agents, CGE model 126
agglomeration effect, FDI 217
Agricultural Bank of China 248
agricultural products
farmers’ income 45
reform of price and distribution systems 55
rural-urban income disparity 55
self-sufficiency policy 310
agriculture
competitiveness 77
earnings from labour 135
productivity 103
trade liberalization 142, 144, 145
Anhui 25, 83, 217, 246, 311
anti-comparative advantage development strategy 51
artificial economies, reversion 80–1
Asia, relative trade openness 14
attitudes, American investors 197–8
balance of payments, CGE model 129
banking system, Indonesia 260–1
behaviour, internal trade, provinces 17
Beijing 26, 60, 72, 77, 80, 109, 176, 199, 224, 267
beneficiaries, industrial investment policy 69–70
births, numbers allowance 180
borders, openness of 5
capital
old and new 124–5
see also financial openness; human capital; rates of return to capital
capital stock, estimation process 114–15
central credit allocation plan, dismantling 255
central regions
income 248
regional disparities 46, 47, 48
intra-regional disparities 39
investment
spread effect 256–8
state-dominated 52
TVEs 245, 246, 275–7
centrally planned economies
investment policy, China 51, 52
productivity 102
CGE model, impact of WTO accession on income disparity 121–46
Chen Guodong 74
Chen Yun 74
China Industrial Economic Statistical Yearbooks 20, 95
China Regional Economy: A Profile of 17 Years of Reform and Opening Up 20
China Statistical Yearbooks 20, 95
cities
FDI (1987–1997) 196
province-level status 246
co-operative medical schemes 178
Coastal Development Strategy 53, 57, 74
coastal provinces
economic growth 59–60
economic indicators 266
economic transition 150
FDI 19, 195, 196, 199
IMR 169
investment
financing of 254–5, 275–7
policy discrimination 70–1
spread effect 255–6
TVEs 245, 246
labour costs 258
openness
average total 18
internal and exterior 17
localization 24
will for 23–4
per capita income 247–8, 304
Index

collective sector, wage income 42
communist regime, industry 88–9
comparative advantage
  development strategy 50–1
  exploitation of 90
computable general equilibrium models
  see CGE model
country size, openness 2, 12
credit allocation
  dismantling of central 255
  interest rate mechanism 260
credit programme, subsidized 260
deflation, convergence results 62–4
definitions, CGE model 126–7
demography, openness 2
dependence 185
depreciation rates, sensitivity analysis 114–15
deregulation
  central provinces 257
  financial sector 259
  loan-deposit ratio (RCCs) 249
developing countries
  exchange rate policy studies 300
  FDI, 1980s 197
development
  and openness 12
  see also regional development
diarrhoea, IMR 184
differential rates of return theory 197
direct effects, external openness on IMR 170–1, 181–3
disparity index, per capita GDP 36
discussion
  provincial development, 1990s 80–3
domestic loans
  rural enterprises 251
state-owned enterprises 252
drugs, overprescription of costly 184
east–central west, income inequality 157–60
eastern regions
  income growth 162
  regional disparities 46, 47, 48
  intra-regional disparities 39
  market opportunities 52–3
  social development 53
economic theory, FDI 227
economic decentralization 90
economic efficiency 145
economic growth
  divergence and spillover effects, 1990s 80–3
  end of redistribution 68–75
  FDI 221–40
  human capital accumulation 218
  income distribution 33
  measured trends 75–80
  progress and paradox 57–64
  redistributive system 64–7
  TVEs 244–6
economic indicators, provinces (1995) 266–8
economic performance, and exports 278–95
economic reform 33–55
  conclusions and recommendations 54–5
  erosion of redistributive system 63–4
  income inequality 150
  openness 27
  ownership, industries 148, 149
  regional disparities
    development strategy 50–3
    development, study of GDP per capita 37–40
    income, changes in 40–50
    trends since 35–7
  rural-urban income gap 151
  success 102
technical efficiency 102
economic structure 130–8
economic transition, income inequality 147, 148–51
economy (Chinese)
openness of 1–27
sectoral structure 130–1, 132–4
size and FDI 214, 215
spatial problems facing 83
education
IMR 171, 180–1
and income 150, 160
levels, rural–urban disparity 313
return rates to capital 206–7, 208–9,
210–11, 213
technical progress 232
empirical model, productivity growth
106
employee bond 250
employment
exporters 282, 285
income inequality 160–1
urban China 149
endogenous growth models
human resources 194
technical progress 226, 227
endogenous risk factors, IMR 170
enterprise income 135
equilibrium, CGE model 128–9
equity-bond instrument 250
exogenous risk factors, IMR 170
export dependency 130–1
export histories 291–4
export promotion regime 123
export rate, openness 5, 6
exporters, economic performance
analysis 279–95
characteristics of firms 281–3, 284,
285
comparison with non-exporters 285–7
conclusions 294–5
data and sample characteristics 280–1
learning from exporting 287–94
exports, agricultural products 310
external openness
IMR 170–2, 173, 174, 181–3, 186,
192
provinces 17
extra-budget public sector, CGE model
128
extra-budgetary funds 172
factor prices, changes, WTO accession
144
family characteristics, IMR 177–81
family composition, income 180
family farming income 41–2, 43, 45
farm households
non-agricultural economic activities
249
non-farm incomes 154
per capita income 41–2, 43, 45, 54, 55
fastest growing provinces (1978–1995) 82
FDI see foreign direct investment
financial openness
compared to other countries 9, 11
estimating 4
evolution of 9, 10
level of development 12
observed 3
policies 16
provinces 18, 19
financial sector, deregulation 259
financial system, rural China 248–50
financing of investments
informal 250
rural enterprises
improving 258–9
regional contrast 253–5
TVEs 275–7
fiscal policy, domestic 145
five-year plans 89, 90, 186
fixed capital formation 249
fixed investment, FDI 214
folk finance 250, 259, 261
foreign direct investment (FDI)
regional distribution, factors that
determine 213–18
attracting 87, 90
evolution of, by group of regions 19
human capital and catching up
introduction 221–2
theoretical aspects 226–32
model and econometric results
233–40
conclusion 240
regional distribution 194–218
determinants, literature review
196–8
factors behind growth 198
rates of return to capital 199–213
conclusion 218
rural enterprises 251–252
Index

Foreign Joint Venture Law 198
foreign trade
FDI 216-17
population 2
provinces 17
foreign-owned enterprises
employment 198
gross output value, industry 148, 149
investment, rural enterprises 251
freight, FDI 214, 217
frontier model, productivity growth 104-16
Fujian 25, 26, 67, 76, 90, 199, 217, 246
Fujian 107
funding, rural enterprises 251-3
Gansu 1, 23, 25, 89, 175, 214, 247
GDP deflators, convergence results 62
geographic orientation, openness 1
geographical groupings, TVEs 246-8
geographical origin, FDI 223-4
geographical position, openness 17, 18, 23
Gini coefficients
farm household income 42, 43
per capita GDP 36, 37, 38, 39-40
per capita income 49, 50
rural China (1978-1997) 151
WTO accession 142
government, CGE model 128
government subsidies 260
grain, prices and distribution 44, 55
Great Leap Forward 51, 89
gross output value
exporters 282, 285
industry 148, 149
growth accounting method 104, 105
growth with equity model 34
growth first, distribution next 33
growth poles 81-2
Guangdong 25, 26, 70, 90, 107, 199, 246
Guangxi 175, 176, 247
Guizhou 20, 89, 175, 176, 217, 247
Hainan 20, 77, 93, 107, 214, 247
health care
income 183-4
supply, IMR 175-6
health insurance, and income 178-80
health status
improvement in 167
income distribution 177-8
heavy industry 51, 52, 89
Hebei 77, 80, 247
Heilongjiang 23, 75, 93, 217, 246
Henan 83, 89, 176, 217, 246
higher education, return rates to capital 210-11, 213
host country policies, FDI 197, 198
household production income 154
household responsibility system 41, 311
households
income 127, 131, 135, 136-7
welfare changes 143
see also farm households
Hubei 25, 83, 89, 217, 246
human capital
and growth, provinces 222-4, 225, 226
growth process 194
regional distribution, FDI 213-18
return rates to capital 212, 213
variables 1994 202-3
Hunan 20, 25, 217, 246
import protection 130, 132-4, 143
imports
agricultural products 310
CGE model 125
IMR see infant mortality rates
incentives, FDI 197, 198
income
family composition 180
growth
rural China (1978-1997) 164-5
urban China (1978-1997) 165-6
health insurance 178-80
IMR 171-2, 183-5
provincial 65-6
see also per capita income
income disparity, impact of WTO accession 121-3
CGE model 123-30
data 130
demands 126-7
equilibrium and macro closure 128-9

Mary-Françoise Renard - 9781843765523
Downloaded from Elgar Online at 12/26/2018 07:20:21AM
via free access
government and extra-budget public sector 128
income distribution 127
production and factor markets 124-5
recursive dynamics 129-30
trade 125-6
economic structure, openness and income distribution 130-8
base case projections and simulations design 138-40
major simulation results 140-5
conclusion 145-6
see also rural-urban income disparity
income distribution 130-8
CGE model 127-8
economic growth 33-4
health status 177-8
income inequality, survey 147-62
economic transition 148-51
description of data 152-3
decomposition analysis of income components 153-5
personal characteristics 155-61
income growth
rural China (1978-1997) 164-5
urban China (1978-1997) 165-6
conclusions 161-2
indicators, of openness
calculating 3-4
normalization equations 11-14
provinces
estimation of 21-4
relevance of 18-21
results according to localization 24-6
indirect effects
external openness on IMR 171-2, 181-3
FDI 230
indirect taxes, CGE model 128
individual wage income 154
Indonesia, banking system 260-1
industrial organization theory 227
industrial output, Shanghai 73, 78
industrial policy 54
industrial progress, IMR 170-1
industrialization, FDI 214, 216
industry competitiveness 78-80
growth of tertiary 55
heavy 51, 52, 89
investment policy 69-70
ownership structure 148, 149
productivity 103
regional development disparities 37-9
spatial dynamics 88-91
specialization 93-4
trade balances 131, 132-4
infant mortality rates (IMR)
introduction 167-8
evolution of 168-9
determinants
analysis of 181-5
specification and data 174-81
theoretical framework 170-3, 192
conclusions 186
informal credit markets 250, 255
informal investment, financing 250
infrastructure, FDI 198, 214, 217
Inner Mongolia 217, 247
integration, spatial consequences of 94
interest rate mechanism, credit allocation
260
interest rates, informal credit markets 250
interior openness, provinces 17
internal rural income disparity 47, 48
internal trade
liberalization 2
provinces 16-17
international trade
openness 167-8
regional specialization 87-98
inverted-U pattern, income distribution 33-4
investment
changes in regional distribution 68-9
coastal and central provinces 246
different forms of ownership 245, 270-4
progressivity 69-71
redistribution of resources 51, 54
regressiveness 71-2
rural enterprises
performance 250-3
regional contrast in financing of 253-5
spread effect 255-8
Third Front policy 89
see also foreign direct investment
investment rate
per capita GDP (1978) 66–7
per capita GDP (1995) 72
Isard indicator, regional specialization 92–4, 100–1

Jade Gate 1
Japan, ‘growth with equity’ 34
Jiang Zemin 74
Jiangsu 25, 64, 70, 78, 79, 82, 88, 107, 199, 246
Jiangxi 25, 26, 246
Jilin 217, 246
joint enterprises, gross output value, industry 148, 149

knowledge, FDI 229

labour costs
coastal provinces 258
FDI 198
labour force, CGE model 125
labour income
agriculture 135
farm households 41–2, 43
labour productivity, lagged exports 290
lagged exports 288, 289–90, 291
landlocked countries, trade openness 12
landlocked provinces
evolution of FDI 19
openness
average total 18
interior and exterior 17
localization 24
will for 23–4
protectionism 26
Latin America
financial openness 11
relative trade openness 14
leap forward development strategy 51, 89
learning, from exporting 287–94
learning by doing 230
learning by watching 230
legal structure, FDI 198
Liaoning 88, 217, 224, 246
life expectancy 167, 175, 185
linear programming models 105
loan rates 260
loan-deposit ratio (RCCs) 249
loans, rural areas 249
localization, openness 23, 24–6
location
income inequality 161
political strategies on industrial 88–90
Lorenz curve, income inequality 135

macro closure, CGE model 128–9
macroeconomic indicators, FDI 197
Malmquist productivity approach 105
manufacturing, shifts in competitiveness 77
Maoist development strategy 35, 88–9
market economy
Chinese transition to 34, 87, 147
introducing elements of 89–90
market size, and FDI 214, 215
market-determined ownership 262
market-driven funds, rural collectives 256, 257–8
market-oriented reform measures 52
markets, openness of 5
metropolitan spread 82–3
MFA see multi-fibre agreement
microeconomic determinants, FDI 196–7
mining resources, openness 12, 22–3
motivation, American investors 197–8
multi-fibre agreement (MFA) 126, 138, 142, 144

national income, Shanghai’s share 73–4
natural resources, FDI 199
neighbouring coastal provinces
evolution of FDI 19
trade openness 17–18
Ningxia 23, 64, 65, 67, 75, 94, 217, 247
nominal effective exchange rate 302
nominal tariff rate 131, 132–4
non-exporters, and exporters,
performance comparison 285–7
non-public sector
employment 149
gross output value, industry 148, 149
income inequality 150
normalization equations, rate of
openness 11–14, 20, 22
northeast regions
economic indicators 267
investment priority 65, 67
northern regions, industrial competitiveness 78

observed openness 2–3, 15
  in different provinces 16–18
  evolution of 5–9
openness 1–27, 130–8
  ambiguities of 2–5
  compared to other counties 5–16
  conclusions 26–7
  of different provinces 16–26
  evolution of disparities 91–8
income 177
  international trade 167–8
see also external openness
openness policy
  Asian norm, short or beyond 11–16
  measuring 3–5
  provincial indicators
    estimation 21–4
    relevance of 18–21
    results by localization 24–6
  vulnerability 27
ordinary trade regime 123
orphan provinces 67, 83
outpatient health care demand 179
outward-looking policies 3
ownership
  Chinese industry 148, 149
  investment
    by different types of 251
    in different forms of 245, 270–4
  market determined forms, rural enterprises 262
  summary statistics on exporters 284
People’s Bank of China 261
people’s commune system, farmers’ income 41
per capita GDP
IMR 172
investment rate
  (1978) 66–7
  (1995) 72
provinces 65–6
  rank order reversals 61–2
real growth (1978–1995) 75–6
redistributive flows 70
regional convergence 58–9
regional development disparities 36, 37–40
vaccination levels 176
per capita GNP, spatial inequality 151
per capita income
  central provinces 248
  coastal provinces 247–8
  education levels 313
  and openness 177
  regional disparities 36, 40–50, 54
rural-urban disparity
during phases of exchange rate policy 301–5
relationship between real effective exchange rate and 305–12
personal characteristics, income inequality 155–61
petroleum resources, openness 12, 22–3
plateauing phase, infant mortality 169–79
political desire, for openness 20, 23–4
political strategies, industrial location 88–90
poorest regions
  1950s and 1960s 83
  (1995) 81
IMR
deterioration 169
  health expenditure 176
population, foreign trade 2
portfolio diversification theory 197
positive externalities, FDI 230
poverty, IMR 177–8
PPP see purchasing power parity
preferential policies, FDI 197, 198
prescription, costly drugs 184
price changes, technological progress 116
price system, redistributive 63, 72–5
prices, agricultural, rural-urban income disparity 55
primary education
  return rates to capital 206–7, 213
technical progress 232
primary industry, regional disparities 37, 38
Index

private enterprise  
FDI 215, 216  
gross output value, industry 149  
interest rates 250  
production brigades 41  
production technology, CGE model 124  
productivity, and social development 53  
productivity growth 102–17  
modelling  
theoretical models 104–5  
empirical model 106  
data issues 107  
estimation results 108–13  
sensitivity analysis 114–15  
comparison, growth accounting method 113–14  
summary and conclusions 115–16  
previous studies 103–4  
profit maximization 260  
progressivity, investment policy 69–71  
property income, farm households 42, 43  
protectionism, regional 25, 26, 91  
provinces  
economic growth 57–83  

economic indicators (1995) 266–8  
human capital and growth 222–4, 225, 226  
income differences 42, 43, 49  
infant mortality rate 167–87  
regional distribution, FDI 194–218  
relative openness of 16–26  
TVEs 246–8  
see also individual provinces; regional development; regional disparities; regional specialization  
public health expenditure, IMR 176, 186  
publicly-owned sector, employment 149  
Pudong New Zone 74  
purchasing power parity (PPP), openness 7  

Qinghai 25, 64, 65, 67, 75, 76, 175, 214, 247  

rank order reversals, provincial GDP per capita 61–2  
rates of return to capital  
data 200–1  
model 199–200  
results 201–13  
real exchange rate 300–27  
rural-urban income disparity  
econometric analysis 312–19  
evolution of 301–5  
modelling relationship between 305–12  
recursive dynamics, CGE model 129–30  
redistributive system 64–7  
effects of erosion of 63–4  
end of 68–75  
regional development  
Maoist 35, 88–9  
strategy 50–3  
study of capital GDP 37–40  
regional disparities  
development strategy 50–3  
study of per capita GDP 37–40  
income 121–2  
openness 91–8  
per capita income 40–50  
potential of trade to reduce 55  
research on 34–5  
since reform 35–7  
regional distribution, FDI 194–218  
regional specialization 87–98  
relative price of tradable goods  
real effective exchange rate 305–8  
rural-urban income disparity 308–12  
resource allocation, investment by 51, 54  
retention system 301  
revealed openness 4–5  
reversion 76, 80–1  
richest provinces  
(1978) 64–5  
(1995) 81  
risk factors, IMR 170  
rural China  
financial system 248–50  
income inequality 161, 164–5  
rural collectives  
change of ownership 257  
financing of investments 253–5  
rural credit cooperatives (RCCs) 248–9  
reorganising RCC-ABC system 260–2  
sources and uses of funds in 269  
rural enterprises 244–63  
deregulating the financial sector 259  
final remarks 262–3  
financial system 248–50

Mary-Françoise Renard - 9781843765523  
Downloaded from Elgar Online at 12/20/2018 07:28:51AM  Via free access
improving financing of 258-9
investment
performance 250-3
regional contrast in financing 253-5
spread effect 255-8
market-determined ownership forms 262
profile of TVEs 246-8
reorganising the RCC-ABC system 260-2
rural household income 121
rural industry 79, 148
rural lending 249, 260
rural reforms, convergence 60
rural–urban disparity, impact on regional disparities 35
rural–urban divide, income inequality 157, 160
rural–urban income disparity 161
(1995) 135
changes in regional 40-50
during phases of exchange rate policy 301-5
economic reform 151
prices of agricultural products 55
real effective exchange rate econometric analysis 312-19
relationship between 305-12

secondary education
return rates to capital 208-9, 213
technical progress 232
secondary industry, regional disparities 37-9
sectoral structure, of economy 130-1, 132-4
self-raised funds, rural enterprises 251, 253
self-sufficiency policy 310
sensitivity analysis, depreciation rates 114-15
Shaanxi 25, 89, 217, 246
Shandong 23, 70, 83, 107, 176, 246, 254
Shanghai
economic growth 60, 70, 72, 73-5, 78, 79, 224
economic indicators (1995) 267
FDI 195, 199
health expenditure 176
industry 88

openness 26
return rates to capital 204-5
higher education 210-11
human capital 212
primary education 206-7
secondary education 208-9
technical efficiency 109
Shantou 90
Shanxi 23, 77, 94, 199, 246
shareholding cooperatives gross output value, industry 149
restructuring TVEs into 257, 262
Shenzen 90
shift-share analysis 77, 78, 79
Sichuan 25, 70, 83, 89, 175, 176, 246, 254
silk wars 25
size see country size; market size
skill, and income 150, 160
social consequences, economic reform 33-55
social development, and productivity 53
socialist price system 72
socio-health environment, IMR 175
southeast regions, overseas investment 53
Soviet aid 89
spatial dynamics, Chinese industry 88-91
spatial inequality, by provincial GNP per capita 151
spatial problems, facing economy 83
Special Economic Zones 53, 90, 198
spillovers econometric analysis, 1990s 80-3
FDI 231-2
state budget, rural enterprises 251, 254-5
state-owned enterprises access to bank loans 249
biggest and most prosperous 247
domestic loans 252
equity-bond instrument 250
financial reforms 259
gross output value, industry 148, 149
income inequality 149-50
wage income 42, 43
structural factors, openness 12, 27
structural openness 15
structural vulnerability 27

Mary-Françoise Renard - 9781843765523
Downloaded from Elgar Online at 12/26/2018 07:20:21AM via free access
Sub-Saharan Africa
  financial openness 11
  relative trade openness 14
Sweden, ‘growth with equity’ 34
tariff collection 131, 132–4, 142
tax exemption, financing 250
taxes, CGE model 128
technical efficiency
  convergence, since 1980s 116
  empirical model 106
  growth accounting method 105
Malmquist productivity approach 105
  rate of change (1982–1995) 112
technological innovations, FDI 197
technological progress
  1980s 116
  centrally planned economies 102
  coefficients of variation 112
  empirical model 106
  FDI 226–32
  growth accounting method 105
  Malmquist productivity approach 105
  price changes 116
  rate of changes (1982–1995) 113
technology transfer, FDI 229–30
tertiary industry, growth of 55
Theil entropy method 39–40, 45
Theil index 155, 157
theoretical models, productivity growth 104–6
Third Front
  policy 89
  regions, redistributive system 64
Tianjin 26, 60, 109, 176, 199, 217, 224, 267
Tibet 20, 93, 247
total factor productivity
  convergence, 1990s 116
  J-shaped curve 116
  lagged exports 290
  rate of changes (1982–1995) 113
town states see Beijing; Shanghai;
  Tianjin
township and village enterprises (TVEs)
  eastern region 53
  economic growth 244–6
  geographical groupings 246–8
  gross output value, industry 149
  income differences 41
  investment financing, coastal and central provinces 275–7
  prospects for future growth 258
  transforming into shareholding cooperatives 262
  waste of capital resources 54–5
Township–Village Enterprises Yearbook (TVEY) 253, 254, 256
tradable goods, relative price 305–12
trade
  CGE model 125–6
  expansion, WTO accession 141
  reducing regional disparities 55
  see also foreign trade; internal trade; international trade
trade liberalization
  agriculture 142, 144, 145
  internal 2
trade openness
  calculation of 3
  compared to other countries 9
  evolution 5–9
  FDI 214, 227
  indicators of 14
  provinces, internal and exterior 16–18
  provincial indicators 18–20
  estimation of 21–2
trade wars 91
trading regimes 123
traditional development strategy 51–2
transfer income, farm households 42, 43
transport costs, openness 12, 21
transport facilities, market development 52–3
TVEs see township and village enterprises
TVEY see Township–Village Enterprises Yearbook
under-reporting, infant mortality 168
underdevelopment 222
Unit Desa system 260–1
United States
  attitude and motivation of investors 197-8
  regional disparities, income distribution 33
urban China
  employment 149
  enterprise income 135
  income 42-3
  income inequality 155, 161, 165-6
  per capital GDP 66
  see also rural-urban disparities
  urbanization, FDI 215-16, 217
Uruguay Round 138-9

vaccination levels, per capita GDP 176
value-added tax, CGE model 128
vertical health programmes, financing 172
vulnerability, of economy 27

wage determination 150
wage income 42, 43, 154
wage policy 311
welfare gains, WTO accession 141, 142-3
west-central east, income inequality 160
western regions
  intra-regional disparities 39
  investment in 52, 89
  investment policy 71
  regional disparities, income 46, 47, 48
will for openness 20, 23-4

WTO access, impact on income disparity
  introduction 121-3
  CGE model 123-30
    data 130
    demands 126-7
    equilibrium and macro closure 128-9
    government and extra-budget public sector 128
    income distribution 127
    production and factor markets 124-5
    recursive dynamics 129-30
    trade 125-6
  economic structure, openness and income distribution 130-8
  base case projections and simulations design 138-40
  major simulation results 140-5
  conclusion 145-6
Wuhan 199

Xiamen 90
Xianjing 180
Xinjiang 23, 25, 71, 77, 91, 93, 247
Yunnan 25, 71, 93, 175, 176, 217, 247
Zhao Ziyang 74
Zhejiang 25, 26, 67, 70, 79, 107, 217, 246
Zhu Rongji 74
Zhuhai 90