Denmark (cont.):
cultural intolerance 86, 87
delusion of responsibility 109–12
dynamic firms 115–17
economy in the 1990s, as a learning
economy 102–6
education 127, 129
education system 75–7, 197
qualitative weakness 77–8
quantitative weakness 78–9
teaching methods 79–81
ethnic workers 193
evaluation of technology 26
financial system and innovation
system 87–8
firms
collaboration with research
institutions 151
and innovation 30–31
international collaboration
156–7
international comparison 109–12
as learning organizations 122–3
food industry 46–7, 131–2, 148
functional flexibility 112–15, 175
human resource development system
197
incremental innovation and imitation
35–7
industrial policy 151, 152
industrial structure 60–61, 73–4
industry and Trade Development
Council 159, 160
innovation 191–3
international comparison 31–5
innovation policy 195–6
innovation system 2, 14–15, 75–93,
100, 126–36
broad sense 148–9
degree of internationalization 58
and financial system 87–8
knowledge intensity and flows
126–36
specialization 60–74
knowledge dissemination, sources
130–32, 134
knowledge intensity 126–36
knowledge management 196–8
knowledge-intensive and knowledge-
estensive sectors 129–30
knowledge-intensive start-up firms
88–90
labour market 82, 197
participation rates 13–14, 19–20,
193
polarization 198
structural weakness 84–5
learning 83
low-technology products 194
low-technology specialization 61–7
machinery industry 132, 134
manufacturing industries 70
marginalization 86–7
Ministry of Education 101
Ministry of Trade and Industry 90, 95
mobility 83
modes of innovation 83–4, 194–5
National Council for Competence 75
new economy sectors 196
paper industry 46–7
patent intensity 127
pharmaceutical industry 131
polarization 86–7
productivity 23
productivity decline 108
productivity growth, and knowledge
creation 39–40
public sector 195
qualifications, general versus specific
168–9
qualifications structure 164–6
R&D 127
regionalization, and globalization
90–92
research 152
research institutions 158–9
society 193–4
technological consultancy system
151, 159–60
technological service institutes (GTS
institutes) 152, 159, 160
training 197
unemployment 19, 85
unemployment support 82
universities 152–4, 155, 156
unskilled workers 85, 106–7, 171
vocational training 86–7, 162–74
see also DISKO project
deregulation 6
diffusion of information 149–50
Index


labour market subset 175–8

lessons from 200–202
topicality 19–23
dissemination of innovations 30
Dosi, G. 11, 99
double-loop learning 122
Drejer, I. 46, 73, 127
earning differentials 7
economic growth, and information technology 3–4
Edquist, C. 46, 58
education
continuing 162–74
and research policy 80
‘embodied technology diffusion’ 127
employee competence 133
employment development 177–8, 186
in static and dynamic firms 181
environmental problems 7
EPOC 111
equality, and growth 200
Erhvervsredegørelsen 23
EU
Portuguese Presidency 11–12, 13
targeted socio-economic research (TSER) program 7
Europe
labour market participation rates 22
policy coordination 202–3
EVCA (European organization of venture capital companies) 89
export specialization
comparison 69
OECD countries 64, 66
Fagerberg, J. 7, 65, 159
fair deal 7–8
financial capital 9
financial speculation 8
financial systems 87–8
firms
collaborations with knowledge institutions 147–61
and knowledge management 15–16
technology consultants, and universities, division of labour between 151–6
flexibility, and labour market 200
The Flexible Firm 30
Foray, D. 94, 126
Foss, N. 41
framework programmes 203
free riders 84
Freeman, C. 11, 46, 53, 54, 60
Fukuyama, F. 28
functional flexibility of Danish firms 112–15
Denmark 175
problems with international comparison 109
reasons for introduction 117–19
further education 199
Gellner, E. 54
Gibbons, M. 94
Gjerding, A.N. 30, 31, 40, 100, 108, 117, 175
globalization 8–9, 46, 59, 95, 190–200
and Danish regionalization 90–92
national innovation system 55–6
Government Institute for Economic Research 28
growth, and equality 200
growth theory 53
Grundtvig, impact on innovation system 191–2
Hatchuel, A. 97
high technology, and productivity 67
Hirschman, A.O. 58
human resource development 173
human resource management (HRM) 41, 179–81
IFKA 172
imitation 30
Denmark 35–7
individual competence, knowledge as 97
industrial districts 199
industrial policy, and social capital 28–9
inequality 28
information diffusion 149–50
knowledge as 94–5
information services 150
information technology
and economic growth 3–4
and tacit skills 96–7
innovation 6, 23–5, 30–42
and Danish firms 30–31
direct and indirect costs 25–6
and firm size, correlation 33
knowledge-based 38–9
low technology sectors 200–201
research based 38–9
and transitions 25
innovation performance, and
organizational forms 41
innovation policy 5–7, 12–13, 17
definition 18–19
Denmark 195–6
small countries 37–8
Innovation Scoreboard 12, 13
innovation system
at different levels 46–7
broad sense 45–6
Denmark 148–9
concept 11, 43
definition 44
Denmark 75–93, 100
knowledge intensity and flows
126–36
narrow sense 44–5
innovation systems
sector-specific 46
technology-specific 46
intellectual property rights 94–5
inter-firm collaboration 47–8, 56–7,
136–46
international comparison 139
survey 136
interactive learning 136
Jakobsson, S. 46
Jante law 193
Japan 11, 54, 109, 132
job creation 184
job dynamics, in static and dynamic
firms 181–6
job loss 184
Jobs Study, OECD 102
Johnson, B. 97, 101, 202
Katzenstein, P.J. 54
Kern, H. 123
Kline, S.J. 38
‘know-who’ 97
knowledge 133–4
as an individual competence 97
as an organizational competence 98
creation 95
development 149–50
direct versus indirect 127–9
as information 94–5
production 95
as a regional competence 98–9
as tacit competence 95–6
transfer 150
knowledge based economy 4
knowledge creation, and productivity
growth 39–40
knowledge dissemination, sources in
Denmark 130–32, 134
knowledge institutions, collaboration
with firms 147–61
knowledge intensity, Denmark 126–36
knowledge management 4, 160,
198–200
at firm level 15–16
Denmark 196–8
knowledge production 155
internationalization 156–8
knowledge-based innovation 38–9
knowledge-intensive and knowledge-
extensive sectors, Denmark
129–30
knowledge-intensive start-up firms,
Denmark 88–90
Kolb, D.A. 99
Kristensen, A. 33, 36, 143, 144
Kuznets, S. 28, 54
labour market
Denmark 82, 84–5
and flexibility 200
participation rates, Europe 22
polarization 25, 190
labour reserves 3
labour supply, and productivity 21
Lam, A. 54
Laursen, K. 41, 68
learning 99–101, 201
by comparing and benchmarking
10–11
double-loop 122
interactive 136
lifelong 24, 76
in small countries 26–7
and work 24
learning economy 1, 4, 9, 15, 18, 80, 81, 94–107, 202–3
and competencies 133
Danish economy in the 1990s as an illustration 102–6
and social capital 100–101
and social polarization 102
learning organizations 108–25, 201
Danish firms as 122–3
‘learning region’, research institutions as part of 158–9
Levinthal, D.A. 30
lifelong learning 24, 76
Lisbon Summit 12, 13
List, F. 53
LOK initiative 111–12, 156
low-technology products 65
low-technology sectors, innovation 200–201
Lund Vinding, A. 41
Lundvall, B.-Å. 2, 10, 11, 21, 43, 44, 45, 46, 52, 53, 58, 60, 81, 94, 97, 99, 101, 107, 126, 136, 202
macroeconomic stance 5
Madsen, P.T. 144
Malerba, F. 46
Mandag Morgen 26, 75, 76, 94, 126, 172
marginalization, Denmark 86–7
Marshall, A. 98
Maskell, P. 36, 45, 46, 139
Maurseth, P.B. 56
Michie, J. 55
middle management 121
multinationals 58
‘naïve benchmarking’ 2, 10, 43–4
NASDAQ 89
National Council for Competence 26, 79, 94
national innovation system 1, 11, 46, 53–9, 94, 159
concept 53
globalization 55–6
OECD project 46
Nelson, R.R. 11, 53, 54
neo-liberalism 8
neo-protectionism 8
network centres 150
networks 201
new economy 4
concept 2–3
new new deal 8, 16, 201–2
new technology 1, 3
negative aspects 24
Nielsen, K. 123
Nielsen, P. 107, 190
Nonaka, I. 96
Nordic countries, comparative analysis 111
Norway 147
Nyholt, J. 156
Jobs Study 102
OECD countries competitiveness and cohesiveness 26, 27
export specialization 64
OECD project, national innovation system 46
old new deal 8
‘Open Method of Coordination’ 11–12
organizational change 119–22
and productivity growth 40–41
organizational competence, as knowledge 98
organizational development 109
organizational forms, and innovation performance 41
Ørsted, impact on innovation system 192–3
Papaconstantinou, G. 127
patent data, and regional specialization 72–3
patent intensity, Denmark 127
patents 56, 70–71
Pavitt, K. 67, 132
Pedersen, P.J. 21
Pedler, M. 122
personnel turnover 184, 185
Pianta, M. 60
PIKE (Productivity and International Competitiveness) project 40, 108
Polanyi, M. 54
polarization
Denmark 86–7
labour market 190
policy coordination 7–8, 52
at European level 202–3
policy strategies 8
Porter, M. 159
Portuguese Presidency of Council of EU 11–12, 13
privatization 6
product innovation 140, 177–8
productivity
Denmark 23
and high technology 67
and labour supply 21
productivity development 20
productivity growth 22
and knowledge creation 39–40
and organizational change 40–41
Putnam, R.D. 28
qualification development, in static and dynamic firms 187–9
qualifications 199
R&D 4, 6, 40, 61, 84
Denmark 127
Regeringen 20, 23, 58, 85
regional competence, knowledge as 98–9
regional specialization 199
and patent data 72–3
Reichstein, T. 67
relationships, between firms and between industries 133–4
research based innovation 38–9
research institutions, as part of the ‘learning region’ 158–9
research policy, and education 80
Rogaczewska, A.P. 139
Romer, P.M. 53
Rosenberg, N. 38
Russia, social capital 28
Sandemose 193
Schumann, M. 123
Schumpeter, J.A 25
shop stewards 121
skilled workers 4, 6
small countries
competitiveness, social capital and learning in 26–7
innovation policy 37–8
small firms, product innovations 140, 143–4
Smith, N. 82
social capital 9, 27, 99–101, 201–2
and industrial policy 28–9
and the learning economy 100–101
in small countries 26–7
social cohesion 3
‘social innovations’ 27
social polarization, and the learning economy 102
social relationships 9
Solow, R.M. 53
specialization, and growth 67–8
Storper, M. 46
Svennilson, I. 28
Sweden, authority for innovation system policy 53
system perspective 48–9
tacit competence, as knowledge 95–6
tacit knowledge 54, 150
tacit skills, and information technology 96–7
Takeuchi, H. 96
targeted socio-economic research (TSER) program, EU 7
technical change 5
technical consultancy system, Denmark 159–60
technology consultants, firms and universities, division of labour between 151–6
Technology and Economic Theory 11
TEP (Technological and Economic Policy) report 43
Tobin tax 9
Tomlinson, M. 2, 10, 44, 81, 132
top management 121
trade unions 121
transfer of knowledge 150
transformation pressure 1, 5–6, 8, 15
unemployment 102
  Denmark 19, 85
universities
  Denmark 152–4, 155, 156
technology consultants and firms,
  division of labour between 151–6
unskilled workers 16, 102, 187–8, 190, 199
  Denmark 85, 106–7, 171
US
  as a best-practice new economy 12–13
economy 3–4
  innovation 45
venture capital 3, 88, 89, 90
Verspagen, B. 7, 56, 68, 159
Villumsen, G. 43
Vinding, A.L. 139
vocational training, Denmark 162–74
Voxted, S. 78, 108, 168, 170
Wagner, M. 192
Weil, B. 97
Westling, H. 137, 146
women 14, 19
  Denmark 85
Woolcock, M. 28
work, and learning 24
Ziman, J. 96