- regimes in the EU 282–92
- and service quality 234, 236–7, 289–90, 291
- and USO 236–7, 283–4, 291–2

linear stochastic switching regressions 320

Linx 353

Lisbon strategy 47

Littlechild, Stephen C. 7, 15

Litzenberger, R. 237

local mail services 217
- examples in EU countries 220, 221, 222, 225, 227, 229
- local and social contribution fund 119
- Logit models 111, 112, 113, 120
- Multinomial Logit models (ML) 121
- Nested Logit models (NL) 121

London Underground 243

Lorenz curve 77, 80

low-income households, and demand for mail 81

low-volume products, product costs of 364

Luxembourg, post offices in 37

Maddala, G.S. 111, 112, 320, 335, 336

mail communication system, data requirements
- for cost accounting in 370–83
- mail system reference model 370–72
- mailer-generated data 378–82, 383
- postal cost accounting 372–8, 382–3
- mail network operator, (MNO), explicit
  - objective functions and constraints for
    - regulation of 150–61, 163–6
- mail preparation services see consolidation services
- mail processing
  - cost accounting for 373–5, 376–7
  - returns to scale in 315–35
  - mail tracking 236, 243, 259, 286, 379
- mail volume data 376–7, 380, 381
- mailer-generated data 378–82, 383
  - MailMerge 223
- Maki, A. 111
- Mäkinen, Mirja 96, 100
- Malta, licensing regime in 287–8, 289–90

Management Operating Data System (MODS) 315, 318–20, 374–5, 383

marginal costs of mail processing 317–18, 334

Margolis, R. 45

market dominant products 251, 254, 256, 257

market failure 191, 193, 194–5

market power of incumbent PO 5, 9, 11, 12, 14

marketing budgets 211, 212

Maruyama, S. 117, 120

mass mail providers 217–18
- examples in EU countries 221, 222–3, 225, 229

Mayer, T. 47

McFadden $R^2$ 113

McHugh, John M. 250
Mean Squared Error (MSE) 356, 358, 359, 361–2, 363
measuring service quality 234
medical laboratories 49, 50, 54
‘meeting competition’ defence 275
Meltzer, Allan H. 76
mentally challenged persons 222
Merewitz, L. 335
mergers 206–8, 209–11
Michelin 268
Michelin II 269, 271
minimarkets 50, 54
minimum coverage obligations 290
minimum headroom 226
Ministry of Transport and Communications Finland (MoTC) 92, 95
Miyauchi, T. 111
mobile phone networks 138
mobile phone text messages 89–90, 91–2, 93, 95
mobile phone users 79, 80
mobile services 41
MODS see Management Operating Data System (MODS)
Moene, Karl Ove 76
money order transfer networks (MO operators) 298
Moniteur Belge 242
Monte Carlo simulations 64–9
Moriarty, R. 335, 376
mortality rates 77
MoTC see Ministry of Transport and Communications Finland (MoTC)
Multinomial Logit models (ML) 121
municipalities 198
museums 49, 50, 54
Musgrave, R.A. 198
Myers, S. 244, 245
Nader, Fouad H. 89, 92
Nankervis, J. 63, 65
national full-service providers 218
examples in EU countries 225, 227, 228, 229
national geographical profile requirement 226, 230
National Regulatory Authorities (NRAs), regulatory accounting requirements of, in the EU 338–50
accounting implications of functions of NRAs under Third Postal Directive 343–50
determining net cost of USOs 346–8, 349
interoperability of postal networks 345–6
price control 344–5
accounting principles 339
Neels, K. 326, 335
negotiated service agreements, (NSAs) 199–213
Bank of America NSA 213
Bank One/Chase NSA 200–201, 206–8, 209–11, 212
Capital One NSA 199, 200, 203–4, 209
Discover NSA 200, 204–6, 209
HSBC NSA 200, 209
Washington Mutual NSA 200, 207, 211, 213
Nelson, F.D. 335
NERA 46, 346, 370
Nested Logit models (NL) 121
Netherlands
access pricing in 221, 228, 229
development of competition in 222–3
interaction between regulation and 223
licensing regime in 291
mandate of regulator in 222
post offices in 37
reserved area in 221, 223, 264
VAT regime in 222, 223
network externalities in two-sided markets
27–8, 33–5, 137, 138, 139, 147
negative 305–6
in Sub-Saharan African postal markets 301–2, 303, 305–6, 307
Network Rail 241, 242
networked local mail services 217
examples in EU countries 220, 221, 222, 225
New Zealand, sender pays principle in 139
New Zealand Post 139
newspapers 251, 287, 347
niche services 218
economies of scope utilized by 348
examples in EU countries 221, 223, 227, 229
Nikali, H. 70, 91, 92, 93, 94, 95, 96, 100, 102
Nikkei Research Co. 109
Niskanen, William A., Jr. 8
non-discrimination principle 189, 226, 265, 276, 278, 279, 346
interpretation of 271–6
non-geographic postcodes 191, 192, 193, 196, 197
Norsworthy, J.R. 335
Norway
ethnic diversity in 78
post offices in 37
NSAs see negotiated service agreements (NSAs)
onobjectivity principle 339
OECD 75, 85
income inequality in OECD countries 75
Ofcom 245
Office Fédérale de la Statistique 58
Ofgem 241, 245
Ofwat 241, 242
OPTA 222
ORR 241
outsourcing 41, 45, 126, 221
overnight delivery service 286
Oxera 48

package rate, demand related to 109, 110, 111, 112, 113, 117, 118

Panzar, John C. 7–8, 16, 30, 136, 140, 148, 335, 346, 372

parcel mail
abuse of a dominant position in market for 268
fair competition in 252
price elasticity of demand for 100
see also small packet market, Japanese, service quality in Pareto optimum 6

passports 218

pay-or-play mechanism 168, 174, 181, 285
PCR see Price Cap Regulation (PCR)
Pearsall, E.S. 320, 332, 335, 336
peer-to-peer networks 137
Penny Post 300, 307
pension obligations 251, 254
performance-based incentives 213
periodicals 251, 252, 285, 287, 347
Perotti, R. 76
Persson, T. 76
petrol stations 49, 50, 54

pharmacies
accessibility in France 49, 50, 52–3, 54, 57
link with commercial services 57
distribution in US 41–2, 44–5
piggy backing 327
PIN AG 220, 221

plant output, measures of 374–5, 376
P.O. boxes
cumulated and marginal effects of variations in number of 309–11
distribution in Sub-Saharan Africa 297, 298
postcodes relating to 192, 196–7
pricing arrangements for 136, 139, 145, 147–8
in Sub-Saharan Africa 295, 298–307
service quality provided by 305–6
population size, and demand for mail 79, 94
portfolio diversification 237, 239–40, 244
Portugal
post offices in 37
service quality incentives in 242
Post Express 225

post offices
see also collection points
comparison of selected countries 37
cumulated and marginal effects of variations in number of 309–11
franchises 37, 41
in Italy 36–7, 39–41
collection of distribution of post offices and banks 43–5
in rural areas 6, 36, 37–8, 40–41, 44, 47, 50–51, 53, 54, 57, 297, 298
in the US 36–7, 38–9
collection of distribution of post offices and pharmacies 41–2, 44–5
Postal Accountability and Enhancement Act (PAEA) (2006) 249–60
background to 249–50
considerations for future of reformed USPS 258–60
evaluating achievement of goals 254–5
goals 250–54
PCR adopted by 15, 208, 249–50, 251, 255–6, 258–9
Postal Rate Commission restructured as Postal Regulatory Commission under 213, 249
reserved areas defined in 107
Postal Directive Committee 291
Postal Directives see EU Directives
Postal Notice (1998) 342, 350
postal rate proceedings 316, 317
postal reform
and application of competition law in the EU 263–80
consequences of Postal Accountability and Enhancement Act (PAEA) (2006) 249–60
and licensing regimes 282–92
in Sub-Saharan Africa 295–307
Postal Reorganization Act (PRA) (1970) 208, 213, 253
postal savings 40
implicit interest rate on 45–6
Postal Service Retiree Health Benefits Fund 255
Postal Services Commission 198
postcards 93
postcodes, regulation of, in competitive markets 189–98
conclusions 197–8
efficiency from a social perspective 193–5
postcodes as public goods 190–93
Poste Italiane 38, 40–41, 43–4
Poverty Line 77
predatory pricing 263, 267–8, 341, 344
Premiere One Limited 288
presorted traffic 169
companies focusing on 223, 227
cost accounting data affected by 374, 377
and mail processing productivity 333
predicting demand volumes for 65–6, 68
Preston, A. 372
Price-cap regulation (PCR)
accounting system for 344–5
applied to USPS 249–50, 251, 255–6, 258–9
cost of capital used in setting 237
demand changes under different structures
238–9
efficiency properties of 7–11, 18–22
implementing under FMO 11–14
and investment incentives 133
and regulation of NSAs 208–9, 213
service quality incentives within 232, 233,
234, 242, 244
see also global price caps
price control, accounting systems for 344–5
price discrimination 263, 267, 268, 269–76, 277
price elasticity of demand for mail
bank mail 164
Business-to-Business (B2B) 96–7
Business-to-Consumer (B2C) 99–100
Consumer-to-Consumer (C2C) 102
first class mail 99–100, 102, 201, 202, 204,
205–6, 208, 211
for monopoly USP 171, 301
single piece mail 163
Standard Mail 202–3, 204, 206, 208, 211
in two-sided markets 301
price leadership 127
price stability 251, 255–6
price subsidies
justification for 25–6
USO funded with 10, 167, 168, 169, 170,
173, 174, 176, 178, 180, 181
shadow cost of 169, 173, 181, 184
USO funded without 3, 4, 14, 170, 181
PricewaterhouseCoopers (PwC) 3, 131, 148,
182, 293
pricing flexibility 5, 6
PCR and 7, 11, 12–14
pricing under entry
access, bypass and productivity gains in
competitive postal markets 125–34
national postal strategies after a full market
opening 167–82
pricing in competitive two-sided mail
markets 136–48
pricing, welfare and organizational
constraints for postal operators 150–61
Priority Mail
fair competition in market for 252
return to density and scale 324, 325
privatization
alternatives to 249, 260
and demand for a level playing field 3
of Japan Post 107, 118, 119
and market dominance 5
volume discounts following 199
Probit models 111, 113
proacca 40
product costing, tradeoffs in 352–65
impact of combining cost pools 356–65
impact of costing errors (bias) and
uncertainty (variance) 355–6
volume variable cost model 353–5
production functions for mail processing 321–3
labour variabilities derived from 326–7
productivity
investment to increase 126, 131–4
of USPS 251–2, 256
in mail processing 315–35
profit maximization
cost allocation under 342
coverage of network under 28, 34–5
efficiency properties of PCR for 7–8, 9, 10,
21
incentives for USPS 208, 212
by retail business (RB) 154, 158–60
and service quality 119, 120
profit sharing 10
proportionality principle 288–9
licensing and 289–91
pseudo residual claimants 10–11
PTS 197, 198
PTT Post 223
public goods
postcodes as 190–93
theory of 190–91
USO as mechanism for 28–9
public infrastructure investments 40
public interest 283, 288
public procurement policies 348
public provision of private goods 25
justification for 25–6
public services networks
accessibility in France 48–54
influence of public services on commercial
activities 54–7
categories of 49
Putnam, Robert 85
PwC see PricewaterhouseCoopers (PwC)
Quandt, R.E. 315, 335

R² 83–4, 332

radio frequency identification (RFID) tagging 245
radio and television broadcasting 137–8, 190
Railtrack 241–2
Ramsey, J.M. 335
Ramsey pricing 9, 21, 33, 152, 153, 155, 157, 163–6, 318
RAND Europe 236, 242
rate of return regulation (ROR) 7
RBB Economics 222
Reay, I. 108, 232, 238, 244
receiver pays principle 139
recording industry 92
redistributive pricing, USO as 24–5
economic background 25–6
redistributing in a sender-pays sector 26–7, 32–3
regional policies
constraints imposed by 51
USO as instrument of 29
registered mail 379
regulation
incentive regime for service quality of USPs in the postal sector 232–44
negotiated volume discounts in a regulated post 199–213
and pattern of competition in the EU 216–30
postcode in competitive postal markets 189–98
role under FMO 6–11
regulatory accounting requirements of NRAs in the EU 338–50
accounting implications of functions of NRAs under Third Postal Directive 343–50
determining net cost of USOs 346–8, 349
interoperability of postal networks 345–6
price control 344–5
accounting principles 339
audit 342–3
cost allocation 339–42
frequency of preparation 343
transparency of accounts 339, 343
regulatory uncertainty 227, 228
reserved area
cross-subsidization of universal services outside reserved sector with profits from 267–9
in Finland 264
in Germany 219, 264, 277
in the Netherlands 221, 223, 264
in Spain 223–4
in Sweden 264
timetable for abolition in the EU 264–5
in UK 225–6, 228, 264
in US 107
and USO 3, 4, 30, 47–8, 58, 107
residual claimants 7, 8, 9, 10, 22, 208, 213
creating pseudo residual claimants 10–11
retail business (RB), explicit objective functions and constraints for regulation of 150–61, 163–6
retail-minus principle 228, 229, 277–8, 279
retained earnings 255
retiree health benefit obligations 254–5
retiree pension obligations 251, 254
returns to scale see scale economies
Richard, Scott F. 76
Riordan, M. 27, 30, 35
risk management 161
rivalry 190
in use of postcodes 191–2
Roberts, M. 319, 326, 335, 372, 373, 374–5, 379
Rochet, Jean-Charles 136, 137, 139, 295, 301, 302
Rodrik, D. 76
Roberson, C. 335
Rovizzi, L. 244
Roy, B. 30
Royal Mail
access agreements with 226–7, 228, 229–30, 277–8
cost accounting by 340, 372, 376–7, 382–3
discriminatory discounting by 270
licence conditions 198, 227, 270, 277, 279, 287
rural post offices maintained by 47
zonal pricing considered by 345
Runyon, Martin 250
rural carriers 38, 333
Rural Free Delivery (RFD) 38
S-curves 90–91
Saint-Paul, Gilles 76
sales revenue maximization 8
efficiency properties of PCR under 9, 21
same-day delivery service 286
Sand 222–3
Sappington, David E.M. 8–9, 21, 232, 244
Sargan test 309
satellite free P.O. boxes 307
savings-based cap on volume discounts 199, 200–201, 207, 210, 212
scale economies
cost function reflecting 8
delivery exhibiting 169, 170
in mail processing 315–35
selective discounts contributing to 275
in two-sided markets 138–9
USO supported by 4, 5
scope economies 4, 5, 8, 40, 348
scope of regulatory intervention 236–7
screens 319–20
seasonal variations 332, 374
second class mail
cross-elasticity in relation to
telecommunications prices 96
predicting demand volumes for 65–6, 68, 112
price elasticity of demand for 100, 102
willingness to pay for service quality
improvements 242
Second Postal Directive (2002/39/EC) see EU
Directives
Second World War 76
secondary schools 49, 50, 54
Selekt Mail 222–3
sender pays principle
adoption in Italy 39–40
adoption in Sub-Saharan Africa 303–7
applied by designated postal operators’
competitors only 302–3
in competitive postal markets 136
effect on transactions costs of switching to
305–6
origination of 136, 139, 300–301, 306–7
redistributive pricing under 26–7, 32–3
and total demand for mail 139
separation of regulatory and operational
activities 265–7
Sertel, Murat R. 21, 22
service quality
bottlenecks due to insufficient 306, 311
incentive regime for USPS in the postal
sector 232–44
core components of regulatory
intervention 234–7
regulatory incentives 240–44
risks to the regulated business 237–40
in Japanese small package market 107–20
USO and service quality 107, 108, 117–19,
120
licensing regimes and 234, 236–7, 289–90,
291
outperformance of 242
as a product characteristic 232
of USPS 252, 256–7
Sidak, J. Gregory 8–9, 21
single piece product
global price cap on 150, 154, 158–60, 165–6
uniform tariffs for 170, 266
small and medium-sized companies 97–8
small packet market, Japanese, service quality
in 107–20
SMS messaging see mobile phone text
messages
social capital 85
social insurance 76
social services provided by POs 119
social tariffs 25
social and territorial cohesion 29, 47, 57
sociale werkplassen 222
Soininvaara, Osmo 96, 100
sorting, automated see automated sorting
sorting centres, centralized 131
sorting networks, rationalization of 131
Soskice, David 76
Spain
access pricing in 224, 228, 229
development of competition in 224–5
interaction between regulation and 225
mandate of regulator in 224
post offices in 37
reserved area in 223–4
VAT regime in 224
Spanish Ministry of Development 224
Spanish Postal Act 224
Special Mail Services (SMS) 227
specific egalitarianism 25
spillovers 189
spot operators 218, 229
stamp price see letter price
Standard Mail
cross elasticity of demand in relation to first
class mail 202, 204, 206, 208, 211–12
own price elasticity of demand for 202–3,
204, 206, 208, 211
price stability of 251
service standards for 252
volume shifts between first class mail and
203–4, 205, 207, 259
state subsidies 339, 348
statement of mailing submission (SMS) 381–2,
383
stock market flotations 240
stock market index 239
Strack, W.D. 335
Sub-Saharan Africa, postal services in 295–307
free delivery and club effects 303–7, 309–11
survey of postal delivery 296–300
two-sided markets analysis and club effects
300–303
subsidiarity principle 24
substitution effects, nature of 90–92
substitution models 93–5
sunk costs 3, 148
Index

Suresa CIT 225
Survey Research Center Co. 109
Sweden
  competition in postal market in 3, 45, 348
  ethnic diversity in 78
  government’s general expenditure in 75
  postcode system in 195, 196–7, 198
  reserved area in 264
  single-piece price increase in 5
Swinand, G. 244
switching costs 121
Switzerland
  ethnic diversity in 78
  letter market in 144
  post offices in 37
  sender pays principle in 139, 147
Tabellini, G. 76
Takis, W. 335
taxes 76, 252, 290
  see also value-added tax (VAT)
technology changes
  and FHP variations 374
  and service quality 238, 252
  and structural changes in the demand for
    mail 64, 67–9
  and substitution of letter mail for different
    sender–receiver segments 89–104
telecommunications
  common costs in 340
  network externalities in 27, 30, 137
  numbering following liberalization 189
  prices in Finland 92, 95
  cross-elasticity of demand for mail in
    relation to 96
  prices in Germany 92
  self-delivery and collection by
    telecommunications companies 300
  service quality incentives in 242, 243
  USO in 347
telefax 93
temperature-controlled handling 109
Teräsvirta, Timo 96
TetraPak case 268
text messages see mobile phone text messages
Third Postal Directive (approved July 11, 2007)
  see EU Directives
Thisse, J.F. 47
Thompson, D. 244
Thompson, Fred 251
Thress, T.E. 70
time-certain delivery service 286
time horizon 67, 69, 70, 306
Tirole, Jean 13, 16, 126, 127, 129, 136, 137,
  139, 296, 301, 302
TNT/Canada Post, DBF Post Dienst, La Poste,
  PIT Poste & Sweden Post 272
TNT Post 5, 221, 222, 223, 227, 228, 230
tobacco dealers 49, 50, 54
Tobin, J. 25
Toledano, J. 295, 296, 306
Tolley, G.S. 70
Total Factor Productivity (TFP) 256, 374, 375
Total Pieces Fed (TPF) 374, 375
Total Pieces Handled (TPH) 374, 375
TPG Post UK Limited 277
tracking and tracing 236, 243, 259, 286, 379
train operating companies 243
transactions costs
  between MNO and RB 161
  of data collection and maintenance 378
  of NSAs 209
  PCR and 7, 11
  postcodes and 189, 193, 194
  in Sub-Saharan African postal markets 302,
    303
  two-sided markets and 138
  uniform pricing and 30
  of zonal pricing 345
transfer prices for intermediate services
  150–51, 153, 154, 157, 158–60, 165–6
transportation
  cost of 372
  returns to scale in 315
Treaty of Rome (1957) 47, 288
Trinkner, Urs 74, 148
two-sided markets
  changes in liberalized markets 147–8
  network externalities in 27–8, 33–5, 137, 138,
    139, 147
  negative 305–6
  in Sub-Saharan African postal markets
    301–2, 303, 305–6, 307
  optimal pricing structures in liberalized
    postal markets 144–7
  postal market as 28, 139–40
  price elasticity in 301
  pricing structures in 137–9, 301
  tying 263, 273
typing rebates 270

UK Competition Appeal Tribunal 278
UK Mail 226, 227, 228, 277–8
UK Office of Fair Trading 275–6
uncertainty, cost estimates affected by 355–6, 361–2, 363–4
unemployment, and demand for mail 76, 80
uniform price
 accounting systems and 345
 adopted in Italy 39–40
 increase in 5–6
 limitations in Third Postal Directive 266, 274
 redistribution achieved through 25, 26–7, 29
 transaction costs avoided by 30
 USO constraint on 168, 169, 170
 Unipost 225
 United Kingdom
 access pricing in 226, 227, 228, 229, 230, 277–8
 compensation schemes in 243
 development of competition in 3, 226–7
 interaction between regulation and 228
 econometric models used in 63
 liberalization of postal market in 227, 228
 licensing regime in 198, 226, 227, 270, 277, 279, 287, 291
 mandate of regulator in 226
 outperformance incentives in 242
 post offices in 37, 47
 postcode system in 197, 198
 reserved area in 225–6, 228, 264
 VAT regime in 226, 228, 230
 United States
 econometric models used in 63
 ethnic diversity in 78
 government’s general expenditure in 75
 mail per capita in 36
 policy decisions in 107
 post offices in 36–7, 38–9
 comparison of distribution of post offices and pharmacies 41–2, 44–5
 postal reform in see Postal Accountability and Enhancement Act (PAEA) (2006)
 rural carriers in 38, 333
 see also United States Postal Service (USPS)
 United States Postal Service (USPS)
 break-even constraint applied to 199, 208, 255
 business lost by 5
 considerations for future of reformed USPS 258–60
 econometric models used by 63, 374, 375
 efficiency of 251–2, 256
 electronic Address Correction Service (ACS) offered by 199, 200, 204, 205, 210–11
 fair competition in competitive products 252–3, 257

In-Office Cost System (IOCS) 374
 long-term financial stability of 250–51, 254–5
 Management Operating Data System (MODS) 315, 318–20, 374–5, 383
 bad data in samples 319–20, 328, 330, 332, 375
 performance reporting by 259
 post office closures by 38–9
 preservation of USO 249, 253–4, 257–8
 price cap regulation applied to 249–50, 251, 255–6, 258–9
 price stability provided by 251, 255–6
 Reports 213, 214, 340
 returns to scale in 315–35
 service quality and performance of 252, 256–7
 volume discounts offered by 199–213
 Universal Postal Union (UPU) 297, 299, 310
 universal service compensation fund 283, 284, 286, 339, 348
 Universal Service Obligation
 and accessibility of the postal retail network 47–58
 definition of 24
 determining net cost of 346–7, 349
 and distribution of post offices in Italy and the US 36–45
 fixed delivery cost imposed by 127, 133
 funding of 3, 4–6, 47–8, 57–8, 125, 167–82, 257, 283–4, 290
 international comparisons of 108
 licences and 236–7, 283–4, 291–2
 and network externalities 28, 139, 147
 preservation by USPS 249, 253–4, 257–8
 reducing costs of 5, 6, 48
 regulation and the USO under entry 3–22
 scope of 5–6, 346–7
 and service quality 107, 108, 117–19, 120
 social costs and benefits of 23–30
 in telecommunications sector 347
 transferable between operators 239–40
 UPS 5
 UPS v Commission 267, 269
 Urbandisa 225
 US Congress 249, 250, 252, 259, 260
 US Federal Trade Commission 253
 US Government Accountability Office (GAO) 251
 US Postal Rate Commission 199, 200, 210, 250, 254, 259, 317, 318, 319, 340, 373, 375
 restructured as US Postal Regulatory Commission 213, 249
 US Postal Regulatory Commission 249, 250, 252, 253, 254, 257, 258–9, 316, 317, 318
US Postal Rate Commission restructured as 213, 249
US Senate 252
US Treasury 255
USO see Universal Service Obligation
USPS see United States Postal Service (USPS)
utility companies, self-delivery and collection of mail by 300

value-added mail products 219, 221, 224, 379
value-added tax (VAT)
   in Finland 95
   in Germany 220
   in the Netherlands 222, 223
   in Spain 224
   in UK 226, 228, 230
value chains 371, 373
Varian, H. 35
Vickers, John 15
Virtual Mobile Operators (VMOs) 41
Vodafone 41
volume discounts in regulated posts 199–213
volume variable cost (VVC)
   cost accounting data requirements relating to 373–8
   impact on VVC estimates of aggregating cost pools 356–65, 367–9
   mailer-generated data used for computing 378–82, 383
   volume variable cost model 353–5
von Stackelberg games 134, 170

WACC see weighted average cost of capital (WACC)
Waddams Price, C. 244
wage maximization, efficiency properties of PCR under 9, 21–2
walk sequencing/walk route optimization 131
Waller, Peter 216–17, 218, 222, 230
Wallerstein, Michael 76
Wallis, K. 64
Ward, Benjamin 9, 21
Washington Mutual NSA 200, 207
   changing circumstances affecting 211
   withdrawn by USPS 213
water and sewerage companies 241, 242, 243, 278, 300
weighted average cost of capital (WACC) 237–8, 239, 240, 241, 244
Weisman, D. 240
welfare state, and demand for mail 76, 82
Wells, F.J. 335
WIK-Consult 3, 7, 220, 222, 226, 243, 292, 342, 344, 345, 346, 350
Wilkes, S.S. 320
Williamson, Oliver E. 8, 18
willingness to pay
   for service quality 6, 108, 232, 234, 235–6, 242
   in two-sided markets 136, 138
within-model forecast errors 64, 67, 68, 69
Wolter, Kirk M. 365
working family members, and service quality demanded 112, 117
worksharing agreements in Spain 224
   meaning of 125
   PCR and 12–14
worksharing discounts 12–14, 256, 258, 278, 381
World Bank 296
Wright, Julian 147
wrongly-addressed mail 287, 289
wrongly-delivered mail 287, 289
X-efficiency 5, 6, 7, 9
X factor 12
Y factor 12
Yarrow, George 15
zonal access agreements 227
zonal pricing 227, 345