Index

Acemoglu, D. 441
aggregate demand aggregate supply diagram 22, 365–76
adjustment mechanism 370
adjustment process from short-run to long-run equilibrium 373–4
adjustment process and Keynes and Pigou effect 374
aggregate demand model and Keynesian diagonal cross diagram 370
aggregate demand model in literature 370–71
aggregate supply curve as independent concept 386–9
derivation of aggregate demand curve 365–8
derivation of aggregate supply curve 368
equilibrium and comparative statics 367, 368–9
and IS–LM equilibrium 371, 374
Keynesian income determination diagram 344–6
Keynesian income determination diagram (Z/D–N) 339, 342–4, 354
model in literature 370–74
and monetary shocks 372–3
and Phillips curve 368, 369, 370, 372, 382–4, 386–8
short-run aggregate supply (SRAS) curve 367, 368–9, 370
SRAS curve as errors-only curve 371–2
SRAS curve in literature 371–3
SRAS curve, sticky wage derivation 372–3
and stagflation 369

‘surprises only’ aggregate supply curve 376
and technological change 373
Akerlof, G. 406
Åkerman, G., cobweb diagram 187
Allais, M., utility-possibility frontier see utility-possibility frontier
Allen, R. G. D.
and elasticity of substitution 52, 54–5, 61–2
and Engel curves 65
income and substitution effect diagram see income and substitution effect diagram
and introduction of income into demand theory 65
isoquants 46, 48, 52
technological change as function of time 88
Alonso, W. 172
Amoroso, L., duopoly reaction curves 142
Anderson, J., concept of trade restrictiveness index 104
Anderson, S. 182
Antrobus, G. 442, 443, 444, 445
Armington, P. 56
Arrow, K. 188, 259
and elasticity of substitution 53, 54
environmental Kuznets curve 443, 445
general equilibrium theory 230, 231, 282–4
integrated world equilibrium diagram 325–6
Two Fundamental Theorems of Welfare Economics 277
unit simplex diagram see unit simplex diagram
Arrow-Debreu state-contingent model 325–6

447

Mark Blaug and Peter Lloyd - 9781849806466
Downloaded from Elgar Online at 01/19/2019 11:29:08AM via free access
Famous figures and diagrams in economics

Ashok, Sowmiya 439–46
Atkinson, A., social welfare theorem 435–6
Attwood, T. 384
Aumann, R., and Pareto efficiency 279
Auspitz, R., monopoly and price discrimination see monopoly and price discrimination
Backhouse, Roger E. 221–9
backward-bending labour supply curves 9, 21, 161–9
and development economics 166–8
gender differences 164
and income demand 164–6
and individual labour supply decision 161–2, 164
origins of 164–5
and poverty 168–9
and price effect 161–2
and self-employment 167–8
substitution and income effect of wage cut 162–3, 164
supply-side economics and Laffer curve 168–9
and taxation 164–6
and under- and over-employment 164
Baldwin, R. 311
Barone, E.
cost curves 76
Pareto efficiency 278
production possibilities frontier 245
Barro, R. 346
Barzel, Y., rent-seeking model 207
Bator, F., and Pareto efficiency 279
Baumol, William J. 10, 17–18, 128–36
Beccaria, C. 11
Beckerman, W. 443
Becsi, Z. 415
Berg, E. 167
Bergson (Burk), A.
Constant Elasticity of Substitution (CES) utility function 56
and Pareto efficiency 278
and social indifference map 315
social welfare function 253
Bernouilli, D. 10, 11
Bernstein, P. 203
Berry, B. 175
Bertrand, J. 157
duopoly reaction curves 142–3
and price discrimination 180
Bessler, D. 189
Beveridge curve see UV (Beveridge) curve
Bhaduri, A., reswitching and capital reversing diagrams 193
Bhagwati, J., trade theory diagram 314
Bhaskar, V., kinked demand curves 157
Bickerdike, C., optimal tariff see optimal tariff
Binmore, K. 89
Bishop, J. 442
Blanchard, O. 389, 407
Blaug, Mark 1–23, 38–49, 80, 191, 228, 277
Bliss, C. 191, 195
Boadway, R. 101
Böhm-Bawerk, E. von 195
Boiteux, M. 107
Borjas, G. 161
Boulding, K. 8, 17
Bound, J. 442
Bowley, A.
duopoly reaction curves 139–40
Engel curves 65
indifference curves 43, 234
isoquants 46
Boyd, L. and D. 73, 76
Boyer, Russell 356–64
Branson, W. 362, 370–71, 374
Braun, C. 14
Bronfenbrenner, M., Keynesian aggregate supply and demand curves 345–6
Brown, A. 349, 384, 396
Brown, M. 53, 54
Brownlee, O. 346
Brownlie, A. 34
Bruno, M. 270
Buchanan, J., Buchanan/Stubblebine diagram 122–4, 125
Buchanan, N., cobweb diagrams 187
Bulow, J. 142
Buquoy, G. von 18
Burk (Bergson), A. see Bergson (Burk), A.
Index

Burmeister, E. 270
Burns, A. 343
Buser, S. 203
Butlin, N. 430

Cambridge controversies 191, 192–3
Camron, Lisa 439–46
capital
  asset pricing model see Markowitz mean-variance diagram
  mobility, perfect see Fleming–Mundell diagram
  theory, factor price frontier see factor price frontier model
capital theory, reswitching and reversing in 191–8
  and Cambridge controversies 191, 192–3
  and Cobb–Douglas production function 197
diagrams 193–5, 196
  heterogeneous capital goods and capital valuation 192
  history and significance 195–7
Ruth Cohen Curiosum (RCC) 195
Samuelson/Solow/Swan aggregate production function model 191–2
Wicksell effects 192–3, 195
Carlaw, K. 391
Carlson, S. isoquants 46
Cassels, J. 48
Catchings, W., circular flow diagram 226
Caves, R. 250, 362
Chamberlin, E., monopolistic competition see monopolistic competition
Champernowne, D. 193
Chapman, D. 445
Shipman, John S. 62, 252–61, 281
Stolper–Samuelson production box 303
Christaller, W., location theory hexagons 175
Christensen, L., Translog Production Function 55
chronology of curves and diagrams 13–14, 20–23
Chrystal, A. 371, 373–4
circular flow diagrams 10, 21, 221–9
  and decomposition of household expenditure 222–3
  early history 225–8
  elements of 221–3
  and income flows 221–2
  and Keynesian economics 223–5
  Phillips machine 224–5, 226
  and production boundaries of firms 221–2
  as visual representation to wider audience 228
Clark, C. 68
Clark, J. 80, 195
classifications of technical change 20, 83–8
Harrod method 86–7, 88
Hicks method 83–4, 85, 86, 87, 88
  and Solow–Swan growth model 84–6, 87, 88
Coase, R. 124, 184
critique and ignored asymmetry, taxation of external costs 124, 125
Cobb–Douglas function
  and capital theory, reswitching and reversing in 197
  and Solow–Swan growth model 430
  and theory of the second best and third best 290
cobweb diagram 21, 41, 184–90
criticism and extensions 187–8
Ezekiel’s diagram 185–6, 188
Ezekiel’s diagram, limitations with agricultural products 186
history 184–5
static and adaptive expectations 187–8
and supply curve 185, 186, 187–8
Coddington, A. 223
Cohen, Avi J. 191–8
Cohen, M., UV (Beveridge) curve 395
Cohen, R., reswitching and capital reversing diagrams 195
Colander, D. 346, 370, 373, 374
commodity expenditure and income, and Engel curves see Engel curves
community indifference curves 110–20
alternatives to 118–19
compensation test 110, 114–16, 117, 119
Famous figures and diagrams in economics

construction 111–13
and Harberger test 119
and free trade 316
and New Welfare Economics 110
Scitovsky paradox 110–11, 113–17
competition, role of numbers in see role of numbers in competition
Congleton, R. 207
c consumer choice, and indifference curves see indifference curves
consumer surplus 20, 97–103
c concept origin and Dupuit and Marshall 97–8, 101
and constant marginal utility of money (MUM) 97–8
and Harberger triangles see Harberger triangles
and Hicks’s compensation variation concept 97–101
measurement, approximate nature of 101–3
multiple price changes and path dependency 101
c consumption, intertemporal utility maximisation see Fisher diagram
contract curve, and Edgeworth box see Edgeworth box
Cook, P. 61
Cook, S. 1
Cooper, R. 356
Corden, M., trade theory diagram 314
cost curves see long-run and short-run cost curves
Cournot, A. 4, 7–8, 11–12, 13
duopoly 16, 21, 31, 91
duopoly reaction curves 137–8, 139, 140, 141–2, 148, 180
geometrical tax-incidence analysis 31
market demand and supply curve diagram 29–31, 36
Marshallian cross diagram see Marshallian cross diagram
monopoly and price discrimination see monopoly and price discrimination
scissors diagram and tax incidence analysis 32
Cowles, A. 200
Cowling, K. 107
Cramer, J. 209–11
Crampes, C. 213
Creedy, John 233–44
Cypher, J. 440, 441
Darity, W. 352, 353, 354
Dasgupta, S. 436, 443
d’Aspremont, C. 181
David, M., UV (Beveridge) curve 395, 396
Davidson, P., Keynesian income determination diagram 344
De Cani, J. 54
De Finetti, B., utility-possibility frontier 259
De Marchi, N. 1
Deardorff, Alan V. 305–10
integrated world equilibrium diagram 327
Deaton, A. 67
Almost Ideal Demand System 66
Debreu, G.
coefficient of resource utilization 256
general equilibrium theory 230, 231
ingindifference curves and preference orderings 46
and integrated world equilibrium diagram 325–6
and Nash equilibrium 89
unit simplex diagram see unit simplex diagram
demand curve for money 23, 346, 401–5
and Cambridge version of quantity theory 402, 403
and gold standard 402–3
and interest rates 403–4
and price levels 401, 403, 404
demand curves, kinked see kinked demand curves
Denis, H., circular flow diagram 228
Denzau, A. 182
Derobert, L. 164
Descartes, R. 11
Dicks-Mireaux, L., UV (Beveridge) curve see UV (Beveridge) curve
Dietz, J. 440, 441
Dillard, D., aggregate demand aggregate supply diagram see aggregate demand aggregate supply diagram
Index

Dimand, Robert W. 426–31
Dinda, S. 442, 443, 444, 445
discriminating monopoly diagram 16, 21, 131–4
Dixit, Avinash 22, 55–6, 152–3, 215, 323–7
Dixon, Robert 50–57, 83–8, 428, 430
Domar, E. 426, 430
Dornbusch, R. 362
Dos Santos Ferreira, R. 182
Dow, J., UV (Beveridge) curve see UV (Beveridge) curve
Downs, A. 182
duopoly
and oligopoly and monopolistic competition 148, 152
price cut in, without collusion 180–81
see also monopolistic competition; oligopoly
duopoly reaction curves 11–12, 16, 21, 31, 91, 137–44
belief-based version 138–9, 140
conjectural approach 140
and Cournot equilibrium 137–8, 139, 140, 141–2, 148, 180
and efficiency of firm 142
extensions 140–43
firm choices, dynamic analysis of 139
interpretations 138–40
and Nash equilibrium 139, 140
and non-cooperative game theory 139–40
and partial product differentiation 142–3
stability analysis and comparison of market performances 140–42
and strategic complements (pure ‘Bertrand’ case) 142–3
Dupuit, J.
and consumer surplus 97–8
Marshallian cross diagram see Marshallian cross diagram
monopoly and price discrimination 33–4, 36, 128, 134
Eaton, B. Curtis 170–78
Economides, N., graph theory and networks see graph theory and networks
Edgeworth, F. 7, 12, 17, 34, 76
indifference curves see indifference curves
long-run and short-run curves see long-run and short-run curves
optimal tariff see optimal tariff
price discrimination 128, 180
role of numbers in competition see role of numbers in competition
Edgeworth box 3, 21, 233–8, 300
disequilibrium price ratio 236
and indifference curves 15, 16, 43–6, 233–7
and parametric prices 235–6
and Pareto efficiency 273, 278
and price-taking equilibrium 233, 236–7
and role of numbers in competition see role of numbers in competition
and utility-possibility frontier 254
Eichberger, Jürgen 89–94
Eichhorn, W. 6
Ekelund, R. 32, 128
Ekins, P. 445
elasticity of substitution 9, 16, 20, 50–57, 61
Allen–Uzawa elasticity of substitution 55
and Cobb–Douglas production function 54
Constant Elasticity of Substitution (CES) production function 54–5
and isoquants 47, 50–51, 52, 54
relative factor prices and relative factor use, relationship between 50–51
Translog Production Function 55
Ellet, C. 128
Enelow, J. 182
Engel curves 5, 15, 20, 64–8
and assumption that all households face same prices 66–7
and family size and composition 67
and homothetic utility functions 71
and income elasticity of demand 65, 66
semi-logarithmic equation 66
Famous figures and diagrams in economics

semi-parametric and non-parametric estimation 66
and total expenditure 64
environmental quality see Kuznets curves, environmental equilibrium
competitive, and factor price frontier diagram 262–6
integrated world equilibrium diagram see integrated world equilibrium diagram
phase diagram technique see phase diagram technique and multiple-market equilibrium stability
stability see stability of equilibrium see also general equilibrium theory
Erkal, Nisvan 179–82
Etheridge, B. 122
Ethier, W., Stolper–Samuelson production box 303
Euler, L.
homogeneous function of the first degree 80
Königsberg Bridge Problem 212
exchange rates, and Fleming–Mundell diagram 357–9, 360–61
Ezekiel, M., cobweb diagram see cobweb diagram
factor price frontier diagram 22, 262–71
application 266–8
and competitive equilibrium 262–6
constrained optimization problem 265–6
extension to growth model 268–9
factor market equilibrium (market clearing) conditions 263
history of 270
Kuhn–Tucker (complementary slackness) conditions 263
literature review 270
and product price changes 266–8
production sector equilibrium 264–5
and profit maximization 263–5, 268–9
and Stolper–Samuelson theorem 16, 267–8, 270
Färe, Rolf 69–72
Feldstein, M. 414
Felipe, J. 197
Fellner, W. 139
Ferguson, C. 86
Findlay, R. 311
Lerner diagram 305
trade theory diagram 314
Fisher, F. 197
Fisher, I. 139, 195
Phillips curve 371, 384
production possibilities frontier 245
SRAS curve 371
variance as measure of risk 201
Fisher diagram 14, 23, 421–5
development and use 424
Fisher Separation Theorem 424
and indifference curves 43, 421, 422, 423
and interest rates 422, 423–4
and international trade 424–5
and market equilibrium 424
Fleming–Mundell diagram 22, 356–64
and exchange rates 357–9, 360–61
and fiscal policy 358, 359, 361–2
and Hicks’s IS–LM diagram 357
IS–LM–BP curve diagram 356, 359–60
limitations of Mundell’s 1963 diagram 362–3
and monetary policy 357–8, 359, 360–61
Mundell–Fleming and Mundell’s diagrams 356–61
Mundell’s 1963 diagram and Fleming’s 1962 equation 361–2
and perfect capital mobility 356, 360, 361–2
Flux, A. 20, 80
Fornari, I. 189
Foster, W., circular flow diagram 226
four-quadrant diagram applications 321–2
and Heckscher-Ohlin model 317
history of 322
two country equilibrium 319–21 see Heckscher-Ohlin model
Fowler, R. 184
free trade
and optimal tariff 328–9
and Scitovsky paradox and community indifference curves 316

trade theory diagram see trade theory diagram
and utility-possibility frontier 255
see also international trade

Friedman, J. 140
Friedman, M. 203, 359, 361, 371, 372, 380, 390
Fujita, M. 172
Fullerton, D. 415, 416
Fulton, M. 138
Furniss, E. 168
Fusfeld, D. 343
Fuss, M. 55

Gale, D. 231
Gallet, C. 441, 442

game theory

and graph theory and networks 215–16
and Nash equilibrium 89–93
non-cooperative, and duopoly reaction curves 139–40
rent-seeking diagrams 207
Gangadharan, Lata 439–46
Garegnani, P., reswitching and capital reversing diagrams 193
Garnier, G. 11
genereal equilibrium theory

and integrated world equilibrium diagram 323
Pareto efficiency see Pareto efficiency

production possibilities frontier see production possibilities frontier
Stolper–Samuelson production box see Stolper–Samuelson production box
unit simplex diagram see unit simplex diagram
see also equilibrium
Giffen’s paradox 15
Giocoli, Nicola 137–44
Giraud, Yann 1, 16, 221–9
Goldfeld S. 10, 17–18
Goolsbee, A. 416
Gordon, A., UV (Beveridge) curve 395, 396
Gordon, R. 389
Gordon, S. 17
Gorman, W.
Scitovsky paradox 117
utility-possibility frontier 259
government policy
fiscal, and Fleming–Mundell diagram 358, 359, 361–2
monetary, and Fleming–Mundell diagram 357–8, 359, 360–61
and rent-seeking diagrams 207, 208
stabilisation, and Phillips curve 380
taxation see taxation policy
Goyal, S., graph theory and networks 214, 215
Graaff, J. de V., utility-possibility frontier 252–6, 257–9
graph theory and networks 21, 212–16
and economics of network industries 213
and game theory 215–16
history and uses 212–13, 215–16
and Medici influence in fifteenth century 215, 216
network of collaborating economists 215
properties of 212
and social network analysis 212, 214–15
tree diagrams 212–13
Groenewegen, P. I, 1, 12, 281
Grosskopf, Shawna 69–72
Grossman, G. 23, 443, 444
growth
logistic growth curve see logistic growth curve
Solow–Swan growth model see Solow–Swan growth model
Grubert, H., Lerner diagram 305
Haberler, G., production possibilities frontier see production possibilities frontier
Hadley, A., price discrimination 128
Hague, D. 6
Keynesian income determination diagram 344
Hahn, F. 83
Hall, R. 21, 152, 154, 388–9
Haller, Hans 58–63
Famous figures and diagrams in economics

Hamermesh, D. 164
Hanau, A. 184
Hands, D. Wade 280–85
Hansen, A.
   IS–LM diagram 353–4
   Keynesian income determination diagrams 339
Hansen, B. 397
Harberger triangles 20, 104–9
   and Anderson–Neary concept of trade restrictiveness index 104
   and consumer surplus 97, 104–9
   and deadweight loss 104–5, 106–8
   and Marshallian demand curve 106
   public projects and cost-benefit test 106
   and Scitovsky paradox 119
   and taxation of external costs 121–2
   and welfare costs of monopolistic behavior in US industry 107–8
   welfare loss measurement in pure monetary values 107
Harcourt, Geoffrey C. 191–8
   Keynesian income determination diagram 339
Harris, J., rent-seeking model 207
Harrod, R. 145, 348, 426, 430
   classification of technical change see classification of technical change
   cost curves 76, 77
   four-quadrant diagram in international economics 322
Hause, J. 102
Hausman, J., Harberger triangles 106
Hayek, F. von 195
Hayes, H. 154
Hébert, R. 32, 128
Heckscher–Ohlin model 7, 248, 300, 317–22
   autarky equilibrium 318–19, 320–21
   and capital–labor endowment ratio 319
   and complete specialization 321
   and demand 319
   factor-intensity reversal 317, 318, 321
   and factor–price equalization theorem 321
   history 322
   Lerner diagram see Lerner diagram
   and Rybczynski theorem 320
   and Stolper–Samuelson factor price frontier 318
   and technology differences 321–2
   and trade theory diagram 313, 314
two-country equilibrium 319–21
Helpman, E. 249
   integrated world equilibrium diagram 327
Hennings, K. 31, 34
Herberg, H. 250
Hertel, T. 225
Hicks, J. R. 7, 17, 41, 58, 61–2
   backward-bending labour supply curves 166
   classification of technical change 83–4, 85, 86, 87, 88
   compensation and decomposition 59, 60, 61, 62
   composite traded commodity 248
   and consumer surplus 97
   consumer surplus and compensation variation concept (four measures) 98–101
   efficiency curve see factor price frontier diagram
   elasticity of substitution see elasticity of substitution
   h-c test 110
   income and substitution effect diagram see income and substitution effect diagram
   introduction of income into demand theory 65
   IS–LM diagram see IS–LM diagram
   real social income measures 253
   and technological change 16, 20, 307
   wage frontier see factor price frontier diagram
Hines, J. 97, 104
Hinich, M. 182
Hirshleifer, J., circular flow diagram 225
   historical issues 9–16
   confusion and controversies 9–10
curves, intersecting 12
demand and supply curves 12
   and duopoly 11–12
   first figures and diagrams in economics 10–13
graphical models 11–12
inverse demand function 11–12
and mathematical analysis 12–13
Hitch, C. 21, 152, 154
Holt, C., UV (Beveridge) curve 395, 396
Holzman, F., Keynesian aggregate
supply and demand curves 345–6
homogeneous functions 9, 20, 71–2, 80
and isoquants 47
homothetic production and utility
functions 20, 69–72
and Engel curves 71
and isoquants 47, 70
separability and duality 69–70
Hotelling, H. 101
Hotelling’s model of spatial
competition 21, 179–82
horizontal differentiation 179–80, 181
and Launhardt 182
and market location 179–80
multiple dimensions 181–2
and political competition 181–2
and price cut in duopoly without
collision 180–81
principle of minimum differentiation 181
Salop’s circular city model 181
Houthakker, H. 64, 65–6, 67
Howe, G. 414–15
Hume, D. 384
Humphrey, Thomas M. 1, 3, 12,
29–37, 384, 421–5
trade theory diagram 313
Hurwicz, L. 259
general equilibrium theory 282–4
Ikema, M. 270
income
and commodity expenditure see
Engel curves
determination diagram see
Keynesian income
determination diagram
distribution see capital theory,
switching and reversing in
flows see circular flow diagrams
inequality, and per capita income see
Kuznets curve
size distribution and wealth see
Lorenz curve
indifference curves 20, 43–6
and duality theory 45–6
and Edgeworth box 15, 16, 43–6, 233–7
and Fisher diagram 43, 421, 422, 423
history of 43
and isoquants see isoquants
and preference orderings 46
and principle of diminishing
marginal rate of substitution 44–6
and production transformation
curve 43
and role of numbers in competition 240–41
and utility-possibility frontier 43, 46
inflation
and Lorenz curve 436
and Phillips curve 379, 381–2, 385
integrated world equilibrium diagram
22, 323–7
and 2-by-2 case 323, 326–7
and Arrow–Debreu theory,
similarities to 325–6
developments 327
and factor price equalization 323, 325, 326
and factors not internationally
tradable 325
and general equilibrium theory 323–4
univalence approach 323–4
interest rates
and demand curve for money 403–4
and Fisher diagram 422, 423–4
IS–LM diagram see IS–LM diagram
Keynes Effect and interest rate falls
345, 346
international trade
and circular flow diagram 225
and elasticity of substitution 53
factor price frontier diagram see
factor price frontier diagram
and Fisher diagram 424–5
four-quadrant diagram see
Heckscher–Ohlin model
free trade see free trade
Kuznets environmental curve 444–5
and non-decreasing returns to scale 72
offer curve see offer curve
optimal tariff see optimal tariff
and Pareto efficiency 277
phase diagram technique see phase
diagram technique and multiple-market equilibrium
stability
Rybczynski Theorem 247
trade theory diagram see trade
theory diagram
utility-possibility frontier see utility-
possibility frontier
investment
inter-temporal utility maximisation see Fisher diagram
Markowitz mean-variance diagram see Markowitz mean-variance
diagram
and savings, IS–LM diagram see IS–LM diagram
Irmen, A. 181
IS–LM diagram 9, 16, 348–55
and aggregate demand aggregate
supply diagram 371, 374
comparative static thought
experiments 351–2
consumption function
representation 353–4
extensions 352–4
and Fleming–Mundell diagram 357, 359–60
Hansen contribution 353–4
Hicks trade cycle analysis 353
Hicks’s 1937 diagram 349–50
Hicks’s September 1936 Conference
diagram (CC–LL diagram) 348–9, 350–51
Hicks’s value and capital methods
and CC–LL and IS–LL
diagrams 350–51
IS–LL to IS–LM transition 352–4
Keynes’s general theory, interpreting
and representing 337, 346, 350, 354
and liquidity trap 349–50
multi-quadrant and multi-dimension
representations 353
and Phillips curve 380, 381–3
isoquants 6, 9, 20, 44, 46–8
and elasticity of substitution 47, 50–51, 52, 54
and homothetic production and
utility functions 47, 70
history of 46
Jackson, M., graph theory and
networks 214, 216
Jantzen, I., 45 degree macroeconomic
diagram 339
Jenkin, F. 4, 12
Marshallian cross diagram see Marshallian cross diagram
Jevons, W. 12, 233
Johannsen, N., circular flow diagram 226
Johnson, G. 442
Johnson, H. 22, 329
four-quadrant diagram see
Heckscher–Ohlin model
indifference curves 43
trade theory diagram 314
Johnson, W. E., indifference curves 43
Jones, Ronald W. 245–51, 298, 362
Stolper–Samuelson theorem 303
Jorgenson, D. 69, 70
Joseph, M. 75
Kahn, R. 154
elasticity of substitution 52
Kakwani, Nanak 432–8
Kaldor, N. 175, 195
cobweb diagrams 184
and h-c test 110
IS–LM diagram 352
Kannai, Y., utility-possibility frontier 259
Kaplow, L. 106
Kats, A. 182
Katz, L. 442
Kemp, Murray 250, 255, 295–9, 328–31
Kendrick, J. 54
Kenen, P. 254–5
Keppler, J. 76
Keynes, J.M. 1, 12–13, 23
and circular flow diagrams 223–5
demand for money and Cambridge
version of quantity theory 403, 404
non-neutrality of money see non-
neutrality of money
Keynesian income determination
diagram 22, 337–47
45 degree or Keynesian cross
diagram 338–9, 342, 343, 346, 353, 370
aggregate supply–aggregate demand
diagram (AS–AD) 344–6
aggregate supply–aggregate demand
diagram (AS–AD), adjustment
process and Keynes and Pigou
effect 374
aggregate supply–aggregate demand
diagram (Z/D–N) 339, 342–4, 354
and constant price level 342
and exports and imports 339, 340
and government expenditure and
taxation 339, 340
and Hansen IS–LM diagram 353
injections–withdrawals or Keynesian
cross diagram 339–41
and IS–LM diagram 337, 346, 350, 354
Keynes Effect and interest rate falls
345, 346
and Marshallian cross diagram,
differences between 340
Patinkin adaptation 341–2
and Phillips curve see Phillips curve
and Pigou real balance effect 342, 345
psychological law of income increase
and consumption decrease 339
and Say’s Law 339
wage units as measure of value 337
Killingsworth, M. 161, 164
Kindleberger, C., Keynesian income
determination diagram 340
King, John E. 161–9
kinked demand curves 14, 21, 152,
154–8
criticism of model 156–7
and discontinuous marginal revenue
156
and goods differentiation 157
and imagined demand curve 154, 155
and price stability 156
static quality of model 157
and tacit collusion 156
and unilateral price changes 154–5
Kiyotaki, N. 407
Klappholz, K. 376
Klein, J. 1, 11, 384
Knight, F. 195
circular flow diagram see circular
flow diagram
marginal product function 48
Knorr, W. 6
Kolm, S., inequality measures 434
Kreps, D. 138
Krueger, A.B. 443, 444
Krueger, Anne O. 21, 23, 204–8
Krugman, P. 152, 249, 362
integrated world equilibrium
diagram 327
Kuczynski, M. 228
Kuga, K. 270
Kuhn–Tucker (complementary
slackness) conditions, factor price
frontier diagram 263
Kurz, H. 270
Kuznets, S. 68
and real social income measures
253
Kuznets curve 23, 439–46
controversies 441–2
income inequality and political
economy 441
income inequality and rural–urban
migration 439–40
and inter- and intra-country
variations 441–2
interpretation of 439–40, 441
inverted-U curve 439–42
as law of economic growth 440–41
and service sector 442
as statistical regularity 440–41
Kuznets curve, environmental curve
16, 23, 442–5
conceptual critique 444–5
controversies 444–5
Famous figures and diagrams in economics

history of 443
and international trade effect 444–5
interpretation of 443–4
methodological critique 445
and pollution levels 444–5

labour market
backward-bending labour supply curves see backward-bending labour supply curves
and rent-seeking behavior 207
Laffer curve 15, 23, 412–18
Anglo-American comparison of use 414–15
and backward-bending labour supply curves 168–9
empirics 415–16
and endogenous growth models 415
history and significance 412–15
and income inequality 416
and labour and capital supply 415–16
and political potential 414, 417
and progressive income tax structures 415
tax rate and revenue relationships 32–3
and US Economic Recovery Tax Act 413–14
and Washington consensus 414, 416–17
Laidler, David 401–5
Lallemand, J. 76
Lancaster, K. 107, 179
theory of second best see theory of second best and third best
land use, location theory see location theory
Lange, O. 184, 255, 259
IS–LM diagram 353
Pareto efficiency 277
Lardner, D. 128
Larkin, J. 17
Launhardt, W.
location theory see location theory
product differentiation and spatial competition 182
Law, J. 384
Lee, Cassey 80–82, 212–16
Leicester, A. 122

Lenfant, J.-S. 62
Leontief, W. 16, 184
production possibilities frontier see production possibilities frontier
trade theory diagram 313
Lerner, A. 1, 7, 15, 16
displacement of substitution 52–3, 54
isoquants see isoquants
Pareto efficiency 278
production possibilities frontier 245
Stolper–Samuelson box see Stolper–Samuelson box
Lerner diagram 14, 15, 16, 22, 305–10
extensions 306–9
factor intensities and allocations 306, 307
history of 305
and Heckscher–Ohlin model 305
and isoquants 305, 306, 307–9
price increase effect 306, 307–9
and social indifference map 315–16
technology improvement effect 306, 307–9
trade theory diagram 313, 315–16
two-cone model 308–9
Leser, C. 430
Lewis, J. 430
Lieben, R., monopoly and price discrimination see monopoly and price discrimination
Lindahl, E.
IS–LM diagram 353
Lindahl–Bowen optimal solution, and utility-possibility frontier 254
Lipsey, Richard G. 22, 107, 110–20,
170–78, 365–92
circular flow diagram 225
theory of second best 286, 287, 288, 290
List, J. 441, 442
Little, I., and welfare distribution 117–18
Liu, L. 108, 215
Lloyd, Peter 1–23, 43–9, 272–9, 311–16
Lloyd Pritchard M. 34
Loasby, B. 152
location theory 21, 170–78
and land rent 171–2
Lösch’s hexagons 172–7
Index

and market economics 172–7
and monopolistic competition 174–5
and new entrants 174–5
transportation costs and block metric 175–7
von Thünen’s circles 170–72, 177
logistic growth curve 21, 209–11
applications 210
and discrete choice, statistical analysis of 210–11
Lomborg, B. 443
long-run and short-run cost curves 20, 73–9
and constant returns to scale 75
first U-shaped 76
relationship between 75–7
and theory of the competitive firm 77–8
Wong–Viner envelope theorem 76–7
Lorenz curve 5, 23, 432–8
applications 436
and inflation 436
relative and absolute inequality 433–5
and social welfare 435–6, 437
and taxation 436
Lösch, A., location theory see location theory
Lucas, R. 371, 376, 385
Lutfalla, G., IS–LM diagram 352
Maas, H. 17
McConnell, C., circular flow diagram 225
McDonald, I., non-neutrality of money diagram see non-neutrality of money diagram
McFadden, D. 55
Machlup, F. 54
McKenna, J. 346, 371
McKenzie, G. 102
McKenzie, L. 250
Maclachlan, Fiona 73–9, 199–203
McManus, M., theory of third best see theory of second best and third best
Maneschi, A. 250
Mangoldt, H. von, Marshallian cross diagram see Marshallian cross diagram
Mankiw, N. 406
SRAS curve 372, 386–7, 388
Mantel, R., utility-possibility frontier 259
Markowitz mean-variance diagram 21, 199–203
asset allocation line 202
criticism of not being economics 203
history of 201–2
and portfolio efficiency 201, 202
variance as measure of risk 201
Marris, R. 407
Marschak, J. 200–201, 202
Keynesian aggregate supply and demand curves 345
Marshall, Alfred. 1, 4–6, 12–13, 60
and consumer surplus see consumer surplus
demand curve and Harberger triangles 106
demand curve for money see demand curve for money
marginal product function 1, 4–6, 12–13, 20, 22
and monopolistic competition 145, 149
monopoly and price discrimination see monopoly and price discrimination
multiple equilibria diagram 282, 283
offer curve see offer curve
phase diagram technique see phase diagram technique and multiple-market equilibrium stability
pure theory of foreign trade 280–82
stability of equilibrium diagram see stability of equilibrium diagram
theory of the firm in perfect competition 77–8
use of geometry 1, 4–6, 12–13, 16, 20, 22
and UV (Beveridge) curve 396–7
Marshallian cross diagram 15, 16, 20, 29–37
and Cournot’s market demand and supply curve diagram 29–31, 36
Dupuit’s deadweight loss triangles and monopoly pricing 33
Famous figures and diagrams in economics

Dupuit’s monopolistic price discrimination and welfare 33–4, 36
Dupuit’s price–times–quantity rectangle 33
Dupuit’s public works’ evaluation 33
and Jenkin’s demand and supply curves and first application of cross diagrams 34–5, 36
and Keynesian cross diagram, differences between 340
and market-clearing equilibrium 31, 34, 35–6
welfare theorems from 32–4, 35–6
Marston, R. 361
Martin, S., duopoly reaction curves 138, 142
Mas-Colell, A. 61
Maskin, E., kinked demand curves 157
mathematical issues and geometry 3–4, 5, 6–8
algebra and calculus, use of 7–8
algebra and geometry comparisons 7–8
and Ancient Greek mathematicians 6–7
Matthews, R. 83
Mayer, W. 248
Meade, J. 107, 348–9, 359
Meek, R. 228
Merton, R. 14, 15
methodological issues 5–9
curves fitted to data 5
graphs as expository devices 8–9
and model dimensions 7
Michaely, M. 362
Middleton, Roger 412–18
Mill, J.S. 10, 328, 384
Mills, E. 172
Mishan, E. 376
and Scitovsky paradox 110, 111, 112, 115–16, 117, 118–19
Mitscherlich–Spillman function 11
Modigliani, F. demand for money curve 403, 404
and IS–LM diagram 353
monopolistic competition 13–15, 21, 145–53
and behavioral assumptions 151
Chamberlin’s arguments 145–53
cost curve and product specification 148–50
and demand and supply conditions 147
duopoly and oligopoly 148, 152
and gains from trade, production possibilities frontier 249
and intra-industry competition 148–50, 152–3
large group 148–50, 152
and location theory 174–5
and marginal producer 147
and marginal revenue curve 145–6, 147, 152
market demand (dd) curve 149–50, 151, 152
monopoly with no free entry in non-neutrality of money 407–9
and new trade theory 249
and non-neutrality of money 406–7
and pure competition 146–7, 148
small group 150–53
and spatial distribution of firms 152
theory essentials 148–50
see also duopoly; oligopoly
monopoly and price discrimination 21, 128–36
conjectural variation 140
and cost issue 133–4
free competition and price discrimination 134–5
and marginal revenue 128–9, 131, 133
maximization requirement and curve shapes 129
monopoly behavior, graphic analysis of 128–9
price discrimination graphics 129–31
and profit margins 129–31
Robinson graph of discrimination 131–4
and second-best optimality conditions 135
three-graph approach 131–4
Moore, H. 185
Morgan, M. 17
Mosak, J., substitution and income effects 58–9, 61
Muellbauer, J., Almost Ideal Demand System 66
Mueller, D. 107, 417
Mundell, R., Fleming–Mundell diagram see Fleming–Mundell diagram
Murphy, K. 442
Muth, J. 188

Nahman, A. 442, 443, 444, 445
Nash equilibrium 5, 15, 20, 89–94
best-reply curves 90–92
and duopoly reaction curves 139, 140
and game theory 89–93
mixed strategies 92–3
and strategic interaction 89
Neary, J. 248
concept of trade restrictiveness index 104
Negishiri, T., utility-possibility frontier 259
Nemours, P. 10
Nerlove, Marc 184–90
networks and graph theory see graph theory and networks
Netz, R. 6
Neumann, J. von 430
Neven, D. 181, 182
Ng, Yew-Kwang 23, 97–109, 121–7, 406–7, 409, 410
theory of second best and third best 286, 288, 289, 290
Nikaido, H. 231
Noel, W. 6
non-neutrality of money 23, 406–11
in long run with free entry 409–10
and menu costs 406, 409, 410
and monopoly competition 406–7
in monopoly with no free entry 407–9
and price stickiness 406–7
Nordhaus, W. 161
Norman, V., integrated world equilibrium diagram see integrated world equilibrium diagram
numbers in competition see role of numbers in competition
Obstfeld, M. 362, 363
offer curve 22, 295–9
assumptions made 295–8
and autarkic equilibrium, lack of 298
and increasing returns to scale 298
labour supply and commodity and price changes 297–8
and multiple world equilibria 297–8
Ohlin, B., Heckscher–Ohlin model see Heckscher–Ohlin model
oligopoly
market conditions and kinked demand curves see kinked demand curves
and monopolistic competition 148, 152
see also duopoly; monopolistic competition
optimal tariff 22, 328–31
and free trade 328–9
history of 328
and offer curves 328–30
and price-taking representative households 329–30
zero optimal tariff 328, 330
Osborne, M. 89–90
Palander, T., IS/LM diagram 353
Panagariya, Arvind 317–22
Pareto, V. 7, 15, 61, 107
Pareto set see utility-possibility frontier
Pareto efficiency 22, 272–9, 300
allocation problems 275–6
concept of 272–3
and economy with production 275–7
and Edgeworth box 273, 278
and exchange economy 273–5, 278
history of 278–9
and indifference curves 43, 233, 235, 237, 273, 275
and international trade 277
and marginal rates of substitution in production 276
model extensions 276–7
Famous figures and diagrams in economics

optimal allocation 274
and price system 277–8
and Stolper–Samuelson production box 275–6, 278
and theory of the second best and third best 286–8
and Two Fundamental Theorems of Welfare Economics 277–8
and utility-possibility frontier 273–4
and welfare economics 110, 117, 237, 316

Pasinetti, L. 354
reswitching and capital reversing diagrams 193

Patinkin, D. 225, 226, 228, 343, 404
aggregate demand aggregate supply diagram see aggregate demand aggregate supply diagram
and Keynesian income determination diagram 341–2

Peacock, A. 415
Pearce, I., Lerner diagram 305
Pearl, R. 21, 210
Petrongolo, B. 399, 400
Pfouts, R. 97
phase diagram technique and multiple-market equilibrium stability 22, 280–85
and pure theory of foreign trade (Marshall) 280–82
and Walrasian general equilibrium theory 280, 282–4

Phelps, E. 371
circular flow diagram 225
Phillips curve 385

Phelps Brown, H. 197
backward-bending labour supply curves see backward-bending labour supply curves
Phillips, W., circular flow machine 224–5, 226
Phillips curve 22, 371, 377–92
and aggregate demand aggregate supply diagram 368, 369, 370, 372, 382–4, 386–8
basic curve 377–80
curve as menu of choice 384–5
development, later 389
empirical problems 385

expectations-augmented Phillips curves 378, 379
‘full employment’ debate 396
history and early developments 384
as independent concept 386–9
and inflation 379, 381–2, 385
and IS–LM model 380, 381–3, 384–5
as kinked aggregate supply curve replacement 381
labour supplied and real wage rate 388–9
in macro models 380–84
new classical critique and neo-Keynesian response 385–6
and non-accelerating-inflationary rate of unemployment (NAIRU) 379, 386, 389–91
productivity growth and unemployment 379–80
reverse-L aggregate supply curve 380, 381
and stabilisation policy 380
and stagflation 382–3, 385–6, 389–90
and sticky wage explanation 387–8
and technological change 390–91
unemployment and income gap 381, 387–8
upward drift in measured Phillips curves 385
wage- and price-Phillips curves 378, 381, 387

Pigou, A. 33, 76, 83
and backward-bending labour supply curves 164
and monopolistic competition 145
price discrimination 128
real balance effect 342, 345
taxation of external costs see taxation of external costs
Pinto, J. 182
Pissarides, C. 398, 399, 400
Pitchford, J. 430
Pollack, R. 67
population growth see logistic growth curve
portfolio diversification see Markowitz mean-variance diagram
Posner, R., rent-seeking diagrams see rent-seeking diagrams
poverty measurement
backward-bending labour supply curves 168–9
Engels curves 68
Prais, S. 65–6, 67
price discrimination, and monopoly see monopoly and price discrimination
fluctuations, self-perpetuating in agricultural commodities see cobweb diagrams
levels, and demand curve for money 401, 403, 404
stickiness, and non-neutrality of money 406–7
system, and Pareto efficiency 277–8
product differentiation, partial, and duopoly reaction curves 142–3
price changes, and factor price frontier diagram 266–8
selection, and spatial competition see Hotelling’s model of spatial competition
product exhaustion theorem 20, 80–82
and factor input prices 81
and income distribution 81–2
production boundaries of firms, and circular flow diagrams 221–2
Stolper–Samuelson production box see Stolper–Samuelson production box
production possibilities frontier 22, 245–51
commodity aggregates or composites 248–9
composite traded commodity 248
endowment case 246, 247
and Heckscher–Ohlin model 248, 250
higher dimensions 246–7
history of 245
and increasing returns to scale 246
monopolistic competition and gains from trade 249
and new trade theory 249
Ricardian case 246, 250
Rybczynski Theorem 247
shifts in curves 247–8
special shapes for 246–7
specific factors model 248
world production possibility curves 249–50
profit maximization, and factor price frontier diagram 263–5, 268–9
Quesnay, F., circular flow diagram see circular flow diagram
Ramsey, F. 135
Rao, B. 346
Rau, H. 4
Marshallian cross diagram see Marshallian cross diagram
reciprocal demand curve see offer curve
Reeder, M., and Pareto efficiency 279
Reed, L. 21, 210
Rees, A. 164
Reid, G. 154
rent-seeking diagrams 21, 204–8
and consumption possibility frontier 205
extensions and variations 206–7
and government policy 207, 208
and labor market 207
licensing and bribes 204, 205, 207
monopoly rents, competition for 207
rationed goods and queueing 204, 207
resource use and loss of output 204–5, 208
and risk 205
tariff increases and lobbying 204, 205–6, 207–8
reswitching and reversing in capital theory 191–8
Harcourt diagrams 193–5
history of 195–7
Neoclassical perspective 191–2
Wicksell effects 192–3
Rettenmaier, A. 108
Ricardo, D. 10
factor price frontier diagram 270
production possibilities frontiers 246, 250
theory of rent 80
Ricci, U. 184, 188
Robbins, L., backward-bending labour supply curves see backward-bending labour supply curves
Robinson, J. A. 441
Robinson, Joan. 14, 15, 33, 193, 354, 441
backward-bending labour supply curves see backward-bending supply curves
classification of technical change 87
discriminating monopoly diagram 16, 21, 131–4
elasticity of substitution see elasticity of substitution
factor price frontier diagram 270
labour supply curve 16
monopolistic competition see monopolistic competition
monopoly and price discrimination 128, 131–4
reswitching and capital reversing diagrams 193, 195
Rodenburg, Peter 393–400
Rogoff, K. 362, 363
role of numbers in competition 21, 239–44
contract curve limit 241–2
and indifference curves 240–41
and price-taking equilibrium 242–3
and recontracting 239–43
and trader coalitions 242–3
Romer, D. 406
Rosen, H., and Harberger triangles 106
Rothschild, M. 215, 436
Rothschild, R. 154–8
Roy, A. 100
mean-variance diagram 202
Rubinstein, A. 89–90
Ruffin, R. 250
Stolper–Samuelson production box 303
Rybczynski, T. 247, 320
Salop, S., circular city model and spatial competition 181
Salvadori, N. 270
Samuelson, P. 1, 8, 75, 77, 161, 430
aggregate production function model 191–2
circular flow diagram see circular flow diagram
and consumer surplus 98
and elasticity of substitution 52, 53
factor price equalization theorem 306
factor price frontier diagram see factor price frontier diagram
four-quadrant diagram in international economics 322
and international trade theory 326–7
IS/LM diagram 353
Keynesian income determination diagram see Keynesian income determination diagram
and Lerner diagram 306
multiple market competitive equilibrium 282
and Pareto efficiency 277, 278
Phillips curve 377
production possibilities frontier 248
reswitching and capital reversing diagrams 191–2, 193, 194–5
and social indifference map 315
Stolper–Samuelson production box see Stolper–Samuelson production box
utility-possibility frontier see utility-possibility frontier
and welfare distribution 118
Santomero, A. 384
Sargent, T. 371, 385
Sato, R., CES function 54, 55
Sawer, G. 430
Say’s Law, and Keynesian income determination diagram 339
Scarf, H., general equilibrium theory 231
Scarth, W. 375
Scheinkman, J., Stolper–Samuelson production box 303
Schneider, Michael 337–47
Schob, R. 122
Schultz, H. 60, 61, 184–5
Index

Schumpeter, J. 52, 77, 78
monopoly and price discrimination
135, 150
Schwartz, A. 359
Scitovsky paradox and community
indifference curves 5, 7, 20, 110–11, 113–17
alternatives to 118–19
community indifference curves
118–19
compensation–bribery test
115–16
efficiency analysis and hypothetical
compensation test (h-c test) 110, 114–16, 117, 119
and free trade 316
and Harberger test 119
interpretation, conflicting 115–16
paradox 112–17
and welfare distribution judgments
117–18, 252
Scott, I., IS–LM diagram 353
Scott, J. 212
Seater, J. 384
Second best see theory of second best
and third best
Segara, J. 14
Selden, T. 445
Sen, D., kinked demand curves 157
Sexton, R. 73, 76
Shafik, A. 197
Sharpe, W., capital asset pricing model
202–3
Shephard, R. 263, 265
homothetic production function see
homothetic production and
utility functions
Shi, He-ling 406–11
Shimomura, K. 328, 329
Shorrocks, A., Lorenz curve 436
Shubik, M., duopoly reaction curves
139
Shy, O. 213
Sidgwick, H. 281
Silberberg, E. 73, 77
Silio, G. 11
Simon, H. 17, 197
Skinner, Andrew 145–53
Slutsky, E.
indifference curves 43, 46
substitution and income effects see
substitution and income effects
Smith, A. 10
Smith, W., IS–LM diagram 353
Smolensky, E., Keynesian income
determination diagram 344
social network analysis see graph
theory and networks
Solow, R.
aggregate production function
model 191–2
classification of technical change see
classification of technical
change
non-neutrality of money see non-
neutrality of money
Phillips curve 377
UV (Beveridge) curve 395
Solow–Swan growth model 23, 426–31
and Cobb–Douglas functional form
430
history 430
and land supply 427
and multiple equilibria 429
Solow diagram 428–9
Swan diagram 427–8, 430
and technical progress change 426,
428, 429
Song, D. 445
Spence, M. 55
Spencer (née Swan), Barbara J.
426–31
Spencer, D. 167
Sraffa, P. 76
capital theory, reswitching and
reversing in 193
factor price frontier diagram 270
stability of equilibrium 20, 38–42
and Marshall and Walras diagrams,
differences between 38–41
stagflation
and aggregate demand aggregate
supply diagram 369
and Phillips curve 382–3, 385–6,
389–90
Stern, D. 443, 445
Stigler, G. 9, 14, 17, 64, 71, 80
Stigler, S. 15, 18, 36
Stiglitz, J. 55–6, 152–3, 259, 436
local network of collaboration 215
Stolper–Samuelson production box 3, 7, 15, 16, 22, 300–304
algebraic model, advantages of 303
and cost minimization 300–302
equilibrium in 300–302
extension 303
factor intensity problems 303
factor price frontier 267–8, 318
and Pareto efficiency 275–6, 300
tariff effect 302–3
Stonier, A. 6
Keynesian income determination
diagram 344
Strogatz, S. 215
Stubblebine, W., Buchanan/
Stubblebine diagram 122–4, 125
substitution
elasticity of see elasticity of
substitution
and income effect of wage cut,
backward-bending labour
supply curves 162–3, 164
substitution and income effects
58–63
Hicks compensation and
decomposition 59, 60, 61
Slutsky compensation and
decomposition 60–61
Slutsky derivation of income and
substitution effect 5, 14, 20,
58–62
Sultan, P. 384
Suri, V. 445
Swan, T.
aggregate production function
model 191–2
Solow–Swan growth model see
Solow–Swan growth model
Swanson, D. 135
Sweezy, P. 152
kinked demand curves see kinked
demand curves
Tabuchi, T. 181
tariff
effect, Stolper–Samuelson
production box 302–3
increases and lobbying, rent–seeking
diagrams 204, 205–6, 207–8
optimal see optimal tariff
welfare loss due to, and trade theory
diagram 314–15, 316
Tarshis, L., isoquants 46
Taussig, F. 148
Taussig–Pigou controversy, and
monopolistic competition 146
taxation of external costs 21, 121–7
bilateral taxation, beauty of 125–6
bilateral taxation and damage
exaggeration prevention 126
Buchanan/Stubblebine diagram
122–4, 125
Coase’s critique and ignored
asymmetry 124, 125
textbook diagram 121–2
taxation policy
and backward-bending labour
supply curves 164–6
Engels curves 68
government expenditure and
taxation and Keynesian income
determination diagram 339, 340
Harberger triangle see Harberger
triangle
Laffer curve see Laffer curve
and Lorenz curve 436
progressive income tax structures,
and Laffer curve 415
tax rate and revenue relationships,
Laffer curve 32–3
US Economic Recovery Tax Act
413–14
see also government policy
Taylor, J. 23, 406
technological change
and aggregate demand aggregate
supply diagram 373
classifications see classifications of
technical change
and elasticity of substitution 53
as function of time 88
and Heckscher–Ohlin model 321–2
and Phillips curve 390–91
Theocharis, R. 10, 11, 18
theory of the second best and third
best 22, 107, 286–91
and Cobb–Douglas utility function
290
and information constraint 288–90
and Pareto optimality 286–8
second best policy in triangle 286–7
and welfare optimum 286, 287–8, 290
Thisse, J.-F. 172, 181
Thompson, Henry 300–304
Thompson, T. 11
Thornton, H. 384
Thweatt, W. 250
Timlin, M. 403, 404
IS–LM diagram 353
Tinbergen, J. 184, 185, 384
Tirrole, J., kinked demand curves 157
Tobin, J. 375
portfolios and asset allocation line 202
Todaro, M., rent-seeking model 207
Torrens, R. 328
trade theory, Lerner diagram see Lerner diagram
trade theory diagram 22, 311–16
and competitive equilibrium 314
and free trade 311–12, 314–15, 316
and Heckscher–Ohlin model 313, 314
history of 313–15
and international policy issues 314
and Scitovsky test 316
and social indifference map 315–16
welfare loss due to tariff 314–15, 316
trader bartering
and Edgeworth box see Edgeworth box
and role of numbers in competition see role of numbers in competition
Travis, W., integrated world equilibrium diagram 327
Tullock, G.
rent-seeking diagrams see rent-seeking diagrams
welfare costs of monopolistic behavior 107, 108
unemployment
and rate of change of money wages see Phillips curve
and vacancies see UV (Beveridge) curve
unit simplex diagram 21, 230–32
and Brouwer fixed point theorem 231
and general equilibrium theory 231–2
and point-to-point mappings 231
utility-possibility frontier 22, 252–61
Allais contribution 252, 255–8
and Edgeworth box 254
and free trade 255
history of 252–6
and indifference curves 43, 46
and international trade 254–5
and Lindahl–Bowen optimal solution 254
and Pareto efficiency 273–4
possibility locus and welfare 252
possible and impossible situations, separation of 257–8
and real social income measures 253–4
Samuelson and Graaf contributions 252–6, 257–9
situation utility-possibility frontier 254
and social return curve 255–8
UV (Beveridge) curve 14, 15, 22, 393–400
contemporary economics, role in 397–8
as diagnostic tool for labour market 398
Dow and Dicks–Mireaux (DDM) UV curve 393–5
and equilibrium theories of labour market 397–8
‘full employment’ debate 396
impact on economic theory 395–7
and labour market clearing debate 397–8
and Lilien’s sectoral shift hypothesis 398
and Marshallian supply and demand analysis 396–7
matching function framework 397–8
stability debate 395
and unemployment classification 396
Uzawa, H.
classification of technical change 87
elasticity of substitution 55
Famous figures and diagrams in economics

Varian, H. 61, 284, 414, 417
Veblen, T. 195
Vega-Redondo, F. 214
Velupillai, K. 195
Verhulst, P.-F., logistic growth curve see logistic growth curve
Viner, J. 145
equilibrium theorem and cost curves
76–7
marginal revenue 128
production possibilities frontier see production possibilities frontier
trade theory diagram 313
von Thünen 11
factor price frontier diagram 270
location theory see location theory
production function 46
Wai Chiu Woo 286–91
Wald, A. 61
general equilibrium theory 231, 300
general equilibrium theory and phase diagram technique 280, 282–4
Wales, T. 67
Walras, L.
general equilibrium theory 230
monopoly and price discrimination
131, 134
stability of equilibrium diagram see stability of equilibrium diagram
Wan, H. 329
Wanniski, J. 413, 417
Washington consensus 414, 416–17
Weintraub, E. 231
Weintraub, S., Keynesian income determination diagram 343, 344, 354
welfare economics
distribution judgments, and Seitzovsky paradox and
community indifference curves
117–18, 252
and Lorenz curve 435–6, 437
loss due to tariff 314–15, 316
loss measurement in pure monetary values, Harberger triangles 107
Marshallian cross diagram 32–4, 35–6
and Pareto efficiency 110, 117, 237, 316
and Seitzovsky paradox see Seitzovsky paradox and community indifference curves
triangles see Harberger triangles
welfare optimum, and theory of the second best and third best 286, 287–8, 290
Whalley, John 230–32
Whitaker, J. 281, 401
Wicksell, K. 80, 403
capital theory, reswitching and reversing in 192–3
Wicksteed, P. 20, 80
Williams, Ross 64–8
Winch, D., theory of second best 286
Wong, K. 298
equilibrium theorem and cost curves
76–7
Woodland, Alan D. 262–71
Working, E. 188
Working, H. 66, 67
Wrightsman, D. 362
Yellen, J. 406
Young, A., monopoly and patents 146
Young, Warren 348–64
Yule, G. 210
Zhou, Y. 329
Zilberfarb, B.-Z. 355