Index

accommodation and food services 114
affordability of health care and education 23–6
agricultural employment 45–61
Agriculture, Forestry and Fishing 177, 183
Almost Ideal Demand System (AIDS) 171–2
Appelbaum, E. 94, 125, 128–9, 132, 137, 168
automotive repair services 15, 89
Bairoch, P. 45, 62
Basic Metal Industries 177, 183, 186–7
Baumol, H. 96
Baumol, W.J. 4, 8, 14, 39, 87–8, 90, 94, 96, 97, 99, 105, 121, 122, 126, 132, 167
Bell, D. 121
Berman, E. 78, 79
Blackman, S.A.B. 96, 97, 99, 121, 126, 132
Blaug, M. 8
Bound, J. 78
Bowen, W.G. 4, 8, 14, 87–8
Boyer, R. 125
Bradford, D.F. 25, 98
British Telecommunications 100
budget lines 37–8
business services 33, 34, 35
Canada 106–16
USA 91, 94, 95
see also intermediate products
Canada 105–18
education costs 8–10
health costs 10–12
labour employment and productivity 106–9
outsourcing 139, 140
service-manufacturing ratios 141, 142
shift in comparative advantage 113–14
technological change 114–16
value-added vs final demand 109–13
capital
accumulation and structural change 49–53
constraint 36–7
inclusion of 39–40, 116
capital-labour substitution 159, 160, 212–13
Canada 107–8
capital stock 63
and employment 49–55
Chow-F-tests 175
Clark, C. 121
closed economy 38–9
Cobb-Douglas utility function 124–5
commodity composition of final demand 92–4
communication sector 106–16
Community/Social and Personal Services 183, 190
comparative advantage 113–14
computer technology 19–20, 114
constant real output 3, 16–18, 121–3, 132
price effects and output shares 126–9
construction sector 177, 183, 186, 187
Canada 106–16
consumer price indices (CPIs) 95
Cornwall, J. 121, 123
Cornwall, W. 121, 123
cost disease 3–28, 35
crisis of health care, education and other services 4–12
evidence and theory 20–1
evidence for in the US 87–91
existence of productivity-growth differentials and 12–15
Index

- rising cost and demand 21–3
- Data Processing/Precision and Optical Instruments 177, 186, 190, 191, 195
data processing workers 96
- Deaton, A. 171–2
decomposition of variations in FPP 143–58
de-industrialization 46–8, 132, 170
  and decline in agriculture 55–9
demand 4, 216
effects of low service productivity
growth 35–6, 38–9
see also income effects; substitution effect
- final see final demand
impacts of rising costs 21–3
income elasticity of see income elasticities
price elasticity of see price elasticities
share of services in national income 16–18
demand analysis 170–6
- AIDS 171–2
  estimation of time-varying elasticities 174–6
  for industry data in an open economy 172–4
- Marshallian demand functions 170–1
- Denmark 139, 140, 141
  skill demand 69, 70, 71, 72, 75
- Desjonqueres, T. 79
developing countries 78–80, 81
direct employment 143, 148–9
- DIW 133
- Domar aggregation rule 35
domestic final demand 112, 113
domestic servants 22
domestic supply effect 36–7
education 15, 22–3, 100
  affordability 23–6
  costs 6–7, 8–10
- Electrical Goods 177, 183, 187, 190, 191, 195
- Electricity/Gas and Water industry 183
  employment 45–66, 215
  agriculture, industry and services 45–55
Canada 106–9
capital accumulation and structural change 49–53
data on employment by sector 62–3
direct-indirect ratio 143, 148–9
final product employment 134–7, 142–3, 144–7
long-run trends in employment structure 45–9
men and women 53–5
price elasticity of demand and 168–70, 216–17 structural change in Germany and USA 196–205
sectoral model 123–6, 129
changes in employment shares 124–5
shifts in skill demand 68, 70–1
structural change and employment patterns 55–9
structural dynamics 140–2, 158, 162
final product productivity and 142–58
USA information economy 96–7, 98
sectoral composition 90–1
energy and construction sector 176–90
Engel-curve effect 169
Europe employment and structural change 48, 49, 55–9, 60
structural economic dynamics 132–3, 137–42
see also under individual countries
exports 93
fabricated metal products 114
Falvey, R.E. 94, 168
Fase, M.M.G. 20
Feliciano, Z. 79
Felton, M.V. 8
final demand 215
commodity composition of 92–4
domestic 112, 113
regression analysis 159–62
value-added vs 109–13
final product 132–66
concept 134–7
dynamics in 137–42
final product demand approach vs institutional approach 140–2
trends in manufacturing and services 158–62
final product employment (FPE) 134–7, 142–3, 144–7
final product productivity (FPP) 134–7, 142–58
Financial Institutions and Insurance 190
FIRE (finance, insurance and real estate) 106–16
Food/Beverages and Tobacco 183, 186, 187
Ford Foundation 8
Fourastie, J. 121
France 71, 161, 165
capital-labour ratio 160
education costs 8–10
FPP 142–58
health care costs 10–12
intermediate products 138, 140
services-manufacturing ratio 141, 142
Frey, B.S. 8
Fuchs, V.R. 121, 132
Gemmell, N. 94, 168
gender
and employment 49, 53–5, 215
and inactivity 58, 59
Germany 75, 161, 165
capital-labour ratio 160
education costs 8–10
FPP 142–58
health care costs 10–12
intermediate products 138, 140
price and income elasticities 176–206
analysis of structural change 196–205
R&D intensity 71, 72
services-manufacturing ratio 141, 142
globalization 67, 78
Glyn, A. 50
Goldin, C. 78
government expenditures 112
Gregg, P. 59
Griliches, Z. 78
growth
productivity see productivity growth
unbalanced 98–9, 100
Gundlach, E. 167
Hackl, P. 175
Hanson, G.H. 79
Harrigan, F. 167
Harrison, A. 79
Harrod’s Law 129
Harvey, A.C. 176
health care 15, 22–3
affordability 23–6
Canada 114
cost crisis 4–6, 10–12
USA 4–6, 10–12, 89, 91, 95
Heston, A. 18
hierarchy of needs 121, 123
high income countries 79, 80, 81
hospital rooms 5–6
household servants 22
housing 92, 112
imported productivity/structural effects 154–7, 158
imports 93
temperature 71, 75–7
inactivity 56, 58, 59
income effects 38, 41, 126, 127, 216
strength of in US 94
income elasticities 167–208
estimation 176–96
panel data approach with time-varying coefficients 190–6
results of industry-specific estimates 176–86
sectoral 121, 122, 129
income-elasticity-of-demand bias 169
income levels 100
indirect employment 143, 148–9
Industrial Chemical 177, 186, 187, 191, 195
Industrial Structure Database (ISDB) 165
industry
employment 45–60, 65
capital accumulation and structural change 49–53
gender 53–5
structural change and employment patterns 55–9
trends in employment structure 45–9
shifts in skill demand within industries 68–70, 71
see also manufacturing
industry-specific productivity 143–58
information and communication technologies (ICT) 19–20, 114
information economy 95–100
as a ‘cure’ to productivity stagnancy 99–100
research on information economy and the productivity paradox 96–8
input-output (I-O) analysis 173
input-output tables 165–6
institutional approach 140–2
insurance 15
intermediate products 32, 39
Canada 109–13, 116
Oulton theorem 20–1
outsourcing and structural change 137–40, 161, 162
USA 94
see also business services
international specialization 40–1
international supply effect 37–8
Internet 99–100
investment 112
Italy 11
Japan 46, 49, 161, 165
capital-labour ratio 160
education costs 8–10
FPP 142–58
health care costs 10–12
outsourcing 138, 140
services-manufacturing ratios 141, 142
skill demand shifts 70, 71, 73, 76
Johnson, J. 106
Katz, L. 78
Keren, M. 98
knowledge workers 96–7
Kuznets, S. 167
labour
absorption by service sector 36–7, 40
agriculture as labour reserve 45–6, 52–3
content of services 13–14
demand 100
unit labour costs 88–9
labour productivity 134
Canada 106–9
overestimation of productivity differential between manufacturing and services 212–13
sectoral in USA 87–9
Leamer, E.E. 113
legal services 15, 89
Leontief, W. 164
Levinsohn, J. 113
Machin, S. 71, 79
Machinery 183, 187, 190, 191, 195
Maddison, A. 45, 50, 62, 63
make table 109–10
Malinvaud, E. 159
manufacturing 158, 167
Canada 106–16
capital-labour substitution 159
outsourcing and decline of 137–40, 158
price effects and output share 126–9
price and income elasticities 176–90, 216–17
real output growth 16
SBTC in US manufacturing 78
services-manufacturing ratios 140–2
and trade 216
see also industry
Marshallian demand functions 170–1
Maslow, A.H. 121
measurement error 94–5, 97, 117, 212
Metal Products 177, 183, 186–7
middle income countries 79, 80, 81
Mining and Quarrying 177, 183
mismeasurement 94–5, 97, 117, 212
Mohnen, P. 114
Momigliano, F. 133
money illusion 24
Muellbauer, J. 171–2
national income 31–2, 40, 110
services’ share in see share in national income
national product 31–2, 40, 110
and value-added 35
needs, hierarchy of 121, 123
net output table 110
Netherlands 11
new information economy 99–100
new products 114
new services 114
Non-Metallic Mineral Products 183, 187, 190, 191
open economies 172–4
optimum allocations 36–7
Organisation for Economic Co-operation and Development (OECD) 100, 165
Other Manufacturing 177, 183, 191
Oulton, N. 20–1
output
constant real output 3, 16–18, 121–3, 126–9, 132
gross
intermediate products’ share 137–40
service-manufacturing ratios 141, 142
shares 121–31
changes in 125–6, 127
price effects and 126–9
underestimation of real output 212
USA
sectoral composition 90–1
shares 97, 98
outsourcing 114–15, 133, 137–42, 162, 213–14
effect on structural change 137–40
FPP 142–58
own productivity/structural effects 154–7, 158
panel data approach 190–6
Paper and Printing 186, 187, 191
parameter stability tests 174–5
Pasinetti, L. 133
performing arts 7–8, 15
personal services 22
Canada 106–16
USA 92–3
Petit, P. 140
petroleum 114
physician services 5
Pine, J. 129
policy 23–6
Pommerehne, W.W. 8
population growth 46, 47, 52
price elasticities 128–9, 167–208, 216–17
estimation 176–96
changes over time 186–90
panel data approach with time-varying coefficients 190–6
results of industry-specific estimates 176–86
and productivity bias in Germany and USA 197–205
price-elasticity-of-demand bias 169
prices 121–31, 216
price effects and output shares 126–9
price indices and mismeasurement 94–5
real price increases 5
relative 35–6, 121–2
in a sectoral model 123–4
US 87–9
primary sector
Canada 106–16
price and income elasticities 176–90
printing and publishing 114
production possibility frontiers 36–7
productivity bias 167, 169, 197–205, 206
productivity effects 143–58, 159
productivity growth 24–6, 29–41, 123, 168, 212–14
Canada 106–9
final product approach 142–3, 144–7
Germany and USA 196–7, 199, 200–1
information economy and 95–100
model of differential productivity growth 30–5
Oulton theorem 20–1
Persistence of productivity-growth differentials and the cost disease 12–15
price and quantity effects of low service productivity growth 35–9
sectoral model 124–5, 126
price effects and output shares 126–9
in stagnant services 24–5
unbalanced 121–2
weighting of sectoral productivity growth 35, 40
in whole economy 25–6
progressive sector 14–15, 20–1, 90
quantity effects 36–9
Index

Quibrai, M.G. 167
Ramaswamy, R. 121, 123, 128, 132, 168
Real Estate and Business Services 186, 187, 190
Reich, R.B. 99
research and development (R&D) intensity 71, 72–4
stocks 115, 116, 214
Restaurant and Hotels sector 183, 186, 190
retail trade 106–16
Robbins, D.J. 79
Rowthorn, R. 50, 53, 55, 121, 123, 128, 132, 168
Saeger, S.S. 168
Salter, W.E.G. 122, 211
saturation 39, 41, 115
Schettkat, R. 94, 125, 128–9, 132, 137, 168
sectoral models 123–9
changes in employment and output shares 123–6
cost disease 14–15, 20–1
price effects and output shares 126–9
services paradox 3–28
cost crisis 4–12
impact of rising costs on demand 21–3
persistence of productivity-growth differentials and the cost disease 12–15
possible resolutions for US 92–5
potential resolutions 29–30, 39–41
recent developments in technology, evidence and theory 19–21
share of services in national income 16–18
toward viable policy 23–6
share in national income 3, 16–18, 132
real share maintenance of the services 29–41
Siniscalco, D. 133
skill-biased technological change (SBTC) 67, 70–8, 80–1, 214–15
skill demand 67–83
explanation of demand shifts 70–8
shifts in 68–70
shifts in the developing world 78–80
skill premium 78
Solow, R.M. 30, 33
specialization 37, 40–1, 132–3, 137
split-sample approaches 174–5
stability tests 174–5
stagnancy 
as a 'disease' 98–9
as a new information economy as a 'cure' 99–100
productivity growth in stagnant services 24–5
stagnant sector 14–15, 20–1, 90
state-space model 175–6, 176–7, 178–9
structural change 45–66, 121–31, 167–208
analysis for Germany and USA 196–205
capital accumulation and 49–53
concepts of demand analysis 170–6
and employment patterns 55–9
estimation of price and income elasticities 176–96
formal model of changes in employment and output shares 123–6
implications of price effects and output shares 126–9
theoretical framework 168–70
structural economic dynamics 132–66
analysis 158–62
effect of outsourcing on structural change 137–40
final product concept 134–7
FPP dynamics in 137–42
142–58
structural effects 143–58
stylized facts 211–17
substitution effect 38–9, 41
cost disease in USA 92–4
Summers, R. 17–18
Sundrum, R.M. 123
supply
domestic supply effect 36–7
international supply effect 37–8
Sweden 11, 71, 73, 76
symbolic analysts 99
technological progress 100, 214–15
Canada 114–16
cost disease and 19–21, 22, 24–5
FPP 143–58, 159

Thijs ten Raa and Ronald Schettkat - 9781781951231
Downloaded from Elgar Online at 05/04/2019 11:02:50AM
via free access
Index

and skill demand see skill demand
ten Raa, T. 30, 114, 133
terms of trade 37–8
Textile/Apparel and Leather 183, 186–7
Throsby, D.C. 8
time-varying elasticities 174–6
panel data approach 190–6
price elasticities 186–90
tobacco products 114
total factor productivity (TFP) 33–5, 108–9, 116, 213
towse, R. 8
trade 215–16
globalization and skill demand 67, 78
imports see imports
shift in comparative advantage 113–14
terms of 37–8
USA 93
Transport Equipment 177, 183, 187, 190, 191
Transport/Storage and Communication 183, 186, 190
transportation 106–16
travel, advertising and promotion 114
trefler, D. 113
unbalanced growth 98–9, 100
unemployment 56, 59
unit labour costs 88–9
United Kingdom (UK)
education costs 8–10
health care costs 10–12
price and income elasticities 176–96, 205
skill demand 69, 70, 71, 74, 77
structural economic dynamics 139, 140, 141, 142
United States of America (USA) 49, 87–104, 122–3, 132–3, 161, 165
education costs 6–7, 8–10
evidence of the cost disease 87–91
sectoral composition of output and employment 90–1
sectoral labour productivity, costs and prices 87–9
health care 4–6, 10–12, 89, 91, 95
impact of growth of the information economy 95–100
possible resolutions of the paradox 92–5
price and income elasticities 176–206
analysis of structural change 196–205
share of services in national income 16
skill demand 69, 70, 71, 74, 77, 78
structural change and employment patterns 55–9
structural economic dynamics 137–58
capital-labour substitution 159, 160
FPP 142–58
outsourcing 137–42
US Department of Commerce 100
use table 109–10
value-added 35, 138–9, 140, 141
Canada 107, 115, 116
vs final demand 109–13
Van Reenen, J. 71, 79
wadsworth, J. 59
wages 68–70, 79
weighting of sectoral productivity growth 35, 40
welfare services 15
wells, J. 55
Westlund, A.H. 175
Wholesale and Retail Trade 183, 186
wholesale trade 106–16
Winder, C.C.A. 20
witherS, G.A. 8
wolff, E.N. 96–7, 99, 121, 126, 132, 133
Wood Products and Furniture 187, 191