Index

airlines 7, 76, 153, 163, 293, 307–8
employment data 426
investment per employee 344–5
labour productivity, international comparisons 526–9
Alchian, A. A. 3
Allard, R. J. 56
Allen, K. 45, 47, 76, 293
Allen, R. G. D. 373, 374, 406, 489
Allen, Sinai 601
aluminium industry 544–6
arbitrage 13
Armstrong, A. 80
Arrow, K. J. 292
Ashworth, M. 35
Australia, airlines in 7
Austria, control and accountability of public enterprises 20
Bain, J. S. 86, 321–2
bargaining 26–7, 28, 29
Batey-Blackman, S. A. 53
Baumol, W. J. 53, 55
Beaver, R. J. 136
Berthomieu, C. 46
Bombach, G. 53, 455, 459, 463, 468, 472, 475, 532, 574
Borcherding, T. E. 5, 8
Boyes, W. J. 81
Bradley, James V. 135
Britain see United Kingdom
British Airways 7, 35
British Caledonian 7, 35
British Steel 22, 41–2
Britton, Andrew 602
business cycles 601–3
Buxton, N. K. 422, 423

Cable, J. 11
Canada, railways in 7
capital
estimates of capital stock 55–7
mobility 292
substitution of capital and intermediate inputs for labour 287–90
see also investment
Carter, C. F. 395, 396, 398
Cas, A. 55, 457
Castellan, N. J. 135
Caves, D. W. 7
Caves, R. E. 286, 601
Chester, Norman 201, 279
Christ, Carl F. 361
Christensen, L. R. 7
Clarke, R. 82, 84
composition effects 184–5, 463–8
computer industry 102, 358–9
conflict 26, 29, 48
Cosh, A. 13
Cowling, K. 10–11
credit restrictions 13
Cripps, Francis 293
crisis monitoring 20–1
Cubbin, J. 11
Cyert, R. M. 26
Daniel, Wayne W. 135
Davies, S. 7, 286, 455
Dean, Andrew 436
Dean, R. M. 77, 80
Dhrymes, P. J. 73
Dornberger, S. 11
Dutton, P. 11
Eckstein, Otto 601
economic cycles 601–3
efficiency
audit of 20
comparison of efficiency of public and private companies 4–8
efficient market hypothesis 14
electricity industry 76, 294
comparison of efficiency of public and private companies 6–7
651
Public enterprise revisited

labour productivity 40, 152, 163
international comparisons 524–6
scale economies 73
employee-years indices 127, 422–3
employment 45, 71, 124, 184
concepts and definitions 419–22, 424–5, 459–63
data on 309–20, 422–4, 436–9
hours worked 127–8, 436–53, 461–3
intercountry comparability 190, 510–21
investment expenditure per employee and 89, 92
measurement of employment indices 419–53
changes in average hours worked 436–53
concepts and definitions 419–22, 424–5, 459–63
construction problems 426–36
data sources 422–4, 436–9
plant size measurement and 78–81, 87
evolutionary theory of the firm 26
Fabricant, Solomon 44, 61, 367, 401, 478
Feinstein, C. H. 445
financial audit 20
firm size see size of firms
Fisher index 127, 195, 410–18, 493–4
Foreman-Peck, J. 262, 279, 290
Forsyth, F. G. 374
Forsyth, M. 7, 35
Fowler, R. F. 374
France
control and accountability of public enterprises
ministerial powers 18
public scrutiny 20
corporate ownership in 11
Gall, M. 53, 574
goal formation 27, 28–30
Godley, Wynne 93, 293
Gollop, F. M. 55
Gordon, Robert J. 601, 602
governments
control and accountability of public enterprises and 26, 28–31
ministerial powers 18–19
public scrutiny 19
interest groups and 17, 29
monitoring of public enterprises and 2
Griliches, Zvi 396
Gupta, S. 400
Hall, G. 11
Hannah, Leslie 82, 85, 279, 294
Hansen, Alvin H. 601
Harris, D. J. 76, 293
Hart, P. E. 81, 82, 84
Hay, D. A. 10
Heath, J. B. 460
Heston, A. 574
Hill, T. P. 458, 471
Hitchens, D. M. W. N. 455
hours worked 127–8, 436–53, 461–3
Hughes, A. 13
Hunter, L. C. 293
ICL 11, 102, 358
incentives contracts 1
industrial disputes 45
interest groups, public enterprises and 15–17, 21, 23, 29, 30
averaging 92–4
deflation by retail price index 94
gross expenditure on fixed capital 89
measurement 88–94
ranking on basis of 88
technical background 336–50
total employment and 89, 92
research and development (R&D)
expenditure and 89, 94–9, 351
investors 3

Jackson, D. 46
Japan, corporate ownership in 11
Jones, A. K. 397
Jorgenson, D. W. 55
Kahn, A. E. 73, 76
Kaldor, N. 62, 257, 278
Kay, J. A. 82, 85
Kendrick, J. W. 394, 396, 401
Kennessey, Z. 574
Kravis, I. B. 195, 463, 574, 580, 583, 586, 594–8, 600
Kruskal-Wallis (KW) test 136, 137, 143, 204, 213, 220, 225, 257
Kurz, M. 73

labour inputs, substitution of capital and intermediate inputs for 287–90
labour productivity 33, 35–42
concept of 457–68
declining industries 47–8, 51
different industry comparisons 50
expanding industries 48, 51
international comparisons 36, 42, 53–5, 170–248, 250–3
commentary 244–8
gross output per employee comparisons 205–14, 221–6, 235–44
interpretations 264–86, 287–90
net output per employee comparisons 195–205, 214–21, 226–35
presentation of estimates 170–95
rate of change comparisons 214–44, 275–84
subperiod comparisons 226–44
technical background 454–621
whole period comparisons 214–26
intertemporal comparisons 51–3, 105–69
commentary on 167–9
interpretations 255–72
presentation of results 105–28, 249–50
subperiod comparisons 144–66
technical change and 264–71
whole period comparisons 129–44
limitations as indicator 55–8
object of study 49–50
output and 44, 61–2, 105, 256–63
plant size and 85
labour-saving bias of technical progress 270–1
Lawson, C. 8
Lawson, T. 46
Lehman, E. L. 135
Lind, R. C. 292
Lipsey, R. E. 594, 596, 598
long-term, bias against 12–15, 31, 291–4
MacKay, D. I. 422, 423
Maddison, Angus 53
Maizels, A. 479
management
monitoring management performance 1–4
risk taking 11–15
takeover as deterrent to 3, 8–11, 12
Mann, Prem S. 7, 134
manufacturing sector
comparison of efficiency of public and private companies 6
labour productivity 36, 42–3
March, J. G. 26
market expansion 43–4, 60, 61–71, 256–7
measure of 63–6
choice of initial and final years 70–1
nominal 66–70
technical background 301–20
Matthews, R. C. O. 445
Maurice, Rita 338
Mayer, Colin 10
Meddls, Ray 135
Meeks, G. 10
Index

Mendenhall, W. 136
Miles, D. 14
Millward, R. 5, 7, 8, 34, 35, 165, 262, 279, 290
minimum efficient scale (MES) estimates 328–36
Mitchell, Bernard 380, 381, 508
Molyneaux, R. 41, 42
monitoring management performance 1–4
Morgenstern, Oscar 360
Morris, D. J. 10
Musgrave, Peggy 70, 601
Musgrave, Richard 70, 601
Myrdal, Gunnar 278
natural resources 263–4
Nelson, R. R. 26, 27
Nerlove, M. 73
Newbold, Paul 134
Nicholson, I. L. 396
Nicholson, R. J. 400
Nickell, S. 14
Niehans, Jurg 83
Niehans index 82–4
Nordhaus, W. 93
Odling-Smee, J. C. 445
O’Mahony, M. 44, 46, 56, 62, 128, 261, 289, 405, 457
organisational slack 27, 40
organisational theory of the firm 26
Oulton, N. 44, 46, 56, 62, 128, 261, 289, 405, 457
output 51–2, 294–5
concept of 457–9
double indicator/deflation methods 363–6, 468–72
Fisher index 127, 195, 410–18, 493–4
gross quantity indicators weighed by net output value (NG formula) 367–9
index formula for international output comparisons 468–94
international comparability of gross output 497–502
international comparability of net output 506–10
labour productivity and 44, 61–2, 105, 256–63
international comparisons of labour productivity 195–244, 284–6
intertemporal comparisons of labour productivity 51–3, 105–69
measurement of intertemporal output indices 360–418
chaining 372–6
construction of gross output indices 392–409
data sources 389–92
definition of industries’ boundaries 382–9
double indicator/deflation method 363–6
Fisher index as final benchmark 410–18
fixed base year versus regular reweighing 372–6
general scope of indices 376–81
gross output indices 366–7, 377–80, 392–409
gross quantity indicators weighed by net output value (NG formula) 367–9
net output value ratios deflated by derived gross price indices (ND formula) 369–71, 380–1
output concept 362–3
net output value ratios deflated by derived gross price indices (ND formula) 369–71, 380–1, 479–89
plant size and 78–9, 85
Paige, D. 53, 455, 459, 463, 468, 472, 475, 532, 574
Parker, D. M. 5, 7, 35
Parrish, H. 20, 279, 294
perpetual inventory method 55–6
Peseau, D. E. 81
Pestieau, P. 20, 279
petroleum and natural gas industry 76, 100, 263–4
plant size see size of plants
Pommerehne, W. W. 5
Posner, M. 18
postal services 76, 308, 345–6
Public enterprise revisited

Prais, S. J. 81, 84, 89, 455
Pratten, C. F. 77, 79, 80, 85, 86, 87, 328, 455
pressure groups, public enterprises and 15–17, 21, 23, 29, 30
prices definitions of sales values and selling price 502–6
price policies 16, 18, 24, 45
purchasing power parity (PPP) indices 193–5, 574–600
principal-agent theory 1–4 evidence 4–8
private companies
concentration in private sector industries 102–4
evidence for superior efficiency of 4–8
monitoring management performance 1, 2–4
risk taking 11–15
short-termism 11–15, 31, 291–4
takeover 3, 8–11, 12
see also international comparisons of labour productivity;
intertemporal comparisons of labour productivity
productivity
labour see labour productivity
multifactor productivity (MFP) 55–7
total factor productivity 37, 288–90
profitability
public enterprises 33–4, 45
takeovers and 8, 9
property rights 3, 25
Pryke, R. 22, 35, 36, 39, 45, 166, 167, 288, 293, 455
Pryor, F. L. 82
public enterprises
characteristics of 26–32
comparisons with private companies 4–8
control and accountability 17–25, 294
direct government control 26, 28–31
effectiveness of 21–4
ministerial powers 18–19
public scrutiny 19–24, 32
size and diversity of sector and 24–5

declining industries 44–8, 51
expanding industries 44–6, 48–9, 51, 60
interest groups and 15–17, 21, 23, 29, 30
monitoring management performance 1–2
potential advantages of public ownership 290–6
soft budget constraints 26, 31–2
study see study of public enterprises
purchasing power parity (PPP), calculation of PPP indices 193–5, 574–600
railways 7, 73, 306–7, 338–40
Ray, G. F. 77, 85
Reddaway, W. B. 44, 46, 61–2, 395
regulation 17–25, 294
direct government control 26, 28–31
effectiveness of 21–4
ministerial powers 18–19
public scrutiny 19–24, 32
size and diversity of public sector and 24–5
Reid, G. L. 76, 293, 294
research and development (R&D), expenditure on 89, 94–9, 351
risk taking 11–15
road transport 73, 307, 340–4
Robertson, J. 289
Robinson, E. A. G. 71
Rostas, L. 429, 454, 473, 577
routines 27
Rowthorn, R. E. 62, 257
Rymes, T. K. 55, 457
sales
definitions of sales values and selling price 502–6
measure of market expansion and 63–71
Salter, W. E. G. 46, 62, 256, 261
sample selection 42–9, 50–1, 60–104
debt industries 44–8
expanding industries 44–6, 48–9, 60
final sample selection 99–102, 351–7
preliminaries 60–1
public and private sector industries 102–4
selection criteria 42–4
investment expenditure per employee 60, 88–94, 336–50
market expansion 43–4, 60, 61–71, 301–20
plant size 60, 71–87, 320–36
taking current R&D expenditure into account 94–9, 351
technical background 301–59
final sample selection 351–7
selection criteria 301–51
Sawyer, M. C. 81, 82
Saynor, P. 20, 279, 294
scale economies 60, 73, 255, 256–7, 262–3, 294
plant size and 71, 76, 80
Schneider, F. 5
scope economies 71
Select Committee on Nationalised Industries (UK; SCNI) 20
selection see sample selection
service sector, comparison of efficiency of public and private companies 5–6
Sharkey, W. W. 73, 76
Shepherd, W. G. 30, 327
Shleifer, A. 13
short-termism 12–15, 31, 291–4
Siegel, Irving 361
Siegel, S. 135
Silberston, Z. A. 80, 455
Simon, Herbert 27
Singh, A. 9–10, 12, 13, 68
size of firms
organisational and evolutionary theories of the firm and 26–7
takeovers and 9–10
size of plants 60, 71–87
employment and 78–81
measurement 78–87
technical background 320–36
ranking on basis of 72–8
size indicator derived from 15 largest plants 81–7
Smith, A. D. 187, 455, 456, 463, 472, 479
Smyth, D. J. 81
social welfare maximisation 2
Sorrell, A. A. 380, 499
standardisation 76, 84–5
Stein, J. 12
Stevenson, A. A. 18
Stiglitz, J. E. 12, 13
Stone, R. 395
Stoneman, P. 11
strikes 45
study of public enterprises
comparisons of different industries 50
greater inherent potential of public sector interpretation 254–96
international productivity comparisons 53–5, 170–248, 250–3
commentary 244–8
gross output per employee comparisons 235–44
interpretations 264–86, 287–90
net output per employee comparisons 226–35
presentation of estimates 170–95
rate of change comparisons 214–44, 275–8
subperiod comparisons 226–44
technical background 454–621
whole period comparisons 214–26
intertemporal productivity comparisons 51–3, 105–69
commentary on 167–9
interpretations 255–72
presentation of results 105–28, 249–50
subperiod comparisons 144–66
technical change and 264–71
whole period comparisons 129–44
object 49–50
plan of book 58–9
point of departure 32–3
potential advantages of public ownership 290–6
results 58, 249–98
conclusion 296–8
interpretation 254–96
summary 249–53
selection of sample see sample selection
substitution of capital and intermediate inputs for labour hypothesis 287–90
technical background
international labour productivity comparisons 454–621
measurement of employment indices 419–53
measurement of intertemporal output indices 360–418
sample selection 301–59
substitution of capital and intermediate inputs for labour hypothesis 287–90
Summers, L. 14
Summers, R. 574
Sweden
control and accountability of public enterprises
ministerial powers 18
public scrutiny 20
takeovers 3, 8–11
performance after takeover 9, 10–11
profitability and 8, 9
short-termism and 12
size of firms and 9–10
Tarling, R. 46
technical background
international comparisons of labour productivity 454–621
comparability of definition and coverage of variables 494–534
construction of purchasing power parity indices 574–600
index formula for output comparisons 468–94
labour productivity concept 457–68
reconciliation of industrial classifications 534–74
years of comparison 600–7
measurement of employment indices 419–53
changes in average hours worked 436–53
concepts and definitions 424–5
construction problems 426–36
data sources 436–9
measurement of intertemporal output indices 360–418
sample selection 301–59
final sample selection 351–7
selection criteria 301–51
technical progress 169, 256, 264–71
labour-saving bias 270–1
telecommunications 308
employment data 426
investment per employee 346
labour productivity 293
international comparisons 529–33
intertemporal comparisons 152, 163
total factor productivity 295
scale economies 76
Thompson, D. 41, 42
Thomson, A. W. J. 293
time comparisons see intertemporal comparisons of labour productivity
Tivey, L. 18
total factor productivity 37, 288–90
transport sector, comparison of efficiency of public and private companies 6–8
Turner, H. 46
unemployment 71
United Kingdom
labour productivity comparisons 36, 42, 53–5, 170–248
commentary 244–8
gross output per employee comparisons 235–44
interpretations 264–86, 287–90
net output per employee comparisons 226–35
presentation of estimates 170–95
rate of change comparisons 214–44, 275–84
subperiod comparisons 226–44
technical background 454–621
whole period comparisons 214–26
public enterprises 32, 33–55
declining industries 44–6, 48–9, 51
expanding industries 44–6, 48–9, 51
labour productivity 33, 35–42, 44, 47–55
ministerial powers 18
price policies 16, 45
public scrutiny 20–1, 32
United States of America
electricity industry in 6–7
labour productivity comparisons 53–5, 170–248
commentary 244–8
gross output per employee comparisons 235–44
interpretations 264–86, 287–90
net output per employee comparisons 226–35
presentation of estimates 170–95
rate of change comparisons 214–44, 275–84
subperiod comparisons 226–44
technical background 454–621
whole period comparisons 214–26
water industry 7
Usher, D. 55
utilities, comparison of efficiency of public and private companies 6–8
value added 122–3, 184
Vickers, J. 1, 35, 42, 358
Vishny, R. 13
Wadhwani, S. 14
wages and salaries 18, 45–6
Ward, T. S. 44, 62, 77, 85, 86, 321
water industry 7, 102, 163, 190–1, 293, 357–8
Weiss, A. 13
West, E. C. 457
Wilcoxon-Mann-Whitney (WMW) test 135, 137, 143, 204
Wilkinson, F. 46
Winter, S. G. 26, 27
Wolff, E. N. 53
Woolf, S. 18
Wragg, R. 289
Yarrow, G. 1, 35, 42, 358