agricultural sector 20, 241, 243–4, 270
marketing in 248
price competitiveness of 254–6 260–61
private traders in 246
producer NPC 257, 260
proportions of irrigated land to total arable land 263
surplus labor force in 244, 261, 266
technological development in 261, 263, 265, 269
cross-breeding programs 261
farm mechanization 263
air conditioning (AC) 74, 85, 94, 96
fixed-speed 78, 83, 94
coefficient of performance (COP) 84
Standards and Labelling system (2008) 83–4
growth of industry 77–8
heat pump 94
impact of energy-saving regulations 82–3
labelling 83–4
inverter 76, 82–5, 94–6
annual performance factor (APF)/seasonal energy efficient ratio (SEER) 84
modularization in 94–6
penetration ratio of 84
Standards and Labelling system (2010) 84, 95
use of rotary compressors in 95
Alibaba 22, 34, 158
Amazon.com, Inc. 34
Amoi Technology Co., Ltd. 89
Angola 159
Apple, Inc.
  product lines of 101, 118
  turnkey suppliers for 54
Ariston
  joint venture activity of 227–8
technology sourced from 227
Australia 141
coal pricing in 317
Austria 59
automobile manufacturing 2, 6, 14–15, 18, 37, 52, 54, 59, 61–5, 70, 181–2, 189–92, 194–5, 198, 200, 204, 209
distribution channels of 158
electric bicycles 67, 70
electric vehicle (EV) 113
fixed/variable costs in 33
foreign-invested costs 63
industrial growth 15
lack of management integrity in Chinese automotive groups 61
parts suppliers 53, 56, 64–5
small manufacturers 61–3
Automobili Lamborghini 61
AVL 59
  joint venture activity of 65
Baird, John Logie
  projection of images onto wired TV screen (1925) 78
Bangladesh 1
Beiqi Futian Automobile 57
BMW AG 62
  investment activity of 65
Braum, Karl Ferdinand
  invention of CRT (1897) 78
Brilliance Jinbei Automobile 57
Buick
  joint venture activity of 197
  market share of 195
BYD 2, 201, 209
  market share of 195, 200–201, 203
Cameron 159
capital 14, 20, 298
foreign 7, 15, 18, 280
investments 316, 320–21
private 7, 18
stock 291
upper stream 168
Carrefour 160
Changan 197
market share of 195
Changshu China Apparel City 157, 161, 163
Chery Automobile Co., Ltd. 57, 64, 201, 209
facilities of 65–6
intellectual property right
infringement dispute with General Motors (2003) 66
joint venture activity of 65–6
market share of 195, 201
AC (air conditioner) market of 95–6
accession to WTO (2002) 15, 222, 250
Act for Tendering Wind Farm Concession (2003) 132
arable land of 263
as net energy exporter 308
automobile industry/market of 52, 56–8, 61–5, 190–92, 194–5, 204, 208–9
market share regional variations 195, 197–8, 200–201, 203, 207
average consumption level of rural population 183
Beijing 150, 252
Bureau of Grain Storage 250
Bureau of Labor 278
cell phone industry/market of 103–4, 122
Changjian Delta
labor shortage in 300
Chongqing 197
consumer electronics industry of 77–8
domestic distribution system of 150–52
domestic market of 179–80, 208
multiplicity of 180, 186, 188–9
vertical heterogeneity in 181
Dongguan 194
economy of 1–2, 13–15, 52, 226, 308–9, 311, 330–31
electric bicycle industry of 67
Eleventh Five-Year-Plan (2006–10) 307–8, 329
establishment of (1949) 244
EV industry of 113
First Five-Year-Plan (1953–7)
introduction of foreign technology during 215
food rationing in 284
Foshan 194
Fujian Province
labor shortage in 300
Xiamen 221
GDP per capita 10, 187, 241
grain yields of 261
Guangdong Province 181–2, 191–2, 195, 201, 203, 207–8, 268, 329
Chaozhou Prefecture
Chaoanxian 198
Guangzhou 107, 159–60, 194, 221
labor shortage in 300
Meizhou Prefecture
Mei-xian 198
Shenzhen 19, 85, 101, 105, 107, 118–19, 159–60, 194, 221, 269
monthly minimum wage in 269
Statistical Bureau 300
Huizhou 101
Hunan Province
Anjing 261
Labor Contract Law (2008) 300
Liaoning Province
Dalian 221
Long Term Development Plan on Renewable Energy (2007) 131
<table>
<thead>
<tr>
<th>Index</th>
<th>337</th>
</tr>
</thead>
<tbody>
<tr>
<td>manufacturing sector of 152–3, 222, 241</td>
<td>Ji’nan City 187</td>
</tr>
<tr>
<td>market distribution in 186</td>
<td>population density of 194–5</td>
</tr>
<tr>
<td>marketplace systems in 156</td>
<td>Qingdao 221</td>
</tr>
<tr>
<td>Ministry of Commerce (Ministry of Foreign Trade) 221</td>
<td>Shanghai 105, 181, 191, 195, 197, 252, 286</td>
</tr>
<tr>
<td>Ministry of Labor and Social Welfare 300</td>
<td>Shantou 194</td>
</tr>
<tr>
<td>Ministry of Science and Technology 222</td>
<td>State Council 251–2, 279</td>
</tr>
<tr>
<td>monthly average wage in 297</td>
<td>‘Opinions on further deepening the reform of the grain marketing system’ 252–3</td>
</tr>
<tr>
<td>National Development and Reform Commission (State Planning Commission) 317</td>
<td>Tianjin 143</td>
</tr>
<tr>
<td>Notice on Relevant Requirements on the Construction of Wind Power (2005) 132–3</td>
<td>TV market of 82, 84, 88–9</td>
</tr>
<tr>
<td>Pearl River Delta 101</td>
<td>Unified Purchase and Unified Supply policy 244–5</td>
</tr>
<tr>
<td>planned economy era 6, 20, 26, 102, 156, 214, 219, 221–2, 307</td>
<td>urban population of 186–7</td>
</tr>
<tr>
<td>absence of rural migrant workers from urban firms 284</td>
<td>average consumption level of 182–3</td>
</tr>
<tr>
<td>cost of labor during 275, 278</td>
<td>Wenzhou 169</td>
</tr>
<tr>
<td>market development during 156</td>
<td>wind power industry of 128, 131–3, 135</td>
</tr>
<tr>
<td>energy policies during 311–12, 316</td>
<td>wind turbine industry 131–2, 136, 138, 143</td>
</tr>
<tr>
<td>resource allocation in 15</td>
<td>vertical disintegration in 135–6</td>
</tr>
<tr>
<td>technology introduced during 26</td>
<td>Wuhu City 65–6</td>
</tr>
<tr>
<td>population of 10, 297</td>
<td>Zhejiang Province 157, 252, 286</td>
</tr>
<tr>
<td>Regulations on Administration of Technology-introduction Contracts (1985) 221</td>
<td>labor shortage in 300</td>
</tr>
<tr>
<td>Regulations on Technology Import and Export Administration (2002) 222, 226</td>
<td>Zhuhai Delta</td>
</tr>
<tr>
<td>reform period 221, 243</td>
<td>labor shortage in 300</td>
</tr>
<tr>
<td>Engel coefficients during 242</td>
<td>China Automotive Industry Yearbook 59</td>
</tr>
<tr>
<td>labor cost during 275–6, 278</td>
<td>China Automotive Technology and Research Center (CATARC) 59, 65</td>
</tr>
<tr>
<td>Feed in Tariff (FIT) 131–2, 142–3</td>
<td>China Unicom 103</td>
</tr>
<tr>
<td>Seventh Five-Year Plan (1986) 81</td>
<td>Chinese Communist Party (CCP)</td>
</tr>
<tr>
<td>Shandong Province 181–2, 195, 198, 200, 203, 207</td>
<td>Central Committee of 246, 279</td>
</tr>
<tr>
<td>Chengdu 195, 286</td>
<td>relationship with labor unions 286</td>
</tr>
</tbody>
</table>
The disintegration of production

Chunlan joint venture activity of 229
Chrysler Group LLC investment activity of 65
clusters 107, 119, 163, 166, 295
apparel 156, 161, 166, 168
cell phone 161
industrial 149, 156, 158, 163–4, 170
Coase, Ronald concept of ‘transaction cost’ 29
Cobb–Douglas production function 290
Cold War 227
Commonwealth of Independent States (CIS) 108
consumer electronics 14–15, 52–3, 70, 77–8, 81
cell phones 57–8
use of ICs in 36
industrial growth 15
personal computers 56–7
Consumer Price Index 290
Cournot competition model 11
Cultural Revolution (1966–76) 242
destruction of social insurance systems during 281
Engel’s coefficient during 242
permanent employment during 279
Daikin transfer of inverter technology to Gree Electric Appliances Inc. 95
Danyang Eyewear Market 157–8
Democratic Republic of Congo 159
Denmark 129, 133, 139, 141
introduction of wind power to 127
installed capacity of 129
Dfsw market share of 130, 136, 138
DHIDCW exclusive supply to Sinovel 135
direct network effect causes of 117
concept of 113
eBay 34, 158
Economist, The 2
electronic manufacturing service (EMS) 101
outsourcing of parts to 105

demand information 121
exploration of 149, 160–61, 171
income gap in 160
low-income consumers in 122
potential demand in 149
Enercon market share of 136
energy 14, 307, 309, 318–19
coal 309–10, 312–14, 316–17
demand for 309–10
domestic supply of 313
mines 310, 314–15, 319–23
capital investments in 316, 320–21
order meeting 322–3
pricing 308, 315, 318–19, 321–4, 326, 328
allocation system 315, 319, 322
government intervention in 316–18, 321–3, 330–31
surcharges 324–6
use in power plants 318, 322–4, 326, 328
consumption 307–12
elasticity of 310–11
reduction of 307
dependence on foreign supplies of 309, 312–13
natural gas 328, 331
liquid (LNG) 328
nuclear 329
oil crude 312–13
photovoltaic (PV) 68–70
generators 18, 52
industry 68–9
depression of 69–70
role of manufacturers in 68, 70
value chain of 68–9
production of 312–17
Engineering, Procurement, and Construction Contractors (EPCCs)
examples of 68–9
use of PV components 68
entry costs 40, 92
of R&D 98

Mariko Watanabe - 9781783476428
Downloaded from Elgar Online at 12/18/2018 06:27:08PM
via free access
Index

reduction of 38
as potential cause of vigorous entry 38
impact of platform use on 34–7 modularization for 92
Ericsson 104
European Union (EU) 18, 90, 115, 230
Eurozone Crisis (2009–) 300
excess entry concept of 7

Farm Production Cost and Profit Survey 270
FAW-Daewoo parts supplied by 65
FAW Group Corporation 65 joint venture activity of 65
Federal Republic of Germany (West Germany) 216
Finland 141
firm costs 22
fixed cost 35, 135, 275 concept of 32–3 examples of 33 labor as 278, 287–8 marketing 113 R&D 113, 168 reduction of 34, 37, 40, 120 use of transaction platforms in 34, 120

food prices 40
Ford Motor Company 62, 65
foreign direct investment (FDI) 5, 26 inflows of 218–19
Foxconn 101
France use of FIT in 142
Fujitsu General launch of Plasma Display Panel (PDP) (1997) 81

Galanz Enterprise Group 85
supplying of inverter compressors 96
Gamesa 133, 140
market share of 129, 136
Gdupc expansion of 138–9
Geely 209
market share of 200
merger with Volvo 1–2
General Electric (GE) 145
market share of 129, 136
General Motors intellectual property right infringement dispute with Chery Automobile Co., Ltd. (2003) 66
Genesis Microchip 89
German Democratic Republic (East Germany) 215
Germany 69, 131, 227 introduction of wind power to 127 installed capacity of 129 use of FIT in 131, 142
Ghana 159
Gini coefficient 186, 204, 207
Global Financial Crisis (2007–09) 300 globalization 12, 68, 101
GM Daewoo joint venture activity of 65
Goldwind 129
acquisition of Vensys 141 expansion of 138–9 gross profit of 144 market share of 129–30, 136, 138 unit investment of 143

governmental intervention measures for 244, 246–7 $baoliang fangjia$ 250
Governor Responsibility System 251 indirect 252–3 labor movement in 265–9 liberalization of 253
maize 260, 270 domestic exports of 257 international price of 257 single-cross 261
market reform 242 marketing 246, 269
national stockpile 250–53 price 241–2, 246, 250–51, 253, 257, 265–70 contract 250, 252 domestic 254, 257 negotiated 249–50

Mariko Watanabe - 9781783476428
Downloaded from Elgar Online at 12/18/2018 06:27:08PM
via free access
The disintegration of production

purchasing 245
rationing 245, 247
subsidies 248, 253
procurement grain 246
procurement quota 248
producer NPCs of 260
production methods 254
rice 260, 270
hybrid indica 261
pricing of 254
soybeans 260
domestic pricing of 254
import quota for 257
staple grains 248
wheat 257, 260, 270
yields 261, 263
Great Leap Forward (1958–61) 242, 245, 309
Engel’s coefficient during 242
Gree Electric Appliances Inc. 85, 96
Chinese AC (air conditioner) market share of 95
transfer of inverter technology from Daikin 95
Guinea 159
Haier Group 85, 91, 228–9
acquisition of SANYO refrigerator and washing machine division (2011) 233
technology introduced by 233
Harbin DongAn Engine Manufacturing Co., Ltd. 59
parts supplied by 65
Herfindahl–Hirschman index (HHI) 204, 207
Hino Motors, Ltd. 62
Hisense Co., Ltd. 91
acquisition of Xuehua 229
entry into refrigerator market 229, 231
market share of 229
technology introduced by 232–3
Hisense Kelon 233
Hitachi, Ltd. 81, 86
Shanghai Hitachi contract with Galanz 96
Hon Hai Precision Industry 54
Honda Motor Co., Ltd. 62, 197
joint venture activity of 197
Hong Kong Skyworth Digital Holdings Co., Ltd. (Skyworth) 91
horizontal differentiation 168–9
concept of 166
use in specialized market systems 166–7
Htblade
products sourced from 133
Huaing
acquired by Midea Group 229
Huawei Technology 120
offices of 101
Hyundai Motor Company 62
Hyundai Pony 64
market share of 195, 200
use of parts and technical support from Mitsubishi Motors Corporation 64
Imperial China
Ching Dynasty (1644–1912) 156
India 2, 10, 31, 37, 129, 140, 181, 185–6, 294–5
educated labor in 297
market distribution in 186
monthly average wage in 297
population of 7
shanzhai firms active in 101
wind turbine industry of 139
indirect network effect 119, 168, 171–2
impact on formation of specialized market system 164
Indonesia
monthly average wage in 297
Industrial and Commercial Bank of China 87
industrial dynamics 30–31
industrial organization theory 26–7
market entry 31–2
market exit 31–2
industrialization 1, 5–6, 149, 160, 244
financing of 20
influence of introduction of foreign technology on 213, 215–16
inflation 87
attempts to control 318
informal economy shanzhai industry as example of 122
innovation 77, 94
architecture
Index 341

kanban system 54
Tv market of 81, 86
LCD and PDP market share 81–2, 86
Japan Automobile Manufacturers Association
World Motor Vehicle Statistics 61
JinkoSolar
PV cell production facilities of 69
Kelon 228–9
Konka Group 81, 91
Kuomintang
labor systems under 278
Kyocera Corporation 68
value chain of 69
labor 20, 275–6, 281, 287, 291, 293, 299
cost 33, 275–8, 299–300
as example of fixed cost 32, 278, 287–8
as example of variable cost 284, 287–8
during planned economy era 275–6, 278
during reform period 275–6, 278
flexibility of 276
distribution of 278
division of 102
educated 294–5, 297
entry of rural migrant workers into urban labor market 277, 279–80, 284–5, 287–9, 295, 300
household registry system 284–6
flexibility of 276, 285–6
in SOEs 278–81, 287, 298–9
marginal productivity of 291, 293
market 20
reform 287, 290, 298
movement in grain industry 265–9
permanent 279
shortage of 20
social security system development of 281, 284
targeting of rural migrant workers 285–6
surplus in agricultural sector 244, 261, 266
unemployment insurance 281

design 76
product 76, 95
competition-nexus 76
concept of 75–6
potential impact of vertical disintegration on 76–7, 93
process 76
product 76, 78, 81–2, 92–6 98
Institute for Industrial Economies and Technology 12
integrated circuits (ICs) 34
baseband 36, 58, 103–5, 114–15, 121
GSM-based 104, 115
design houses 89, 91
Taiwanese 92–3
US 91
platform 92
radio frequency 58
suppliers 57–8
upstream design process 112
use in cell phones 89, 115
use in TVs 88–9
image processing IC (LCD TV controller) 89–91
LCD driver IC 89
LCD monitor IC 89
Intel Corporation 91
chipset manufactured by 113
intermediate goods production 39
Iran
Tehran 163
Bazar-e Bozorg 163
Italdesign Giugiaro 59
Italy 61, 69, 216
JAC 209
market share of 201
Japan 1–2, 6, 10–11, 31, 37, 51, 78, 140, 146, 197, 227, 254, 294–5, 297
AC (air conditioner) market of 94
arable land of 263
automobile market of 195
average consumption level of rural population 183
average consumption level of urban population 182–3
Engel's coefficient during 243
GDP per capita 10
government of 11
grain yields of 261

Mariko Watanabe - 9781783476428
Downloaded from Elgar Online at 12/18/2018 06:27:08PM via free access
The disintegration of production

unions 286–7
relationship with CCP 286
urban system
fixed labor (Gudinggong) 278
LDK Solar Co., Ltd.
growth of 69
Lewis, Arthur
dual economic model of 242–3, 265–6, 268
LG Corporation 81, 104
joint venture activity of 229
market share of 101
Liebherr
technology sourced from 227
Lifan 209
market share of 201
Little Swan
technology introduced by 232
LM
products sourced from 133, 140, 146
low price phenomenon 14, 26, 40, 98
LZFRP
products sourced from 133
macroeconomics 180
Malawi 159
Malaysia 61
monthly average wage in 297
market economy 6, 38
market multiplicity 180
market stratification 180–81, 185, 189, 197, 200
lower market layer 181–2, 185–6, 189, 207, 209
regional 184–6
upper market layer 180–81, 187, 189, 207
vertical 191
MediaTek (MTK) 36, 58, 115–16, 118, 120–21
baseband IC 103–4, 110
GSM-based 104
customers of 91–2
personnel of 117
share in Chinese GSM-based baseband IC market 115
Meiling 228–9
joint venture activity of 227–8
production lines and technology introduced by 227
mergers and acquisitions (M&A) 139, 141, 229
technology acquired during 143
use of acquired brand names following 229
Mexico
monthly average wage in 297
microeconomics 4, 11, 38
perfect competitive market 38
Midea Group 85, 96, 226
acquisitions made by 229
joint venture activity of 95, 232
market share of 229
production of rotary compressors for AC 95
technical advice provided by Toshiba Corporation to 231–2
Mitsubishi Chemical 226
Mitsubishi Electric Corporation
value chain of 69
Mitsubishi Heavy Industry 140
Mitsubishi Motors Corporation 56
joint venture activity of 65
personnel of 57
provision of parts and technical support from 64
modularization 37
in flat panel TVs 94
in inverter AC 94–6
use in entry cost reduction 92
Motorola Corporation 104, 117
Mstar 89
annual reports of 92
customers of 91
Multibard
acquired by Suzlon 141
multinational companies 102, 139–40, 143, 160–61
Mywind
expansion of 138–9
unit investment of 143
Namibia 159
National BlueStar 226
National Development Bank 320
National Planning Committee
China Industrial Development Report
1997 12–13
Index

NEGMicon acquired by Vestas (2003) 141
NEOPLAN Bus GmbH 62
Nigeria 159
Nissan Motor Co., Ltd. 62, 197, 201
market share of 200–201, 203
Nokia Oyj 15, 104, 120, 122
cell phones manufactured by 108
market share of 101–2
product lines of 118
North Huaqiang Market 107, 114, 118–19, 121, 161
submarkets of 159
ordinary least squares (OLS) 290
Organization for Economic Co-operation and Development (OECD) 294–5
estimation of producer nominal protection coefficients (producer NPC) 257, 260
Producer and Consumer Support Estimate Database 260
original design manufacturing (ODM) specialized outsourcing of parts to 105

Panasonic Corporation 86, 233
market share in Japan 81
monopolization of PDP production 89
value chain of 69
perfect competition market theory 27, 37–8
microeconomic 38
Philippines monthly average wage in 297
Philips 91
monopolization of PDP production 89

Pininfarina 59
platforms 113, 122
concept of 34, 113
impact on entry costs 34–7
impact on product prices 35 fixed 39
technology 34, 113, 120
in value chains 115
transaction 34–5, 113–14, 120, 163, 168

concept of 114
examples of 118–19
purchasing and money platform (PMP) 119
in value chains 115, 118–19
specialized market systems as 162–4
use in shanzhai (guerrilla) cell phone industry 113, 120–21
price competition 6, 35, 44–5, 132, 164, 166
impact on price of PCBA 121
promotion of 131
relationship with vigorous entry 31
price mechanisms 31
printed circuit board (PCB) 104–5, 161
+ assembly (PCBA) 105, 107, 114, 117–18, 120
impact of price competition on price of 121
project development 111–12
shared 117
hardware design 115
hardware reference design 105
product price impact of platform use on 35 fixed 39
property rights approach concept of 29
purchasing power parity (PPP) 182, 241

Q-Cells acquisition of REC 69
bankruptcy of 70
parts produced by 69
Qingdao Haier joint venture activity of 227–8
production lines and technology introduced by 227

Rakuten Market 158
Realtek Semiconductor Corp. 89
refrigerator manufacture industry 214–15, 226–7, 229, 233
energy-saving models 230
impact of technology introduction on 214–15, 228
market share in 228–30
multi-function models 229–30, 234

Mariko Watanabe - 9781783476428
Downloaded from Elgar Online at 12/18/2018 06:27:08PM
via free access
The disintegration of production

production lines introduced in 227
twin-fan models 232–3
Renesus 89
Renewable Energy Corporation (REC)
acquired by Q-Cells 69
renewable portfolio standard (RPS)
131–2, 142–3
upgrading of 143
Repower
acquired by Suzlon 139
research and development (R&D) 36,
77, 117, 121, 130–32, 135, 169, 215
costs of 76, 112, 217, 234
entry cost 98
fixed 113, 168
departments/facilities 103, 107, 127,
218, 233
internal 33
Ricardian trap 266
Ricardo, David 59
Rolls-Royce Motor Cars 61
Rongji, Zhu
anti-smuggling campaign of (1996) 88
Royalstar
acquired by Midea Group 229
Samsung Group 15, 89, 91, 93, 104
cell phones manufactured by 108
market share of 101
Sanding Group 168
SANYO Electric Co., Ltd. 226
technology sourced from 233
transfer of refrigerator and washing
machine division to Haier
Group (2011) 233
scattered market share 74, 84
SEAT, S.A. 65
seedbed effect 179, 182, 185–6, 203
creation of 188–9
semiconductors 36, 91
chipsets 37
design houses 85
Shanghai Volkswagen 63
shanzhai (guerrilla) cell phone industry
29, 37, 92, 101–3, 107, 115, 121–3,
166–7, 169–70
baseband IC vendors 104, 108, 110
consumer behaviour 110
development project 111–12
market share of 101–2
mobility of firms 103
specialized markets for 114
system integrators in 101
use of platforms in 113, 120–21
value chain of 105–8, 112, 118–20
technology platforms in 115
variant 117
transaction platforms in 115,
118–19
Shaoxing China Textile City 157
shared mold (SPSM) 115, 117–18
use in cell phones 118, 121
Sharp Corporation 68–70, 89
value chain of 69
Window LCD TV (1995) 81
Shenyang Aerospace Mitsubishi
Engine Manufacturing Co., Ltd.
(SAME)
parts supplied by 56–7, 59, 65
personnel of 57
Shenzhen North Huaqiang Market
157, 161, 163
Sichuan Changhong Electronic Co.,
Ltd. (Changhong) 81, 87, 91
Siemens AG
subsidiaries of 135
Sinoma
gross profit of 144
Sinovel
expansion of 135
market share of 130, 136, 138
subsidiaries of 135
small- and medium-sized enterprises
(SMEs) 101, 103, 110, 112, 141,
149, 169, 171
development entry barrier 103
fixed costs of 113
role in development of shanzhai
system 122
second-tier 142
solar power 14
Sony Corporation 15, 36, 81, 89, 91, 93
South Africa 159
South Korea 89–90, 229
Seoul 163
Don Daemon Market 163
Soviet Union (USSR) 61, 215–16
Spain 65, 69, 129, 131
use of FIT in 131, 142
wind power industry of installed capacity of 129
Special Economic Zones 280
technology introduction in 221
use of temporary employment system in 280
specialized market system 158–60, 168, 170–71
as transaction platforms 162–4
benefits for emerging markets 160–61
dynamic development of 162, 171
examples of 156
impact on Chinese manufacturing sector 164, 168
market entry 167–8, 171
use of horizontal differentiation 166–7
use of vertical differentiation 169
origins of 149–51, 156, 159, 162, 170
impact of indirect network effects on 164
Spreadtrum 105, 120
baseband IC vendor for shanzhai cell phones 108, 110
manufacture of GSM-baseband IC 104
state-owned enterprises (SOEs) 7, 13–14, 18, 33, 87–8, 140, 222, 227, 234, 275
decline of 13
entry into color TV market 87–8
‘iron rice bowl’ phenomenon 279
labor in 278–81, 287, 298–9
rural 279
Suntech Power Holdings Co., Ltd. 69
supply chain governance 51, 53
asset creation 53
black boxes 66–7
client/supplier relations 56
outsourcing 56–8
structures of 53–4
supportive value chain 18
surface mount technology (SMT) 107, 119
Suzlon 133
acquisitions made by 139, 141
establishment of (1995) 139
expansion of
impact of transportation costs on 139–40
facilities of 139
market share of 129
subsidiaries of 135
Sweden 1
Taiwan 89, 105, 115
fabless design houses in 91
Takayanagi, Kenjiro
development of imaging disk and projection apparatus using CRT (1927) 78
Taobao 158
Taobao Net 159
Taobao Village 159
TCL/Alcatel
offices of 101
TCL Corporation 85, 91–2, 96
technology introduction 214–19, 221–2, 231–4
as cause of vigorous entry 213, 228
decision rights 221
economic impact of 217, 221
influence on dispersed market structure 234
influence on industrialization 213, 215–16
intra-firm 219
promotion of market entry 221–2
regulation of 221–2, 226
technology transfers 5, 95
television (TV) 19, 57, 74–5, 92
cathode ray tube (CRT) 15, 57, 81, 87–9, 92–3, 214
architecture of 88
color (CTV) 37, 77–8, 81, 84, 89–91, 94
flat panel 15, 75, 81, 84, 94
modularization in 94
Liquid Crystal Display (LCD) 81–2, 84–6, 88–9, 92, 98, 214
architecture of 88
Light-Emitting Diode (LED-LCD) 81
supplies of 89–90
vertical integration in market of 91
Organic EL 81
penetration ratio of 78
The disintegration of production

Plasma Display Panel (PDP) 81, 86, 88–9
pricing conflicts 87–8
rear-projection 81
surface-conduction electron-emitter
display (SED) 81
use of ICs in 88–9

Thailand
Bangkok 254
monthly average wage in 297

Tianjin Wireless Factory
TV development activity of 78
top brand cell phones
consumer behaviour 110
production of 108, 110
smartphones 214–15
value chain 104–5, 107–8

Toshiba Corporation 86
joint venture activity of 95, 232
technical guidance provided to
Midea Group 231–2
technology provided by 232–3
Toshiba Semiconductor
contract with Galanz 96
total factor productivity (TFP) 21
concept of 13
township and village enterprises
(TVEs) 221–2, 227, 234
concept of 279

Toyota Motor Corporation 62, 197, 201
joint venture activity of 197
market share of 200–201, 203
transaction costs 52, 54, 172
concept of 52–3
origin of concept of 29
use in price mechanisms 31

Trident Microsystems 89
bankruptcy of (2011) 91
Tritec Motors 65
turn-key solution 36

TWEA
established by Suzlon 135

United Arab Emirates (UAE)
Dubai 159–60

United Kingdom (UK) 59, 61, 65, 216
first TV broadcasting (1936) 78
United States of America (USA) 1, 18, 61, 89–91, 115, 129, 133, 146, 158, 197, 227, 254
automobile industry of 61
Department of Agriculture (USDA) 247
introduction of wind power to 127
installed capacity of 129
TV market of 81
urbanization 160, 191
impact on diffusion rate 191
value chains 6, 58–9, 63–4
cell phone
shanzhai 105–8, 112, 115, 118–20
top brand 104–5, 107–8
Chinese 57
global 4, 51, 53–4
governance 52, 55–6
captive 55, 66
hierarchy 54
market 54–5, 68–9
modular 54–5, 58
relational 55, 59, 64–6, 68
supportive 58, 64–8, 70
use of vertical integration to
graduate from 66
variable cost 39, 275
concept of 33
examples of 33
labor as 284, 287–8

Vensys
acquired by Goldwind 141
vertical differentiation 169
concept of 168–9
vertical disintegration 6, 26–8, 30–31,
37–8, 40, 74
concept of 3
in Chinese domestic wind turbine
industry 136, 146
potential impact on innovation 76–7,
93
vertical integration 22, 26, 29–30, 52–4,
104
downstream 68–9
in LCD TV market 91
use in graduation from supportive
value chains 66

Vestas 133, 140, 143, 145
acquisition of NEGMicon (2003) 141
market share of 129, 136
refusal to issue technical licenses 141
unit investment of 143
vigorous entry 3–4, 10–11, 14, 18, 26, 39–40, 52, 74, 84, 98, 164
as surging phenomenon 11
as temporary phenomenon 7
causes of 19
as desire to reduce entry cost 38
introduction of foreign technology 213, 228
relationship with low pricing 85, 96
relationship with price competition 31
Visteon, Yanfeng 57
Volkswagen
joint venture activity of 197
market share of 195, 200
Volvo
merger with Geely 1–2
wages 14, 40, 269
fixed-type 275, 294, 299
flexibility of 276
legal minimum 243
low 20, 35
mechanisms for setting 20
monthly average 297
of rural workers 244, 268
of urban workers 241
real annual 243
growth 290
real daily 269
subsistence 244, 266, 269–70
variable 294
Walmart 160
as example of merchant-mode intermediary 114
WDST
established by Siemens AG 135
Williamson, Oliver E. 29, 52, 54
wind power 14, 127, 141
blade suppliers 133, 135, 144, 146
development of industry 127–9, 131–3, 135
impact of transportation costs on 139–40
development of supply networks 140
market share 136
installed capacity of 127–9, 131
integrated control technology 141
MW-class turbines 127, 140
outsourcing of parts manufacturing 140–41
R&D activity 127, 130–32
wind turbine industry 131–2, 136, 138–41, 143–5
development of 145
investment cost in 143
vertical disintegration in domestic Chinese industry 135–6, 146
Wintec
acquired by Suzlon 141
Winwind
acquired by Suzlon 141
World Trade Organization (WTO) 133
Chinese accession to (2002) 15, 222, 226, 257
Wuling
market share of 195
XOCECO 89, 91
Xuehua
acquired by Hisense Co., Ltd. 229
Yahoo! Inc.
Yahoo Auction 158
Yearbook on the Farm Production Cost and Profit Survey 268
Yiwu China Commodity City (Yiwu Market) 156–9, 161, 163–5, 168–9
as first-tier wholesale market 157
One Village One Product scheme 164
Taobao Village 159
Yuan, Longping
hybrid rice variant developed by 261
Zambia 159
ZTE Communications 117, 120
offices of 101