Appendix The Postan Thesis and the Ricardian Corn-Model

The Postan thesis is often regarded as a Malthusian or neo-Malthusian model. However, as Postan made clear, his thesis owes more to Ricardo than to Malthus. In his reply to Brenner, Postan wrote that:

Anyone anxious to fit these hypotheses with a doctrinal cap would be advised to look for it elsewhere, and in the first place to Ricardo. It will be remembered that the essence of the Ricardian theory of rent is the continuous trend of diminishing returns in agriculture which manifested itself in the declining productivity of older lands, the extension of cultivation to new lands of lower quality, and the consequent fall in output per head ... the Ricardian system provides a better matrix than Malthusianism for the historical views Professor Brenner criticizes \(^1\)

Postan argued that "Ricardo's irreversible trend of diminishing returns" would go "a long way to explain why the late medieval recovery was so slow" and that "if the historians holding these views have refrained from overtly involving the name of Ricardo, they have done so mainly because no theoretical matrix, not even Ricardo's, will fit closely enough the infinite complexity of historical facts". It is therefore appropriate to take this opportunity to re-examine the contribution made by Ricardo's Corn-Rent model to the Postan thesis.

Ricardo assumed a two-sector economic model in which agriculture and manufacturing are the main economic activities.³ The only output from the agricultural sector is grain and the only inputs are land and labour, as it is assumed that non-wage capital inputs are small enough to be disregarded. Society is divided into landowners, farmers and labourers. Landowners rent out their land to the farmers, who possess the capital needed to hire labourers to work the land. The surplus product of the land after the payment of wages is divided into profit and rent. Profits are retained by

¹ Postan and Hatcher, "Agrarian Class Structure and Economic Development", p. 29. Postan's initial knowledge of Ricardo's Corn-Rent model may have come from his economic studies at Odessa, as both Ricardian and Malthusian ideas had considerable intellectual influence in late Tsarist Russia. Another source of information on Ricardo would have been Alfred Marshall and the economists of his school, whose works Postan would have encountered in the 1920s and 1930s as a student in England. At Cambridge during the late 1940s, Postan could hardly have been ignorant of Piero Sraffa's interest in and work on Ricardo, which led to Sraffa's eleven volume edition of Ricardo's *Works and Correspondence* published between 1951 and 1973.

² Postan and Hatcher, "Agrarian Class Structure and Economic Development", p. 30.

³ Not a one-sector model in which agriculture is the only form of economic activity, as some more recent attempts to formulate Ricardian theory in mathematical terms would suggest.

the farmer to provide the wages fund for future operations, and rent is appropriated by the landowner.⁴

Ricardo argued that there is a natural wage rate. This rate represents the minimum wage consistent with the labourer's bare subsistence and the future reproduction of the labour force. The market wage for labour may be above or below this natural wage rate in the short-term depending upon the laws of supply and demand. When the market price is above the natural wage rate, the number of labourers will increase. If the market rate falls for any reason below the natural rate, labourers will not reproduce themselves and the population will fall. The result is that the market prices for labour tends to conform to its natural price over the long-term.⁵

In addition, Ricardo assumed that the most fertile and the most favourably situated land was the first to be colonised during the initial settlement of a country. No rent is paid for this land, as its abundance is such that it is without a market value. However, although land is free, the cost of labour is high. Because there is more land than the available number of labourers can cultivate, the cost of labour is well above the natural rate and for that reason the population increases rapidly. Demographic growth leads to the outward movement of the margin of cultivation and the tillage of inferior land. Rent is then charged for use of the best quality land and, as progressively poorer and poorer land is brought under cultivation, the rent on more fertile tracts of land increases. In Ricardo's own words:

When, in the progress of society, land of the second degree of fertility is taken into cultivation, rent immediately commences on that of the first quality, and the amount of rent will depend on the difference in the quality of these two portions of land. When land of the third quality is taken into cultivation, rent immediately commences on the second, and is regulated as before by the difference in their productive powers. At the same time, the rent of the first quality will rise, for that must always be above the rent of the second by the difference between the produce which they yield with a given quantity of capital and labour.⁶

Landowners therefore receive an ever-increasing share of the surplus product of labour as the process of internal colonisation continues.⁷

⁴ Ricardo's Corn-Rent model is largely set out in the second chapter of his *Principles of Political Economy and Taxation*. The assumptions upon which his model was based, however, were largely implied rather than stated. The result is that the academic literature on Ricardian economics is immense and the task of determining what Ricardo said and what he actually meant is likely to continue for sometime. However, the best place to start is still Ricardo's own writings. D. Ricardo, *The Principles of Political Economy and Taxation*, London, 1911, pp. 33-45.

⁵ *ibid*., pp. 52-3.

⁶ *ibid.*, p. 35.

⁷ *ibid.*, p. 72.

As the margin of cultivation moves outwards the cost of grain production rises because additional labour is required to produce the same amount of grain. The result is an increase in the market price for grain. This increase in turn leads to a rise in the price of manufactured articles, as higher grain prices lead to a rise in nominal wages. However, as grain production is more labour-intensive than manufacturing, the price of grain will rise faster and further than that of most manufactured necessities.⁸

Despite the rise in wages in nominal terms due to the tillage of poorer and poorer soils, Ricardo assumed that wages would fall in real terms over the long-term. This is because the demand for labour increases at a slower rate than the growth in population, as a result of the diminishing productivity of agricultural labour. The result is that the market price for labour will gradually fall, although not to a sufficient degree to offset the increase in the amount of labour required to cultivate the marginal lands being brought into cultivation. The share of wages in the surplus product of agriculture therefore rises at the expense of the capitalist's profit, while labourers experience a progressive fall in their standard of living.

Ricardo's basic assumption was therefore that the extension of the arable would eventually bring about a fall in the rate of profit. As the process of colonisation continues, farmers are caught between the scissors of rising wage costs and increasing rents. This decline in the rate of profit proceeds as long as the profits of cultivation remain greater than the cost of wages. Ricardo believed that:

The natural tendency of profits then is to fall; for, in the progress of society and wealth, the additional quantity of food required is obtained by the sacrifice of more and more labour ... The rise in the price of necessaries and in the wage of labour is, however, limited, for as soon as wages should be equal ... to ... the whole receipts of the farmer, there must be an end to accumulation, for no capital can then yield any profit whatever, and no additional labour can be demanded, and consequently population will have reached its highest point. Long indeed before this period, the very low rate of profits will have arrested all accumulation, and almost the whole produce of the country, after paying the labourers, will be the property of the owners of land and receivers of tithes and taxes. ¹⁰

In this manner, Ricardo predicted that the final result of the extension of the margins of cultivation would be a stationary state in which all economic growth comes to an end.

Although the points of similarity between the Postan thesis and the Ricardian Corn-Model are obvious, the differences appear, at least at first glance, to outweigh the correspondences.

⁸ *ibid.*, pp. 39, 52, 57-62.

⁹ *ibid.*, pp. 56, 75.

¹⁰ *ibid.*, p. 71.

Ricardo's model did not assume that the outwards movement of the margin of cultivation must result in the exhaustion of marginal lands. ¹¹ In addition, there is no indication in Ricardo's writings that the fall in the rate of profit will inevitably lead to the eventual retreat of cultivation from the land at the extensive margin and a consequent fall in population. Instead, Ricardo argued that that the final results of the process of economic development would be a state of equilibrium. It is important to note also that Ricardo's model specifically excluded consideration of many questions, such as the effect of the outwards movement of the margin on livestock numbers, which are essential to the Postan thesis.

The degree of structural correspondence between the medieval English economy and Ricardo's model is not high. Most estate owners in the pre-Black Death period combined the functions of both "landowners" and "farmers" in the Ricardian model. Being direct managers, the majority of thirteenth and early fourteenth century lords appropriated the entire surplus product of their demesnes. There can be no question of a declining rate of profit in the true Ricardian sense in England before the Black Death.

Another discrepancy is the fact that demesne sector formed only part of the English agrarian economy before the Black Death. Peasant husbandry may have provided the greater part of the total output in the agricultural sector. In contrast, the Ricardian concept of a declining rate of profit assumes that all farms are run along capitalist lines. Peasant households which could draw upon family labour and enjoyed a high measure of self-sufficiency would not necessarily face the same problems as capitalist farmers. It is therefore unsurprising that Postan was reluctant to make more explicit reference to the Ricardian Corn-Model in his writings on the pre-1348 period.

Despite the differences between the Ricardian Corn-Model and the Postan thesis, Postan's debt to Ricardo is undeniable. The Postan thesis rests on the Ricardian concept of the margin. The assumption that population growth causes land of poorer and poorer quality to be taken under cultivation is the starting-point from which develops Postan's reconstruction of demographic trends before the Black Death. Also, Postan's explanations for the upward movement of prices (in particular the rise in grain prices and the apparent fall in real wages during this thirteenth century) are pure Ricardo. Like Ricardo, Postan explained rising prices and an apparent fall in real wages before c.1325 in terms of the diminishing marginal product of agriculture. Postan's explanation for the falling prices and rising real wages in the decades before the Black Death was equally Ricardian, representing as it did the logical extension of the implications of Ricardo's theories.

¹¹ Ricardo explicitly excluded from his model consideration of the implications of changes in the fertility of the soil, as can be seen from his comments on Malthus' theory of rent cf. Ricardo, *Principles of Political Economy*, pp. 272-6.

In addition, both Ricardo's Corn-Model and the Postan thesis frequently predict analogous results from the same basic causes. They differ, however, in their identification of the mechanisms responsible for these results. To take one example: both the Corn-Model and the Postan thesis agree that the extension of cultivation to more marginal lands led to a fall in the productivity of agriculture. Ricardo explained this trend in terms of a drop in the average fertility of the soil under cultivation. The Postan thesis places greater emphasis on the progressive exhaustion of the soil due to overtillage. Another case in point is the long-term movement of rents. Ricardo predicted that rents would increase over time, just as the Postan thesis assumes a continuous rise in rents before c.1320. However, Ricardo attributed this trend to increasing difference in quality between the land at the margin and the best agricultural land, whereas Postan prefers an explanation in terms of peasant land hunger.

Like Ricardo's Corn-Model, the Postan thesis predicts a fall in output per worker as the drift towards the margin continues. But, unlike Ricardo, Postan saw this trends as a consequence of a decline in the fertility of the soil under cultivation due to physical exhaustion (Ricardo explained the same result in terms of a fall in the average fertility of the agricultural land). In addition, the Ricardian model assumes that the fertility of any piece of agricultural land is fixed, as Ricardo defined rent as "that portion of the earth which is paid to the landlord for the use of the original and indestructible powers of the soil". Thus, in assuming a continual decline in the fertility of the soil, Postan proposed a decidedly contra-Ricardian model.

Postan's interpretation of the process of demographic and economic contraction after c.1320 provides another parallel between the Corn-Rent model and the Postan thesis. Postan assumed that the external manifestations of this downwards trend included rural depopulation, the abandonment of marginal land, a reduction in rents and a general fall in prices. These assumptions should be compared with Ricardo's observation that:

with every portion of additional capital which it becomes necessary to employ on the land with a less productive return rent would rise. It follows from the same principles that any great reduction in the capital of a country which should materially diminish the funds destined for the maintenance of labour would naturally have this effect. Population regulates itself by the funds which are to employ it, and therefore always increases and diminishes with the increase or diminution of capital. Every reduction of capital is therefore necessarily followed by a less effective demand for corn, by a fall of price, and by diminished cultivation. In the reverse order to that in which the accumulation of capital raises rent will the diminution of it lower rent. Land of a less productive quality will be in succession relinquished, the exchangeable value of produce will fall, and

¹² *ibid.*, p. 33.

land of a superior quality will be the land last cultivated, and that which will then pay no rent. ¹³

Ricardo was describing the effects of a shortage of capital, and not the consequences of the exhaustion of the lands on the margin of cultivation. Nonetheless, the similarities between Postan's account of the trends he perceived at work in the English countryside after c.1320 and the sequence of events described by Ricardo are striking.

There is little doubt the Postan thesis owes a good deal to Ricardo's Corn-Model, perhaps more than is generally realised. Many of the most important elements of the Postan thesis are derived from Ricardo's Model. This is despite the fact that, in its pure form, the Corn-Model is inapplicable to medieval England. Further aspects of the Postan thesis are derived, albeit indirectly, from some of the predictions of Ricardo's Model. The Postan thesis may therefore be described as Ricardian in a broad sense, as its author asserted

¹³ *ibid.*, p. 41.

Bibliography

Primary Sources in Manuscript

Beveridge Archive, London School of Economics and Political Science Library. Box 10.

Hampshire Record Office. Eccles II 415808,159342, 159512

Longleat MSS. 10762, 11244, 11272, 11273.

Somerset Record Office. DD/SAS/TN16.

Norfolk Record Office. Hare 4057, DCN 7/1, 2, 6, 7, 8, 9, 10, 11, 12, 14, 15,16.

Public Record Office. E179 73/3, 123/5, 135/2.135/6, 242/12, 242/13, 123/5, 123/6, 242/63.

Published Primary Sources and Secondary Sources

- Archibald, M. M. "Wastage in the Currency: Long Cross and the Recoinage of 1279", in Mayhew, N. J. (ed.). Edwardian Monetary Affairs.
- Aston, T. H., Cross, P. R., Dyer, C. and Thirsk, J. (eds.). Social Relations and Ideas: Essays in Honour of R. H. Hilton, Cambridge, 1983.
- Aston, T. H. and Philpin, C. H. E. (eds.). The Brenner Debate, Cambridge, 1985.
- Ault, W. O. Open-Field Farming in Medieval England: A Study of Village By-Laws, London, 1972.
- Bailey, M. "The Concept of the Margin in the Medieval English Economy", *Economic History Review*, 2nd series, 42 (1989).
- Baker, A. R. H. "Evidence in the *Nonarum Inquisitiones* of Contracting Arable Lands in England in the Early Fourteenth Century", *Economic History Review*, 2nd series, 19 (1966).
- Baker, A. R. H. "Fields and Farms in Medieval Kent", in Roake, M. and Whyman, J. (eds.). Essays in Kentish History.
- Baker, A. R. H. and Butlin, R. A. (eds.). Studies of Field Systems in the British Isles, Cambridge, 1973.
- Bartlett, P. F. "Adaptive Strategies in Peasant Agricultural Production", Annual Review of Anthropology, 9 (1980).
- Bazeley, M. L. "The Extent of the English Forest in the Thirteenth Century", *Transactions of the Royal Historical Society*, 4th series, 4 (1921).
- Bennett, J. M. "Medieval Peasant Marriage: An Examination of Marriage Licences in the *Liber Gersumarum*", in Raftis, J. A. (ed.). *Pathways to Medieval Peasants*.
- Bennett, J. M. "Spouses, Siblings and Surnames: Reconstructing Families From Medieval Village Court Rolls", *Journal of British Studies*, 23 (1983).
- Bennett, J. M. Women in the Medieval English Countryside: Gender and Household in Brigstock Before the Plague, New York, 1987.
- Bennett, M. K. "British Wheat Yields Per Acre for Seven Centuries", Economic History, 3 (1935).

- Beresford, G. The Medieval Clay-Land Village: Excavations at Goltho and Barton Blout, London, 1975
- Beresford, G. "Goltho: A Deserted Medieval Village and its Manor House", *Current Archaeology*, 56 (1977).
- Beresford, M. W. New Towns of the Middle Ages, London, 1967.
- Beresford, M. W. and Hurst, J. G. Deserted Medieval Village Studies, Guildford, 1971.
- Berry, G. Medieval English Jettons, London, 1974.
- Beveridge, W. H. "The Yield and Price of Corn in the Middle Ages", *Economic History Supplement*, 2 (1929).
- Beveridge, W. H. "Wages in the Winchester Manors", Economic History Review, 1st series, 7 (1936).
- Beveridge, W. H. "Westminster Wages in the Manorial Era", *Economic History Review*, 2nd series, 8 (1955).
- Biddick, K. (ed.). Archaeological Approaches to Medieval Europe, Kalamazoo, Mich., 1984.
- Biller, P. D. A. "Birth Control in the West in the Thirteenth and Early Fourteenth Centuries", *Past and Present*, 94 (1982).
- Bishop, T. A. M. "The Rotation of Crops at Westerham 1297–1350", *Economic History Review*, 1st series, 9 (1938).
- Blunt, C. E. and Brand, J. D. "Mint Output of Henry III", British Numismatic Journal, 39 (1970).
- Bois, G. "Against the Neo-Malthusian Orthodoxy", in Aston, T. H. and Philpin, C. H. E. (eds.). *The Brenner Debate*.
- Bois, G. The Crisis of Feudalism: Economy and Society in Eastern Normandy c.1300-1550, Cambridge, 1984.
- Bolton, J. L. The Medieval English Economy 1150-1500, London, 1980.
- Booth, A. and Sundrum, R. M. Labour Absorption in Agriculture, Oxford, 1985.
- Boserup, E. The Conditions of Agricultural Growth, London, 1965.
- Boserup, E. "The Impact of Population Growth on Agricultural Output", Quarterly Journal of Economics, 89 (1975).
- Brand, J. D. "The English Coinage 1180–1247: Mints and Exchange", M.A. Thesis, University of Kent, 1981.
- Brandon, P. F. "Demesne Arable Farming in Coastal Sussex during the Later Middle Ages", *Agricultural History Review*, 19 (1971).
- Brandon, P. F. "Farming Techniques: South-eastern England", in Hallam, H. E. (ed.). *The Agrarian History of England and Wales. Vol. 2: 1042–1350*.
- Brenner, R. "Agrarian Class Structure and Economic Development in Pre-Industrial Europe", in Aston T. H. and Philpin, C. H. E. (eds.). *The Brenner Debate*.
- Brenner, R. "The Agrarian Roots of European Capitalism", in Aston T. H. and Philpin, C. H. E. (eds.). *The Brenner Debate*.
- Brenner, Y. S. "The Inflation of Prices in Early Sixteenth Century England", *Economic History Review*, 14 (1961).

- Bridbury, A. R. "Before the Black Death", Economic History Review, 2nd series, 30 (1977).
- Bridbury, A. R. Medieval English Clothmaking: An Economic Survey, London, 1982.
- Bridbury, A. R. "Thirteenth Century Prices and the Money Supply", *Agricultural History Review*, 33 (1985).
- Bridbury, A. R., The English Economy from Bede to the Reformation, Woodbridge, Sussex, 1992.
- Britnell, R. H. "The Proliferation of Markets in England, 1200–1349", *Economic History Review*, 2nd series, 34 (1981).
- Britton, E. "The Peasant Family in Fourteenth Century England", Peasant Studies, 5 (1976).
- Britton, E. The Community of the Vill, Toronto, 1977.
- Campbell, B. M. S. "Commonfield Origins: The Regional Dimension", in Rowley, T. (ed.). The Origins of Open Field Agriculture.
- Campbell, B. M. S. "Agricultural Productivity in Medieval England: Some Evidence from Norfolk", Journal of Economic History, 48 (1983).
- Campbell, B. M. S. "Agricultural Progress in Medieval England: Some Evidence from Eastern Norfolk", *Economic History Review*, 2nd series, 36 (1983).
- Campbell, B. M. S. "Population Pressure, Inheritance and the Land Market in a Fourteenth-Century Peasant Community", in Smith, R. M. (ed.). Land, Kinship and Life-cycle.
- Carley, P. The Chronicle of Glastonbury Abbey, Woodbury, Suffolk, 1985.
- Carus-Wilson, E. M. and Coleman, O. (eds.). England's Export Trade 1275-1547, Oxford, 1963.
- Carus-Wilson, E. M. "The Woolen Industry", in Postan, M. M. and Miller, E. (eds.). The Cambridge Economic History of Europe. Vol. 2: Trade and Industry in the Middle Ages.
- Cazel, F. A. and Cazel, A. P. (eds.). Rolls of the Fifteenth of the Ninth Year of Henry III for Cambridgeshire, Lincolnshire and Wiltshire and Rolls of the Fourtieth for the Seventeenth Year of Henry II for Kent, London, 1981.
- Chibnall, A. C. Early Taxation Returns, Buckinghamshire Record Society, Vol. 14, 1966.
- Cipolla, C. M. (ed.). The Fontana Economic History of Europe: The Middle Ages, Glasgow, 1972, pp. 250-52.
- Clapham, J. H. and Power, E. (eds.). The Cambridge Economic History of Europe. Vol 1: The Agrarian Life of the Middle Ages, 1st edition, Cambridge, 1942.
- Clarke, C. "Patterns of Colonization, Contraction and Crop Rotation on the Demesne Arable on Some Bishopric of Winchester Manors in the Thirteenth and Fourteenth Centuries", M.A. thesis, University of Saskatchewan, 1980.
- Clarke, C. "Peasant Society and Land Transactions in Chesterton, Cambridgeshire 1277–1325", Ph.D. thesis, Oxford University, 1985.
- Coleman, M.C. Downham-in-the-Isle, no location, 1984.
- Connell, K. H. "Land and Population in Ireland, 1780–1845", *Economic History Review*, 2nd series, 2 (1950).
- Connell, K. H. "The Colonization of Waste Land in Ireland 1780–1845", *Economic History Review*, 2nd series, 3 (1950).

- Cooper, J. P. "In Search of Agrarian Capitalism", in Aston, T. H. and Philipin, C. H. E. (eds.). *The Brenner Debate*.
- Crump, C. G. and Johnson, C. "Tables of Bullion Coined under Edward I, II, III", *Numismatic Chronicle*, 4th series, 13 (1913).
- Darby, H. C. (ed.) A New Historical Geography of England before 1600, Cambridge, 1976.
- Desai, M. "A Malthusian Crisis in Medieval England: A Critique of the Postan-Titow Hypothesis", unpublished conference paper, 1978.
- DeWindt, A. R. "Society and Change in a Fourteenth Century English Village: King's Ripton", Ph.D. thesis, University of Toronto, 1972.
- DeWindt, E. B. Land and People in Holywell-cum-Needingsworth, Toronto, 1972.
- Dodgshon, R. "The Interpretation of Subdivided Fields: A Study in Private or Communal Interests?", in T. Rowley (ed.). *The Origins of Open Field Agriculture*.
- Dodwell, B. "Holdings and Inheritance in Medieval East Anglia", *Economic History Review*, 2nd series, 22 (1969).
- Donkin, R. A. "Changes in the Early Middle Ages", in Darby, H. C. (ed.). A New Historical Geography of England before 1600.
- Drake, M. Population and Society in Norway, 1735-1865, Cambridge, 1969.
- Drew, J. S. "The Manor of Chilbolton", unpublished typescript, Library of the Institute of Historical Research, London, 1945.
- Drew, J. S. "The Manor of Silkstead", unpublished typescript, Library of the Institute of Historical Research, London, 1947.
- Dyer, C. "English Peasant Buildings in the Later Middle Ages", Medieval Archaeology, 30 (1986).
- Dyer, C. Standards of Living in the Later Middle Ages, Cambridge, 1989.
- Emmons, T. "The Peasant and Emancipation", in W. Vucinich (ed.). The Peasant in Nineteenth-Century Russia.
- Lord Ernle, "The Enclosure of Open-Field Farms", Journal of the Ministry of Agriculture, 27 (1920-21).
- Faith, R. "Debate: Seigneurial Control of Women's Marriage", Past and Present, 99 (1983).
- Farmer, D. L. "Grain Yields on Westminster Abbey Manors, 1271–1410", Canadian Historical Review, 18 (1983).
- Farmer, D. L. "Crop Yields, Prices and Wages in Medieval England", Studies in Medieval and Renaissance History, 6 (1983).
- Farmer, D. L. "Prices and Wages", in Hallam, H. E. (ed.). The Agrarian History of England and Wales. Vol. 2: 1042-1350.
- Farmer, D. L. "Prices and Wages, 1350–1500", in Miller, E. (ed.). The Agrarian History of England and Wales. Vol. 3: 1350–1500.
- Floud, R (ed.). Essays in Quantitative Economic History, Oxford, 1974.

- Flynn, D. O. "The Population Theory View of Inflation Verses Economics and History", in Van Cauwenberghe, E. and Irsigler, F. (eds.). *Minting, Monetary Circulation and Exchange Rates*.
- Flynn, D. O. "Use and Misuse of the Quantity Theory of Money in Early Modern Historiography", in Van Cauwenberghe, E. and Irsigler, F. (eds.). *Minting, Monetary Circulation and Exchange Rates*.
- Fox, H. S. A. "Approaches to the Adoption of the Midland System", in Rowley, T. (ed.). *The Origins of Open Field Agriculture*.
- Fox, H. S. A. "Some Ecological Dimensions of Medieval Field Systems", in Biddick, K. (ed.). Archaeological Approaches to Medieval Europe.
- Fox, H. S. A. "The Alleged Transformation from Two-Field to Three-Field Systems in Medieval England", *Economic History Review*, 2nd series, 39 (1986).
- Franklin, P. "Peasant Widows' 'Liberation' and Remarriage before the Black Death", *Economic History Review*, 2nd series, 39 (1986).
- Gadiel, L. and Falkus, M. E. "A Comment on the Price Revolution", *Australian Economic History Review*, 9 (1969).
- Gatrell, P. "Historians and Peasants: Studies of Medieval English Society in a Russian Context", *Past and Present*, 96 (1982).
- Gatrell, P. The Tsarist Economy 1850-1917, London, 1986.
- Gaydon, A. T. The Taxation of 1297, Luton, 1959.
- Gerschenkron, A. "Agrarian Policies and Industrialization: Russia 1861–1917", in Postan, M. M. and Habakkuk, H. J. (eds.). The Cambridge Economic History of Europe. Vol 6: The Industrial Revolutions and After.
- Glass, D. V. and Eversley, D. E. C. (eds.). *Population History: Essays in Historical Geography*, Chicago, 1965.
- Godoy, R. A. "Ecological Degradation and Agricultural Intensification in the Andean Highlands", *Human Ecology*, 12 (1987).
- Goose, N. R. "Wage Labour on a Kentish Manor: Meopham, 1307-79", Archaeologia Cantiana, 9 (1977).
- Grantham, G. W. "Scale and Organisation in French Farming, 1840–1880", in Parker, W. N. and Jones, E. (eds.). European Peasants and their Markets.
- Gray, H. L. English Field Systems. Cambridge, Mass., 1915.
- Grigg, D. Population Growth and Agrarian Change: An Historical Perspective, Cambridge, 1980.
- Hadwin, J. F. "The Medieval Lay Subsidies and Economic History", *Economic History Review*, 2nd series, 36 (1983).
- Hajnal, J. "European Marriage Patterns in Perspective", in Glass, D. V. and Eversley, D. E. C. Population History: Essays in Historical Geography.
- Hallam, H. E. "Some Thirteenth Century Censuses", *Economic History Review*, 2nd series, 10 (1958).
- Hallam, H. E. "The Postan Thesis", Historical Studies, 15 (1971-73).
- Hallam, H. E. Rural England 1086–1348, Brighton, 1981.

- Hallam, H. E. "The Climate of Eastern England", Agricultural History Review, 32 (1984).
- Hallam, H. E. "Age at First Marriage and Age at Death in the Lincolnshire Fenland", *Population Studies*, 39 (1985).
- Hallam, H. E. (ed.). The Agrarian History of England and Wales. Vol. 2: 1042-1350, Cambridge, 1988.
- Hallam, H. E. "Farming Techniques: Eastern England", in Hallam, H. E. (ed.). The Agrarian History of England and Wales. Vol. 2: 1042–1350.
- Hallam, H. E. "Farming Techniques: Southern England", in Hallam, H. E. (ed.). *The Agrarian History of England. Vol. 2: 1042–1350.*
- Hallam, H. E. "Postscript (1983)", in Hallam, H. E. (ed.). The Agrarian History of England and Wales. Vol. 2: 1042-1350.
- Hanawalt, B. The Ties That Bound, New York, 1986.
- Hare, J. W. "Durrington: A Chalkland Village in the Later Middle Ages", Wiltshire Archaeological Magazine, 74-75 (1981).
- Harris, C. (ed.). The Sociology of the Family, Sociological Review Monographs, 28 (1979).
- Harvey, B. F. "The Population Trend in England between 1300 and 1348", *Transactions of the Royal Historical Society*, 5th series, 16 (1966).
- Harvey, P. D. A. A Medieval Oxfordshire Village Cuxham 1240-1400, Oxford, 1965.
- Harvey, P. D. A. "The English Inflation 1180-1220", Past and Present, 61 (1973).
- Harvey, P. D. A. Manorial Records of Cuxham, Oxfordshire c.1200-1359, London, 1976.
- Harvey, P. D. A. Manorial Records, London, 1984.
- Harvey, P. D. A. The Peasant Land Market in Medieval England, Oxford, 1984.
- Harvey, P. D. A. "Crops in Medieval England: Manorial Demesnes and Manorial Tenants", unpublished conference paper, 1985.
- Harvey, P. D. A. "[Review of] Hallam, H. E. (ed.). The Agrarian History of England and Wales. Vol. 2: 1042–1350", *Economic History Review*, 43 (1990).
- Hatcher, J. Plague, Population and the English Economy, 1348-1530, London, 1977.
- Hatcher, J. "English Serfdom and Villeinage: Towards a Reassessment", *Past and Present*, 90 (1981).
- Heckscher, E. "Swedish Population in the Seventeenth and Eighteenth Centuries", *Economic History Review*, 2nd series, 2 (1950).
- Henish, B. A. Fast and Feast: Food in Medieval Society, London, 1976.
- Hilton, R. H. The English Peasantry in the Later Middle Ages, Oxford, 1975.
- Hilton, R. H. (ed.). Peasants, Knights and Heretics, Cambridge, 1976.
- Hilton, R. H. "Individualism and the English Peasantry", New Left Review, 120 (1980).
- Hilton, R. H. "Lords, Burgesses and Hucksters", Past and Present, 97 (1982).

- Hilton, R. H. "A Crisis of Feudalism", in Aston, T. H. and Philipin, C. H. E. (eds.). The Brenner Debate.
- Hilton, R. H. "Why Was There So Little Champart in Medieval England", *Journal of Peasant Studies*, 17 (1990).
- Holt, R. The Mills of Medieval England, Oxford, 1988.
- Homans, G. C. English Villagers in the Later Middle Ages, New York, 1941.
- Hoskins, W. G. The Medieval Peasant: The Economic and Social History of a Leicestershire Village, London, 1957.
- Howell, C. Land, Family and Inheritance in Transition: Kibworth Harcourt, Cambridge, 1983.
- Hudson, W. "The Prior of Norwich's Manor of Hindolveston", Norfolk Archaeology, 20 (1921).
- Hunt, T. J. The Medieval Custom of the Manors of Taunton and Bradford on Tone, Frome, Somerset, 1962.
- Hurst, D. G. and Hurst, J. G. "Excavations at the Medieval Village of Wythemail, Northampton-shire", *Medieval Archaeology*, 13 (1969).
- Hyams, P. R. King, Lord and Peasants, Oxford, 1980.
- Johnston, A. E. and Poulton, P. R. "Yields on Exhaustion Land and Changes in the NPK Content of Soils due to Cropping and Manuring 1852–1975", Rothamstead Experimental Station Report for 1976, Part 2, 1977.
- Jones, E. L. Agriculture and the Industrial Revolution, Oxford, 1974.
- Keil, I. "Farming on the Dorset Estates of Glastonbury Abbey in the Early Fourteenth Century", Dorset Natural History and Archaeological Society Proceedings, 87 (1965).
- Kershaw, I. "The Great Famine and Agrarian Crisis in England 1315–1322", in Hilton, R. H. (ed.). Peasants, Knights and Heretics.
- King, E. Peterborough Abbey 1086–1310: A Study in the Land Market, Cambridge, 1973.
- Kingston-Mann, E. "Marxism and Russian Historical Development: Problems of Evidence, Experience and Culture", *American Historical Review*, 84 (1981).
- Klima, A. "Agrarian Class Structure and Economic Development in Pre-Industrial Bohemia", in Aston T. H. and Philpin, C. H. E. (eds.). *The Brenner Debate*.
- Knowles, D. The Religious Orders in England, Vol. 1, Cambridge, 1948.
- Kosminsky, E. Studies in the Agrarian History of England in the Thirteenth Century, (ed. R. H. Hilton), Oxford, 1956.
- Kovalchenko, I. D. and Selunskaia, N. B. "Labour Rental in the Manorial Economy of European Russia at the End of the 19th Century and the Beginning of the 20th", *Explorations in Economic History*, 4 (1981).
- Langdon, J. "The Economics of Horses and Oxen in Medieval England", Agricultural History Review, 30 (1982).
- Langdon, J. "Horse Hauling: A Revolution in Vehicle Transport in Twelfth- and Thirteenth-Century England?", *Past and Present*, 103 (1984).
- Langdon, J. Horses, Oxen and Technological Innovation, Cambridge, 1986.

- Laslett, P., Oosterveen, K. and Smith, R. M. (eds.). *Bastardy and its Comparative History*, London, 1980.
- Lawrence, L. A. "Some Early English Reckoning Counters", *Numismatic Chronicle*, 5th Series, 28 (1938).
- Le Patourel, H. E. J. "Documentary Evidence for the Medieval Pottery Industry", *Medieval Archaeology*, 12 (1968).
- Le Roy Ladurie, E. "A Reply to Robert Brenner", in Aston, T. H. and Philpin, C. H. E. (eds.). *The Brenner Debate*.
- Lennard, R. "The Alleged Exhaustion of the Soil in Medieval England", *The Economic Journal*, 32 (1922).
- Levett, A. E. The Black Death on the Estates of the See of Winchester. Oxford Studies in Social and Legal History, Vol. 5, Oxford, 1916.
- Lindert, P. H. "English Population, Wages and Prices 1541–1913", *Journal of Interdisciplinary History*, 15 (1985).
- Lloyd, T. H. The Movement of Wool Prices in Medieval England, Economic History Review Supplement No. 6, 1973.
- Lloyd, T. H. The English Wool Trade in the Middle Ages, Cambridge, 1977.
- Lloyd, T. H. "Overseas Trade and the English Money Supply in the Fourteenth Century", in Mayhew, N. J. (ed.). Edwardian Monetary Affairs.
- Lloyd, T. H. Alien Merchants in England in the High Middle Ages, Brighton, Sussex, 1982.
- Long, W. H. "The Low Yields of Corn in Medieval England", *Economic History Review*, 2nd series, 32 (1979).
- Longridge, A. M. "The Population of Chartham from 1086 to 1600", *Archaeologica Cantiana*, 101 (1984).
- Loomis, R. S. "Ecological Dimensions of Medieval Agrarian Systems: An Ecologist Responds", *Agricultural History*, 52 (1978).
- Macfarlane, A. The Origins of English Individualism, Oxford, 1978.
- Maddicott, J. R. The English Peasantry and the Demands of the Crown 1294–1341, Past and Present Supplement No. 1, 1975.
- Mate, M. "Monetary Policies in England 1272–1307", British Numismatic Journal, 41 (1972).
- Mate, M. "High Prices in Early Fourteenth Century England: Causes and Consequences", *Economic History Review*, 2nd series, 28 (1975).
- Mate, M. "The Role of Gold Coinage in the English Economy, 1338–1400", *Numismatic Chronicle*, 7th series, 18 (1978).
- Mate, M. "Medieval Agrarian Practices: The Determining Factors", Agricultural History Review, 33 (1985).
- Mathias, P. "Preface", in Ramsey, P. H. The Price Revolution in Sixteenth-Century England, London, 1971
- May, A. N. "An Index of Thirteenth-Century Peasant Impoverishment? Manor Court Fines", *Economic History Review*, 2nd series, 26 (1973).

- Mayhew, N. J. "Numismatic Evidence and Falling Prices in the Fourteenth Century", *Economic History Review*, 27 (1974).
- Mayhew, N. J. (ed.). Edwardian Monetary Affairs 1279-1344, Oxford, 1977.
- Mayhew, N. J. and Walker, D. R. "Crockards and Pollards: Imitation and the Problem of Fineness in a Silver Coinage", in Mayhew, N. J. (ed.) Edwardian Monetary Affairs.
- Mayhew, N. J. "Money and Prices in England from Henry II to Edward III", Agricultural History Review, 35 (1987).
- Mazumdar, D. "Size of Farms and Productivity: A Problem of Indian Peasant Agriculture", *Economica*, 32 (1965).
- Mazumdar, D. "The Theory of Share-Cropping with Labour Market Dualism", *Economica*, 42 (1975).
- McCloskey, M. "Review of The Price Revolution in Sixteenth Century England", Journal of Political Economy, 80 (1972).
- Metcalf, D. M. "A Survey of the Numismatic Research into the Pennies of the First Three Edwards", in Mayhew, N. J. (ed.). Edwardian Monetary Affairs.
- Miller, E. The Abbey and Bishopric of Ely, Cambridge, 1951.
- Miller, E. "The English Economy in the Thirteenth Century, Implications of Recent Research", *Past and Present*, 28 (1964).
- Miller, E. "The Fortunes of the English Textile Industry in the Thirteenth Century", *Economic History Review*, 2nd series, 18 (1965).
- Miller, E. "The Twelfth and Thirteenth Centuries, An Economic Contrast?", *Economic History Review*, 2nd series, 24 (1971).
- Miller, E. "War, Taxation and the English Economy in the Late Thirteenth and Early Fourteenth Centuries", in J. M. Winter (ed.). War and Economic Development.
- Miller, E. "Michael Moissey Postan, 1899-1981", Proceedings of the British Academy, 69 (1983).
- Miller E. (ed.). The Agrarian History of England and Wales. Vol. 3: 1348-1500, Cambridge, 1991.
- Miller, E and Hatcher, J. Medieval England Rural Society and Economic Change 1086-1348, London, 1978.
- Miskimin, H. A. Money, Prices and Foreign Exchange in Fourteenth Century France, New Haven, 1963.
- Mitchiner, M and Skinner, A. "English Tokens c.1200 to 1425", British Numismatic Journal, 53 (1983).
- Moodie, E. "The Population History of England 1541–1871: A Review Symposium", *Social History*, 8 (1983).
- Moore, E. W. The Fairs of Medieval England, Toronto, 1985.
- Munro, J. H., Wool, Cloth and Gold: The Struggle for Bullion in Anglo-Burgundian Trade, 1348-1478, Toronto, 1972.
- Munro, J. H. "Bullionism and the Bill of Exchange in England, 1272–1663", in *The Dawn of Modern Banking*, London, 1979.

- Munro, J. H. "Bullion Flows and Monetary Contraction in Late Medieval England and the Low Countries", in Richards, J. F. (ed.). Precious Metals in the Later Medieval and Early Modern Worlds.
- Nabholz, H. "Medieval Agrarian Society in Transition", in Clapham, J. H. and Power, E. (eds.). The Cambridge Economic History of Europe. Vol 1: The Agrarian Life of the Middle Ages.
- Nef, John U. "Mining and Metallurgy in Medieval Civilisation", in Postan, M. M. and Miller, E. Cambridge Economic History of Europe, Vol. 2: Trade and Industry in the Middle Ages.
- Netting, K. Cultural Ecology, Mento Park, Calif., 1972.
- Noonan, J. T. Contraception. A History of its Treatment by the Catholic Theologians and Canonists, Cambridge, Mass., 1965.
- North, T. "Legerwite in the Thirteenth and Fourteenth Centuries", Past and Present, 111 (1986).
- Ohlin, G. "No Safety in Numbers: Some Pitfalls of Historical Statistics", in Floud, R. (ed.). Essays in Quantitative Economic History.
- Oschinsky, D. Walter of Henley and Other Treatise on Estate Management and Accounting, Oxford, 1971.
- Outhwaite, R. B. Inflation in Tudor and Early Stuart England, 2nd edition, London, 1982.
- Padoch, C. "Labour Efficiency and Intensity of Land Use in Rice Production: An Example from Kalimantan", *Human Ecology*, 13 (1985).
- Page, F. M. "The Customary Poor Law of Three Cambridgeshire Manors", Cambridgeshire Historical Journal, 3 (1930).
- Palmer, R. C. "Contexts of Marriage in Medieval England, Evidence from the King's Court circa 1300", Speculum, 59 (1984).
- Parker, W. N. and Jones, E. (eds.). European Peasants and their Markets, Princeton, 1975.
- Patterson, C. "Silver Stocks and Losses in Ancient and Medieval Times", *Economic History Review*, 25 (1972).
- Penn, S. A. C. "Female Wage Earners in Late Fourteenth Century England", Agricultural History Review, 35 (1987).
- Poos, L. R. and Smith, R. M. "Legal Windows Onto Historical Problems? Recent Research on Demography and the Manor Court in Medieval England", *Law and History Review*, 2 (1984).
- Poos, L. R. "Population and Resources in Two Essex Communities: Great Waltham and High Easter 1327-1389", Ph.D. thesis, Cambridge University, 1984.
- Poos, L. R. "The Rural Population of Essex in the Later Middle Ages", *Economic History Review*, 2nd series, 38 (1985).
- Post, J. B. "Manorial Amercements and Peasant Poverty", *Economic History Review*, 2nd series, 28 (1975).
- Postan, M. M. The Famulus: The Estate Labourer in the Twelfth and Thirteenth Centuries, Economic History Review Supplement, No. 2 (1954).
- Postan, M. M. "Note", Economic History Review, 2nd series, 12 (1960).
- Postan, M. M. "Medieval Agrarian Society in its Prime: England", in Postan, M. M. (ed.). The Cambridge Economic History of Europe. Vol 1: The Agrarian Life of the Middle Ages.

- Postan, M. M. (ed.). The Cambridge Economic History of Europe, Vol 1: The Agrarian Life of the Middle Ages, Cambridge, 1966.
- Postan, M. M. "Investment in Medieval Agriculture", Journal of Economic History, 27 (1967).
- Postan, Fact and Relevance, Essays on Historical Method, Cambridge, 1971.
- Postan, M. M. The Medieval Economy and Society, Harmondsworth, 1972.
- Postan, M. M. Essays on Medieval Agriculture and General Problems of the Medieval Economy, Cambridge, 1973.
- Postan, M. M. Medieval Trade and Finance, Cambridge, 1973.
- Postan, M. M. "The Trade of Medieval Europe: The North", in M. M. Postan and E. Miller (eds.). The Cambridge Economic History of Europe. Vol. 2: Trade and Industry in the Middle Ages.
- Postan, M. M. "Feudalism and its Decline: A Semantic Exercise", in Aston, T. H., Coss, P. R., Dyer, C. and Thirsk, J. (eds.). Social Relations and Ideas: Essays in Honour of R. H. Hilton.
- Postan, M. M. and Hatcher, J. "Population and Class Relations in Feudal Society", in Aston, T. H. and Philpin, C. H. E. (eds.). *The Brenner Debate*.
- Postan, M. M. and E. Miller (eds.). The Cambridge Economic History of Europe. Vol. 2: Trade and Industry in the Middle Ages, 2nd edition, Cambridge, 1987.
- Postgate, M. R. "Field Systems of East Anglia", in Baker, R. A. H. and Butlin, R. A. (eds.). Studies in Field Systems of the British Isles.
- Postles, D. "Oseney Abbey: Studies in a House of Augustinian Canons 1129–1348", Ph.D. thesis, Leicester University, 1975.
- Postles, D. "Fleece Weights and the Wool Supply c. 1250-1350", Textile History, 12 (1981).
- Postles, D. "Cleaning the Medieval Arable", Agricultural History Review, 36 (1989).
- Power, E. "The Wool Trade in English Medieval History", Oxford, 1941.
- Power, E. and M. M. Postan (eds.), Studies in English Trade in the Fifteenth Century, London, 1953.
- Prestwich, M. "Edward I's Monetary Policies and their Consequences", *Economic History Review*, 2nd series, 22 (1969).
- Prestwich, M. "Currency and the Economy of Early Fourteenth Century England", in Mayhew, N. J. (ed.). Edwardian Monetary Affairs 1279–1344.
- Raftis, J. A. The Estates of Ramsey Abbey, Toronto, 1957.
- Raftis, J. A. Assart Data and Land Values, Toronto, 1974.
- Raftis, J. A. Warboys: Two Hundred Years in the Life of an English Medieval Village, Toronto, 1974.
- Raftis, J. A. and Hogan, M. P. (eds.). Early Huntingdonshire Lay Subsidy Rolls, Toronto, 1976.
- Raftis, J. A. (ed.) Pathways to Medieval Peasants, Toronto, 1981.
- Ramsey, P. H. The Price Revolution in Sixteenth-Century England, London, 1971.
- Ravensdale, J. R. Liable to Floods: Village Landscape on the Edge of the Fens AD 450-1850, London, 1974.

- Ravensdale, J. R. "Population Changes and the Transfer of Customary Land on a Cambridgeshire Manor in the Fourteenth Century", in Smith, R. M. (ed.). Land, Kinship and Life-cycle.
- Razi, Z. "The Toronto School's Reconstruction of Medieval Peasant Society: A Critical View", *Past and Present*, 85 (1980).
- Razi, Z. Life, Marriage and Death in a Medieval Parish, Cambridge, 1980.
- Ricardo, D. The Principles of Political Economy and Taxation, London, 1911.
- Richards, J. F. (ed.). Precious Metals in the Later Medieval and Early Modern Worlds, Durham, N. Carolina, 1983.
- Rigold, S. E. "Small Change in the Light of Medieval Site Finds", in Mayhew, N. J. (ed.). Edwardian Monetary Affairs.
- Roake, M. and Whyman, J. (ed.). Essays in Kentish History, London, 1973.
- Robbert, L. B. "Monetary Flows Venice 1150 to 1400", in Richards, J. F. (ed.). Precious Metals in the Later Medieval and Early Modern Worlds.
- Roberts, B. K. "Field Systems of the West Midlands", in Baker, A. R. H. and Butlin, R. A. (eds.). Studies of Field Systems in the British Isles.
- Robinson, G. T. Rural Russia under the Old Regime, New York, 1949.
- Robinson, W. C. "Money, Population and Economic Change in Late Medieval Europe", *Economic History Review*, 2nd series, 12 (1959).
- Robo, E. Medieval Farnham: Everyday Life on an Episcopal Manor, Farnham, 1939.
- Roden, D. "Field Systems in the Chiltern Hills and their Environs" in Baker, A. R. H. and Butlin, R. A. (eds.). Studies of Field Systems in the British Isles.
- Rogers, J. E. T. A History of Agriculture and Prices in England, Vol. 1, Oxford, 1867.
- Rogger, H. Russia in the Age of Modernisation and Revolution 1881--1917, London, 1983.
- Rowley, T. (ed.). The Origins of Open-Field Agriculture, London, 1981.
- Russell, J.C. "The Pre-Plague Population of England," Journal of British Studies, 5 (1966).
- Salter, H. E. (ed.) Eynsham Cartulary, Oxford Historical Society Publications, 51 (1908).
- Schubert, H. R. History of the British Iron and Steel Industry from 450 B.C. to A.D. 1775, London, 1957.
- Searle, E. "Seignurial Control of Women's Marriages: The Antecedents and Function of Merchet in England", *Past and Present*, 82 (1979).
- Shanin, T. The Awkward Class, Oxford, 1972.
- Simkhovitch, V. G. "Hay and History", Political Science Quarterly, 28 (1913).
- Simms, J. Y. "The Crisis in Russian Agriculture at the end of the 19th Century: A Different View", *Slavonic Review*, 36 (1977).
- Simms, J. Y. "The Crop Failure of 1981: Soil Exhaustion, Technological Backwardness and Russia's 'Agrarian Crisis'", *Slavonic Review*, 41 (1982).

- 806071
- Smith, R. A. L. Canterbury Cathedral Priory, Cambridge, 1943.
- Smith, R. A. L. Collected Papers, London, 1947.
- Smith, R. M. "Some Reflections on the Evidence for the Origins of the European Marriage Pattern in England", in Harris, C. (ed.). The Sociology of the Family.
- Smith, R. M. [Review of] "Z. Razi, Life, Marriage and Death in a Medieval Parish", *Journal of Historical Demography*, 8 (1982).
- Smith, R. M. "Hypothèses sur la Nuptialité en Angleterre aux XIIIe-XIVe siècles", *Annales ESC*, 38 (1983), pp. 117-9.
- Smith, R. M. "Appendix", in Laslett, P., Oosterveen, K. and Smith, R. M. (eds.). Bastardy and its Comparative History.
- Smith, R. M. "Some Issues Concerning Families and Their Properties in Rural England 1250–1800", in Smith, R. M. (ed.). Land, Kinship and Life-cycle.
- Smith, R. M. "Families and Their Land in an Area of Partible Inheritance: Redgrave, Suffolk 1260-1320", in Smith, R. M. (ed.). Land, Kinship and Life-cycle.
- Smith, R. M. (ed.). Land, Kinship and Life-cycle, Cambridge, 1984.
- Smith, T. C. The Agrarian Origins of Modern Japan, Stanford, California, 1959.
- Snell, K. D. The Annals of the Labouring Poor, Cambridge, 1985.
- Spufford, P. Money and Its Use in Medieval Europe, Cambridge, 1988.
- Stacey, R. C. "Agricultural Investment and the Management of the Royal Demesne Manors, 1236–1240", *Journal of Economic History*, 46 (1986).
- Steane, J. The Archaeology of England and Wales, London, 1985.
- Taylor, P. J. "The Estates of the Bishopric of London From the Seventh Century to the Early Sixteenth", Ph.D. thesis, University of London, 1976.
- Thompson, J. D. A. Inventory of British Coin Hoards AD 600-1500, Royal Numismatic Society Special Publication, No. 1, 1956.
- Thornton, C. "Report of the Spring Conference of the British Agricultural History Society", Agricultural History Review, 37 (1989).
- Thrupp, S. "Medieval Industry 1000–1500", in Cipolla, C. M. (ed.). The Fontana Economic History of Europe: The Middle Ages.
- Titow, J. Z. "Land and Population on the Bishop of Winchester's Estates 1209–1350, Ph.D. thesis, Cambridge University, 1962.
- Titow, "Evidence of Weather in the Account Rolls of the Bishops of Winchester 1209–1350", Economic History Review, 2nd series, 12 (1960).
- Titow, "Some Evidence of the Thirteenth-Century Population Increase", *Economic History Review*, 2nd series, 13 (1961).
- Titow, J. Z. "Some Differences Between Manors and their Effects on the Condition of the Peasant in the Thirteenth Century", *Agricultural History Review*, 10 (1962).
- Titow, J. Z. English Rural Society 1200–1350, London, 1969.
- Titow, J. Z. Winchester Yields: A Study in Medieval Agricultural Productivity, Cambridge, 1972.

- Watkins, S. C. and van de Walls, E. "Nutrition, Mortality and Population Size: Malthus' Court of Last Resort", Comparative Studies in Society and History, 14 (1983).
- Watts, D. G. "The Estates of Titchfield Abbey c.1245 to c. 1380", Ph.D. thesis, Oxford University, 1955.
- Watts, D. G. "A Model for the Early Fourteenth Century", *Economic History Review*, 2nd series, 20 (1967).
- Weir, D. R. "Life Under Pressure: France and England, 1670–1870", *Journal of Economic History*, 44 (1984).
- White, S. P. and Vann, R. "The Invention of English Individualism: Alan Macfarlane and the Modernization of Pre-Modern England", *Social History*, 8 (1983).
- Williamson, J. "Norfolk: Thirteenth Century", in Harvey, P. D. A. (ed.). The Peasant Land Market in Medieval England.
- Wrigley, E. A. and Schofield, R. S. The Population History of England 1541-1871, London, 1981.
- Wrigley, E. A. and Schofield, R. S. "English Population History from Family Reconstruction: Summary Results 1600-1799", *Population Studies*, 37 (1983).
- Wrightson, K. "Medieval Villagers in Perspective", Peasant Studies, 7 (1978).
- Ugawa, K. "The Economic Development of Some Devon Manors in the Thirteenth Century", Transactions of the Devonshire Association, 94 (1962).
- Van Cauwenberghe, E. and Irsigler, F. (eds.). Minting, Monetary Circulation and Exchange Rates, Aktendes 8th International Economic History Congress, Budapest, 1982.
- Volin, L. A Century of Russian Agriculture, Cambridge, Mass., 1970.
- Vucinich, W. (ed.). The Peasant in Nineteenth-Century Russia, Stanford, Calif., 1968.
- Wilbur, E. "Was Russian Peasant Agriculture Really that Impoverished? New Evidence from a Case Study from the 'Impoverished Center' at the End of the Nineteenth Century", *Journal of Economic History*, 43 (1983).
- Winter, J. M. (ed.). War and Economic Development, Cambridge, 1975.
- Wood, S. "Cowley", in Victoria County History of Oxfordshire, Vol. 5, Oxford, 1957.