

Notes

CHAPTER 1

- 1 Schumpeter (1954), p. 3.
- 2 *Ibid.*, p. 5.
- 3 For a slightly broader perspective on the philosophy of science in economics, see ch. 22.
- 4 Lakatos (1970), p. 91.
- 5 Popper (1972), p. 30.
- 6 *Ibid.*
- 7 Kuhn (1962), p. 10.
- 8 *Ibid.*, pp. 47–8.
- 9 *Ibid.*, p. 44.
- 10 *Ibid.*, pp. 37–9.
- 11 *Ibid.*, p. 19.
- 12 *Ibid.*, pp. 46–7.
- 13 *Ibid.*, p. 80.
- 14 *Ibid.*, ch. VI.
- 15 *Ibid.*, pp. 67–8.
- 16 *Ibid.*, p. 68.
- 17 *Ibid.*, p. 83.
- 18 *Ibid.*, p. 83.
- 19 *Ibid.*, pp. 87–8.
- 20 *Ibid.*, p. 85.
- 21 *Ibid.*, pp. 96–7.
- 22 *Ibid.*, p. 111.
- 23 *Ibid.*, pp. 94, 135.
- 24 *Ibid.*, p. 107.
- 25 *Ibid.*, p. 122.
- 26 *Ibid.*, p. 162.
- 27 See Lakatos (1970 and 1974b).
- 28 Lakatos (1974a), p. 4; (1974b), p. 149.
- 29 Lakatos (1974a).
- 30 Lakatos (1970), p. 71.
- 31 Lakatos (1974a), pp. 5–6.
- 32 See Lakatos (1970), pp. 49–52.
- 33 *Ibid.*, p. 50.
- 34 *Ibid.*, p. 65.
- 35 Merton (1963), p. 371.
- 36 Merton (1961), p. 356.
- 37 Merton (1963), p. 376.
- 38 *Ibid.*, p. 375.
- 39 *Ibid.*, p. 380.
- 40 Schumpeter (1954), p. 6.
- 41 Blaug (1978), p. 1.
- 42 Note that Blaug adds important qualifications to the sentence quoted here.
- 43 On relativism and absolutism, see Blaug (1978), pp. 2 f.
- 44 See chs 13 and 21.

CHAPTER 2

- 1 O'Brien (1976b), p. 133.
- 2 E.g. Sidgwick, Nicholson. See O'Brien (1976b).
- 3 Hutchison (1978), p. 24.
- 4 Cf. Gide and Rist (1909), p. 50.
- 5 Schumpeter (1954), p. 185.
- 6 This was a project which remained unfinished.
- 7 O'Brien (1976b).
- 8 Smith (1759) quoted in Skinner (1979), p. 105.
- 9 Bowley (1973) makes an interesting comparison with Cantillon in this respect.
- 10 E.g. Roll (1973).
- 11 Blaug (1978), pp. 39–40.
- 12 Hollander (1973), ch. 3; Mathias (1983).
- 13 Smith (1776), p. 1; cf. p. 4 n. 2.
- 14 Ibid.
- 15 Ibid., p. 352.
- 16 Transport and retailing, for example, counted as productive.
- 17 Ibid., p. 291.
- 18 Ibid., pp. 296–8. Note that money fits in here as a technical device.
- 19 Ibid., pp. 1–2.
- 20 Ibid., p. 7.
- 21 Ibid., p. 21.
- 22 Define the following variables:
 - X^t — output in period t
 - L^t — labour employed in period t
 - P — productivity of productive labour
 - w — wage rate
 - k — fraction of output devoted to employing productive labour

The two basic relationships are:

$$X^t = pL^t$$

and

$$L^t = kX^{t-1}/w,$$

from which can be derived the equation

$$X^t = k(p/w) X^{t-1}$$

The growth rate then follows as $k(p/w) - 1$.
- 23 Ibid., p. 359.
- 24 Ibid., pp. 32–3.
- 25 Ibid., p. 34.
- 26 Ibid., pp. 54–6.
- 27 Ibid., pp. 53–4; cf. pp. 72–3.
- 28 There is *one sentence* which can be construed as supporting a labour theory of value, on p. 40. But compare with pp. 37–8.
- 29 Ibid., p. 62.
- 30 Ibid., p. 61. See diagram in O'Brien (1975), pp. 80–1.
- 31 Ibid., p. 77.
- 32 Ibid., pp. 92–3.
- 33 Ibid., pp. 88–9.
- 34 Ibid., p. 95.

- 35 Ibid., p. 98.
- 36 Ibid., p. 375.
- 37 Ibid., ch. 10.
- 38 Ibid., p. 111.
- 39 Ibid., p. 161.
- 40 Ibid., p. 162. Smith has been criticized for neglecting competition between landlords. The monopolistic interpretation is more justifiable if it is assumed that the landlord always has the option of cultivating the land himself.
- 41 Ibid., p. 180.
- 42 Ibid., p. 182.
- 43 Ibid., pp. 103–4. Samuelson instances Smith's analysis of the situation in colonies to argue that he envisaged diminishing returns. However, this is not the case in the part of the WN where Smith deals with rent. One defence of Smith's apparent inconsistency would be to argue that once lands were fully developed constant returns prevailed, but that until then returns would be higher, and diminishing.
- 44 Ibid., p. 208.
- 45 Ibid., Bk. II, ch. V.
- 46 Similar arguments can be advanced on the basis of Smith's trade theory.

CHAPTER 3

- 1 This is the abbreviated title by which the essay is commonly known.
- 2 See O'Brien (1975), p. 126, n. 49.
- 3 Because labour and capital are used in fixed proportions, either capital or labour could be used on the horizontal axis. When one increases, so too does the other.
- 4 Ricardo (1817), p. 21.
- 5 A bundle of agricultural products would work, provided that the items in the bundle were always produced and consumed in fixed proportions.
- 6 Ricardo (1817), p. 55.
- 7 Ibid., p. 130.
- 8 For further discussion of this, see Sraffa (1960).
- 9 Ricardo (1817).
- 10 Similar problems also occur if the capital used in different industries differs as to its durability, or if the ratio of circulating capital to fixed capital varies across industries.
- 11 This argument appears only in the third edition of Ricardo's *Principles*. He had earlier argued that mechanization could not harm workers.
- 12 Schumpeter (1954), p. 473.
- 13 Compare this with the criticisms levelled against Keynes: p. 334.
- 14 Blaug (1978), p. 140.
- 15 O'Brien (1975), p. 45. It is important to note that Ricardo's influence extended to much more than the theory of value and distribution.
- 16 There has been a revival of interest in Ricardo since Sraffa (1960), but the nature of this interest is rather different. See pp. 384–5.

CHAPTER 4

- 1 Gide and Rist (1909), p. 106.
- 2 See p. 51.

- 3 The fact that the capitalist and the entrepreneur were usually the same in early nineteenth century England has been suggested as a reason why the concept of the entrepreneur never became prominent in English economics. See Blaug (1958).
- 4 Bowley (1973), p. 144.
- 5 Ibid., pp. 144-6.
- 6 Ibid., p. 146.
- 7 Cournot (1838), p. 20.
- 8 Ibid., p. 57.
- 9 See pp. 140 ff.
- 10 See Ekelund and Hebert (1983).
- 11 The first edition was in 1816, prior to Ricardo's *Principles*.
- 12 See Hutchison (1978), ch. 2, on the relation between Mill and Ricardo.
- 13 Torrens (1821), p. xiii, quoted in Blaug (1958), p. 52.
- 14 Bailey (1825), pp. vii-viii.
- 15 Ibid., p. 1.
- 16 Ibid., p. 2, 4.
- 17 Ibid., p. 185.
- 18 Ricardo (1817), p. 56.
- 19 Bailey (1825), p. 229.
- 20 See Blaug (1958), pp. 55-8.
- 21 Senior (1836), p. 12, quoted in O'Brien (1975), p. 101.
- 22 Longfield (1834), p. 110.
- 23 Ibid., p. 28.
- 24 Bowley (1973), p. 150.
- 25 Longfield (1834), pp. 111f.; Senior's statement of diminishing marginal utility was probably not available to Longfield when he wrote this - see Bowley (1973), p. 153.
- 26 Longfield (1834), p. 115.
- 27 Bowley (1973), p. 153.
- 28 Senior (1836), p. 178.
- 29 Ibid., pp. 166-7.
- 30 Ibid., p. 153.
- 31 Ibid., pp. 153, 187.
- 32 Longfield (1834), p. 191.
- 33 Ibid., p. 192.
- 34 Ibid., p. 193.
- 35 Ibid., p. 210.
- 36 Ibid., p. 209.
- 37 Ibid., pp. 210-11.
- 38 Schumpeter (1954), p. 466.
- 39 Ibid., p. 603; cf. Blaug (1978), ch. 9, especially p. 167.
- 40 See Mill's summary of his theory of value, (1848), Bk. III, ch. VI.
- 41 See p. 76.
- 42 O'Brien (1983), pp. 89-90.
- 43 See Hutchison (1953), ch. 1.
- 44 See pp. 64 ff.
- 45 See pp. 212 ff.

CHAPTER 5

- 1 For example, Locke (1691), Law (1705), Cantillon (1730).
- 2 Hicks (1967), p. 177.
- 3 See pp. 172–3.
- 4 Thornton (1802), pp. 118–19.
- 5 See Thornton's analysis of the 1797 crisis where he defends the decision to suspend cash payments.
- 6 Ricardo (1810), sect. 22. This telescoping of the short and long runs was characteristic of his work, not just of his monetary economics.
- 7 Ibid. Note that this was written before his *Essay on Profits* (see p. 26).
- 8 See p. 53.
- 9 Overstone, quoted in Tooke (1844), p. 8.
- 10 Tooke (1844), p. 70.
- 11 Ibid., p. 82.
- 12 Ibid., p. 84.
- 13 Say (1803), pp. 113–14.
- 14 Compare the statements on *ibid.*, pp. 116, 117.
- 15 Mill (1808), p. 135.
- 16 Ibid., emphasis added.
- 17 Ibid., p. 137.
- 18 Ibid., p. 138. Note that here Mill was arguing against Smith's "vent for surplus" theory.
- 19 Keynes (1936), pp. 362–3.
- 20 Ricardo (1817), p. 296; cf. ch. 3.
- 21 Mill (1844), p. 69.
- 22 Ibid., p. 70.
- 23 Ibid., p. 73.
- 24 Overstone (1837a), p. 44; (1857), p. 31.
- 25 Overstone (1857), p. 167.
- 26 Overstone (1857), pp. 264 ff.
- 27 Overstone (1857), p. 167.
- 28 Overstone (1837b), p. 36.
- 29 Tooke and Newmarch (1838), vol. II, p. 214.
- 30 See ch. 16 on more recent theories. See Schumpeter (1954), pp. 738–47 for details of other classical theories.
- 31 Cf. Schumpeter's assessment (1954), p. 747. He argues that Marshall did no more than elaborate on Mill's suggestions. Hansen (1964) also links Mill with later work.
- 32 Mill (1848), p. 654.
- 33 Ibid., p. 655.
- 34 Ibid., p. 320.
- 35 Ibid., p. 323.
- 36 Ibid.
- 37 Ibid., p. 401.

CHAPTER 6

- 1 See O'Brien (1975).
- 2 See p. 18.
- 3 O'Brien (1975), pp. 174–5.

- 4 Ricardo (1817), pp. 152–3.
- 5 Ricardo (1817), p. 152.
- 6 Ricardo (1817), pp. 153–4.
- 7 Ricardo (1817), p. 158; cf. p. 155.
- 8 These essays were written as early as 1829–30.
- 9 Edgeworth (1894), p. 7.
- 10 Mill (1848), p. 250, quoted in Black (1971).
- 11 *Ibid.*, p. 251.
- 12 *Ibid.*, p. 255.
- 13 *Ibid.*, p. 261.
- 14 *Ibid.*, p. 261.
- 15 *Ibid.*, pp. 263 f.
- 16 It is worth mentioning that the last sections of the chapter, added in later editions, were neglected for many years because economists could make no sense of them. Edgeworth (1894) and Viner (1937) are perhaps the most eminent examples. In these sections Mill confronts the issue of the possible indeterminacy of the terms of trade, dealing with it by considering the special case where demands have unit elasticity (Mill (1848), p. 268). See Chipman (1966).
- 17 See pp. 47 f.
- 18 Wheatley (1807); see Viner (1937), pp. 296–7.
- 19 See Mason (1955), pp. 529 ff.
- 20 Quoted in Mason (1955), p. 530.
- 21 *Ibid.*
- 22 For references see Mason (1855), p. 531; O'Brien (1970), pp. 208 ff.; Viner (1937), pp. 297 ff.; Fetter (1968), and O'Brien (1975).
- 23 The following argument is taken from Mason (1957).
- 24 This section relies very heavily on Winch (1965).
- 25 Smith (1776), p. 424 as quoted in Winch (1965).
- 26 Winch (1965), p. 12.
- 27 See p. 21.
- 28 *Ibid.*, p. 25.
- 29 See pp. 50 ff.
- 30 Winch (1965), p. 32.
- 31 *Ibid.*, p. 30.
- 32 *Ibid.*, p. 26.
- 33 Hutchison (1956); Winch (1965), p. 33.
- 34 See pp. 27 and 56.
- 35 Winch (1965), p. 41.
- 36 *Ibid.*, p. 48.
- 37 *Ibid.*, pp. 51 ff.; Ghosh (1964).
- 38 Wakefield (1833), note I, especially p. 328. Note that Wakefield preferred the term "combination of labour" to Smith's "division of labour". The terms mean the same thing.
- 39 Cf. Smith (1776), Bk. III, ch. I.
- 40 Wakefield (1833), p. 375.
- 41 *Ibid.*, p. 376.
- 42 Winch (1965), p. 99.
- 43 Wakefield (1833), p. 522 for examples of the inefficiencies which occurred on colonies where land was very cheap.
- 44 *Ibid.*, pp. 467–8.
- 45 O'Brien (1970), pp. 342–3.

- 46 Ibid., pp. 336 ff.
- 47 See p. 22.
- 48 O'Brien (1975), p. 275.
- 49 O'Brien (1975).

CHAPTER 7

- 1 See pp. 123–5.
- 2 Keynes (1933).
- 3 Black (1973).
- 4 See pp. 212 ff.
- 5 Jevons (1879), p. viii.
- 6 Ibid., p. ix.
- 7 Jevons (1871), p. 90.
- 8 Ibid., p. 91.
- 9 Ibid., p. 110.
- 10 Ibid., p. 148.
- 11 Ibid., p. 194.
- 12 Ibid., p. 202.
- 13 Ibid., p. 205.
- 14 Ibid., p. 226.
- 15 Ibid., p. 236.
- 16 Ibid., p. 241.
- 17 Jevons (1865), p. 241.
- 18 Ibid., p. 149.
- 19 Ibid., p. 151.
- 20 Ibid., p. 155.
- 21 Ibid., p. 222.
- 22 Jevons (1863), p. 20.
- 23 See Black (1960), p. 219.
- 24 Cairnes (1874).
- 25 Jevons (1875, 1878).
- 26 Jevons (1882), p. 12.
- 27 Jevons (1882), p. 171.
- 28 Jevons (1872–81), vol. II, p. 287.
- 29 Jevons (1883), pp. 191–2.
- 30 Jevons (1882), p. 14.
- 31 Ibid., pp. 33–4.
- 32 Jevons (1871), p. 72.
- 33 See pp. 36 ff.
- 34 de Marchi (1973); Black (1960).
- 35 See pp. 241 f.

CHAPTER 8

- 1 Walras (1874), p. 40.
- 2 Ibid., p. 84.
- 3 Ibid., p. 86; note that although monopoly was defined as an aspect of applied economics, the *Elements* contain a section on monopoly.
- 4 Jaffe (1978), p. 574.
- 5 Jaffe (1975), p. 820.

- 6 See pp. 34 ff.
- 7 He distinguished between “extensive”, “intensive”, “effective” and “rectangular” utility, making the subject seem unnecessarily complicated.
- 8 See p. 35.
- 9 Cournot (1838), p. 127.
- 10 Walras (1874), p. 44.
- 11 Let p be the rental and P the price of the asset. Assume the depreciation charge is mP , and the insurance premium νP . The net income derived from the asset is therefore $p - mP - \nu P$, which gives a percentage yield of $(p - mP - \nu P) / P$.
- 12 Using the notation from note 11, this implies that the return from buying a capital good, $p - mP - \nu P$, equals the return, iP , where i is the rate of interest, that could be obtained from lending the purchase price, P , at the going market rate of interest.
- 13 See chs. 9 and 14.
- 14 This is the familiar formula for the yield on a long-term bond.
- 15 Walras (1874), pp. 143, 255, 305.
- 16 See pp. 164–5.
- 17 Cf. Jaffe (1977), p. 379. Although Walras derives conditions equivalent to those for a Pareto optimum, the value judgements involved were very different: uniform competitive price was itself the ethical ideal, Walras’s value judgement being that exchange should not alter the *numéraire* value of an individual’s endowment of goods. This is very different from the value judgements usually used to support Pareto optimality.
- 18 Wicksell (1906), vol. I, pp. 72 ff.; cf. Hutchison (1953), pp. 206–7.
- 19 Walras (1874), p. 601 and references there.
- 20 See pp. 175 ff.
- 21 See ch. 16.
- 22 Schumpeter (1910), p. 79.
- 23 This order for the material occurs only from the 4th edition.
- 24 Walras appreciated the significance of variable production coefficients only after this was pointed out to him by Barone in 1894. Walras (1965), vol. II, pp. 619 ff. For the history of marginal productivity theory, see pp. 146 ff.
- 25 Marginal productivity itself occurs only from the 4th edition, despite the appearance of variable coefficients in earlier editions. Walras (1874), pp. 549–53.
- 26 This follows from the assumption of diminishing marginal utility.
- 27 Harrod (1956), p. 316.
- 28 Walras (1874), pp. 390–1.
- 29 Walras’s phrase was “mettre en ruines”. Walras (1965), vol. I, p. 646; and Jevons (1872–81), vol. V, p. 95.
- 30 Walras criticized the Marxian labour theory of value on similar grounds. Walras (1896), pp. 226 ff.
- 31 Jaffe (1975), p. 882.
- 32 Walras (1898), p. 76.
- 33 *Ibid.*, p. 198.
- 34 See p. 171.
- 35 This was also the view of Auguste Walras; Jaffe (1975), p. 813.
- 36 Jaffe (1975), p. 815.
- 37 This argument is developed in Jaffe (1975).
- 38 See note 7 above.
- 39 Blaug (1978), p. 587. He also provides a good discussion of some of the technical aspects of the problems Walras was analysing.
- 40 Morishima (1980), p. 552; cf. (1977), p. 4.

CHAPTER 9

- 1 Note that before 1914 Austria was not a small, neutral state, but the centre of a large empire.
- 2 See p. 13.
- 3 The nationalistic emphasis of the Historical School might be an explanation of why it was less important in Austria than in Germany; this emphasis could have been divisive in a country containing many nationalities.
- 4 The original wording, though the English is obscure, is important in view of Menger's attitude to causation. See p. 90.
- 5 Menger (1871), p. 52.
- 6 This division of goods into orders is clearly intended as a simplification, made to clarify the exposition.
- 7 Menger (1871), p. 115.
- 8 Menger's objections to the use of the term utility are little more than a quibble over the exact use of words, and is not evidence against this. *Ibid.*, pp. 118–19.
- 9 *Ibid.*, p. 132.
- 10 Menger does not suggest that these measurements can have more than ordinal significance.
- 11 *Ibid.*, p. 150.
- 12 *Ibid.*, p. 149.
- 13 *Ibid.*, p. 164; cf. p. 165.
- 14 *Ibid.*, p. 63.
- 15 *Ibid.*, p. 165. Menger does not seem to be aware of the existence of an adding-up problem.
- 16 *Ibid.*, p. 157; cf. p. 153.
- 17 *Ibid.*, p. 161.
- 18 *Ibid.*, p. 191.
- 19 See Hutchison (1981), especially ch. 6.
- 20 Menger (1871), p. 217.
- 21 *Ibid.*, p. 97.
- 22 *Ibid.*, pp. 260–1.
- 23 This view of the development of wants has something in common with that of Marshall. See p. 99.
- 24 *Ibid.*, pp. 152–5.
- 25 See ch. 18.
- 26 See Hutchison (1981), ch. 6, and Alter (1982).
- 27 Menger (1883).
- 28 Menger (1871), p. 51.
- 29 See p. 85.
- 30 Alter (1982).
- 31 Antonelli (1953).
- 32 Menger (1883), p. 218.
- 33 Wieser (1893), p. 60.
- 34 *Ibid.*, p. 61.
- 35 *Ibid.*, p. 62.
- 36 See p. 166.
- 37 Wieser (1893), p. 66.
- 38 *Ibid.*
- 39 See Hayek (1935).
- 40 Schumpeter (1954), p. 847.

- 41 *Ibid.*, p. 234. See Hutchison (1981). There seems some similarity here with Walras's use of the competitive model.
- 42 See pp. 151 ff.
- 43 See pp. 265 ff.
- 44 See pp. 266–8 and 379.
- 45 See Hayek (1935).
- 46 See p. 379.
- 47 See pp. 189 f.
- 48 See p. 157.

CHAPTER 10

- 1 This has been disputed. See below.
- 2 Because of Marshall's emphasis on continuity with the English classical economists, the term "neoclassical" is in a sense more applicable to Marshall than to the Jevons, Walras or Menger.
- 3 Whitaker (1975).
- 4 Cf. Marshall's review of Jevons (1871), reprinted in Marshall (1925).
- 5 See Marshall's paper on mechanical and biological analogies in economics, reprinted in Marshall (1925).
- 6 Marshall (1925), p. 417.
- 7 Marshall (1890).
- 8 Cf. the diagrams in Whitaker (1975) and Marshall (1879).
- 9 Marshall (1890), p. 502; emphasis added.
- 10 *Ibid.*, p. 317.
- 11 *Ibid.*, p. 501.
- 12 *Ibid.*, p. 665.
- 13 *Ibid.*, p. 545.
- 14 Marshall (1879).
- 15 See pp. 175 ff.
- 16 Marshall (1890), p. 1.
- 17 Parsons (1931 and 1932).
- 18 Marshall (1890), p. 689.
- 19 *Ibid.*, p. 470.
- 20 See pp. 167 and 242.
- 21 Whitaker (1977), p. 163.
- 22 Marshall (1907).
- 23 Marshall (1890). It is worth noting that many of Marshall's pupils were involved in surveys which were gradually revealing the extent of poverty in Britain.
- 24 Hutchison (1953), p. 70.
- 25 See pp. 212 ff.
- 26 Marshall (1925), p. 159.
- 27 *Ibid.*, p. 437.
- 28 See n. 5 above.
- 29 Marshall (1961), vol. II, p. 72.
- 30 Marshall (1897).
- 31 Guillebaud (1952), p. 114.
- 32 Marshall (1890), pp. 9–10.

- 33 Quoted in Whitaker (1975), p. 110 and in Coats (1967a).
- 34 Samuelson (1967), pp. 109, 111.
- 35 Cf. pp. 142–3.
- 36 Cf. Hayek's argument, p. 379.
- 37 Hutchison (1981), p. 53.
- 38 Marshall (1925), p. 165. cf. p. 244.
- 39 Taussig (1924), p. 1.

CHAPTER 11

- 1 John Bates Clark should not be confused with his son, also an eminent economist, John Maurice Clark.
- 2 Dorfman (1946–59), vol. III, p. 192.
- 3 Ibid.
- 4 See p. 147. See also Dorfman (1946–59), vol. III.
- 5 These publication dates are slightly misleading, for much of the contents was contained in earlier articles.
- 6 Clark (1886), p. iii.
- 7 Ibid., p. iv.
- 8 Ibid., p. 15.
- 9 Ibid., p. 74.
- 10 Ibid., pp. 107–8.
- 11 Wieser probably comes closest to this. See p. 91 f.
- 12 Ibid., p. 120.
- 13 Ibid., p. 151.
- 14 Ibid., prefaces.
- 15 He still considered that it was his stress on social value which distinguished his views from those of his European contemporaries. Clark (1899), p. 376.
- 16 Ibid., p. vi.
- 17 Ibid., pp. 29–30.
- 18 Ibid., pp. 67–70.
- 19 Ibid., ch. VI.
- 20 Ibid., pp. 106–7.
- 21 See ch. 14 for discussion of Böhm-Bawerk and Clark's disagreement with him.
- 22 Clark (1899), pp. 334–40.
- 23 Ibid., pp. 401–2.
- 24 Ibid., p. 404.
- 25 Ibid., p. 405.
- 26 Ibid., p. 410. Note the similarity to Schumpeter's theory of profits. See p. 157.
- 27 Ibid., p. 418.
- 28 Ibid., p. 434.
- 29 Ibid., p. 436.
- 30 Ibid., p. 9.
- 31 See pp. 227 f.
- 32 Clark (1896), pp. 12–14.
- 33 Cf. Hutchison (1953); Jalladeau (1975); Henry (1982).

CHAPTER 12

- 1 Texts on Marx abound, and this chapter attempts to do no more than provide a brief introduction to some of the themes most relevant to developments in mainstream economics.

- 2 Kolakowski (1978), vol. I, p. 401.
- 3 Much of this paragraph is taken from Pribram (1983), pp. 246 ff.
- 4 Morishima and Catephores (1978), p. 10; much of this section is taken from ch. 1 of this book.
- 5 Ibid., pp. 3, 12–13.
- 6 Schumpeter (1954).
- 7 See Morishima (1973), p. 11; Marx (1867–94), pp. 46–7. Marx needed to assume something like this to avoid the absurdity of implying that the value of a commodity could be increased simply by expending more labour on it. Subsequent references to *Capital* simply give the volume number.
- 8 To simplify the exposition the distinction between stocks and flows is ignored. Marx brings in assumptions about rates of turnover of capital to link together the stock of capital (the base on which to calculate the rate of profit) and the flow of capital used up in production (which enters into the value of commodities).
- 9 Vol. III, ch. 9.
- 10 A further problem is that if we accept that total surplus value is defined as equal to total profits, it no longer follows that total output will be the same in value terms as in price terms. This problem does not arise in the simple example used here because in it values and prices are not separated as they should be. See p. 238; also, Seton (1957).
- 11 Vol. III, ch. 9, p. 155; note that the only reason why, in this example, all prices turn out to be the same is that the capital in each sector is the same. In other words, it is assumed that the depreciation rate on fixed capital is 100%. Nothing of importance hangs on this. In Marx's example where the turnover rates of the various types of capital are different, prices differ.
- 12 Vol. II, ch. 19, pp. 363 ff.
- 13 See Eltis (1975).
- 14 In Quesnay's *tableau* gross output is 2500, this being because he includes an interest charge of 500 (assumed equal to 10% of a capital invested of 5000). This interest charge is used to cover depreciation, being spent entirely within the productive sector. It does not affect the balance between the sectors and it is simpler to leave it out.
- 15 See Eltis (1975), p. 195.
- 16 If we adopted the assumptions about depreciation mentioned in note 14 there would be an entry of 500 here.
- 17 Vol. II, ch. 20, pp. 396 ff.
- 18 Vol. II, p. 397.
- 19 This condition was derived from the condition that demand and supply for investment goods are equal; exactly the same can be derived from the condition that output of consumer goods equals demand (total variable capital plus total surplus value).
- 20 It can be shown that for simple reproduction, $v_I/v_{II} = k_{II}/(1+e)$. If e rises, department I must become smaller relative to department II.
- 21 Vol. II, ch. 21; Morishima (1973), pp. 117 ff.
- 22 It was important for Marx not so much because of its greater realism as because of its importance in Marx's Hegelian scheme.
- 23 Morishima (1973), p. 118f.; for other objections see Blaug (1978), p. 263.
- 24 See ch. 25.
- 25 Vol. III, ch. 14.
- 26 There are, of course important senses in which Marx was not one of the classical economists. For example, the classical economists can be regarded as a

reasonably well defined sociological group, of which Marx was clearly not a member.

- 27 Blaug (1980), ch. 2.
28 See p. 237.

CHAPTER 13

- 1 This is taken from the title of Bowley (1972).
- 2 Hutchison (1955), p. 3.
- 3 See pp. 43–4 and 212 ff. The classic reference on the state of the subject in 1870 is Hutchison (1953), ch. 1. See also Coats (1964), pp. 95 f; Hutchison (1955), pp. 3 f.; Hutchison (1978), ch. 3.
- 4 Hutchison (1978), p. 75.
- 5 *Ibid.*, p. 81.
- 6 *Ibid.*, p. 86.
- 7 Hutchison (1955), p. 7.
- 8 *Ibid.*, p. 9.
- 9 *Ibid.* See also Coats (1964, 1967a).
- 10 Hutchison (1953), pp. 63–4.
- 11 Coats (1967a), p. 714 f.; Kadish (1982).
- 12 See Coats (1967b).
- 13 Coats (1967a), p. 710.
- 14 Coats (1980), p. 601. Most of this section is taken from this article.
- 15 It is significant that the American Economic Association was founded before the Royal Economic Society.
- 16 Coats (1980), p. 594.
- 17 *Ibid.*, p. 602.
- 18 *Ibid.*, p. 605. To get an impression of the variety within American economics, see Mitchell (1969).

CHAPTER 14

- 1 In this chapter we are concerned solely with the meaning of utility as applied to a single individual. Questions of interpersonal utility comparisons are discussed in ch. 15.
- 2 Jevons (1871), pp. 112–14.
- 3 Edgeworth (1881), p. 7.
- 4 Bonar (1888), esp. pp. 24–5; Mitchell (1969), p. 253.
- 5 See Mitchell (1969), p. 257.
- 6 Fisher (1892), p. 11.
- 7 *Ibid.*, p. 23.
- 8 *Ibid.*, p. 89.
- 9 Pareto (1893).
- 10 Johnson (1913), p. 103.
- 11 Schumpeter has suggested that Johnson's failure to acknowledge Pareto earned Slutsky's resentment amongst Italian economists. The circumstances of 1915 go partly to explain the neglect of Slutsky amongst English-speaking economists.

- The mathematics in both articles was also very difficult for most contemporary economists.
- 12 An additively separable utility function is one that can be written in the form $U = u_1(x_1) + u_2(x_2) + \dots + u_n(x_n)$ where x_1, \dots, x_n are the quantities of the n goods consumed.
 - 13 Fisher (1892), pp. 64-75.
 - 14 This was also done by Barone. See Shackle (1967), p. 81, but note Shackle's complete neglect of Fisher.
 - 15 Hicks recalls coming to the new consumer theory via the elasticity of substitution as applied to the production function. Hicks (1981), pp. 3-4.
 - 16 See p. 95.
 - 17 Cassel (1918), p. 82.
 - 18 There were of course exceptions, such as Mill's theory of reciprocal demand; but it is with Cairnes' extension of this aspect of Mill's theory that is associated the demise of classical economics.
 - 19 Schumpeter (1954, pp. 963 ff) distinguishes between a static state and a stationary one.
 - 20 Pareto (1906), p. 106.
 - 21 Marshall (1890), p. 810; quoted by Hutchison (1953), p. 81.
 - 22 Schumpeter (1954), p. 978.
 - 23 Chamberlin (1933), p. 8.
 - 24 *Ibid.*, p. 68.
 - 25 *Ibid.*, p. 3.
 - 26 *Ibid.*, pp. 82, 110; Chamberlin (1937), p. 195.
 - 27 Chamberlin (1937), p. 195.
 - 28 Blaug (1978), p. 417.
 - 29 Robinson (1933a), p. 1. Her quotation is from Pigou.
 - 30 *Ibid.*, p. 11.
 - 31 *Ibid.*
 - 32 She has later (1973) argued that this was her main purpose. For an argument that this reflects her later concerns see Harcourt (1984), p. 641.
 - 33 Robbins (1928), p. 393.
 - 34 See O'Brien (1983a).
 - 35 The marginal revenue curve was discovered independently by Harrod, Chamberlin and Yntema. See the contrasting comments of Shackle (1967) and Samuelson (1967a) on this.
 - 36 Harrod (1930), p. 91.
 - 37 Robinson (1932), pp. 549-52.
 - 38 Robinson (1933a), p. 15.
 - 39 *Ibid.*, p. 6, emphasis added.
 - 40 Shove (1933), p. 121.
 - 41 Robinson (1933b), p. 124.
 - 42 E.g. Loasby (1976); O'Brien (1983a).
 - 43 Loasby (1976), p. 202.
 - 44 See p. 103.
 - 45 See p. 35.
 - 46 This is hinted at in Bowley (1924) and used by Frisch (1933) and Hicks (1935b).
 - 47 Robinson (1933a), pp. 38, 81.
 - 48 Sweezy (1939), Hall and Hitch (1939).
 - 49 Stigler (1947), p. 410.
 - 50 Arrow and Hahn (1971); much of the following is taken from here.
 - 51 Moss (1984), p. 307.

- 52 Hicks (1939a), pp. 83–5.
- 53 See pp. 191 ff.
- 54 This and the following three paragraphs owe much to Gordon (1973).
- 55 See Marshall (1890), Appendix J.
- 56 See article on Wood in Stigler (1965).
- 57 Note that Walras held similar views on taxing land.
- 58 See Coase and Stigler (1969).
- 59 Berry (1891), p. 315.
- 60 Wicksteed (1894), p. 7.
- 61 Ibid.
- 62 Linear homogeneity means that if $Y=F(K,L)$ then $aY=F(aK,aL)$ where a is any positive constant.
- 63 Note that the first of these assumptions implies constant returns.
- 64 Wicksell had himself (1893) put forward a similar theory, but he was unaware of this.
- 65 Edgeworth (1925), vol. 1, p. 31.
- 66 Such a function had previously been used by Wicksell.
- 67 Schumpeter (1954), p. 909.
- 68 See below.
- 69 Böhm-Bawerk (1889), p. 347.
- 70 Ibid., p. 358.
- 71 Ibid., p. 365.
- 72 See ch. 25.
- 73 Clark (1893), p. 308.
- 74 Cassel (1901), p. 89.
- 75 Fisher (1907), p. 74.
- 76 Ibid., p. 139.
- 77 Fisher (1930), p. 321.
- 78 See pp. 108 f.
- 79 See pp. 189 f.
- 80 For a list of the numerous contributions to this debate see Kaldor (1938).
- 81 Knight (1933), p. 328.
- 82 Ibid., p. 329.
- 83 See pp. 325 f.
- 84 See ch. 20.

CHAPTER 15

- 1 See Myint (1948).
- 2 See Hutchison (1981), ch. 3.
- 3 See p. 36.
- 4 See pp. 70 ff.
- 5 Bentham (1789), p. 2.
- 6 Bentham (1818), p. 3.
- 7 Ibid., p. 102.
- 8 Ibid., p. 103.
- 9 Bentham (1789), p. 66.
- 10 Ibid.
- 11 In modern theory this assumption would be expressed as saying that all

- individuals have a common utility function, in which all ascertainable individual characteristics enter as arguments.
- 12 Cf. Sidgwick's attitude, discussed below.
 - 13 This is not to imply that Bentham and Mill held exactly the same theory of utility. There were differences, but they are not relevant to the present argument.
 - 14 See p. 75.
 - 15 See Hutchison (1981), ch. 3.
 - 16 Sidgwick (1887), p. 71.
 - 17 *Ibid.*, p. 90.
 - 18 Sidgwick (1874), p. 129.
 - 19 *Ibid.*, p. 123.
 - 20 *Ibid.*, pp. 144, 398.
 - 21 Sidgwick (1874), p. 397.
 - 22 *Ibid.*, p. 409.
 - 23 *Ibid.*, p. 406.
 - 24 See Hutchison (1978), p. 104.
 - 25 Sidgwick (1874), p. 506.
 - 26 *Ibid.*, p. 517.
 - 27 Schumpeter (1954), p. 1070.
 - 28 Marshall (1890), p. 108.
 - 29 Pigou (1920), p. 6.
 - 30 *Ibid.*, p. 10.
 - 31 *Ibid.*, p. 11.
 - 32 *Ibid.*, p. 86.
 - 33 See Hicks (1975), pp. 219-20.
 - 34 Pigou (1920), p. 185; quoted in Hutchison (1953), p. 291; see Collard (1981), p. 114.
 - 35 See pp. 315 f.
 - 36 See p. 100.
 - 37 See the symposium in the *Economic Journal*, 1928.
 - 38 Blaug (1978).
 - 39 Edgeworth (1881), p. 7.
 - 40 Suppose individual A can distinguish between "good" and "awful", whereas B can distinguish between "good", "fairly good", "acceptable", "poor" and "awful". Edgeworth is assuming that if A moves from "awful" to "good", this has the same value to society as if B moves from "awful" to "poor". This clearly involves an ethical judgement. See Sen (1970a), pp. 93-4.
 - 41 Edgeworth (1881), p. 56.
 - 42 *Ibid.*, p. 64.
 - 43 Edgeworth (1894). See Creedy (1981), pp. 89-91.
 - 44 See p. 77.
 - 45 Pareto (1896), para. 721, p. 92.
 - 46 *Ibid.*, para. 721, n. 2., pp. 92-4.
 - 47 This idea is developed in Chipman (1976), p. 92.
 - 48 Pareto (1908), p. 201.
 - 49 Myrdal (1929), p. 128.
 - 50 Hicks (1975), p. 220.
 - 51 Myrdal (1929), p. 199.
 - 52 Hicks (1975), p. 220.
 - 53 See pp. 302 f.

CHAPTER 16

- 1 Marshall's contributions to monetary economics came later and considered below.
- 2 See pp. 46 f.
- 3 See p. 53.
- 4 See p. 74.
- 5 2nd edn, p. xix; quoted in Hutchison (1853), p. 372.
- 6 See pp. 181 ff.
- 7 These ideas were developed in Wicksell (1906), vol. II.
- 8 The problem of defining the natural rate is more complicated than suggested here, for the rate at which inflation is zero may not be the same as the rate equating saving and investment. This formed the basis for Myrdal's later development of Wicksell's theory. See below pp. 192 f.
- 9 See p. 155.
- 10 Fisher was not the first to draw this distinction, but it was he who was responsible for popularizing the idea.
- 11 This contrasts with the Cambridge approach. See below.
- 12 Fisher (1911), p. 55.
- 13 Ibid., p. 62.
- 14 Ibid.
- 15 See section 16.3.
- 16 Fisher (1911), p. 66.
- 17 Ibid., p. 169.
- 18 Ibid., p. 161.
- 19 Pigou (1917).
- 20 Pigou, quoted in Keynes (1923), p. 61.
- 21 Keynes (1923), p. 61.
- 22 Note that the *ceteris paribus* conditions included the expected rate of inflation.
- 23 Linking the quantity of money to the value of *money*.
- 24 Keynes (1923), p. 65.
- 25 Pigou (1917), p. 179. Note that if we divide both sides by $c+h(1-c)$ we obtain something much more familiar: the condition that the demand for money must equal the quantity of high-powered money multiplied by the money multiplier.
- 26 Marshall (1887), p. 181.
- 27 Ibid., p. 192. Note that he refers to general over-production as a "monstrous fallacy".
- 28 Particularly notable is ch. 1 of Keynes (1923).
- 29 See also p. 251.
- 30 See pp. 206 ff.
- 31 Keynes (1923), p. 36.
- 32 Much of the following is taken from Hutchison (1953), ch. 22.
- 33 Ibid., p. 367.
- 34 Cf. Parrini and Sklar (1983). Note that Marx also criticized Say's Law, and stressed the falling rate of profit.
- 35 See ch. 5.4.
- 36 Written jointly with A. F. Mummery.
- 37 See Kolakowski (1978), vol. I, p. 327, who describes the question of markets as "one of those most discussed in Marxist circles".
- 38 Hansen (19164), p. 286.
- 39 See pp. 218 ff.

- 40 Schumpeter (1910). These ideas were developed in Schumpeter (1912) and (1939).
- 41 Hansen (1964), p. 397; Dorfman (1946–59), p. 360.
- 42 Cf. Koopmans (1947b).
- 43 Mitchell (1927), p. 3.
- 44 Ibid., p. 11.
- 45 Ibid., pp. 54–5.
- 46 See pp. 223 f.
- 47 Mitchell (1927), pp. 113–15.
- 48 See p. 223.
- 49 Cassel (1918a), vol. II, p. 545.
- 50 Haberler (1936), p. 64.
- 51 Hicks (1977), p. 118; Schumpeter (1954), p. 1121; Davies (1981), pp. 204, 211.
- 52 Hawtrey (1913), p. 5.
- 53 Hicks (1982), p. 129.
- 54 Preface to Robertson (1926).
- 55 To get the flavour of this note that lacking might be: short, long or unproductive; spontaneous, induced or automatic; imposed; applied or abortive; and that there were similar classifications for hoarding, stinting and splashing!
- 56 Frisch (1933), p. 178.
- 57 The exposition was similar to that of a two-country multiplier model, though he analysed a supply shock, and allowed for the elasticity of supply. Pigou (1927), pp. 51–64.
- 58 Ibid., p. 284.
- 59 It was at this time that English translations of Wicksell's major works were first published.
- 60 Schumpeter (1954), p. 1120. This followed Hayek (1929).
- 61 See pp. 151 ff. and 172–3.
- 62 For a discussion of how this situation might come about see Hicks (1967).
- 63 For Hayek this starting point was a methodological assumption.
- 64 This is not Keynes' notation. Note that Keynes had separate equations for the prices of consumption and investment goods.
- 65 The reference is to the Old Testament, 1 Kings, ch. 17.
- 66 Ohlin (1937) is the source of this description.
- 67 See the symposium in *History of Political Economy*, 1978, Patinkin (1982), Hansson (1982).
- 68 Myrdal (1973), pp. 4–5.
- 69 Steiger (1978); Patinkin (1982), pp. 45–6.
- 70 Lindahl (1939), p. 141.
- 71 Ibid., p. 159.
- 72 Ibid., pp. 166, 178.
- 73 Ibid., pp. 184–5.
- 74 Published in Swedish in 1931, in German in 1933, and in English in 1939. The last is not simply a translation, though the main ideas are to be found in the Swedish edition.
- 75 Myrdal (1939), p. 32.
- 76 Ibid., p. 47.
- 77 Ibid., p. 46.
- 78 Ibid., p. 83.
- 79 Ibid., pp. 131–3.

- 80 Ibid., p. 135.
- 81 Ibid., pp. 164–5.
- 82 Ibid., pp. 167–8.
- 83 Ibid., p. 168.
- 84 See p. 249.
- 85 Cf. Pigou (1927), p. 64.
- 86 The MacMillan Committee is discussed on pp. 255–6.
- 87 See Davies (1981), pp. 216–17.
- 88 Like Myrdal, Kahn explained the MPC in terms of the increase in income which occurred when a man moved from the dole to receiving a wage, not in terms of a fundamental psychological law.
- 89 See the preface.
- 90 Keynes (1971–1983), vol. XIII, pp. 54, 152.
- 91 Ibid., pp. 337–43.
- 92 See Robinson (1933c), written in the summer of 1931.
- 93 The Harris Lectures, Keynes (1971–83), vol. XIII, pp. 343 ff.
- 94 Ibid., pp. 355–6.
- 95 Patinkin's answer to this is in 1933; Patinkin (1982), p. 30.
- 96 In discussing the *General Theory* it is assumed that the reader is familiar with the standard macro textbook expositions of Keynesian economics. Ackley (1961), Branson (1979), Blaug (1978).
- 97 Fisher (1930).
- 98 Cf. Kregel (1973).
- 99 Hicks (1935a) and Hicks (1982), p. 8.

CHAPTER 17

- 1 See Viner (1937).
- 2 Cairnes' views on the transfer mechanism, written rather earlier, are considered in ch. 6.
- 3 Cairnes (1874), pp. 372, 418, 423. This was described as the difference between the theory of international trade (why countries trade) and international value (the terms on which they trade).
- 4 Ibid., pp. 373, 416.
- 5 Cairnes did not use the term, but the concept is clear.
- 6 Bastable (1897), p. 24.
- 7 Ibid., pp. 29–31.
- 8 Cf. pp. 43–4 and 212 ff.
- 9 Cliffe Leslie (1879).
- 10 Sidgwick (1883), pp. 205–9.
- 11 Ibid., p. 212.
- 12 Bastable (1897), p. 176.
- 13 See pp. 213 f.
- 14 Edgeworth (1894), p. 32. Note that both Marshall and Edgeworth applied reciprocal demand to representative "bales" of commodities; Edgeworth (1894), p. 157; Marshall (1879), p. 2. An economist who did use partial equilibrium supply and demand curves to analyse trade was Barone, in 1908. See Viner (1937), pp. 589–91.

- 15 Edgeworth (1894), p. 39.
- 16 Pareto (1908), pp. 269–71.
- 17 See Angell (1926).
- 18 Graham (1932), p. 584.
- 19 Graham (1923), p. 328.
- 20 Graham (1932), pp. 584–6.
- 21 This objection is not applicable to the Marshall–Edgeworth approach of aggregating all exports and all imports into “bales”. As Graham points out, however, this approach is invalid when the relationships between different items within the bales change. Graham describes the Marshall–Edgeworth approach as building “imaginary bricks with imaginary clay” (Graham, 1932) p. 583.
- 22 Graham (1923), pp. 326–30.
- 23 Graham (1932), p. 581.
- 24 Haberler (1955), p. 11.
- 25 This was presented as a dissertation in Swedish in 1924.
- 26 Heckscher (1919), p. 277.
- 27 *Ibid.*, p. 285.
- 28 I.e. exactly the same combinations of inputs were used to produce each commodity.
- 29 *Ibid.*, p. 291.
- 30 Ohlin (1933), Appendix 1, pp. 553–62; also pp. 305–6 See p. 144 for discussion of Cassel’s system.
- 31 *Ibid.*, p. 564.
- 32 A similar criticism was also directed at Marshall: *ibid.*, pp. 567–8.
- 33 Haberler (1933), p. 175.
- 34 *Ibid.*, pp. 175 ff.
- 35 Viner (1937), p. 521. The diagram was presented at LSE in 1931.
- 36 This derivation of the offer curve was contained in earlier discussions of consumer theory. See p. 135; Cf. Chipman (1965), p. 687.
- 37 Bastable (1889), pp. 12–13.
- 38 *Ibid.*, p. 16.
- 39 Cf. Angell (1926), pp. 100–2.
- 40 Nicholson (1897) quoted by Iversen (1935), p. 244.
- 41 Bastable (1889, p. 114) saw himself as attacking an unchallenged orthodoxy. Iversen refers to the income approach as being consigned to oblivion for 20 years (Iversen, 1935) p. 244).
- 42 See pp. 59 f.
- 43 Taussig (1917), p. 389.
- 44 *Ibid.*, p. 393.
- 45 Wicksell (1918), p. 405.
- 46 Taussig (1927), p. 260.
- 47 Iversen (1935), pp. 259 ff.
- 48 Keynes pointed out that even if the elasticity of demand were as high as 2, a 10% fall in costs would raise the value of exports by only 8% (Keynes, 1929a, p. 166).
- 49 *Ibid.*, p. 162.
- 50 Viner (1924a), pp. 204–6; cf. Viner (1937), p. 305 ff.
- 51 This is by no means the whole of the discussion; many other issues such as German borrowing abroad in the 1920s, and the relation between international

- investment and trade flows, were discussed. See Iversen (1935), pp. 278 ff; Haberler (1933), pp. 6 ff; Viner (1937), pp. 307 ff.
- 52 Keynes (1929b), p. 479.
- 53 Keynes (1930), ch. 21. See Haberler (1933), p. 74.
- 54 Cf. p. 193. Ohlin does not have the multiplier. For Ohlin here the increases in imports are not due to successive rounds of expenditure and income, but are due to supply responses.
- 55 The term was introduced in 1918, but the concept was used earlier.
- 56 Cassel (1916), p. 62.
- 57 *Ibid.*
- 58 Given the quantity theory it makes no difference whether the growth of the money supply or of the price level is used.
- 59 The average of these years was used.
- 60 Cassel (1918b), p. 413.
- 61 Cassel (1919), pp. 494–5. The example which drew attention to this factor was post-war Germany (Cassel (1922), pp. 147 ff.).
- 62 Keynes (1923), p. 79; cf. Angell (1926), p. 191.
- 63 Anderson (1920).
- 64 Fisher (1920).
- 65 Keynes (1930), pp. 72–4.
- 66 Bresciani-Turroni (1934), p. 80.
- 67 Keynes (1924), p. 80.
- 68 Taussig (1927), p. 357; see Bresciani-Turroni (1934), p. 434.
- 69 Brisman (1933), p. 73; cf. Officer (1976), which contains an outline of developments since the 1930s.
- 70 *Ibid.*, p. 74.
- 71 For the views of more orthodox economists see Wood (1983).
- 72 He held a different view in his earlier writings. See Cain (1978, 1979a), from which most of this section is taken.
- 73 See p. 65.
- 74 Hobson (1902), 2nd edn, quoted in Cain (1978), p. 572.
- 75 This can be explained in terms of changes in the political climate: see Cain (1978), Clarke (1981), Cain (1981).
- 76 Later (1911) Hobson adopted a more orthodox view of increasing international division of labour.
- 77 Cain (1975), p. 512.
- 78 Cain (1979a), p. 419.
- 79 *Ibid.*, p. 413.
- 80 *Ibid.*, p. 418.
- 81 Arndt (1981), p. 460.
- 82 This was reflected in the replacement, in 1939, of the Colonial Development Act by the Colonial Development and Welfare Act.
- 83 Boeke (1953), a brief excerpt from which is in Meier (1970).
- 84 For a brief excerpt from Furnivall's work see Meier (1970).
- 85 Arndt (1972), p. 21.

CHAPTER 18

- 1 For some exceptions, see pp. 40–1.
- 2 Spiegel (1983) refers to these as the Baconian and Hegelian variants of historical economics.

- 3 Jones (1833), p. vii.
- 4 *Ibid.*, pp. xxii–xxiii.
- 5 *Ibid.*
- 6 Jones (1859), p. 560.
- 7 Spiegel (1983), p. 398.
- 8 Cliffe Leslie (1870), p. 152; see Koot (1975), pp. 326–7.
- 9 Koot (1975), p. 313. Cliffe Leslie was concerned to find solutions to the problems of agrarian Ireland, for which the methods of classical economics were no use.
- 10 Cliffe Leslie (1870), p. 148.
- 11 *Ibid.*, p. 149.
- 12 *Ibid.*, p. 160.
- 13 *Ibid.*, p. 162.
- 14 *Ibid.*, p. 150.
- 15 Ingram (1893), p. 228.
- 16 Cliffe Leslie (1876), p. 217.
- 17 *Ibid.*, p. 227.
- 18 *Ibid.*
- 19 *Ibid.*
- 20 *Ibid.*, p. 242.
- 21 The economist who has paid most attention to this argument of Cliffe Leslie's is perhaps Hutchison, from 1937 to 1981.
- 22 Cliffe Leslie (1879), p. 939.
- 23 *Ibid.*, p. 941.
- 24 Bagehot (1876), p. 26, cf. p. 9.
- 25 *Ibid.*, p. 27.
- 26 *Ibid.*, p. 33.
- 27 Ingram (1878), p. 47.
- 28 These ideas were developed in Ingram (1893).
- 29 Ingram (1878), pp. 48 ff.
- 30 *Ibid.*, p. 55.
- 31 *Ibid.*, p. 59.
- 32 *Ibid.*, p. 60.
- 33 *Ibid.*, p. 66.
- 34 Sidgwick (1883), p. 7.
- 35 *Ibid.*
- 36 *Ibid.*, pp. 28–9.
- 37 *Ibid.*, pp. 30–2.
- 38 *Ibid.*, pp. 33–4.
- 39 See pp. 262 ff.
- 40 See also pp. 101 ff.
- 41 Marshall (1885), p. 159.
- 42 Cf. Kadish (1982), pp. 131 f, 135.
- 43 Marshall (1885), p. 165.
- 44 *Ibid.*, pp. 165–6.
- 45 Harte (1971), pp. xii, xix. Much of the following account as taken from this source. For details of the Rostovian metaphor see p. 364.
- 46 Ashley (1889), p. 429.
- 47 These were published posthumously in (1908).
- 48 Harte (1971), p. xi.
- 49 Cunningham (1889), pp. 109–10.
- 50 *Ibid.*, p. 110. Note that Marshall was in fact careful *not* to make exaggerated claims concerning the universal validity of economic doctrines. See p. 102.

- 51 See Kadish (1982), pp. 150–1. Cunningham's inaugural lecture (1892a) is also worth mentioning.
- 52 Cunningham (1892b), p. 491.
- 53 Koot (1980), pp. 188–9.
- 54 Ashley (1893), p. 7.
- 55 Kadish (1982), pp. 217–18 explains the difference in terms of their academic positions, Cunningham having little to lose by attacking Marshall, Ashley having little to gain.
- 56 Ashley (1893), p. 8.
- 57 Koot (1980), p. 192.
- 58 Harte (1971), p. xxvii.
- 59 In the 1960s links between economics and economic history were revived with the *New Economic History*, but the influence here was solely from economics to economic history. Influence in the reverse direction was confined to the literature on economic development, and to certain aspects of work on growth.
- 60 Hartwell (1973), p. 33.
- 61 Hartwell (1973) provides a comparison of the economic history of the two periods.
- 62 Gide and Rist (1909), p. 582.
- 63 Pribram (1983), p. 215.
- 64 *Ibid.*, p. 214; see also Gide and Rist (1909), p. 382.
- 65 *Ibid.*, p. 382–3.
- 66 Hildebrand (1848), p. v, translated in Gide and Rist (1909), p. 383.
- 67 Pribram (1983), p. 215.
- 68 Kries (1853), pp. 24–5, translated in Gide and Rist (1909), pp. 390–91.
- 69 See Hutchison (1953), Spiegel (1983) and Mitchell (1969).
- 70 Hutchison (1953), p. 185.
- 71 Schmoller (1900) translated in Gide and Rist (1909), p. 385.
- 72 Schmoller (1900) p. 356 quoted in Hutchison (1953), p. 182.
- 73 Hutchison (1953), p. 183; see p. 179.
- 74 *Ibid.*, p. 184; cf. Mitchell (1969), pp. 556 ff.
- 75 Hutchison (1953), p. 184; cf. Schumpeter (1954), p. 813.
- 76 Mitchell (1969), p. 574.
- 77 Hutchison (1953), pp. 185–6; Schumpeter (1954), pp. 816–17.
- 78 See Spiegel (1983), pp. 428 ff and p. 179.
- 79 Spiethoff (1932); cf. Schumpeter (1954), p. 816; Seligman (1962), pp. 34 ff.
- 80 Seligman (1962), p. 36.
- 81 *Ibid.*, p. 15; cf. Spiegel (1983), p. 428.
- 82 Weber (1904).
- 83 Selections in Brodbeck (1982).
- 84 This is the meaning of the term "wertfreiheit".
- 85 Two of the easiest introductions to Veblen, containing details of his background, are Dorfman (1949), ch. XIX, and Mitchell (1965), ch. XX. See also Spiegel (1983); Ekelund and Hebert (1983); Hutchison (1953).
- 86 Veblen (1898), p. 71.
- 87 *Ibid.*, emphasis added.
- 88 *Ibid.*, p. 75.
- 89 Rutherford (1984), p. 335.
- 90 Veblen (1898), pp. 76–7.
- 91 *Ibid.*, p. 77.
- 92 Veblen (1915), p. 267; see Rutherford (1984), p. 334.
- 93 Rutherford (1984), p. 334.

- 94 Veblen (1904), ch. II.
- 95 *Ibid.*, p. 9.
- 96 *Ibid.*, p. 27.
- 97 *Ibid.*, p. 28.
- 98 *Ibid.*, p. 59.
- 99 *Ibid.*, p. 63.
- 100 *Ibid.*, p. 64.
- 101 *Ibid.*, p. 66.
- 102 *Ibid.*, p. 67.
- 103 Veblen (1904), pp. 374 ff., (1921).
- 104 Coats (1954a).
- 105 Veblen (1898), pp. 60–1.
- 106 Rutherford (1984), p. 341.
- 107 *Ibid.*, p. 60.
- 108 Veblen (1899–1900), p. 92.
- 109 Veblen (1898), p. 65. He refers to this criterion as that of “ceremonial adequacy”.
- 110 Veblen (1899–1900), pp. 142–3.
- 111 Veblen (1898), p. 60.
- 112 Veblen (1899–1900), p. 145.
- 113 Veblen (1898), p. 69.
- 114 See p. 239.
- 115 Veblen (1898), p. 79.
- 116 Rutherford (1984), p. 332.
- 117 Veblen (1914), pp. 7–8; quoted in Rutherford (1984), pp. 333–4.
- 118 Rutherford (1984), p. 333.
- 119 Coats (1954a), p. 531.
- 120 *Ibid.*
- 121 Arrow (1975), p. 5.
- 122 See p. 182.
- 123 Marshall (1907), quoted in Mitchell (1925), p. 20.
- 124 Mitchell (1925), pp. 20–1.
- 125 *Ibid.*, p. 26.
- 126 *Ibid.*, pp. 29–30.
- 127 Klein (1983), pp. 876 ff.
- 128 *Ibid.*, p. 875.
- 129 *Ibid.*
- 130 Mitchell (1965), p. 586; emphasis added.
- 131 Commons (1924), p. 67.
- 132 Commons (1931), p. 649.
- 133 *Ibid.*, p. 650; emphasis added.
- 134 *Ibid.*, p. 651.
- 135 *Ibid.*, p. 650.
- 136 Commons (1936), p. 244; cf. Chamberlain (1963), p. 85.
- 137 Commons (1931), p. 652.
- 138 Commons (1934a), pp. 67–8.
- 139 See Rutherford (1983), p. 725.
- 140 Commons (1950), p. 48; note that this was published posthumously.
- 141 Rutherford (1983), p. 725.
- 142 Commons (1931), p. 655.
- 143 Commons (1924), p. 138.
- 144 *Ibid.*

- 145 Cf. Rutherford (1983), pp. 726–9.
- 146 Commons (1925), p. 380; quoted in Rutherford (1983), p. 728.
- 147 Rutherford (1983), p. 729.
- 148 Dorfman (1946–59), vol. IV, pp. 379 ff.; Chamberlain (1963).
- 149 Boulding (1957), p. 7.
- 150 Rutherford (1983), p. 731.
- 151 Commons (1934a), p. 673; cf. Rutherford (1983), p. 731.
- 152 Chamberlain (1963), pp. 83–7; cf. Mitchell (1965), p. 729 ff.
- 153 Commons (1924), p. vii.
- 154 Ibid., pp. vii–viii.
- 155 Commons (1934a); p. 5; cf. Mitchell (1935), pp. 339–40.
- 156 Commons (1950).
- 157 Boulding (1957), p. 7.
- 158 Boulding (1957), p. 8.
- 159 Kolakowski (1978), vol. II, p. 1; the following pages contain a discussion of Marxism in the context of Socialism in Europe at the end of the nineteenth century. See also Pribram (1983), pp. 267 ff.
- 160 In reading Wicksteed's article it is important to remember that it was written before the third volume of *Capital*, containing Marx's discussion of the transformation problem, had appeared.
- 161 Edgeworth (1925), vol. III, p. 273.
- 162 Mitchell (1969).
- 163 See Brewer (1981).
- 164 See pp. 178 f.
- 165 Sweezy (1949), pp. ix–x.
- 166 A correct translation of the title would be *On the Completion of the Marxian System*.
- 167 See pp. 114–15.
- 168 When thinking about the technical aspects of Böhm-Bawerk's criticism, not discussed here, it is important to note that it was published before Bortkiewicz had published his solution to the transformation problem. Thus when Böhm-Bawerk argues that Marx mixes values and prices, he is not using the statement of the transformation problem expounded in p. 000.
- 169 Cf. Jevons' similar criticism of the English classical theory of value. See p. 76.
- 170 Böhm-Bawerk (1896), p. 101.
- 171 Hilferding (1904), p. 196.
- 172 Ibid., pp. 130, 139.
- 173 Ibid., pp. 156–9.
- 174 Ibid., p. 134.
- 175 Cf. Veblen (1906–7), where the metaphysical nature of the Marxian theory is argued.
- 176 Hilferding (1904), p. 134; emphasis added.
- 177 Cf. pp. 000–000 on Menger and institutions.
- 178 Kolakowski (1978), vol. II, pp. 296–7.
- 179 See p. 114.
- 180 Bortkiewicz (1907), p. 200. He used a three-department model, the third sector producing luxury goods for the capitalists.
- 181 Ibid., p. 202.
- 182 Note that we are here assuming that fixed capital turns over once a year, and that the capital stock is the same as depreciation.
- 183 See p. 117.

- 184 For a straightforward explanation see Blaug (1978), p. 243.
- 185 Hutchison (1955).
- 186 Mitchell (1919) quoted in Young (1925), p. 176.
- 187 Young (1925), pp. 179–80.
- 188 *Ibid.*, p. 183.

CHAPTER 19

- 1 Hutchison (1978), pp. 94 ff.; Crouzet (1982), pp. 105–12.
- 2 For a critical discussion of these terms see Crouzet (1982), pp. 56–63.
- 3 See p. 73.
- 4 Much of this section is taken from Hutchison (1978), ch. 4; see *ibid.*, pp. 256 ff. for a discussion of some views very different from those presented here.
- 5 Cf. Deane (1978), p. 101.
- 6 Hutchison (1978), p. 97; see p. 75.
- 7 See pp. 165 ff.
- 8 Sidgwick (1883), p. 403; see Hutchison (1978), p. 104.
- 9 See p. 163.
- 10 This conclusion would also require the assumption that all utility functions were identical, and that utilities were inter-personally comparable.
- 11 Hutchison (1978), p. 104; Creedy (1981), pp. 89–91.
- 12 Hutchison (1978), p. 117, quoting the 3rd edition of Cannan (1893).
- 13 Cain (1979), p. 40 f.
- 14 Because temporary import duties had been introduced during the Boer War, discussion centred on whether these temporary duties should be removed, not on whether new duties should be introduced.
- 15 *Ibid.*, p. 41.
- 16 Balfour, quoted in Coats (1968), p. 194.
- 17 Bastable *et al.* (1903).
- 18 Coats (1964), pp. 99–103.
- 19 See the quotation from Pigou, quoted in Coats (1968), p. 216.
- 20 Cain (1979), pp. 45 ff. contains an appraisal of whether tariffs would in fact have worked.
- 21 Coats (1968), p. 207.
- 22 See pp. 214 f.
- 23 Quoted in Coats (1968), pp. 214–15.
- 24 *Ibid.*, p. 215.
- 25 Cain (1979a), p. 55.
- 26 Tomlinson (1981), p. 55.
- 27 Cain (1979a), pp. 54 ff.
- 28 Coats (1968), p. 224; see pp. 212 ff. and 262 ff.
- 29 *Ibid.*, pp. 225 ff.; cf. Coase (1972).
- 30 Hutchison (1978), p. 409; Harris (1972), p. 4 attributes first use of the term to Marshall in 1888. Much of this section is from Harris (1972), pp. 1 ff.
- 31 Foxwell (1886), quoted in Hutchison (1953), p. 412.
- 32 For a discussion of Hobson see Alett (1981).
- 33 Hobson (1896), pp. 9–10.
- 34 Hobson (1896), p. viii; cf. pp. 56 ff.

- 35 Harris (1972), p. 11.
- 36 Harris (*ibid.*) suggests that it was the search for such measures which led to the theoretical explanations used.
- 37 Beveridge (1909), p. 235.
- 38 *Ibid.*, p. 237.
- 39 For other effects see *ibid.* pp. 210 ff.
- 40 *Ibid.*, pp. 228 ff.
- 41 Hutchison (1953), pp. 416–17.
- 42 Hawtrey (1913), p. 260; quoted in Hutchison (1953), p. 417; see pp. 184 ff.
- 43 Blaug (1978), pp. 684–5 provides an interpretation of Pigou's argument in terms of the balanced budget multiplier.
- 44 The election of 1923 was fought, and lost, by Baldwin on the issue of protection.
- 45 Pigou later argued to the MacMillan committee that the issue was seen as how, not whether, to return to gold.
- 46 See section 17.5 for discussion of the purchasing power parity theory which underlay this discussion.
- 47 Cf. Moggridge (1972), p. 228: "The 'Norman Conquest of \$4.86' was ultimately an act of faith in an incompletely understood adjustment mechanism undertaken for largely moral reasons."
- 48 See p. 177.
- 49 See pp. 184 ff. and 249.
- 50 See pp. 189–90.
- 51 Keynes (1971–1983), vol. XIX, p. 813.
- 52 Winch (1969), pp. 104–7.
- 53 See p. 248.
- 54 Winch (1969), p. 106.
- 55 *Ibid.*
- 56 Quoted in *ibid.*, p. 109.
- 57 This summary is taken from Bradbury's note of dissent to the report in MacMillan Committee (1931), p. 263.
- 58 For an extensive discussion of attitudes to wage cuts see Hutchison (1978), ch. 6; Pigou's views are in Collard (1981).
- 59 Hutchison (1978), pp. 182–3.
- 60 See below.
- 61 Keynes' advocacy of public works predates the actual return to gold.
- 62 Keynes (1971–1983), vol. XIX, pp. 812–13; emphasis added.
- 63 Liberal Party (1929), pp. 54–5.
- 64 See Harrod (1951), p. 465.
- 65 For an account of the period see Alford (1972).
- 66 Galbraith (1955) provides a good account of this.
- 67 Winch (1969), pp. 120–35; Howson (1975), p. 75.
- 68 Confidence was impaired also by the exaggerated estimates the May Committee provided of the likely deficit, and by the MacMillan Committee's estimates of the extent of British short-term indebtedness.
- 69 Howson (1975), pp. 80 ff.
- 70 This is not the same as saying either that government policy was the cause of cheap money, or that this was the cause of the recovery. See Nevin (1955); Howson (1975), pp. 86 ff.
- 71 Howson (1975), pp. 90 ff; Sabine (1970).
- 72 MacMillan Committee (1931), p. 5.

- 73 Ibid., p. 108.
 74 Ibid., p. 109.
 75 Ibid.
 76 Ibid., pp. 239 ff.
 77 Ibid., p. 110.
 78 Ibid., p. 117.
 79 Ibid., p. 126.
 80 Ibid., pp. 131–3.
 81 Other major recommendations concerned the need for greater statistical information, and the so-called “MacMillan gap” – the inability of firms of a certain size to obtain finance.
 82 Ibid., p. 190.
 83 Ibid., p. 191.
 84 Ibid., p. 200.
 85 See p. 191.
 86 Given the collapse of world trade following the monetary collapse of the 1930s this fear was perhaps less unjustifiable than it might now seem.
 87 Cf. pp. 177 and 251.
 88 Winch (1969), p. 138.
 89 Hutchison (1981), pp. 114 ff.
 90 Keynes (1926), p. 287.
 91 Ibid., pp. 290–1.
 92 Ibid., p. 288.
 93 Ibid., p. 291.
 94 Ibid., p. 292.
 95 See Skidelsky (1983) for a broader discussion of Keynes’ philosophical outlook.
 96 For discussion of these issues see Aldcroft (1984); Alford (1972); Cain (1979a); Floud and McCloskey (1981); Moggridge (1972); Pollard (1970); Tomlinson (1981).
 97 Cf. the position taken by Rogin (1956).
 98 See pp. 187 and 190.
 99 Problems of long-term development were of course important to Marshall, but these were grafted on to, rather than being analysed within, the supply and demand framework.
 100 Dorfman (1946–1959) is the most important reference. See also texts such as Scheiber *et al.* (1976).
 101 E.g. Scheiber *et al.* (1976), pp. 304 ff.

CHAPTER 20

- 1 Gide and Rist (1909).
 2 Cf. Blaug (1980), pp. 81–6.
 3 The terms English and German were used to describe the two though there were of course exceptions. See ch. 18.
 4 Keynes (1891), p. 8. Note that John Neville Keynes was the father of John Maynard Keynes.
 5 Ibid., pp. 10, 29.
 6 Ibid., p. 47.

- 7 Ibid., p. 143.
- 8 Ibid., p. 165, cf. p. 211.
- 9 Ibid., p. 172.
- 10 Ibid., p. 144.
- 11 Ibid., p. 165.
- 12 Ibid., p. 168.
- 13 Ibid., p. 166.
- 14 Ibid., p. 183.
- 15 Ibid., p. 193.
- 16 Ibid., p. 196.
- 17 Ibid., p. 211.
- 18 Ibid., p. 140.
- 19 Ibid., p. 206.
- 20 Ibid., p. 220.
- 21 See Robertson's illuminating comment on the English attitude being that methodological controversy was a subject more suitable for Germans than for Englishmen. He doubted whether many of his contemporaries actually read Keynes' book; Robertson (1951), p. 14, quoted in Hutchison (1981), pp. 63–4.
- 22 See pp. 101 ff.
- 23 See pp. 140–1.
- 24 Clapham (1922).
- 25 See p. 165.
- 26 Hutchison (1981), pp 64 f.
- 27 Robinson (1962), p. 72; see Hutchison (1981), p. 57.
- 28 Much of this section is taken from Hutchison (1981), ch. 7.
- 29 See p. 90.
- 30 Böhm-Bawerk, quoted by Hutchison (1981), pp. 203–4.
- 31 Böhm-Bawerk (1896), pp. 101, 117; quoted by Hutchison (1981), p. 204.
- 32 See Mitchell (1969), pp. 376 ff.
- 33 Wieser (1929), p. 17; quoted by Hutchison (1981), p. 206.
- 34 Wieser (1913), p. 8; quoted by Hutchison (1981), p. 206.
- 35 Hutchison (1981), p. 205.
- 36 Mises (1933), pp. xiii–xiv.
- 37 Ibid., p. 2.
- 38 Ibid., p. 12.
- 39 Ibid., p. xv.
- 40 Ibid., p. 9.
- 41 Ibid., p. 28; cf. p. 9.
- 42 Ibid., p. 2.
- 43 Ibid., p. 27.
- 44 Ibid., pp. 12–13.
- 45 Ibid., pp. 13–14.
- 46 Ibid., p. 2.
- 47 Ibid., p. 14.
- 48 Ibid., pp. 33–5.
- 49 Ibid., p. 37.
- 50 Ibid., pp. 38, 40.
- 51 Ibid., pp. 3–4.
- 52 See Hayek (1935).
- 53 Mises (1933), p. 42.
- 54 Ibid., p. 42.

- 55 See also p. 169.
- 56 Robbins (1932), pp. xiv, 1.
- 57 *Ibid.*, p. 3.
- 58 *Ibid.*, p. 16.
- 59 Cf. Marshall's definition in terms of economic welfare; *ibid.*, p. 4.
- 60 *Ibid.*, pp. 78–9; cf. p. 75.
- 61 *Ibid.*, p. 76.
- 62 Caldwell (1982), pp. 103–6.
- 63 Robbins (1932), p. 81.
- 64 *Ibid.*, pp. 74, 79.
- 65 *Ibid.*, p. 105.
- 66 *Ibid.*, pp. 116–18.
- 67 *Ibid.*, p. 107.
- 68 *Ibid.*, p. 106.
- 69 *Ibid.*, p. 113.
- 70 *Ibid.*, p. 114.
- 71 Caldwell (1982), chs. 2–4, from which much of this section is taken. Note that this statement does not label Hutchison as a positivist; for other influences on Hutchison see Coats (1983).
- 72 Caldwell (1982), pp. 13 f.
- 73 *Ibid.*, pp. 30–31; see ch. 24.
- 74 Hutchison (1938), p. 3.
- 75 *Ibid.*, p. 9.
- 76 *Ibid.*, p. 7.
- 77 *Ibid.*, p. 10.
- 78 *Ibid.*, pp. 140–1.
- 79 *Ibid.*, pp. 40 f.
- 80 *Ibid.*, pp. 84 f.
- 81 *Ibid.*, p. 98.
- 82 *Ibid.*, p. 100.
- 83 *Ibid.*, p. 107.
- 84 Knight (1941), p. 752.
- 85 *Ibid.*, p. 753.

CHAPTER 21

- 1 Cf. p. 228.
- 2 See p. 101; also Perlman (1977), who places Marshall alongside the American Institutionalists.
- 3 See pp. 239, 376–7.
- 4 See pp. 142–3.
- 5 Shackle (1967).
- 6 Note (a) that these remarks do not apply to all economic theorizing, and (b) that they do not apply to Friedman, the principal exponent of “positive economics”. See p. 277.
- 7 See Stigler (1954).
- 8 See Darnell (1984).
- 9 See Patinkin (1976a).

CHAPTER 22

- 1 See p. 288.
- 2 Caldwell (1982), p. 15.
- 3 Samuelson (1947), p. 4. Hypothesis has been changed to the plural. Samuelson's version of operationalism differs from Bridgman's – see Blaug (1980), pp. 99–100; Caldwell (1982), p. 189.
- 4 Whether Samuelson's methodology as illustrated by his subsequent work is best characterized as falsificationism is another matter. See Machlup's comment below.
- 5 Friedman (1953), p. 26. Note that Friedman uses "meaningful" in a slightly different sense from Hutchison.
- 6 *Ibid.*, pp. 26–8; cf. Caldwell (1982), p. 174.
- 7 Friedman (1953), p. 30.
- 8 *Ibid.* Note that Friedman explicitly denies that unrealistic assumptions guarantee a good theory.
- 9 For lists of the contributions to this controversy see Blaug (1980), p. 110; Boland (1979).
- 10 Nagel (1963).
- 11 E.g. Archibald (1959) distinguished five types; Blaug (1980), p. 107.
- 12 Samuelson (1963).
- 13 Samuelson, quoted in Blaug (1980), p. 113.
- 14 See p. 270.
- 15 For an account of this view see Nagel (1961) or Suppe (1977).
- 16 Caldwell (1982), p. 23.
- 17 Machlup (1955, 1956, 1964).
- 18 See p. 270.
- 19 Caldwell (1982), pp. 144–5.
- 20 Machlup (1956).
- 21 Machlup (1964), p. 735.
- 22 *Ibid.*, p. 753.
- 23 Koopmans (1957), p. 132. He argues that observations should be collected with a view to testing the least well-established postulates of economic theory (p. 142).
- 24 *Ibid.*, pp. 142–3.
- 25 *Ibid.*, p. 150.
- 26 *Ibid.*, p. 154.
- 27 *Ibid.*, p. 164.
- 28 Suppe (1977), pp. 617–18; this is the view which underlies Machlup's methodology, described above.
- 29 *Ibid.*, Afterword; Blaug (1980), ch. 2.
- 30 Feyerabend (1975).
- 31 Kuhn (1962).
- 32 Toulmin (1972).
- 33 Lakatos (1970).
- 34 Suppe (1977), pp. 652–3.
- 35 Blaug (1980) cites an unusually wide variety of philosophical views.
- 36 See ch. 1.
- 37 E.g. Gordon (1965), Bronfenbrenner (1971), Kunin and Weaver (1971).
- 38 Coats (1969), p. 295.
- 39 See ch. 1.

- 40 E.g. Blaug (1980).
 41 E.g. Boland (1982), Caldwell (1982)
 42 Blaug (1980), Hutchison (1981); cf. Coats (1983), pp. 27–8.

CHAPTER 23

- 1 Cf. Hicks (1960), pp. 76–7.
 2 We neglect here developments relevant primarily to other chapters.
 3 Dorfman *et al.* (1958), p. 1.
 4 The simplest inherently linear structure is the simple budget constraint.
 5 Leontief (1941), p. 3.
 6 This assumption found some justification in non-substitution theorems.
 7 Leontief (1941), p. 40.
 8 Dorfman *et al.* (1958), p. 107.
 9 Hicks (1960), p. 111.
 10 When non-zero sum games are considered the problem is no longer linear.
 11 von Neumann and Morgenstern (1944), pp. 8–15.
 12 *Ibid.*, p. 38.
 13 Though tackling a more specific problem it could be argued that the true originator of the concept was Edgeworth.
 14 It is important to distinguish the two concepts associated with Nash: what is often called the Cournot–Nash equilibrium, a solution to a non-cooperative game, and the Nash bargain, a solution to a cooperative game.
 15 The core is similar to von Neumann and Morgenstern’s “solution”, though not exactly the same. See Shubik (1981).
 16 Scarf (1962), Aumann (1964).
 17 E.g. See Nicholl (1941); cf. the quotation from Fisher on p. 157.
 18 They developed this to deal with the theory of games.
 19 Green (1964) contains a thorough treatment of the problem. See also Bliss (1975) and Green (1976).
 20 Samuelson (1947), p. 6.
 21 See p. 102.
 22 Samuelson (1947), pp. 3–4.
 23 See p. 280; see also Hahn (1983), pp. 31–6.
 24 See p. 96.
 25 Samuelson (1947), pp. 5, 257–8.
 26 *Ibid.*, p. 314.
 27 See p. 144.
 28 For references see Debreu (1982).
 29 See section 23.1
 30 Debreu (1959), pp. 83–4.
 31 See p. 311.
 32 Hahn (1982d), p. 745.
 33 It is worth noting that this is an equilibrium concept, not simply an assumption about expectations.
 34 Hahn (1971), p. 3; Kurz (1974); Starratt (1973).
 35 See pp. 337 f.
 36 Grossman (1969).
 37 See pp. 337–8.

- 38 Arrow and Hahn (1971), p. 167.
- 39 See section 25.1.
- 40 See Lancaster (1957).
- 41 See Deaton and Muellbauer (1980) for more details.
- 42 *Ibid.*, p. 3.
- 43 *JPE* 1962, issue on “Investment in human beings”; the idea of human capital goes back to Smith.
- 44 Although it is Lancaster’s theory of goods characteristics which is most widely cited, the theory can be found in earlier work: Gorman (1980), written in 1956; and Ironmonger (1972).
- 45 Tobin (1952) surveys this literature.
- 46 See pp. 292 and 338.
- 47 See p. 157.
- 48 Arrow and Hurwicz (1972), Milner (1954), Shackle (1949, 1961).
- 49 For a survey see McCall (1971); Hey (1979).
- 50 See Hey (1979).
- 51 See Azariadis and Stiglitz (1983).
- 52 Hey (1981b).
- 53 Stiglitz (1974).
- 54 Hey (1979), pp. 178 ff.; Hey (1981a), pp. 171 ff.
- 55 See p. 308.
- 56 If consumers are risk neutral, then anyone with above-average health will refuse to buy the policy; if consumers are risk-averse then the cut-off point will be higher.
- 57 See symposium introduced by Stiglitz (1977).
- 58 Hey (1981a), pp. 172 ff.; Spence (1974); symposium introduced by Spence (1976).
- 59 Coase (1937), p. 389.
- 60 *Ibid.*, p. 395.
- 61 See p. 232.
- 62 This subject is briefly treated in Williamson (1977), pp. 190 ff.; see also p. 377.
- 63 The issue of separation of ownership from control dates from Berle and Means (1932).
- 64 See also Simon (1978). Simon’s theory has implications for all behaviour, not merely that of firms.
- 65 Simon (1976), p. 130.
- 66 *Ibid.*, p. 131.
- 67 Baumol (1984), p. 477.
- 68 Solow (1980), Okun (1981).

CHAPTER 24

- 1 Parts of this chapter are based on the assumption that the reader will have read a standard treatment of welfare economics, such as Bator (1957), or the relevant chapters of texts such as Hirschleifer (1976).
- 2 For a list of earlier contributors, who between them developed the conditions for a Pareto optimum, see Boulding (1952).
- 3 Kaldor (1939), p. 389.
- 4 Hicks (1939b).

- 5 This assumes that income is efficiently redistributed, by lump sum transfers. Note that although the exposition is in terms of utility, it does not require any interpersonal utility comparisons.
- 6 For example, Smith's distinction between productive and unproductive labour could be related to the issue of whether to include in national income the cost of producing government services. A survey of the theory of index numbers, as applied to individuals, is found in Frisch (1936).
- 7 Hicks (1939a), p. 41.
- 8 Hicks (1941), p. 104.
- 9 Ibid., p. 106.
- 10 This gives a social welfare function of the form

$$W = W(U_1(x_1), U_2(x_2), \dots)$$
 where W is social welfare, and U_i is the i th individual's utility function.
- 11 This assumes that there is an interior solution.
- 12 Boulding (1952), p. 31.
- 13 See Mishan (1965).
- 14 This condition was introduced in the second edition, replacing two conditions (positive association of individual and social values, and citizens' sovereignty) which were used in the first edition.
- 15 Arrow (1951a), p. 59.
- 16 See Graaf (1957); Baumol (1965), ch. 14.
- 17 E.g. Little, Samuelson.
- 18 See Sen (1970a and 1985).
- 19 Gibbard (1973), Satterthwaite (1975).
- 20 Sonnenschein (1983).
- 21 Sen cites the example of the welfare implications of Nero's fiddling while Rome burned. We can say that the utility gained by Nero was less than the utility lost by all other Romans put together without committing ourselves that we could always compare the utilities of any two Romans.
- 22 This link is very hard to establish formally.
- 23 Note that although economists have usually described as Rawlsian a social welfare function where social welfare depends on the welfare of the worst-off person in society, Rawls himself defined his criterion differently, in terms of the quantity of socially necessary goods consumed by the worst-off person.
- 24 E.g. Duncan Black (1948).
- 25 The use of the term Pareto optimal comes from Little (1950).
- 26 The terms Pareto-efficient and Pareto-optimal are used interchangeably.
- 27 The *Pareto condition* is that a change be a *Pareto improvement*. A *Pareto optimum* is a situation such that no Pareto improvements are feasible.
- 28 Atkinson (1975), p. 48.
- 29 See also Sandmo (1976); Musgrave (1959); Pigou (1928a).
- 30 Atkinson and Stiglitz (1980), pp. 347–50.
- 31 Ibid., p. 6.
- 32 Ibid., p. 352.
- 33 Ibid., pp. 336–42.
- 34 Ibid., p. 357.
- 35 Ibid., p. 359.
- 36 This goes back to Ramsey (1927).
- 37 See p. 242. The modern treatment stems from Mirrlees (1971).
- 38 Atkinson and Stiglitz (1980), pp. 394–7.
- 39 Ibid., p. 393.
- 40 Ibid.

- 41 *Ibid.*, pp. 355–6.
- 42 *Ibid.*, p. 433.
- 43 *Ibid.*, p. 456.
- 44 *Ibid.*, p. 335.
- 45 For discussion of earlier treatments see Musgrave (1939), pp. 213–17.
- 46 Samuelson (1955), p. 182.
- 47 See Samuelson's diagram (1955), p. 196.
- 48 See p. 297.
- 49 See ch. 15.
- 50 Elsinga (1984).
- 51 Coase (1960), p. 424.
- 52 *Ibid.*, p. 435.
- 53 *Ibid.*, p. 436.
- 54 *Ibid.*, p. 437.

CHAPTER 25

- 1 See p. 364.
- 2 Harrod (1939), p. 45.
- 3 *Ibid.*, p. 46.
- 4 *Ibid.*, p. 61.
- 5 *Ibid.*, p. 47.
- 6 *Ibid.*, p. 62.
- 7 Domar (1946), p. 68.
- 8 *Ibid.*, p. 67.
- 9 *Ibid.*, pp. 72–3.
- 10 Harrod included the effects of capital accumulation on capacity in his natural rate of growth, not his warranted rate.
- 11 Solow (1956), p. 162.
- 12 *Ibid.*
- 13 See Solow (1961) for a simple exposition of the two-sector model as a miniature general equilibrium model.
- 14 See Hicks (1965) for a simple exposition.
- 15 Special problems arise when infinite time is considered. See Shell (1971).
- 16 Cf. Hicks (1965), p. 208.
- 17 If there is steady growth, capital and labour must grow at the same rate. Investment, therefore, must equal nK , where n is the growth rate of the labour force, and K is the capital stock. Investment per head, i , is thus equal to $nK/L = nk$ where k is capital per head. Assuming output per head is related to capital per head by $y = f(k)$, consumption per head, $c = y - i = f(k) - nk$. For c to be a maximum, $dc/dk = f'(k) - n = 0$, from which the golden rule follows.
- 18 Harrod and Domar are exceptions.
- 19 See Harcourt (1984).
- 20 See pp. 190 and 397.
- 21 Translated in Kalecki (1969).
- 22 Kalecki (1969), p. 3. For an explanation, see the discussion of Kaldor's model.
- 23 See also Robinson (1956).
- 24 $P + W = C + I = (1-s)P + W + I = (P + W) + (I - sP)$, therefore $I = sP$.
- 25 Kaldor (1957); Kaldor and Mirrlees (1962).

- 26 E.g. Tobin (1960).
- 27 Cf. Harcourt (1972), p. 15.
- 28 Robinson (1953), p. 47.
- 29 Robinson (1956) and numerous articles: see Harcourt (1972).
- 30 She also raised the issue of whether technical coefficients could in reality be varied.
- 31 Harcourt (1972), pp. 99 ff.
- 32 Robinson (1953), pp. 54–9.
- 33 Cf. Samuelson (1948a), 7th edn, pp. 573–6; Burmeister (1980), pp. 112–15.
- 34 See Harcourt (1972), pp. 39 ff.
- 35 Swan (1956), p. 103.
- 36 Solow (1957), pp. 401–2.
- 37 Ibid.
- 38 See pp. 29 and 114.
- 39 See Harcourt (1982).
- 40 See pp. 384 ff.
- 41 See, for example, Dobb (1973); cf. Bliss (1975), ch. 6.
- 42 Although reference is made to “changes” this is solely to simplify the exposition: the changes involve comparisons across steady states, not changes over time.
- 43 See Harcourt (1972), recent editions of Samuelson (1948a), or Blaug (1975). Note that Price–Wicksell effects are more important than reswitching. Price–Wicksell effects, necessary if reswitching is to occur, are on their own sufficient to rule out an aggregate production function.
- 44 Samuelson (1966b), pp. 233, 250.
- 45 Garegnani and Nell are examples of critics; Laing provides a defence.
- 46 Cf. Blaug (1975), pp. 39–40.
- 47 Samuelson (1966), p. 249.
- 48 E.g. Bruno, Burmeister and Sheshinski (1966).
- 49 Ferguson (1969), p. 266; cf. Robinson (1973a), chs 16, 16a; Blaug (1975).
- 50 See p. 157.
- 51 It would be more correct to say “non-increasing”, as there is no reason why the MRS should not be constant over a certain range, as in Figure 25.2.
- 52 The terminology sometimes used is that a set of prices “supports” a given allocation of resources.
- 53 Cf. Dixit (1977) for a helpful review, which stressed the importance of Bliss’s book.
- 54 Bliss (1975), p. 63.

CHAPTER 26

- 1 See pp. 194 ff.
- 2 Pribram (1983), p. 496; cf. introduction to Harris (1947).
- 3 Moggridge (1975), p. 73.
- 4 Schumpeter (1954), p. 1180; Samuelson (1946), p. 187.
- 5 Samuelson (1946), p. 189.
- 6 Schumpeter (1954); Johnson (1971).
- 7 Leontief (1937).

- 8 Guillebaud's description of Marshall's habit of "leaving the context to explain the meaning"; see p. 102 above.
- 9 Schumpeter (1954), p. 1171.
- 10 *Ibid.*, p. 1176.
- 11 See pp. 191 ff.
- 12 Pribram (1983), p. 504.
- 13 E.g. Branson (1979), pp. 183–7.
- 14 Dunlop (1938), Tarshis (1939).
- 15 See Samuelson (1968) on how the classical theory was never rigorously stated.
- 16 See p. 145.
- 17 Hicks (1982), pp. 69, 319.
- 18 Hicks' (1939a), p. 178.
- 19 Hicks (1937), pp. 135–8.
- 20 See p. 172; Hicks (1984), pp. 198–9.
- 21 Cf. Schumpeter's view discussed on p. 334.
- 22 Weintraub (1979), p. 63.
- 23 Patinkin (1965), p. 343. This was limited in that Patinkin did nothing to solve the aggregation problem; cf. section 23.1.
- 24 Ackley (1961), Dernberg and McDougall (1960).
- 25 Leijonhufvud (1976), p. 82.
- 26 Solow and Stiglitz (1968) contains a model containing many of Barro and Grossman's ideas, but they are to a great extent left implicit in the mathematics of the model.
- 27 See p. 292.
- 28 See p. 190.
- 29 Bronfenbrenner and Holzman (1963), Samuelson and Solow (1960).
- 30 See Bronfenbrenner and Holzman (1963), p. 63.
- 31 Gordon (1976), pp. 259–62; Bronfenbrenner and Holzman (1963), p. 64 f.
- 32 Lipsey and Parkin (1975), p. 149; Bronfenbrenner and Holzman (1963); there is more to the Phillips relation than merely a negative slope – see Lipsey and Parkin (1975), p. 150.
- 33 Samuelson and Solow (1960).
- 34 Lipsey and Parkin (1975), pp. 156–9. There were serious problems with this model, not least the fact that unionization might well depend on the state of demand.
- 35 Samuelson and Solow (1960), p. 384.
- 36 Friedman (1968), p. 102.
- 37 Lipsey and Parkin (1975), p. 154.
- 38 Gordon (1976), p. 264.
- 39 Villard (1948), pp. 319–20.
- 40 Patinkin (1949).
- 41 Johnson (1956b), pp. 2–6; Patinkin (1965).
- 42 Friedman (1956), p. 52.
- 43 *Ibid.*, pp. 62–3.
- 44 *Ibid.*, pp. 51–2.
- 45 Ch. 18; Friedman (1974), pp. 162–3.
- 46 Patinkin (1969), pp. 100–1 on influence of Keynes.
- 47 Much of this is contained in Friedman (1969).
- 48 Friedman (1969), p. 181.
- 49 *Ibid.*, p. 259.
- 50 See Blaug (1980a).

- 51 In Gordon (1974).
- 52 For reactions see Gordon (1974).
- 53 Tobin (1963, 1969).
- 54 A slight modification is needed in that the yield on capital, not the yield on bonds, should appear on the vertical axis of the ISLM diagram.
- 55 There is a large literature on this, not discussed here.
- 56 Lucas (1972), Sargent and Wallace (1975); see Begg (1982), Sheffrin (1983).
- 57 Muth (1961).
- 58 See e.g. Begg (1982).
- 59 Lucas (1972), Sargent and Wallace (1975).
- 60 One of the simplest expositions is Sargent and Wallace (1976).
- 61 Lucas (1980).
- 62 Hall (1982), Sargent and Wallace (1982).
- 63 House of Commons (1981), ch. 4. This contains a survey of recent attitudes to policy, and the fourfold classification it employs can usefully be compared with the Monetarist–Keynesian classification found in many textbooks.
- 64 E.g. Hahn (1982a).
- 65 See p. 180.
- 66 Haberler (1956), p. 137.
- 67 Keynes (1936).
- 68 E.g. Hansen (1941).
- 69 Simons (1942).
- 70 Adelman and Adelman (1959), p. 301.
- 71 E.g. Haberler (1956).
- 72 E.g. Friedman (1969), chs 6 and 9.
- 73 *Ibid.*, pp. 116–21.
- 74 Lucas (1975, 1977, 1978); see Sheffrin (1983), pp. 31–40 for a simple account.

CHAPTER 27

- 1 On pre-1940 contributions see section 17.3. Note that the geometry of international trade theory is general equilibrium geometry, using Edgeworth boxes and similar constructions.
- 2 Meade (1952), p. 12.
- 3 *Ibid.*, pp. 19–26.
- 4 Cf. Corden (1965), p. 29. It is worth noting that in addition to the developments mentioned in the text there was Mosack (1945), which discussed the theory of trade in the context of Hicks' *Value and Capital*.
- 5 See p. 336.
- 6 See p. 206.
- 7 Samuelson (1952); see also Samuelson (1954b), Bhagwati (1964), pp. 190–2.
- 8 E.g. Jones (1970).
- 9 Jones (1983).
- 10 Cf. de Marchi (1976), p. 114.
- 11 E.g. Jones (1956).
- 12 Bhagwati (1964), pp. 175 f.; de Marchi (1976), p. 119.
- 13 This was written in the early 1930s; de Marchi (1976), p. 115.
- 14 This is partly a reversion to Heckscher's original result. It is important to note,

however, that the way in which it was derived differed from the way Heckscher derived his, for he was averse to the use of general equilibrium theory. See Ohlin (1933), appendix to 2nd edn, p. 306. See also Chipman (1966) and Samuelson (1971). There Samuelson points out that, if there is one immobile factor, Ohlin's claim that there would be only partial factor price equalization was right.

- 15 Mundell (1957).
- 16 E.g. Kuhn (1959).
- 17 Bhagwati (1959), p. 271.
- 18 See Pearce (1970), ch. 16.
- 19 Corden (1965), pp. 31–4; Bhagwati (1964), pp. 181–4.
- 20 See Dixit and Stiglitz (1977).
- 21 See Caves and Jones (1977), pp. 137–41.
- 22 See p. 306.
- 23 Samuelson (1939a), p. 204.
- 24 Samuelson (1938b), p. 265.
- 25 Bhagwati (1964), pp. 214–17.
- 26 These assumptions described the problem facing many countries in the immediate post-war period.
- 27 Meade (1955a).
- 28 Ibid.
- 29 E.g. in Fleming (1951) the constraints preventing the utopian solution were the inability to devalue, the inability to impose export subsidies, and so on.
- 30 See p. 306.
- 31 O'Brien (1976a), p. 540; see also Machlup (1977).
- 32 Viner (1924b, 1931); Taussig (1892). See O'Brien (1976a), pp. 556–8. Much of the following is taken from this.
- 33 The balance of payments did of course feature in the early versions of the multiplier. See p. 194.
- 34 Corden (1965) claims that Robinson's book served as the principal text on the balance of payments until Meade (1951).
- 35 Paish (1936), p. 46. The concept itself was not new.
- 36 E.g. Robinson (1937), p. 214.
- 37 Metzler (1942); Machlup (1943). For a more detailed discussion see Pribram (1983), pp. 537–8; Haberler (1955), pp. 44–8.
- 38 See Corden (1965), pp. 10–15; Allen and Kenen (1978), pp. 13 f.
- 39 Meade (1951), pp. 104–5.
- 40 Ibid., pp. 114 f.
- 41 Ibid., pp. 157–62.
- 42 Corden (1965), pp. 15–21.
- 43 Frenkel and Johnson (1976); Johnson (1977); Whitman (1975).
- 44 It was argued that in the long run it is impossible to sterilize a balance of payments imbalance.
- 45 See p. 210 for earlier views.
- 46 In addition to the factors discussed below, there is also the obvious one of the number of underdeveloped countries which became independent, especially in the 1950s and 1960s.
- 47 Arndt (1972), p. 24.
- 48 The Economic Commission for Asia and the Far East, and the Economic Commission for Latin America, both established in the late 1940s.
- 49 Little (1982), pp. 35 ff.

- 50 Little (1982), 35n for a list.
- 51 Hirschman (1981), pp. 3, 6.
- 52 Arndt (1981), p. 465.
- 53 Rosenstein-Rodan (1943), p. 245.
- 54 Ibid. It is also worth mentioning another influential contribution: Mandelbaum (1945).
- 55 Cf. Brookfield (1975), p. 71, n. 13.
- 56 Singer (1949), p. 5.
- 57 Myrdal (1968).
- 58 Rosenstein-Rodan (1943), p. 250.
- 59 Ibid., p. 248.
- 60 Rosenstein-Rodan (1961), quoted in Meier (1970), p. 396.
- 61 Nurkse (1952), pp. 257–8, quoting Mill, *Essays on Some Unsettled Questions of Political Economy* (1844).
- 62 This is discussed in a different context in section 25.3.
- 63 Clark (1953).
- 64 Cf. Singer (1952), especially pp. 396–9.
- 65 Brookfield (1975).
- 66 Lewis (1954), pp. 402–3. Surplus labour is defined as involving a zero marginal product of labour.
- 67 There is of course an enormous difference in the distribution of the benefits of growth: workers do not benefit at all. See *ibid.*, pp. 448–9.
- 68 See section 28.1.
- 69 Little (1982), pp. 70 ff.
- 70 Singer (1950), p. 165.
- 71 See Cardoso (1977); Brookfield (1975), pp. 139–42.
- 72 Cardoso (1977), pp. 12–13.
- 73 *Ibid.*, p. 26. For discussion of the reactions of orthodox economists to this see *ibid.*, pp. 16–24, or Little (1982), pp. 70 ff.
- 74 Hirschman's argument owed a lot to Scitovsky (1954), especially pp. 300 ff.
- 75 Hirschman (1958), ch. 6.
- 76 Hirschman used the terms "trickling down effect" and "polarization effect" to describe these phenomena.
- 77 The ideas of Hirschman and Myrdal have important implications for geographical aspects of development. For discussion of such issues amongst geographers see Brookfield (1975), ch. 4.
- 78 E.g. Friedman (1958), Bauer (1984).
- 79 For details of the growth performance see Sen (1983), Brookfield (1975), Little (1982).
- 80 Hirschman (1981), p. 20.
- 81 Livingstone (1981a), pp. 8–9. He adds a further explanation, that increasing numbers of development economists came from the underdeveloped countries themselves.
- 82 Singer (1964a), p. 17.
- 83 Gerschenkron (1962). See Hirschman (1981), p. 11.
- 84 Little (1982), p. 149.
- 85 *Ibid.*, pp. 125 f.
- 86 Sen (1983) argues forcefully that traditional development economics does work, but that it does not produce the desired results in terms of reducing hunger.
- 87 Rimmer (1981) points out that this is a reversion to earlier ideas.

- 88 Little (1982), p. 123 refers to the resurgence of neoclassical economics. The word theorizing is used here to indicate an approach, not a particular theory.
- 89 The definition is taken from *ibid.*, p. 25, where this is contrasted with the “structuralist” view of the world as inflexible (p. 20).
- 90 *Ibid.*, pp. 128–9.
- 91 *Ibid.*, pp. 128, 136 f.
- 92 *Ibid.*, pp. 138–9.
- 93 *Ibid.*, p. 40.
- 94 *Ibid.*, p. 149.
- 95 *Ibid.*, pp. 160–1.
- 96 Stiglitz (1974).
- 97 Newbery and Stiglitz (1981).
- 98 E.g. Baran (1957), Frank (1968), Emmanuel (1974), Amin (1976).
- 99 Dos Santos (1970), p. 143.
- 100 *Ibid.*
- 101 See p. 366.
- 102 Cardoso and Faletto (1979), quoted in Little (1982), p. 409, n. 1.
- 103 Cardoso (1977), p. 35.
- 104 For discussion of Marx’s and Lenin’s theories of Imperialism see Brewer (1981). Some of the economists listed in note 99 are discussed there.
- 105 Little (1982), p. 220.
- 106 *Ibid.*, p. 221.
- 107 Rimmer (1984), pp. 228–9; Little (1982), pp. 218 ff.

CHAPTER 28

- 1 See Breit and Culbertson (1976a); Dorfman (1946–59), vol. IV, pp. 126–9.
- 2 Ayres (1935a and b) which should be read together with Knight (1935).
- 3 Ayres (1935a), p. 175.
- 4 *Ibid.*, p. 176.
- 5 Ayres (1935b), pp. 356–7.
- 6 Ayres (1935a), p. 181.
- 7 *Ibid.*, p. 186.
- 8 *Ibid.*, p. 189.
- 9 Ayres (1935b), p. 358.
- 10 *Ibid.*
- 11 Ayres (1944), p. 223.
- 12 *Ibid.*, p. 224.
- 13 *Ibid.*, p. 85.
- 14 *Ibid.*, p. 226.
- 15 *Ibid.*, p. 85.
- 16 The subtitle of *American Capitalism* was “A theory of countervailing power.”
- 17 It is in some ways closer to the Austrian concept of competition.
- 18 Myrdal (1978).
- 19 See p. 192.
- 20 Myrdal (1978), p. 772.
- 21 See p. 367.
- 22 Myrdal (1968), p. 26.
- 23 *Ibid.*, p. 7.

- 24 *Ibid.*, p. 25; see his discussion of the sources of bias, pp. 8–24.
- 25 *Ibid.*, p. 32.
- 26 Myrdal (1929), p. 128; cf. p. 169.
- 27 Myrdal (1968), p. 33.
- 28 *Ibid.*, pp. 49–125.
- 29 See pp. 238 ff.; cf. Myrdal (1978), p. 772.
- 30 Myrdal, *ibid.*, attributes the decline of Institutionalism to the depression, a problem on which Institutionalists had no effective advice to offer.
- 31 Ayres (1944), p. 12.
- 32 Samuelson (1976) 10th edn, quoted in Klein (1978), pp. 252–3.
- 33 See Samuels (1977, 1978).
- 34 Much of this paragraph comes from Furobta and Richter (1984).
- 35 See Williamson (1977), p. 191.
- 36 See North (1984), p. 8.
- 37 Mises (1969), p. 10, where he excepted his own work from this generalization; quoted in Littlechild (1978), p. 14. Much of the following argument is from this source.
- 38 This is not to imply that Hayek and Mises held identical views, as is shown below. Hutchison (1981), pp. 210 ff., argues that fundamental change in Hayek's views took place with his 1937 article, his early views being close to those of Mises.
- 39 Quoted in Littlechild (1978), p. 20.
- 40 This list is taken from Littlechild (1978), p. 20.
- 41 See p. 89.
- 42 This is not completely absent from theories involving Walrasian elements; see pp. 108 and 157.
- 43 Kirzner (1976), p. 40.
- 44 See p. 266.
- 45 Rothbard (1976), p. 21; see p. 267.
- 46 Kirzner (1976), p. 42.
- 47 Much of the following argument is owed to Hutchison (1981), pp. 214 ff., where it is argued that this article constitutes a significant break with his earlier views.
- 48 Hayek (1937), p. 33. In a footnote to this passage Hayek interprets verification in terms of falsificationism, citing Popper (1934).
- 49 *Ibid.*, p. 42; cf. discussions of conjectural variation (p. 143) and rational expectations (p. 345).
- 50 *Ibid.*, p. 44.
- 51 *Ibid.*
- 52 See pp. 79 and 291.
- 53 *Ibid.*, p. 45.
- 54 *Ibid.*, p. 46.
- 55 The argument is developed further in Hutchison (1981), pp. 216 ff.
- 56 Hayek (1937), p. 48.
- 57 Cf. Knight's view: see p. 157.
- 58 See Ford (1983).
- 59 Shackle (1972).
- 60 *Ibid.*, p. 96.
- 61 *Ibid.*, p. 183; cf. p. 428.
- 62 *Ibid.*, pp. 429 ff.; Shackle (1967).
- 63 See pp. 336 f.

- 64 S. Weintraub was one of the first economists to question the Hicks–Hansen interpretation of Keynes.
- 65 Keynes (1936), pp. v, 4 ff.
- 66 *Ibid.*, p. 149.
- 67 *Ibid.*, p. 194.
- 68 Keynes wrote the demand for money as $M^d = L_1(Y) + L_2(r)$.
- 69 *Ibid.*, ch. 15.
- 70 *Ibid.*, ch. 17.
- 71 Note that Keynes defined the term “classical” to include neoclassical economics as well as what is usually thought of as classical economics.
- 72 Keynes (1937), p. 216.
- 73 *Ibid.*, p. 218.
- 74 See Kregel (1973).
- 75 See pp. 325 ff.
- 76 E.g. Garegnani (1970); Harcourt (1972).
- 77 See p. 324.
- 78 See Hahn and Matthews (1964).
- 79 Robinson (1962b), p. 23.
- 80 *Ibid.*, p. 26.
- 81 Sraffa is also discussed on pp. 326 ff.
- 82 A simpler version of these equations is on p. 327.
- 83 Dobb (1973), p. 261.
- 84 *Ibid.*, p. 169.
- 85 Hahn (1982b), p. 353.
- 86 This is the Kaldorian theory of distribution. Given the growth rate, the rate of profit (interest) is $r = g/s_p$.
- 87 Bliss (1975), p. 121.
- 88 *Ibid.*
- 89 *Ibid.*, pp. 122–3, 276.
- 90 See p. 32.
- 91 See p. 334.
- 92 Bliss (1975), p. 125, emphasis added.
- 93 See p. 140.
- 94 Roncaglia (1977), p. 172.
- 95 Bharadwaj (1978), p. 41; emphasis added.
- 96 *Ibid.*, p. 67.
- 97 *Ibid.*, p. 66.
- 98 Roncaglia (1978), p. 120.
- 99 Samuelson (1947), quoted by Roncaglia (1978), p. 120.
- 100 *Ibid.* The sentence quoted refers to technology, but similar remarks are made concerning preferences.
- 101 Bharadwaj (1978), p. 60.
- 102 *Ibid.*, pp. 60–2.
- 103 Samuelson (1962), quoted in Samuelson (1974), p. 270.
- 104 Samuelson (1974), p. 270.
- 105 See Klamer (1984), p. 7, and the quotation from Solow on p. 130.
- 106 Lange (1935), p. 191.
- 107 *Ibid.*, p. 201.
- 108 *Ibid.*, p. 196.
- 109 Dobb (1937), p. 22.
- 110 *Ibid.*, p. 135.

- 111 Ibid., p. 136; see Hutchison (1981) for a severe criticism of Dobb on this point.
- 112 He has continued to express similar views: e.g. (1973).
- 113 Schumpeter (1942) also contained an extensive discussion of Marx.
- 114 Many economists would prefer to say that Marx is as worthwhile as much modern growth theory, being sceptical as to the value of both.
- 115 See pp. 321 f.
- 116 Meek (1967), p. 176; see p. 327.
- 117 Steedman (1977), p. 207.
- 118 Ibid., italics in original.
- 119 See p. 112.
- 120 Bronfenbrenner (1970), Lindbeck (1971).
- 121 Blaug (1983), p. 750.
- 122 Bronfenbrenner (1970), p. 748 gives a list of reasons.
- 123 Ibid., p. 753.
- 124 Lindbeck (1971), pp. 9 ff.
- 125 See Blaug (1983).
- 126 Friedman (1974), quoted in Samuels (1976).
- 127 Reder (1982), p. 11; much of the following argument is taken from here.
- 128 Ibid.
- 129 Such an assertion requires strong assumptions about the nature of the disturbances involved.
- 130 Ibid., p. 16.
- 131 See p. 341.
- 132 Stigler (1961, 1962).
- 133 Becker (1965); see p. 294.
- 134 Becker (1976). It is important to note that an assumption Becker maintains throughout is that preferences do not change.
- 135 See pp. 345 f.
- 136 Samuels (1976), p. 4.
- 137 See quotation above.
- 138 Reder (1982), p. 13.
- 139 Ibid., p. 15.
- 140 Ibid., p. 17.
- 141 Littlechild (1978), pp. 23-4.

CHAPTER 29

- 1 Peden (1983), p. 282.
- 2 See p. 254.
- 3 Ibid., p. 283; Middleton (1982).
- 4 Peden (1983), p. 284.
- 5 Meade (1975).
- 6 Howson (1975), pp. 127-8.
- 7 By the time the policy was agreed, however, the recession had begun and it was too late to implement it.
- 8 Peden (1980).
- 9 Peden (1983), p. 285.
- 10 See p. 248.
- 11 Harrod (1951), pp. 579 ff.

- 12 Booth (1983), pp. 106–7.
- 13 Ibid., p. 107.
- 14 Meade was one of a group of economists in the Economic Section of the War Cabinet secretariat.
- 15 Booth (1983), pp. 107–8.
- 16 Ibid., pp. 108–9.
- 17 Beveridge (1953).
- 18 In contrast with his earlier report, this was not produced in any official capacity. See Beveridge (1953), ch. 15.
- 19 Beveridge (1944), p. 128.
- 20 Ibid., pp. 30–1.
- 21 Ibid., p. 106; see pp. 247 f.
- 22 Booth (1983), p. 109.
- 23 Ibid., p. 110.
- 24 Ibid., p. 114.
- 25 Note that Keynes was not involved in the production of this White Paper.
- 26 Peden (1983), p. 295.
- 27 Booth (1983), pp. 119 ff.
- 28 Ibid., pp. 119–20.
- 29 Ibid. Dalton's orthodoxy did not extend to monetary policy, where he tried to get the interest rate as low as possible.
- 30 For other reasons see *ibid.*, p. 120.
- 31 Ibid., p. 122.
- 32 Ibid.
- 33 Peden (1983), p. 295; see Harrod (1968).
- 34 Dow (1965), pp. 178 ff.; cf. Matthews (1968).
- 35 For further details on what was happening to the British economy see Backhouse (1983), chs 1 and 12.
- 36 Riddell (1983), p. 59.
- 37 Ibid., pp. 28, 59.
- 38 This follows from there being only three sectors in the economy (i.e. public, private and overseas) for one sector's deficit must be matched by a surplus in one or both of the other two sectors.
- 39 Cf. discussion of the Ricardian vice, pp. 32 and 386.
- 40 Stewart (1977).
- 41 Dow (1965), pp. 391–2.
- 42 Stewart (1972), p. 188.
- 43 Coats (1981), p. 33. Discussion of the reasons for the growth in numbers is discussed here.
- 44 Before this there was the European Free Trade Area, a group of countries not in the EEC.
- 45 Riddell (1983), pp. 59–60.
- 46 Reference is to the *apparent* deficit, because subsequent revisions of the statistics resulted in a substantially lower deficit for these years. Backhouse (1983), p. 242.
- 47 Hutchison (1977), ch. 5.
- 48 See pp. 250 ff.
- 49 See pp. 358 f.
- 50 OECD (1971), pp. 24–31.
- 51 No suggestion is being made as to the permanence of this change of attitude, other than to suggest that things can never be quite the same again.

- 52 Hutchison (1977), ch. 2.
- 53 *Ibid.*, p. 6; see Appendix, "Knowledge and ignorance in action", for some examples.
- 54 *Ibid.*, p. 4.
- 55 *Ibid.*, p. 5; this sentence is emphasized in the original.
- 56 Viner (1958), quoted in Hutchison (1977), p. 7.

CHAPTER 30

- 1 Hutchison (1978), pp. 291 ff.
- 2 See pp. 125 ff.
- 3 See Coats (1977), Eichner (1983) and Heller (1975).
- 4 Leontief (1971), Hutchison (1977).
- 5 See section 1.2.
- 6 See pp. 279 f.
- 7 See p. 280.
- 8 Cf. Blaug (1980a).
- 9 See p. 278.
- 10 See p. 6.
- 11 See, e.g., Branson (1979).
- 12 See p. 335.
- 13 Income has, at least since Fisher (1906) been defined as the amount someone can consume without reducing his or her wealth. If inflation reduces the real value of financial assets, it is necessary to save a certain amount simply in order to prevent real wealth from falling. Given the level of measured income, therefore, a higher level of inflation implies a lower level of income.
- 14 See pp. 300 f.
- 15 It is perhaps worth noting that Lakatos distinguished between research programmes which were empirically progressive and those which were only theoretically progressive (see chapter 1, and the references cited there).
- 16 Weintraub (1982), pp. 302–3.
- 17 Blaug (1980a).
- 18 See Katouzian (1980).
- 19 Leontief (1971).
- 20 Canterbury and Burkhardt (1983), Blaug (1980), p. 261.
- 21 See pp. 289 ff.
- 22 Hahn (1984), p. 961.
- 23 See p. 386.