

1. SUMMARY OF RESEARCH RESULTS

The research dealt with questions concerning the development of efficient markets and the role of dominant cities in that process. In particular, it focused on England between 1300 and 1600 and on the impact of London on its hinterland and more distant regions. Historians of the period from the later sixteenth century onwards have long stressed the role of London as a promoter of specialisation in production, distribution and finance, and its contribution thereby to the emergence of an integrated economy. Recent work has emphasised the dominance of London from a much earlier period and has pointed to developments apparent by about 1300 which were once thought to have emerged after 1500. The city appears to have reached a population peak in 1300 from which it subsequently declined, not regaining the former level until about 1570. This raises questions as to whether change over these three centuries is best understood in unilinear or cyclical terms and as to the nature of the supposed transition from a 'medieval' to a 'modern' economy.

Earlier research demonstrated London's effect in promoting agrarian and other specialisation in the ten counties of its immediate hinterland about 1300, and the changes which took place later in the fourteenth century following depopulation and the emergence of new patterns of consumption. These relationships, and the role of London and other towns in the region as centres of trade and credit, were also explored for the period around 1400, using cases of debt from the records of local town courts and from the Court of Common Pleas which met at Westminster and heard cases from throughout England.

The present research has built on these approaches, aiming to establish a broader picture both geographically and in terms of chronological change. It has two principal components. One used the records of debt cases in the Court of Common Pleas in cross-sectional analyses of commercial networks at three successive dates within the period for London and its immediate hinterland and for the outlying counties of Devon, Staffordshire and Yorkshire. These records provide an accurate picture of the activities of London creditors throughout the kingdom. The second component deals with the evidence of grain (mainly wheat) prices, with the aim of estimating degree of integration in the market for this important basic commodity.

Common Plea records are complex and vary considerably over time, but an important result of the research has been to demonstrate that they provide a robust basis for analysing changes in commercial networks over the long run. In order to make the best use of relevant information (including the occupations and places of residence of parties) substantial datasets for analysis were compiled from the rolls for the Michaelmas terms of 1329, 1424 and 1570. This information was analysed and mapped. The occurrence and occupational profiles of debtors and creditors residing in particular towns, counties and regions were tabulated and the value of their debts analysed. Urban hinterlands were mapped, using both point and county-based values. The material is especially good for reconstructing the extent and density of London's contacts, but also provides comparable pictures for other towns, including Exeter and York. In addition, debt information from city of London records around 1300 and from the records of other towns at later dates was analysed in a similar fashion.

The price series are fragmentary and 'low-grade' by comparison with modern data, but useful series within the period 1277-1640 were compiled for fifteen places across southern England and for Chester. Comparisons were drawn with series for Antwerp, Bruges and Douai.

Statistical analysis of covariation of detrended series (the standard method of measuring the degree of integration) is possible only for parts of some of the series. Other revealing exercises have included visual comparison of graphed series for pairs of places, and measurement of temporal and spatial variations in price volatility.

The full results will be presented in a book now being written for publication by the Cambridge University Press. Overall, they point to a regionally-differentiated pattern of change over the three centuries rather than a straightforward linear trend towards an integrated system focusing on London. Several distinctive types of interaction between London, its immediate hinterland, and more distant regions have been identified, along with episodes in which some markets became less, rather than more, integrated. International markets, especially those linked by the English Channel and the southern part of the North Sea, had an important influence on these changes. To a large extent they worked through London thus contributing to the way in which the capital undermined the commercial independence of some provincial towns, but they seem also to have had direct and positive effects on Exeter and the South West. At the same time, the fall in interest rates over the period as a whole indicates a general improvement in the conditions of trade. The results thus constitute a case study in the evolution of commercial systems, emphasising the role of cumulative, small-scale change and of reactions to a changing commercial environment rather than the significance of dramatic transition from one system to another.

Despite London's great size in the early fourteenth century, its hinterland, as defined by intensive commercial interaction, appears to have been limited to the South East and the Midlands. By 1424 that hinterland took in much of England, at a date significantly earlier than sometimes suggested. Further change by 1570 concerned the structure of that hinterland rather its extent. London became a more dominant market for livestock and coal. In several regions Londoners intervened directly in the market for local products rather than through provincial centres and middlemen, as had been the case in 1424. In Exeter and Devon, however, the opposite took place. In the South East, London seems to have become an increasingly dominant centre for retail trade. These changes were not straightforwardly reflected in measures of wheat price integration. A high degree of integration in the early fourteenth century (including between Exeter and London) was followed after the Black Death by greater price volatility indicating a less efficient market. In the fifteenth century markets in the south became less volatile, but at Chester volatility increased, suggesting a growing detachment from southern and continental developments.

2. FULL REPORT OF RESEARCH ACTIVITIES AND RESULTS

Background

The research grew out of a series of previous projects based at the Centre for Metropolitan History between 1988 and 1997, which had explored different aspects of medieval London's interaction with its hinterlands. Feeding the City I and Feeding the City II, funded respectively by the Leverhulme Trust and the ESRC (Award No R000233157), had examined London's impact upon its agrarian hinterland before and after the Black Death. That research identified definite patterns of specialisation attributable to the impact of concentrated urban demand, most notably in the production of grains and firewood. It also explored the activities of groups of specialised traders who supplied the city, one of the largest in medieval Europe. Building on this work, the project 'Market networks in the London region c.1400', funded by the Leverhulme Trust between 1994 and 1997, took further the investigation of the commercial networks in which London participated in the post-Black Death period, pioneering the use of debt litigation in the royal Court of Common Pleas to reconstruct regional patterns of economic interaction. It became apparent that a full understanding of London's role in the wider economy would necessitate breaking out of the regional framework of the foregoing research, and would require investigation of longer-term processes of change. As well as posing the problem, the 'c.1400' project suggested a means to address it, at least in part, through the rich and abundant Common Pleas records.

Objectives

The aims as originally formulated comprised the following:

1. To make a substantial contribution to knowledge of London's role within the English economy c.1300-1600
2. To contribute to an assessment of the transition from the medieval to the modern economy
3. To measure changes in market integration over the same period
4. To assemble new datasets on debt, credit, prices and trade
5. To continue to develop methodologies for analysing and mapping debt and credit linkages.

These have continued to be the principal objectives during the course of the project. We consider that objectives 1 and 2 have been, or are in the course of being met (see 'Results' and 'Outputs' below). Definitive peer judgement will necessarily await full publication of the results of the research. Objective 3 has been substantially met, through the analysis of debt and price data ('Results' below), with the qualification that our data are rarely of sufficient quality to satisfy the more rigorous statistical tests for integration employed by students of the nineteenth and twentieth century economies.

Objective 4 has been met, although the specific coverage of datasets has had to be modified. Substantial datasets have been assembled and deposited with the Data Archive ('Outputs' below). These cover price series for London, Exeter, Chester, Canterbury and a range of bishopric of Winchester manors in southern England, and Common Pleas debt samples for 1329, 1424 and 1570. Some additional manorial price series have also been collected. The original intention to collect Common Plea data from 1300 and 1600 had to be modified due to

changes in the nature of the records. In 1300 the records of pleas are relatively sparse, and have little information on residence of parties, while after 1570 the records, although extremely voluminous, almost universally omit residence of creditors, making the data of little use for our purposes. 1329 therefore represented the earliest and 1570 the latest years for which high quality data could be collected while avoiding years of high prices or economic crisis. The number of relevant cases in the 1329 roll was small (542 cases by comparison with over 4,000 for 1424). In order to increase the coverage for the early period, samples of debts registered or enrolled in the City of London's records were collected for the years 1276-9, 1290-2, 1300-2 (from the 'Letter Books') and 1313-15 (from the 'Recognisance Rolls'). These debts are not wholly comparable with the cases in Common Pleas, but have been analysed in a similar fashion and provide useful additional insights into the geographical and commercial interests of London-based creditors and debtors.

The complexity and richness of the Common Plea data meant that considerably more time than planned had to be devoted to collection, editing and organisation of this source. As a result the planned sampling of debt litigation and miscellaneous data on contacts with London from local sources had to be scaled down. It had been proposed to sample the manuscript records of five or more provincial towns for *c.*1600 and (where possible) the pre-Black Death period, to set along side local court datasets for the period *c.*1400 which were assembled during the precursor ('Market networks...*c.*1400') project. In the event only those of Canterbury and Yarmouth were drawn upon. This reduction in scope has been partly offset by the use of printed urban records, including the valuable sixteenth-century court books of Witney in Oxfordshire, and by the generosity of colleagues working on the ESRC-funded project 'Urban hierarchy and functions in the East Midlands in the late Middle Ages' (R0002359022) who have made available data from local records and Chancery proceedings on connections between London and that region. In addition, because of constraints of time and the bulk and complexity of the record, it was necessary to curtail the sampling of cases laid in London in the 1570 Common Plea Roll. A robust method was devised of adjusting the statistics derived from the cases for that year so that they are comparable with those from the other years. The method and other problems associated with the 1570 roll are described in Appendix 2 to D. Keene, 'Changes in London's economic hinterland as indicated by debt cases in the Court of Common Pleas' submitted with this report.

Objective 5 has been met. In particular it has been necessary to devise new strategies for comparing Common Pleas samples from different dates, taking into account procedural changes, the progress of inflation and other complicating factors ('Methods' below). The *Mapinfo* software package has again proved suitable for the organisation and mapping of the data.

Methods

i) Debt data

Common Pleas debt data had been collected during the preceding Leverhulme-funded project for the Michaelmas terms of three years, 1384, 1403 and 1424, covering debt cases 'laid' - that is, where the cause of the debt was supposed to have originated in - London, and a block of ten surrounding counties (Beds, Berks, Bucks, Essex, Herts, Kent, Middx, Northants, Oxon and Surrey). The year with the best quality of data, in terms of proportion of creditor and debtor residences and occupations recorded, 1424, was selected as the basis for an enlarged sample, with the additional collection of cases laid in Yorkshire, Devon and Staffordshire. Comparable data was then collected from a Michaelmas term plea roll for the pre-Black

Death period (1329) and the later sixteenth century (1570). The reasons for the choice of those years are outlined in 'Objectives', above. The data were collected on manual coding sheets and then entered into dBase datafiles; the extremely bulky and awkward nature of the manuscript sources made use of laptop computers in the archive unfeasible. A lengthy process of editing was then undertaken to eliminate duplicate cases, identify and modernise place-names, devise procedures for dealing with the use of 'alias' residences (particularly common in the 1570 dataset), append Ordnance Survey grid references, and standardise and code occupational and status terms for the approximately 16,000 parties (creditors + debtors) who occur in the datasets. In addition, the subsample of about 1,300 cases where details of a transaction are specified (in terms of types of commodity traded, or mechanism of exchange) were entered into Idealist text databases and subjected to further editing, along with an additional 200 such detailed cases from the Michaelmas term plea rolls for 1500 and 1602.

The datasets were then analysed and mapped, principally using Mapinfo software. The occurrence and occupational profiles of debtors and creditors residing in particular towns, counties and regions were calculated and tabulated, and the value of debts analysed. Regularities in the spatial and occupational linkages of parties were investigated and tabulated. Urban hinterlands have been mapped, with particular emphasis upon reconstructing the extent and density of London's contacts, using both point and choropleth (county-based) formats. The commodities traded and mechanisms of exchange described in 'detailed' cases have been analysed and both spatial and temporal comparisons drawn.

ii) Price data

Wheat price series were collected from manuscript sources for the locations described in 'Objectives' above (Corporation of London Record Office, Westminster Abbey Muniments and Public Record Office) and unpublished transcripts and tabulations (Beveridge Price and Wages collection at the British Library of Economic and Political Science, D. Farmer papers in University of Saskatchewan Archives, and Exeter assize transcripts in the Devon Record Office). The quality and coverage of the data are highly variable, restricting the types and scope of analyses that can be validly be undertaken. All the series have gaps. The London series is a composite, comprising principally assize prices (one or more per year) for the periods 1277-1370, 1500-1542 and 1594-1640, plus manorial and Westminster Abbey sale prices for the period 1370-1500. No useable, systematically-compiled wheat prices were available for the period 1542-94. The Chester (Dee Mills) series provides only a single price per accounting year for the period 1378-1503, with a major gap between 1428 and 1462. Canterbury city prices cover 1393 to 1502, providing between one and nine prices per year, while the most extensive series, that for Exeter provides up to 40 prices per year (although at most periods, much fewer) between 1317 and our prices 'cut-off' date of 1640. The manorial series have many gaps, and normally only provide one price per year. The most continuous of the series, those derived from the bishopric of Winchester 'Pipe Rolls', provide interrupted coverage of locations in southern England between the early thirteenth and mid-fifteenth century.

The generally low-grade nature of the data constrains the types of analysis which can be undertaken. Thus, the statistical analysis of the covariation of detrended series has only been possible for parts of some of the series, where reasonably comparable data are available eg. autumn prices and mean annual prices for London and Exeter during parts of the fourteenth century. In such cases detrending has been carried out through first differencing, or the measurement of deviations from linear trends or moving averages, and correlation coefficients have then been calculated. At least as revealing has been the visual inspection of graphed series, including, where available, short-frequency movements for pairs of places.

Calculation of coefficients of variation for the urban and manorial series has also proved a useful exercise, permitting investigation of spatial and temporal variations in price volatility and their relations to transport networks and known features of market organisation. Comparison of English and continental European grain prices (principally the series for Bruges wheat 1348-1640, Douai wheat 1329-1640 and Antwerp rye 1366-1600) has been undertaken, principally on the basis of price variability.

iii) Other measures

Data on urban wealth or taxpaying populations in 1334, 1377, 1524 and the later seventeenth century have been used in the calculation of 'urban potential', a measure of the ability of individual towns within an urban system to interact with each other and hence of the extent of market opportunities open to inhabitants of different towns. We have broadly followed the adaptation of this geographical model by Jan de Vries, *European Urbanisation, 1500-1800* (1984).

Results

The results of the research are many and ramified. It is possible here only to give an impression of the outcomes, and to summarise some of the lines of argument they are being used to support, under the headings i) London's Hinterland ii) Market Networks and iii) Integration. Work is continuing in all these areas, and the conclusions drawn here are thus subject to revision. The results will be presented in a book now being written (see 'Outputs'). They point to a regionally-differentiated pattern of change over the three centuries rather than a straightforward linear trend towards an integrated system focusing on London. Several types of interaction between London and the regions were identified, along with episodes in which some markets became less, rather than more, integrated. International markets had an important influence on these changes. At the same time, the fall in interest rates over the period as a whole indicates a general improvement in the conditions of trade.

i) London's Hinterland

The analysis and mapping of Court of Common Plea debt samples (above 'Objectives' and 'Methods') has enabled the partial reconstruction of London's economic hinterland at three different periods: before the Black Death, towards the end of the period of urban buoyancy c.1400, and in the later sixteenth century. In the 1424 and 1570 plea rolls it is evident that Londoners overwhelmingly chose to 'lay' their cases in London, and thus the samples collected provide effectively national snapshots of Londoners as creditors. That practice was less prevalent in 1329, for which the sample is both smaller and less informative (in terms of information on residence and occupation), but with the additional data from city sources it is possible to construct a broadly comparable debt hinterland. The picture that emerges is, in essence, of a metropolitan hinterland, marked by intensive interaction, which was largely confined to the south-east and the Midlands in 1329, and which by 1424 had expanded to take in much of the rest of England. Changes between 1424 and 1570 were more significant in terms of the structure of that hinterland (see below) rather than in its extent. It thus appears that London's assumption of a quasi-national role in the economic life of England, consonant with its pre-existing political and cultural dominance, predates the 'great depression' of the middle decades of the fifteenth century, which has been ascribed a key role in the capital's ascendancy by some writers. In particular, the role which Londoners played in the internal distributive trade of England by about 1400 appears to have been greater than previously believed.

The principal shifts evident between 1424 and 1570 include a decline in the relative intensity of contacts with counties to the south and east of London (most dramatic in the case of Essex), a corresponding relative increase in contact with interior counties to the north and west, including Hertfordshire, Bedfordshire, Wiltshire and Warwickshire, and an increase in the proportion of debts contracted between inhabitants of the capital itself. There is also an increase evident in contacts between London and Yorkshire, Cheshire and Northumberland, although not apparently with other northern counties, while a relative decline in contacts with Devon and Cornwall is indicated (see below). These changes, which on the whole contrast with the marked national shift in population and wealth in favour of the south-east between the fourteenth and sixteenth centuries, suggest that within that region there was a movement of business into London itself while, at least at some levels of commerce, more distant counties were becoming more important for Londoners than those in its immediate vicinity.

London's hinterland, throughout the period under consideration, was vastly greater than that of any provincial town. Even the greatest of these had zones of regular contact extending little more than 50 km from their suburbs. York, at the height of its late medieval prosperity in the decades around 1400, was perhaps the nearest England came to having a provincial capital, but its routine economic hinterland as revealed by debt litigation extended only just beyond the bounds of Yorkshire, and by 1570 had contracted markedly. Smaller towns characteristically had hinterlands of some 8-15 km for the routine business which features in local court records, with a slightly more extensive zone of 'higher-level' trade reflected in Common Pleas litigation (where the debts were usually larger) and a sprinkling of longer-distance contacts. For much of the interior of England, London credit and trade were by the fifteenth century becoming essential for access to both domestic and international markets. These findings fit well with the results of the 'urban potential' analyses, which both demonstrate the unifocal character of the urban system throughout the period and indicate that London's influence was stronger and more intensive in some directions than others.

ii) Market Networks

The global changes summarised above clearly reflect both changes in London's dominance of national and regional credit networks, and the changing scale and articulation of numerous overlapping supply and distributive systems. Common Pleas data shed light on the organisation of a number of these systems, while different sources - including local court material, local customs accounts, price series and related data assembled during the current project and its predecessors on productive systems, transport networks and on the identity and organisation of groups of specialised traders - have been more useful in the detailed reconstruction of others. It seems clear that the scope of the routine grain supply system was not greatly enlarged during the period c.1300-1600, although it did undergo significant restructuring, as overland supplies of malt became progressively more significant while coastal supply of bread grains contracted and expanded with aggregate demand. Coastal trade with East Anglia, once seen by historians as a core element in London's grain supply, appears rather to have represented a safety valve or emergency source of supply, tapped only in years of shortage, throughout the period from 1300 to 1600. Yarmouth boats, for instance, appear to have been more active as carriers of coal than grain to London in the fifteenth and sixteenth centuries. The increasingly central role of coal in London's fuel supply is reflected in growing direct contact with Newcastle-upon-Tyne, reflected in debt litigation, while networks for the supply of firewood and charcoal by land and water remained much more spatially restricted. The role of London as a centre for the consumption and redistribution of north-eastern coal is documented throughout the period, and is partially reflected in price gradients for coal in the south east. Livestock supply networks linking London with the midlands and Wales, although documented from the thirteenth century onwards, appear to have become busier and more

extensive in the later middle ages, and are known to have expanded rapidly in the sixteenth century. This seems to be reflected in the relatively dense debt contacts in 1570 between London and a corridor of counties running north west from Oxfordshire to Cheshire, a pattern also apparent in the origins of the apprentices to London butchers.

The Common Plea datasets shed important light on the economic contacts of Londoners active within the city's main mercantile groupings, as well as members of the lesser London livery companies and provincial merchants. Although members of the principal companies could trade wholesale in any commodity, analysis and mapping of debt contacts has revealed striking differences between them in ways of doing business and spatial patterns of activity. The most prominent mercantile grouping in the 1329 sample, the drapers, seem to have conducted most of their trade with counties in the immediate vicinity of the capital, notably Essex. Distributive trade organised by Londoners or otherwise articulated through the capital appears to have increased in both volume and spatial range during the fourteenth century. Thus, the mercers, the most prominent and wealthy group in 1424, had geographically-extensive contacts, dense in the counties around London, but extending strongly into the south west and the eastern and north-eastern counties, with a strong focus upon urban centres including Bristol, Gloucester, Bridgewater, Reading, Northampton and Coventry. Much of their business was conducted with chapmen, provincial merchants who characteristically travelled to London with domestic cloth and other produce for sale or book-exchange, returning home with imported linens and other goods which they retailed in their own locality. By contrast, the drapers of the early fifteenth century seem principally to have dealt directly with aristocratic and gentle consumers without the intervention of middlemen, and their trade hinterland, although greatly expanded since 1329, was more restricted than that of the mercers. A more diverse pattern is displayed in the debts claimed by grocers. Many were owed by dyers resident in important cloth-making centres such as Coventry, the smaller towns and villages of the north Essex textile zone, and, above all, Salisbury. It must be assumed (and in some instances can be demonstrated) that such debts reflect the supply of dye-stuffs to provincial industry, imported through provincial ports as well as through London.

iii) Integration

The debt-derived patterns of contact between London and provincial towns and regions, and of interregional and interurban contact independent of London, shed light upon the degree to which England constituted one economy at different periods, rather than an aggregation of poorly integrated local and regional ones. They also help to explain the differential experience of towns and regions between the fourteenth and sixteenth century, providing a framework for a more holistic explanation of change than has generally been prevalent in debates over urban 'growth' or 'decline'. In particular, they help to identify several different types of relationship between London and regional economies.

A tendency for a decline in the relative importance of the principal provincial towns among London's domestic trading partners, evident between 1424 and 1570, reflects changes in the organisation of regional trade which were in part London-directed. Thus, contacts with Wiltshire show a marked shift between the two dates, away from Salisbury and towards the northern part of the county, where rural and small-town cloth manufacture had developed strongly in the intervening period. London had come to serve as an important market for the Wiltshire industry as an increasing share of the whole country's cloth production came to be channelled towards the Antwerp market in the late fifteenth and earlier sixteenth centuries. The debt connections between Wiltshire people and Londoners (predominantly mercers, merchant tailors and clothworkers) in 1570 in part reflect the organisation of the export trade

in the late 1560s, the last phase of the Antwerp hegemony. Similar changes are apparent in the increased penetration of York's commercial hinterland by London merchants. Whereas in 1424 the bulk of Londoners' dealings had been directly with York men, by 1570 they were extending credit to many of the burgeoning textile towns and villages of the West Riding, including Halifax, Leeds and Wakefield, as well as to the inhabitants of primarily agrarian districts throughout Yorkshire. This is compatible with the findings of other studies of the county, based on different sources, that Yorkshire cloth was increasingly marketed through London.

By contrast, London's direct intervention in the economy of the South West, as reflected by debt litigation, appears to have been contracting. There was a notable decline in the occurrence of Exeter inhabitants indebted to London men, and a shrinkage in the number and spread of other places within Devon and Cornwall where individuals owed Londoners money. The relative occurrence of Devon and Yorkshire within the whole debt samples for 1424 and 1570, however, shows a marked growth in the share of the south-western county, and a decline in that for Yorkshire. This indicates strongly that the well-attested strength of the Exeter and Devon economies in the later middle ages and for much of the sixteenth century derived from the growth of circuits of exchange that were largely independent of the metropolitan economy. Yorkshire's sluggish performance, by contrast, appears to be associated with a growing dependence on London credit.

These and related processes of commercial integration and disintegration appear to be reflected in changes in the indebtedness to Londoners of provincial chapmen. By 1570 chapmen debtors had disappeared from counties of the south east such as Kent and Essex where they had been prominent before, seemingly a reflection of a growing dominance of the capital as a retail centre within that region. By contrast, they remained prominent elements in Londoners' dealings with many of the more distant and interior counties of England, and become relatively more important in *inter alia* Yorkshire, Lancashire and Shropshire. This seems to reflect a displacement outwards of characteristic exchange mechanisms, undoubtedly an aspect of integration associated with the growth of the metropolitan market.

Wheat price data have so far been more revealing for the structure of markets and integration levels in the fourteenth century than in the *longue durée*. Comparison of London prices and manorial series from southern England suggests that system a relatively well-integrated in 1300 experienced disruption after the Black Death, and perhaps reached a new equilibrium from the 1370s onwards.

There are indications that over the fourteenth century as a whole land-locked areas suffered greater volatility of prices than areas closer to navigable water. Before the Black Death London's grain supply hinterland displays the characteristics of a well-integrated market overall. There were areas on its fringe, however, where levels of price volatility were high, because London was the only substantial urban market which could draw on their supplies and did so only intermittently. By contrast, districts more isolated from London displayed less volatility.

Comparison of Exeter and London prices and their relation to fluctuations in the Exeter grain trade suggest that before the Black Death both places were part of a relatively well-integrated coastal wheat market in which London may not have been dominant. That market rather may have centred upon Flanders and other parts of the near-Continent as well as embracing coastal districts of south-eastern and south-western England. Decline in aggregate demand for cereals after the Black Death may have precipitated a decline in the level of integration of coastal

grain markets. The 1360s seem to have ushered in a period of generally greater price volatility at Exeter, suggestive of a less efficient and less well integrated market, while covariance of London and Exeter prices declines sharply. This trend to increasing volatility at Exeter culminated in the 1430s, after which a notable decline is evident until the last decade of the fifteenth century, when volatility again increased. Both the rural and urban economies of Devon performed well in the fifteenth century reflected in the growth of the county's share of national taxable wealth and in a remarkable surge in building activity. Real improvements in market organisation may have been associated with this prosperity.

The apparently growing detachment of Exeter from a London-focused economy between 1424 and 1570 revealed by analysis of debt cautions against generalising from the Exeter data alone. Preliminary analysis of fifteenth-century prices from London (Westminster) Canterbury and Chester suggests that the decline in volatility was shared by other southern markets, but that in the north west the picture may have been very different. The movement of prices in later fifteenth-century Chester appears more violent and erratic than at any of the other locations, which may, in the absence of clear evidence for changing measures or other distorting factors, indicate a growing detachment from circuits of exchange linking the grain markets of south-east and south-west England to those of continental Europe.

Activities

An international conference on 'Trade, urban hinterlands and market integration, c.1300-1600' was organised as part of the project and held in London on 7 July 1999. Two papers containing conclusions from the research were presented and discussed, along with findings from other regional studies and Germany.

In addition, six substantial seminar papers on the findings were presented at the Institute of Historical Research, L.S.E. and the universities of Ghent, Leeds and Oxford.

Outputs

Substantial databases of information from debt cases in the Court of Common Pleas for the Michaelmas terms of 1329, 1424 and 1570, from detailed cases in 1500 and 1602, and on wheat prices for sixteen places in later medieval England have been assembled and deposited with the History Data Archive. They are fully described in 'Metropolitan market networks: London, its region and the economy of England c.1300-1600, a guide to the Dataset'. Numerous additional sets of information from city of London and other local sources were compiled.

The proceedings of the conference (see Activities) have been published as: J.A. Galloway, ed., *Trade, Urban hinterlands and Market Integration, c.1300-1600* (Centre for Metropolitan History working paper 3, 2000), which includes the following papers directly arising from the project:

J.A. Galloway, 'One market or many? London and the grain trade of England', pp. 23-42

D. Keene, 'Changes in London's economic hinterland as indicated by debt cases in the Court of Common Pleas', pp. 59-82.

The results of the project will be incorporated in the following book, now being written and contracted for publication by the Cambridge University Press in its 'Studies in Historical Geography':

J.A. Galloway, D. Keene and M. Murphy, *London and the Transformation of the English Economy, 1300-1600: market networks in transition*

Other publications drawing on results from the project include:

D. Keene, 'Metropolitan values: migration, mobility and cultural norms, 1300-1700', in L.C. Wright (ed.), *The Development of Standard English, 1300-1800* (Cambridge, 2000), 93-114.

D. Keene, 'South East England, 600-1540' in D.M. Palliser (ed.), *The Cambridge Urban History of Britain*, vol. 1, *Middle Ages* (Cambridge, 2000 forthcoming)

J.A. Galloway, 'Town and country in England, 1300-1570', in S.R. Epstein (ed.), *Town and Country in Pre-Modern Europe* (Cambridge, 2001 forthcoming), 106-30

Impacts

The findings and intellectual agenda of the research have had a considerable impact within economic history and other fields. The latter include historical, art-historical and archaeological approaches to the study of regional identities and cultures; and socio-linguistic studies of the processes of language change, including the 'levelling' and 'standardization' of English.

Future Research Priorities

The project has established a methodology and an overall interpretation of change based principally on three widely-spaced samples of systematic debt data. Valuable future work could include an additional sample for c.1500 - after the worst of the late medieval economic depression and before the resumption of significant demographic and economic growth - and less comprehensive sampling of 'London' cases at twenty-year intervals between the fourteenth and late sixteenth centuries. Comparable investigation of additional regions, especially East Anglia, would also be valuable.

Further exploration of prices relevant to the findings of the project would include study of cross-grain elasticity in manorial price series as an indicator of integration levels and more extended consideration of the relationship between England and Continental markets.

Investigations such as these would provide a sound foundation for a new, and necessarily less quantitative, assessment of London's role as an organising principle in the economies and cultures of the British Isles and beyond.

Many of the conclusions and hypotheses arising from the research could usefully be explored in parallel and explicitly comparative investigations of material culture, strengthening the methodologies currently employed.