academic capitalism 24, 132–3, 219, 415, 431, 456
Academic Ranking of World Universities (ARWU) 98, 107, 134, 136, 139, 392
academic science
competition
to develop strongest research universities 136–7
for internationally mobile researchers 134–6
contemporary landscape 140–42
post-Cold War theories of conceptual critique 132–3
four concepts 131–2
post-2001 geopolitical environment 134
reasons for understanding in geopolitical context 130–31
research university’s role in economy and society 137–40
towards new conceptualization of geopolitics of 143–5
see also scientific nationalism
academic staff representation 420–21
academic work
in faculty roles political context 449–64
in gender politics context 435–8
accountability
democratic, in Scotland 58–60
era of
in Australia 37
in UK 48–9
logic of 322
as paramount for UIC 495
in scientific nationalism logic 153
tensions with improvement 396
under TEQSA 333–4
activism
categories of students 477–8
contemporary conceptions of 468–9
on- and off-campus 478–9
online 479–80
Alliance for Peoples of Our America (ALBA) 120, 126
allocation see resource allocation
alternative providers 55, 335, 344, 350–51, 379
American Association of University Professors (AAUP) 451, 453, 458–9, 461, 463
American Federation of Teachers (AFT) 458–9, 461, 463, 475
ASEAN (Association of Southeast Asian Nations)
establishment and purpose 116
higher education regionalism project 118–19, 124–6
inter-regionalism example 115
as intergovernmental organization 109, 417, 424
Qualifications Agency 125
Qualifications Reference Framework 365
Quality Assurance Network 363
region-specific free trade agreements 195
trade-inspired university network 124, 201
Asia-Europe Meeting (ASEM) 115, 117, 119
Asia-Pacific Economic Cooperation (APEC) 109, 118–19
Asia, tertiary regulation in
Australia 355–9
China 369–72
emerging trends
differentiated capacity-based regulatory approach 375
prescriptive regulatory approach 375
risk-based regulatory approach 374
essential measure for good regulation 375
Hong Kong 359–62
Malaysia 362–5
New Zealand 365–8
overview 354–5
regulatory environment characteristics 372–3
regulatory responses and trends 373–4
Asian Infrastructure Investment Bank (AIIB) 92, 392
Aske revolt 31, 40
Assessment of Higher Education Learning Outcomes (AHELO) 516–17
‘audit explosion’ 381–9
austerity 216–18
Australia
changing regulatory culture 327–8
distribution of ranking points 101
East Asian HE systems influenced by 396
economic performance and goals 488–90
extent of casualized labour in 435, 437, 439
for-profit sector 397–9
higher education funding 32, 231–2, 234, 237–8, 254–6
higher education sector
ambiguous returns 403
exponential growth 392–3
as main international provider of 508
move to level of Commonwealth 382
international students
distribution of 99
increasing reliance on 191
leading as top study destination 134
publishing workplace data 284–5
qualities creating successful student experience 405
R&D funding 298, 305, 309–12
requirement for university title 342
research paper production 142
scientific nationalism in 155, 157–60
share of 25–34-year-old higher education graduates and projection to 2030 102
share of 25–64-year-olds scoring at PIAAC numeracy level 4 and 5 104
soft power projection 169–70, 173–4, 178–9, 183
spatial restructuring of classrooms for digitized learning 440
talent-for-citizenship exchange 134–5
tertiary education
challenges and future actions 359
definition 355
regulatory effectiveness and outcomes 358
regulatory framework and approach 356–8, 372–3, 386–7
regulatory responses and trends 373–5
system overview 355–6
trade liberalization and educational services 193–5
universities
capital-intensive 31
contribution scheme 37
‘corporatist thinking’ 37
model of deferred repayments 37
national or sub-regional networks 203
public/private distinction varying over time 35–6
student contributions 32
tension with local authorities 37–8
triple helix mission 42
university–industry collaboration
apparent lack of 489–90
attributes missing in 492
barriers to improved 492–3
facilitating 498–9
HE policy relevant to 487–8
hypotheses for lack of 493
overall observations 494
question responses 495–8
shape of relations 490–93
stakeholder perspectives 493–4
towards improved 499–503
women in academic life 439
see also Higher Education Contribution Scheme (HECS); Tertiary Education Quality and Standards Agency (TEQSA)

Baldwin, R. 328–9, 394, 464
Barnett formula 54, 64
Barnett, R. 197, 341–2
Barr, N.A. 218, 245, 249–51, 262–3
Barr, R.B. 505–7
Barrow, C. 12, 19, 216
Bayh–Dole Act 24, 219, 500
bicameralism 48
Big Science projects 151–2
block grants 302–3, 309–12
Boggs, A.M. 48
Bologna Declaration 94, 104, 122, 342, 505, 508–9
Bologna Process 50, 93, 95, 114, 122–3, 127, 231, 379, 386, 388, 413, 417, 506
Bologna Qualifications Framework 511
Bologna, University of 46–7
Bradley Review 357, 386–7, 487
brain drain 95, 135, 162
brain gain 98, 135
“brain race” 135
Brennan, J. 81, 84, 87–8, 220
Brexit 53, 91–2, 98, 127, 130, 145, 163, 178
Bruce, T. 50, 53–4, 57–8
Brunsson, N. 211, 220, 416–17
bureaucratic agency role in TICAL scheme 270–72
business incentives 305
Calderon, A. 187, 189, 191
CALOHEE project
advantages to Assessment Framework 515–17
civic, social and cultural engagement dimensions 513–14
framework 514–15
comparable initiative 517–18
explanation of 512
focus on programme level 516–17
limited to ‘desirable’ learning outcomes 517
merging of meta-frameworks 511–12
purpose 511
subject area dimensions 512–13
Index 525

as Tuning initiative 511
ultimate aim 516
Cambridge University 47–8, 223, 340
Cantwell, B. 131, 133–4, 139, 143, 204–5
Castells, M. 92, 96, 133, 187, 198, 205, 413–14
casualized labour 435, 437, 439
change in higher education
  drivers of 188–9, 205
  extent of 187
  mediating tensions 190–91
  response to forces of 191–2
Chapman, B. 36–7, 244, 249–55, 262–3, 274
Chaturon, Chaisaeng 266–7, 270, 275
China
  academic science funding 159
  Australia’s heavy economic reliance on 489
  competence and skills development 506
  contributions to idea of university 74–6
  cross-national research networks 161
  failure of Boxer Rebellion 152
  higher education
    challenge of growing demand for places 33
    contrast with West 66
    current cultural transformations 76–7
    development of funding 234
    encounter with West 69–74
    geopolitics 189, 191, 204–5
    historical legacy of Dong Zhongshu in 67
    historical roots of 67–8, 76, 169
    impact on global 92–3, 97–100, 102, 111
    as ‘intellectual capital’ engine 392
    at massification stage 355
    private institutions 237
    public expenditure 231–3
    separate bodies for 373
    traditions as negative aspect in developing 76
    leading as sender country 134–5
    national science policies 155, 158
    and neo-techno-nationalism 144
    as powerful domestic economy 122
    pursuing universities through national policy
    and investment 139
R&D expenditure 140–41
reasons for developing human capital in
  science 157
rise as scientific superpower 141–2, 145
and soft power projection 177–8
student difficulty in finding employment 403
tertiary education
  challenges and future actions 371–2
  definition 368
  education reforms and policy formulation 370
legislative measures 369–70
quality control and implementation 370–71
regulatory effectiveness and outcomes 371
regulatory framework and approach 369–71, 373–5
system overview 368–9
wider expenditure across 32
transnational education growth 181
civil society
  effects of trade liberalization 194–5
  evolution of theories 15–16
  groups beyond 18
  higher education 21–3, 192
    impacts of 83–4
    and power 25
    and state 18–19, 190
needs
  comparative assessments of HE 519
  disconnect with fruits of HE 504, 506, 518–19
  skills and competence set relevant for 511–12, 514
  public and private spheres of action 17–18
  role of research university 137–40
  social movements in 24
  and state
    contest between 11, 14, 16–17, 20–21, 25–6
    and higher education 18–19, 190
    and rights 16–17
  understanding 14–15
  universities as both apart from and part of 44
Clark, B.R. 12, 19, 80, 132, 221, 395, 414, 420–21, 439, 453, 478
Clinton, Hillary 37
Coates, H. 4, 393, 396, 405, 517
colonialism 168–71
commercial services for using workforce data 289–90, 292, 295
Committee of University Chairs (CUC) 49, 57
cOMPETENCES
  competence-based learning 508
  competence/learning outcomes philosophy 505
  competency-based approach 507
  concept 507–8
  distinction with learning outcomes 507–8
  distinction with skills 507
  framework 511–15, 517
  importance given to 506
  initiatives highlighting role of 504
  innovations in modelling and measuring 518
  for life-long learning 507
new policy initiatives for 519
in qualification frameworks 509
terminology confusion 507
competition
to develop strongest research universities 136–7
for internationally mobile researchers 134–6
Competition and Markets Authority (CMA) 55, 344, 384
competitive research funding 303–5
Confucianism 66–70, 73, 75, 168–9, 177, 182
contrived randomness
benefits and disadvantages 381
as mode of regulation 380
observed trajectory 388
and oversight explosion 388
use of peer review 387
corporatization, era of 48–9
cross-border higher education
competing political imperatives 174–6
diverse methods of regulation 167–8
dramatic increase in scale 167
historical roots
colonialism and globalization 168–71
since Cold War 171–4
politics of providing
to sell or give away 176–9
struggles with dependency and inequality 179–83
recommendations for 183–4
Croucher, G. 36–7
CUC (Committee of University Chairs) 49, 57
Davis, G. 35, 400
Deem, R. 137, 431–3, 435–6, 438–9, 441, 445
Degree Qualifications Profile (DQP) 510, 512, 514
demand and supply of workforce 282–6, 288–94
demand-side ambivalence
increasingly ambiguous returns 403–4
more private and household cost 401–3
Department for Employment and Learning (DELNI) 62–3
deprofessionalization 450, 452, 455, 457, 462–3
devolution 49–64
differentiated capacity-based regulation
in Asia 373–4
as emerging trend 375
differentiated higher education systems 80–81, 84–6, 350, 361
’diploma mills’ 105, 109, 398
dissolution 30–31, 34, 36, 39–40
diversity
aspects of
student cohorts 347–9
types of provider and delivery context 349–50
reasons for importance to higher sector and its regulation 350–51
and regulation policy narrative 343–6
Dohmen, D. 230, 236, 239, 241, 244–5
Dong Zhongshu 67–8
Dublin Descriptors 509
economy, role of research university 137–40
Education Investment Fund 241–3, 245
elite phase
bifurcation of system 137
combined with differentiation 81
coordination 2–3
democracy 16
European 118
global trend continuing to move from 33
move to massification in UK 339–40
and universalization 79–80
reproduction 82–3
research universities operation 138
shift to economic imperative 119
emerging global model (EGM) 137
Erasmus mobility programme 118–19, 123, 176
EU Referendum 49–50, 53, 63
Europe
academic science
as anchoring global power in 142
patent for protecting inventions 159
policies 154–5
treatment of 133
CALOHEE project 511–18
classical idea of university 70, 72–4
colonialism 169–70, 173
competitive research funding 303–4

Index

definitions 342
destination for international students 174
English-taught programmes 179
examples of representation 420–22
free trade agreements 193–5
gender politics 439–40, 444
governance
associations of HEIs 106–7
multilateral structures 111
organizations 109
professional bodies 108
qualifications recognition arrangements 109
quality assurance and accreditation 108
trade agreements 108
graduate student unions 475
higher education
enrolment in 229–31
funding 213–26, 234–5, 237–8
open 103
second country to experience
massification 187
as theoretical 73
as tradable commodity debate 94–5
imbalances and inequalities
global science and research 97–8
student mobility 98–100
investment in research capacity 138–9
medieval 35, 40, 46–7, 68, 168
need for qualifications framework 508–10
new policy initiatives for 519
oldest regional trade agreement 193
party-affiliated student organizations 476
penetration of NPM 196
policy learning 424
political environment 91–3
principles of shared governance upheld in
473
regional networks 200–203
regionalisms
as basis of comparison 116
coming in waves 116
early 115, 117–18
project 121–2, 126–7
as spectre of 117
regulation 327, 382–3, 385–6
rise of extremist right-wing parties 473
short-term overseas study 179
tuition charges 249
Tuning Educational Structures in 504–8,
510–15, 517–18
university networks 195–6
European Centre for the Development of
Vocational Training (CEDEFOP) 235,
285, 506–7, 509
European Higher Education Area (EHEA) 50,
108, 114–15, 122–4, 471, 508–9, 511–12
European Qualifications Framework for
Lifelong Learning (EQF for LLL) 507,
509, 511–12
expansion era 48
expert-driven paradigm 506
faculty roles
decline of shared governance 456–8
deprofessionalization 452, 455, 457, 462–3
faculty voice in shaping
non-union efforts at mobilization 461–2
union solutions 460–61
marketization 455–6
and neoliberal logic 454
politics of
historical context and framing 450–53
moving forward 462–4
political shifts redefining 449–50
unbundling 456
union influence 458–60
financing
in England 53–4
higher education 249–56
in Northern Ireland 62–3
in Scotland 52–3
in Wales 60–61
flow models 282–4, 286, 288–9, 292
Foucault, M. 14–15, 171, 454
free trade agreements 94, 193, 195
Friedman, M. 11, 18–20, 37, 250
gender politics
academic work and careers 435–8
on campus 441–3
effectiveness of gender equality change
projects 443–5
future research avenues 445
‘job done’ perspective on 431–2
of leadership and leadership training 438–41
theoretical framework 432–5
gender violence 442
General Agreement on Trade in Services
(GATS) 94, 109, 188, 190, 193
geopolitics of academic science
competition lines 134–40
contemporary landscape 140–42
post-Cold War theories 131–4
reasons for geopolitics 130–31
towards new conceptualization of 143–5
geopolitics of higher education
drivers of change 188–9, 205
extent of change 187
future outlook 206
mediating tensions 190–91
nodes and networks of universities 198–206
response to change 191–2
trade liberalization and educational services
diffused idea of university 197–8
implications and lessons 195
neoliberalism and HE policy and practice 196
trade agreements 193–5, 205
Geuna, A. 211, 216, 219, 224
global era, competing political imperatives in 174–6
global higher education
governance
assessment of 110–11
case and quest for 105–10
imbalance and inequalities
global science and research 96–8
learning outcomes 104
open higher education 101–3
student mobility 98–101
unit of analysis 95–6
political environment 91–3
scenarios 93–5
and variegated regionalism
case for 120–21
comparison of projects 121–7
defining 114
HE in early region-building 117–20
lack of empirical work on 114–15
words describing regions 115–17
global innovation networks (GINs) 143–4
global professional bodies 107
global science and research 96–8
global university rankings
acting as powerful regulatory mechanism 324
benefits and disadvantages 107
China, Russia and Japan 139
critique of 136–7
developments hinting at disciplinary perspectives 394
early 21st century 379
effect of collaborations 198
effect of motivating national policy 134
global university networks 198–204
increasing emphasis on 85
and move to nationalism 145
as occupying space in strategic plans and
directions 444
as transparency tool 105
unintended consequence of 197
use by scholarship funding bodies 180
“world-classness” as intrinsically tied to 136
globalism, scientific 150–53, 160–62
globalization of modern HE 168–71
González, J. 505–6, 508, 511
governance
of global HE
assessment of 110–11
case and quest for 105–10
global professional bodies 107
global rankings 107
international arrangements for recognition of qualifications 108–9
international associations of HE institutions 106
international organizations 109–10
international quality assurance and accreditation 108
international research networks 107
self-regulation 106
trade agreements 108
multi-level 413–26
reordering of traditional forms of 481
of universities in United Kingdom 46–64
see also shared governance
government
levers for research 308
and state 20
structuring role for facilitation of UIC 500
student 474–5
and universities, models for 42–4
graduate contribution 240–41
Gramski, A. 13
Hardy, C.P. 12, 19, 216
Hayhoe, R. 67–9, 72–3, 75
Hazelkorn, E. 3, 61, 133–4, 136, 379, 436, 444
Hettne, B. 116–17, 119–20, 125
Hicks, D. 211, 219, 224
Higher Education Contribution Scheme (HECS)
beginnings of 254–5
budgetary and political factors 256–8
higher education financing
case for tuition charge 249
chronology of 254–6
income-contingent student loans (ICLs) 253–4, 275
international reform 262
reasons for student loans 249–50
time-based repayment loans 250–53
instigators of 266, 268
introduction of 256
model of deferred repayments 37
policy reform
  motivation for 248
  as radical economic 262–3
understanding political opposition to 258–62
Wran Committee 255–6
higher education funding
  austerity thesis 216–18
  Australia 32, 231–2, 234, 237–8, 254–6
  China 231–4
  conceptual issues 249–54
in context of competing demands for
government expenditure
  development in relation to other funding
requirements 234–5
  developments affecting funding
requirements 235–7
  enrolment in HE 229–31
  private funding sources 237–43
  public expenditure 231–2
Europe 213–26, 234–5, 237–8
funding environment of HE institutions
  213–14, 225–6
  instruments 221–5
  lack of, for HE systems 234–5, 402
  Nordic government 31–3, 36
  overview 212–15
  United Kingdom 213, 215–16, 222–4, 232–4, 238
Higher Education Funding Council for
  England (HEFCE) 41, 50, 56–7, 326, 335, 343–6, 348, 350, 382, 384, 518
higher education (HE)
  as both politics and policy-making 519
  change in 188–92
  and civil society 21–3, 192
  and state 18–19, 190
  cross-border 167–84
  in early region-building 117–20
  enrolment in 229–31
  gender politics of 431–45
  global 91–111
  as having grown in political relevance 3–4
  increasingly ambiguous returns 403–4
  as increasingly important social sector 3
  as inherently political activity 1
  and needs of society 504, 506, 518–19
  as at point of transition 4
  policy and devolution in United Kingdom
    49–64
  power in 25
  regulation 379–89
  risk-based 319–36
  resource allocation decisions 211–26
  social dimension of 79–87
  and social movements 24
  and stakeholder organizations 413–26
  and state 19–21
  and civil society 18–19, 190
  trade liberalization and educational services
    193–8
  transparency as lynchpin for success
    392–407
  use of workforce data to plan degree
    programs 280–95
  and variegated regionalisms 121–7
see also politics of higher education
‘Higher Education Inc’ 94
higher education institutions
  as autonomous in UK 339
  collaborative relationships 87
  cross-cultural gender change project 444
  defined, in US 342
  funding environment of 213–14, 225–6
  impact of globalization on 96–8
  international associations 106
  principles of shared governance upheld in 473
  for-profit and non-profit 397–9
  rationale for existence of 39
  role of 23–4
  self-regulation 106
  stakeholder organization representation of
    421
  status differentiation of 81–2
  transformations in Chinese tradition 66–77
Higher Education Investment Fund (HEIF)
  239–40
higher education systems
  casualized labour growing in 435
  convergence in 104
  differentiated 80–81, 84–6, 138
  elite, mass and universal 79–80
  expansion generated by government
    investment 79
  harmonizing in South East Asia 124
  internationalization of 175
  lack of funding for 234–5, 402
  modern
    conceptualization of 220
    contradictory functions of 86–7
    national 79, 108, 111, 134, 169, 175, 181, 224
    regulation in pluralistic 338–51
Hong Kong tertiary education
  challenges and future actions 362
  definition 359
  funding and incentive schemes 360
  laws and regulatory measures 360
  quality assurance, good practices and
    transparency 361
regulatory effectiveness and outcomes 361–2
regulatory framework and approach 372–5
system overview 359–60
Hood, C. 196, 379–81, 390, 394
horizontal differentiation 80–81, 85, 106
Humboldt, W. von 71–2, 80, 223
identity politics 432, 476
income-contingent student loans (ICLs)
Australian 248, 255–6, 258–63
characteristics 252–4
as form of government intervention 250
political economy of Thailand’s scheme
265–79
industry engagement challenges 305–7
inequality
and activism 479
cross-border HE in importing states 179–83
gender 431–5, 440, 442, 445
global 95–105, 107, 110–11
massification and policy changes to alleviate
205
missions and policies as state efforts to
redress 19
and science 162
social 81–7
institutional block grants 302–3
institutional logics
conceptualizing 149–50
expressed in national science policies 153
fragmentation and contradiction manifested
in 160
scientific nationalism as dominant 163
institutional processes 293–4
international associations of HE institutions
106
international higher education financing
reform 262
international organizations
as active in dissemination of scientific ideas
154
changes in regulatory approaches 327
governance of global HE 109–10
promoting transfer agreements 181
role in shaping conversation around HE 137
supporting students to study in foreign
universities 179
international quality assurance and
accreditation 108
international research networks 107
Irish framework 509–10
Jacob, M. 134–5, 150–51, 302–3
Jessop, B. 120–22
job listings 290, 295
Joint Quality Initiative 509
Jongbloed, B. 211–13, 215, 217, 221, 223–4,
413–15, 426
Kezar, A. 450, 454–6, 458–60, 462
King Henry VIII 30–31, 36, 44
King, R.P. 110, 327, 394–6
Klemenčič, M. 404, 415, 417, 421–2, 468,
470–71, 473–5, 478, 480–81
Krause, E. 450–52, 464
'laddism' 443, 445
Latin America
distribution of internationally mobile
students 100
example of ‘first wave’ regionalism 116
higher education
as feature of regional initiatives 115
regional projects 120, 126
online course participation 103
leadership and leadership training 438–41
leadership capacity building 313
League of European Research Universities
(LERU) 106, 421
learning gain(s)
comparative assessments for 519
definition 504
distinction with learning gains 517
role in MCL project 517–18
technical means when measuring 518
understanding of in HEFCE programme 518
unrealistic when measuring learning
internationally 517
Learning Gain in Higher Education 507, 518
learning objectives
changing definition 508
role for curriculum in setting 348
terminology confusion 507
learning outcomes
CALOHEE project for measuring 511,
515–18
concept 508
defining in transparent descriptors 505
definition 507–8
German program relevant to measuring 518
global inequalities illustrated by 104
in learning gain definition 504
role for curriculum in setting 348
TEQSA standards 358
terminology confusion 507
time for study having effect on 82
unionization effect 476
LEGACY (Learning and Employability Gain
Assessment Community) 518
Lepori, B. 211–15, 218, 220–22, 224–5
Index 531

lobbying 2, 309, 418, 420–22, 461, 474
Lodge, M. 389–90
Luescher-Mamashela, T.M. 421–2, 468, 470–71, 477
Malaysia
access to education 32
education system as central to stabilizing 125
HE sector
for-profit investment in 398
strong for-profit presence in 397
as host countries of international students 191
legacy of state-controlled universities 39
at massification phase of development 355, 372
source country for Australian government-sponsored students 173
TBRL system in 251
tertiary education
challenges and future actions 365
definition 362
regulatory effectiveness and outcomes 364
regulatory framework and approach 363–4, 372–3
regulatory responses and trends 373–5
system overview 362–3
universities shielded from private sector 181
management capacity building 313
market forces
effect on universities 182, 205, 449–50
and faculty power 451–2, 463–4
openness to 188
relationship with HE 190–91
marketization
of faculty 455–6
of higher education 53, 413, 415
massification
accompanied by autonomy 431
in Asia 354–5, 361, 372
causing change in political dynamics 174
combined with differentiation 81
global integration involving 175
move to
from elite 79–80
global trend 33
in UK 339–40
stratification alive despite 205
US first country to experience 187
McAdam, D. 468–72, 478
Measuring College Learning (MCL) project 517–18
Medical Research Future Fund (MRFF) 312
medieval Europe 35, 40, 46–7, 68, 168
Mercosur
challenges faced by 127
establishment and purpose 122–3
as good example of trade agreement 108
higher education 123–4
illustrating rescaling processes 126
regionalization 123
Merton, R. 130, 151, 160, 220
Milanovic, B. 92–3, 95, 105
mobilization of faculty 461–2
Mode 2 concept 131–2
Modelling and Measuring Competencies in Higher Education (KoKoHS) 518
Mok, K.H. 39, 137, 181, 392, 464
monasteries 30–31, 34, 36, 39–40
MOOCs (massive open online courses), 101, 103, 167, 188, 190, 379
mutuality
benefits and disadvantages 381
as mode of regulation 380, 394
in Netherlands 383
observed trajectory 388
with oversight and rivalry 383
and peer review 388
under pressure 389
Naidoo, R. 34, 40, 220, 328
National Education Association (NEA) 458–9, 461
National Innovation and Science Agenda (NISA) 311, 490–91, 502
National Labor Relations Board (NLRB) 460, 476
National Student Satisfaction Survey (NSS) 344, 348, 384
neo-techno-nationalism 144–5
neoliberalism
dominating second wave regionalisms 119–20
in England 51
faculty roles and work 449–50, 454, 456–7, 460, 462
globalization of 117
and HE policy and practice 196, 205
in international higher education 181–2
market capitalism 126
in politics of higher education 11
reflected in gender politics 431, 438, 440, 443
and state 16, 18, 20, 24–5
and students as politics actors 471, 478, 481
variegated 120
workforce casualization as product of 437
networks
research 97, 107, 161
university 198–206
New Faculty Majority (NFM) 460–62
new public management 94, 119, 196, 205, 211–12, 218–25
‘new regionalism’ 116–17, 119
New Skills Agenda for Europe 505, 507
New Zealand tertiary education
challenges and future actions 368
definition 365
regulatory effectiveness and outcomes 367–8
regulatory framework and approach 366–7, 372–5
regulatory purpose and priority setting 367
system overview 365–6
non-tenure-track faculty (NTTF) 455–6, 459–60, 464
Nordic countries
expenditure in public and private institutions per student 216, 218
government funding 31–3, 36
model for equalizing function of HE 87
Northern Ireland 62–3
occupational data 284–8
Occupy movement 17, 92, 471
on- and off-campus activism 478–9
on-campus gender politics 441–3
One Belt One Road (1B1R) 92, 98, 111, 392
online activism 479–80
open higher education 101–3, 175
open networking 93–4
organizational culture 494, 496–7, 503
organizational theories, application of 470–72
Orr, D. 84, 101, 402
oversight
to assure features of accountability, relevance and transparency 395
benefits and disadvantages 381
explosion 381–2, 388
in France 385
in Japan 382
as mode of regulation 380, 394
observed trajectory 388
with rivalry and mutuality 382
Oxford University 47–8, 223, 340
Paris 46–7
party-affiliated student organizations 476–7
Pasteur, Louis 150–52
peer review 39, 303–4, 334, 380–81, 383–4, 387–8, 395
Pettigrew, A. 313
Polanyi, M. 117, 151, 219
policy
bold transnational move 508
and “brain race” 135–6
diversity and regulation in UK 343–6
embedding beliefs in national structures 221–5
in gender politics 431, 433–4, 440–45
for global higher education 105–6, 108–11
grafting of America onto China 74
higher education as both politics and policy-making 519
and devolution in UK 49–64
and neoliberalism 196
relevant to UIC 487–8
national science 153–63
need for new initiatives 519
as not reserved to governments 510
‘as own cause’ 384, 387
qualifications framework as instrument of 510
rationales in resource allocation 218–21
research
contemporary approaches to study of 299–300
in macroeconomic contexts 300–301
need to reconstruct 313–14
shaping state form and practice 23
in student representation 473–5
suggestions for improved ranking position 389
suggestions for improved UIC 487–8
weakening system methodologies 399–401
see also
public policy
policy learning 423–5
policy-makers
approach to student debt 37
benefits of UIC as priority for 490
difficulty in designing and implementing research policies 301–3
education as policy agenda issue for EEC 118
and faculty groups 463
harnessing power of academic science 133
idea of Entrepreneurial University taken up by 132
interest groups influencing 418–19
Korean 140
making connections between human capital and knowledge economy 152
need for better HE accountability 518
recognition of no-charge university system as regressive 249
regulation 324, 394
Brendan Cantwell, Hamish Coates and Roger King - 9781786435026
Downloaded from Elgar Online at 01/17/2019 09:31:58AM
via free access
Index 533

tension for 33–4, 38, 40, 42
threat of litigation 194
in TICAL scheme 269–70
use of OECD data 110
political settlements 34, 168, 178, 182–3
politico-economic theory of TICAL scheme 268–9
politics of higher education
in behavioural terms 1
conclusions of debates on 220–21
cross-border 176–84
dimensions and implications 85–6
environment for global 91–3
faculty roles and work 450–53, 462–4
future focus of research 225–6
Higher Education Contribution Scheme 256–62
macro-political environment affecting 134
neoliberalism in 11
rational choice vision of 2–3, 11
in state terms 1–3
state-theoretical model offering holistic approach to 11
two-by-two matrix for framing 2–3
where HE is regarded as global good 338
power
academic science 133, 140–42, 145
administrative 457
approaches to understanding 14
balance of 189
Chinese 66–7, 111, 122, 139, 141, 145
colonial 167, 169–70
collection of 25
decentralization 371
degree-awarding 54, 335, 340, 343, 346
devolved 49, 58–60
elite 16
European 170
faculty 449–53, 457–8, 463–4
in framing politics of higher education 2–3
and gender 439, 442
of global institutions 92
of governments 36
hierarchies 479
inequalities in 14
legislative 26
logics of 20
nodal 126
normative 122
between persuaders and persuadees 423
private sector 23
regulatory 56, 108, 331, 358
research university 136
Russian 139
sharing arrangements 62–3
shift towards centralised monarchy 30, 40
of soft law 109
sovereign 44
staff union 422, 459
stakeholder 415–18, 422
state 13, 25, 40, 125, 140, 144, 268–9, 400
student 481
of Student Loan Fund Committee 277–8
symbolic 105–6
taking truth to 84
top-down regional 124
Western 70
see also soft power projection
Power, M. 321–3, 327, 381, 389
PRC (People’s Republic of China) see China
prescriptive regulation 375
private and household cost, increasing 401–3
private for-profit sector 396–9
private funding sources
higher education investment fund 239–40
practice and implications of 237–8
through graduate contribution 240–41
through state contribution
Education Investment Fund 243
interest payments and expectations 242–3
investment fund or bond issues 241
reasons for state interest 243
special education fund or general education fund 242
private providers 54–6, 195, 344, 349, 356, 359, 373
private spheres of action 17–18
professional bodies 107–8
Public Administration and Constitutional Affairs Committee (PACAC) 63–4
public expenditure
developments affecting funding requirements 235–7
higher education funding 231–2
in relation to other funding requirements 234–5
public policy
case study of changes in, for research in universities 309–12
funding instruments towards academic science 159
measuring effectiveness of 307–8
suggestions for improved UIC 502–3
public/private distinction
reasons for lack of clarity 338
tension circling round 33–4
varying over time 35–6
public spheres of action 17–18
Pusser, B. 11–13, 15, 19–21, 23, 26, 190, 454
qualifications framework
ASEAN 363
Australian 355–6, 358
based on descriptors 517–18
for EHEA and LLL 511–12
Europe's need for 508–10
focus on learning process 509
Hong Kong 360
for Ireland 512
as major policy instrument for governments 510, 516
Malaysian 363
regional 123–4
at subject area level 511, 516
USA's initiative 510
qualifications recognition
causes of weakening 205
international arrangements for 108–9
quality
as core to higher education 393
evolution of prevailing contexts 394–6
factors affecting 396–404
new initiatives 404–7
perspectives on 392–4
quality assurance
analytic approach traditionally used by 323
in Asia 356–7, 361–8, 370–71, 373, 396
benefits of frameworks for 510, 515
comparative assessments as reliable form of 519
conceptualizing across HE systems 394–6
different arrangements for different providers 350
global strengthening of 481
international 108–9
mobility enhanced by alignment of 122
national variations to UK arrangements 50, 52
new approaches to set conditions in 400
organizations with strong focus on 334
proposed changes in England and Northern Ireland 46, 57, 346
responsibility for, in UK 343–4
risk- and standards-based approach to 331–3
seen as response to massification 339–40
student involvement in 348–9
Quality Assurance Agency (QAA) 52, 56–7, 320, 325–6, 330, 335–6, 343–5, 346, 348–9, 382, 395, 504
quality standards
QAA case study 335–6
and risk-based regulation 330–31
TEQSA case study 331–4
rankings see global university rankings
rational choice
models of behaviour 150
vision of politics of higher education 2–3, 11
Reformation 30, 40
regional trade agreements (RTAs) 193
regionalisms
defining 114
‘new’ 116–17, 119
proliferation of words describing 115–17, 125–6
region-building
higher education in early 117–20
waves of 116
social nature of regions 117
variegated
case for 120–21
higher education projects 121–7
idea of as way forward 126
regulation
age of multiple paradoxes 389
audit explosion 381–9
case for 338–9
current situation 383–7
different modes of 380–81, 388–9, 394
of diversity in UK 343–51
early 21st century 379, 381–3
in England 55–8
essential measure for good 375
lack of research into 379–80
in Northern Ireland 62–3
in Scotland 58–60
tertiary, in Asia
Australia 355–9
China 369–72
emerging trends 374–5
Hong Kong 359–62
Malaysia 362–5
New Zealand 365–8
overview 354–5
regulatory environment characteristics 372–3
regulatory responses and trends 373–4
in Wales 60–61
see also risk-based regulation
repayment burden (RB) 252–3
representation
stakeholder organizations 420–22
student 421–2, 468, 473–7
reproduction
or change 83
of inequalities 82, 87
research and development (R&D)
budgets 97–8, 305
expenditures 140–41, 305
imbalances and inequalities 96–8
mix of public, private and international 306
research paper production 141–2
Research Assessment Exercise (RAE) 310, 383, 436
Research Block Grant (RBG) 309–12
Research Excellence Framework 50, 383–4, 436
research funding
Australia 298, 305, 309–12
building leadership and management capacity 313
case study of changes in public policies for research in universities 309–12
challenges of industry engagement 305–7
measuring effectiveness of 307–8
mechanisms and approaches
competitive 303–5
importance of national investments 301–2
institutional block grants 302–3
tax and other business incentives 305
other levers of government 308
research policy
in macroeconomic contexts 300–301
studies 299–300
supporting human capital development 298–9, 314
research networks 97, 107, 161
research universities
emerging global model 137
Humboldtian model shaping 72, 223
present circumstances 138
role in economy and society 137–40
resource allocation
austerity reconsidered 216–18
evolution of 211–12
funding instruments
allocation criteria 222–4
allocation mode 222
complexity of classification 221
general observations 224–5
higher education funding 212–15
policy rationales 218–21
return to pragmatism 225–6
revenue generation
through graduate contribution 240–41
through state contribution 241–3
Rhoades, G. 12, 15, 21, 132, 219, 452–60, 464, 476
rights
in civil society and state 16–17, 22
classic liberalism 16, 75
customer 384
employee 194, 449, 451, 459–62, 475
risk
and its management 321–3
as means of regulation 323
and regulation 319–20
tolerance 323–8
and uncertainty 326–7
risk-based regulation
in Australia 331–4, 356, 359, 373, 387–8
behaviour and institutions 328–30
better regulation 320–23, 327
changing regulatory cultures and modes 327–8
as emerging trend 374
future research avenues 328
implementation in UK 324–5
issues for regulators 326–7
quality standards 330–36
rationale 323–4
reasons for 319
resources 330
risk-based frameworks in HE 325–6
rivalry
benefits and disadvantages 381
in France and Germany 382–3, 385–6
growing move towards more 381
as mode of regulation 380, 394
in Netherlands 383
observed trajectory 388
with oversight and mutuality 382
in United States 385
Robertson, S.L. 119, 121–2
Sá, C. 152, 163
Salmi, J. 136–8, 238
Schwartz, H. 257–8, 263
science
collaborative nature of 161
imbalances and inequalities 96–8
as increasingly globalized activity 149
open 111, 152–3
reasons why states develop human capital in 157
specialization in 162
scientific nationalism
common vocabulary 156–60
future research avenues 163
institutional logics 149–50
national science policies 153–6
and scientific globalism 150–53
tensions with globalism 160–62
Scotland
devolution
and HE policy 50–53
history of 49
vs England political system 51–2
Handbook on the politics of higher education

HE system management and mandating
governance of universities in 58–60
regulation 383–4
Scottish Funding Council (SFC) 58–60, 346, 383
Scottish Independence Referendum 49
self-regulation
governance of global HE 106
regulated model 384
in United States 395
use in Asia 354, 358, 373–5
Service Employees International Union (SEIU) 459, 461
serving local communities 93–4
Shah, M. 356–7, 396, 398
shared governance
decline of 456–8, 464
faculty pushing for models of 451
participatory democracy manifested through 473
rise of neoliberal university as heavy cost to 454
shifting constraints on 452
steady corporatization of 458–9
and unions 453
skilled labour/workforce
bilateral flows 176
brain circulation 135
changing needs 51, 250
collaboration aim to upgrade 304
factors driving 235–6
-growing mobility of 108–9
HE as source of
-expectations of 414
-following Cold War 4
immigration policies to attract 135–6
increasing demand for 235
for industrializing society 35
innovation and economic growth depending
-on 235, 300
integration with HE system for national
-success 175
investment in 119
-middle-skills 293
national system necessary for provision of
-302
need to generate 85
-as part-time instructors 455
-scientists 162
-skilling up 157, 393
-use of knowledge 138
-skills
-applying knowledge into practice 506
-for civic, social and cultural engagement 514
-definition 507
differences among higher education
graduates across countries 104
distinction with competences 507–8
employability 34, 42
gap between importance and achievement
-of 506
identification of appropriate 510–15
measuring learning in terms of application
-of 519
as pathway to employability and prosperity
-505
role of HE 518
soft 493, 501
terminology confusion 507
-transferable 505, 517
types of 506, 517
Slaughter, S. 11–12, 15, 19, 23–4, 132–3, 139,
-205, 219, 415, 454–7
social dimension of HE
-contradictory functions of 86–7
differentiated systems 80–81
-from elite to mass to universal 79–80
impacts
-and inequalities 81–2
-on students and society 83–4
-political dimensions and implications 85–6
reproduction or change 83
social movements
-applications of theories of 470–72
-and higher education 24
-influential in political contests over state
-purposes 18
-organizations 474–5
society see civil society
soft power projection
-colonialism and globalization of modern HE
-168–71
-competing political imperatives in global era
-174–6
-expansion of educational mobility 167
-politics of providing cross-border HE
-in importing states 179–83
-to sell or give away 176–9
-since Cold War 171–4
-thoughts on power relations 183–4
Sorbonne Declaration 127, 508
stakeholder organizations
-as epistemic communities 423–5
-as interest groups 418–22
-involvement in higher education 413–14
-legitimacy 415–23, 425–6
-lobbying 418, 420–22
-membership, legitimacy and meta-
-organizational aspects 416–18
policy learning 423–5
representation
of academic staff 420–21
of higher education institutions 421
of students 421–2
towards research agenda 424–6
unpacking stakeholder concept 414–16
state
civil society
contest between 11, 14, 16–17, 20–21, 25–6
and higher education 18–19, 190
and rights 16–17
dearth of state-centred scholarship 11–12
definitions and analyses 12–14
and government 20
groups beyond 18
and higher education 19–21
and civil society 18–19, 190
in politics of 1–3
limited application of theory of 11–12
policies shaping form and practice 23
and power 25
private revenue generation 241–3
public and private spheres of action 17–18
from theory to practice 25–6
in triangle of authority relations 12
as unit of analysis 95–6
and universities
hostility 30–31
intersecting histories and traditions 34–7
models for government 42–4
new missions 40–42
political frustration 31, 33
reconciling expectations 37–40
tensions between 33–4, 38, 40, 42
who pays? 34
STEM (science, technology, engineering and mathematics) subjects 98, 100, 292, 304, 379, 383
STEMM (science, technology, engineering, mathematics and medicine) subjects 436, 440–41
Stiglitz, J.E. 92, 94, 105, 253, 338
stock models 282–6, 288–9
stratification 80, 86, 105–7, 121, 133, 204–5, 238, 464
student as consumer discourse 40, 384
student-centred approach 505, 509
student cohorts, diversity among 347–9
student governments 474–5
Student Loan Funds (SLF) program
abuse of 266
changes to new administrator power 276–7
debt repayment 278–9
new lending system and conditions 277–8
question of why new law will not work 279
efforts to change to TICAL scheme 265–6,
271, 274–5
financial control of 270
problems with 273–4
year established 266
student loans
case for tuition charge 249
and fees in England 53–4
reasons for 249–50
types of 250–54
student mobility
imbalance and inequalities 98–101
impact of Brexit on UK universities 92
student politics
activism
categories of students 477–8
contemporary conceptions of 468–9
on- and off-campus 478–9
online 479–80
blind spots in research 468–9, 473, 480
future research avenues 480–81
representation
conditions for emergence of 473–4
party-affiliated student organizations 476–7
by stakeholder organizations 421–2
student governments 474–5
student unions 475–6
typical strategies of 468
theorizing
applications of organizational and social
movements theories 470–72
early scholarship 469–70
expansion of youth political participation
theories 472–3
students, impacts of higher education 83–4
supply and demand of workforce 282–6,
288–94
supply-side problems
privatising provision 396–9
weakening system policy methodologies 399–401
Tagg, J. 505–7
tax incentives 305
teaching and learning
as central to university mission and identity 41
competency-based approach 507
creative integration of technologies in 103
as one focus of universities 299
Handbook on the politics of higher education

paradigm 504–6
ratings in Malaysia 364
shift to outcome-based education 371
student-centred approach 509
student survey on quality of 357
student unions in decision-making concerning 417
Teaching Excellence Framework (TEF) 86, 345–7, 349, 384
Teixeira, P. 99, 218–20, 415
tenure-track faculty (TTF) 449, 455–7, 459, 464
Tertiary Education Quality and Standards Agency (TEQSA)
challenges 359, 387
establishment 356–7, 387, 487
experiencing resistance from universities and governments 325
level of transparency 397
organizational characteristics that build confidence of 333–4
quality risk indicators 398
recommendation of standards 320, 330
regulatory principles underpinning 358
responsible for regulation of all HE provision in Australia 356
risk- and standards-based approach to quality assurance 331–3, 395–6
risk-based regulation through 321
scope 331
universities with authority of 356
tertiary regulation see Asia, tertiary regulation
Thailand’s Income Contingent and Allowance Loan (TICAL) scheme
beginning of 266–7
changes in new Student Loan Fund program 276–9
involvement of main players
bureaucratic agencies 270–72
general public 273
politicians and political policy-makers 269–70
university people 272
next phase 267–8
politic–economic theory of 268–9
revolution of educational kind 265–6
rise, fall and update 273–5
Thaksin, Shinawatra 265–7, 269–71, 273
third-stream funding 41
TICAL Scheme see Thailand’s Income Contingent and Allowance Loan (TICAL) Scheme
time-based repayment loans (TBRLs) 250–53, 258–60, 262
trade agreements
bilateral and multilateral 188–9, 195
free 94, 193, 195
governance of global HE 108
preferential 193–5, 205
under pressure 91–2
Trade in Services Agreement (TISA) 193–4
trade liberalization and educational services
diffused idea of university 197–8
implications and lessons for HE 195
neoliberalism and HE policy and practice 196
trade agreements 193–5, 205
Trans Pacific Partnership (TPP) 91, 194
Transatlantic Trade and Investment Partnership (TTIP) 91, 194–5
transparency
in Asia 358, 361
building better advisory platforms 404–7
challenges changing status quo 396–404
evolution of prevailing quality contexts 394–6
quality perspectives 392–4
triangle of authority relations 12
TRIGGER project 444
“Triple Helix” 131–2
Trump, Donald 30, 39, 130, 145, 163, 178–9, 194, 385, 432
trust 34, 41, 93, 218, 330, 374, 381, 498
Tuning approaches 118, 371, 504–8, 510–13, 515–17
Turnbull, Malcolm 490–91
UIC see university–industry collaboration (UIC)
UK (United Kingdom)
arrangements of power 452
audit explosion 381
distribution of foreign and international students 99
distribution of ranking points 101
equality policies project 433
facilitating UIC 500
former colonialism 170–71, 174
gender politics
of academic careers 436–7, 440–41
lad culture 443
of leadership and leadership training 438–9
higher education
funding 213, 215–16, 222–4, 232–4, 238
implications of Brexit for regional projects 127

Brendan Cantwell, Hamish Coates and Roger King - 9781786435026
Downloaded from Elgar Online at 01/17/2019 09:31:58AM
via free access
nature of 340–41
policy and devolution 49–64
share of 25–34-year-old graduates and projection to 2030 102
share of 25–64-year-olds scoring at PIAAC numeracy level 4 and 5 104
as vertically stratified system 85–6
income-contingent student loans 263
leading as study destination 178
move to massification 339–40
neoliberalism in 196
participation in online courses 103
publishing occupational employment projections 284
questioning meaning of global flows of people, goods, services and ideas 189
R&D expenditure 140–41
regulation 145, 178, 328, 383–4
and diversity 343–51
risk-based 324–5, 330, 335–6
research assessment process 50, 310, 383–4, 436
research paper production 142
scientific nationalism in 155–61
social attitudes of graduates and non-graduates 84
students
less time for study 82
mobility 92, 98–9
perceptions on benefits of HE 84
trade in educational services 191
universities
dominance of methodological individualism 34
history 30–31, 34, 36, 39–40, 47–9, 340–41
knowledge transfer mission for 41
student contributions 32, 37
unions
influence on faculty roles 458–60
solutions to contingent faculty 460–61
student 475–6
United Auto Workers (UAW) 461, 475
universalism 150–51, 160
universalization
combined with differentiation 81
ensuring ‘reproduction of inequality’ 82
extent of in UK 339, 341
increasingly stratified differentiation 86
move to 79–80
as predicated on expanded student base 347
of tertiary education development 354–5, 372
universities
aspiration 341–2
as both apart from and part of society 44
case study of public policy changes for research in 309–12
in China
American influence 72–4
contributions to idea of 74–6
current knowledge of Western 76–7
German influence via Cai Yuanpei 71–2, 76
initial knowledge of Western 69–71
use of term 67–8
effect of market forces 182, 205, 449–50
as exposed and subject to scrutiny 204–5
facing questions about missions and activity 44
growing demand for places 33
idea of
Chinese contributions to 74–6
classical 70, 72–4
diffused 197–8
international perspective 342
networks and nodes
global 198–200
multinational and multi-regional 200–202
national and sub-regional 203–4
predictions for 205–6
recognising need for continued relevance 43
sovereign risk for 43
and state 43–4
hostility 30–31
intersecting histories and traditions 34–7
models for government 42–4
new missions 40–42
political frustration with 31, 33
reconciling expectations 37–40
significant investment in 31–2
tensions between 33–4, 38, 40, 42
who pays? 34
suggestions for improved UIC 499–502
tension for policy-makers 33–4
world-class 85–6, 136–40
see also research universities
university governance
devolution and HE policy
England 53–8
fees and loans 53–4
governance changes 55–8
new private providers 54–5
Northern Ireland 62–3
Scotland 49–53, 58–60
Wales 60–61
future outlook for United Kingdom 63–4
history
CUC and CUC Code 49
medieval European origins 46–7
handbook on the politics of higher education
dearth of critical approaches to politics
higher education
of 11–12
enrolment in 229–31
funding 215, 220, 232–4, 237–8
growth of institutions despite gloomy
predictions 190
as main international provider 508
as most vertically stratified system 85
share of 25–34-year-old graduates and
projection to 2030 102
share of 25–64-year-olds scoring at
PIAAC numeracy level 4 and 5 104
imbalance
and inequalities
global science and research 97–8
open higher education 103
student mobility 98–101
increase of for-profit sector 190–91
and Indonesian students 183
influence on China 72–4
as largest economic superpower 189
leading as study destination 134–5
limited application of state theory 11–12
Measuring College Learning (MCL) project
517–18
mobilization of marginalized 18
national HE systems modelled on those of
169–70
neoliberalism in 196
party-affiliated student organizations 476–7
patents issued 191
polarization of popular feelings in 92
power as theoretical construct 25
public universities 23
qualifications framework 510
questioning meaning of global flows of
people, goods, services and ideas 189
R&D expenditure 140–41
regulation 327, 384–5, 388
repayment burdens 252
research networks 107
research paper production 141–2
rivalry 382
scientific nationalism in 155, 157–9, 162
sexual harassment 441–2
short-term overseas study 179
soft power projection since Cold War 171–4
special-focus institutions in for-profit sector
192
state
role of 19–20
universities and policies 20–21
trade agreements 193–5
trade in educational services 191
in triangle of authority relations 12

Brendan Cantwell, Hamish Coates and Roger King - 9781786435026
Downloaded from Elgar Online at 01/17/2019 09:31:58AM
via free access
tuition charges 250
universities
  competing funding processes 33
  public mission 35
  state and policies 20–21
  student as consumer discourse 40
  student debt 37
  university networks 199–200
  using workforce data for planning 291–3
Van Damme, D. 106, 109
Van der Wende, M. 94–5, 98–9, 105, 111, 114, 136
variegated regionalisms see regionalisms
vertical differentiation 80–81, 85, 95, 105
Victorians 48
Vukasovic, M. 413, 415, 418–19, 421, 424
Wagenaar, R. 505–8, 510, 512, 516
Wales 60–61
Weisbrod, B.A. 15, 18, 21–2, 24
Wildavsky, A. 217, 222–3, 384, 387
work–life balance and boundaries 431, 437–8
workforce data use
  approaches to modeling workforce needs 289
  commercial services 289
  connecting postsecondary capacity to projected demand 288–9
  defining constructs and levels of analysis 281–2
  demand for workers by occupation 284–5
  identifying gaps between demand and supply 282–3
  job listings 290
  linking occupations to postsecondary education 286–8
  national and regional supply and demand 285–6
  other sources of workforce supply 288
  qualitative analysis of employer and expert perceptions 290
  total supply of workers by occupation 285
  using indicators of workforce need 289–90
  data provision concerns 294–5
  describing current practices for 290
  institutional processes 293–4
  planning in United States 291–3
  role of governments 280, 294
  three types of 280–81
  world-class university (WCU) 85–6, 136–40
Wran Committee 255–7, 263
Yang, R. 70, 74–6, 170–71, 177, 180–82
  youth political participation theories 472–3
Yuanpei, Cai 71–3, 76
Ziguras, C. 168, 176, 178, 181–2