

# Early Thirteenth-Century Prices

---

Paul Latimer

When discussing anything in the reign of King John, even the economy, there is a temptation to try to relate it to the great, twin climaxes of that reign – the loss of Normandy in 1204 and the rebellion of 1215. Discussion of the price history of the reign has not been immune from the temptation to look for political consequences.<sup>1</sup> Nor is this illegitimate, except that it prompts us to look at the consequences of a price history the course of which has remained a matter for debate. The same problem of not being entirely sure what it is we are arguing about has also bedevilled the numerous attempts to discuss the causes of price changes in this period.<sup>2</sup> It seems necessary first to try to establish more securely what happened. The starting point is, and must be, the late D.L. Farmer's work on prices.<sup>3</sup> For the sake of brevity and simplicity, I will discuss in detail only two of the price series he constructed – for wheat and for oxen. All of the other

<sup>1</sup> Warren, *King John*, 163; P.D.A. Harvey, 'The English Inflation of 1180–1220', *Past and Present* 61, 1973, 3–30, at pp. 9–15; Turner, *King John*, 7, 89–91, 96–7.

<sup>2</sup> *The Cambridge Economic History of Europe, II: Trade and Industry in the Middle Ages*, 2nd edn, ed. M.M. Postan and E. Miller, Cambridge 1987, 217; M.M. Postan, *The Medieval Economy and Society*, London 1972, 235–41, 248–9; Harvey, 'The English Inflation of 1180–1220', 25–30; E. Miller and J. Hatcher, *Medieval England: Rural Society and Economic Change 1086–1348*, London 1978, 68–9; J.L. Bolton, *The Medieval English Economy 1150–1500*, London 1980, 72–8; A.R. Bridbury, 'Thirteenth-Century Prices and the Money Supply', *AgHR* 32, 1985, 1–21; N.J. Mayhew, 'Money and Prices in England from Henry II to Edward III', *AgHR* 35, 1987, 121–132; D.L. Farmer, 'Prices and Wages', in *The Agrarian History of England and Wales, II 1042–1348*, ed. H.E. Hallam, Cambridge 1988, 715–817, at pp. 718–25; J.L. Bolton, 'Inflation, Economics and Politics in Thirteenth-Century England', in *Thirteenth Century England IV, Proceedings of the Newcastle upon Tyne Conference 1991*, ed. P.R. Coss and S.D. Lloyd, Woodbridge 1992, 1–14, at pp. 1–6.

<sup>3</sup> Farmer, 'Prices and Wages', 715–817. This, however, only partially supersedes his earlier articles on prices: 'Some Price Fluctuations in Angevin England', *EcHR* 2nd ser. 9, 1956–57, 34–43; 'Some Grain Price Movements in Thirteenth-Century England', *EcHR* 2nd ser. 10, 1957–58, 207–20; 'Some Livestock Price Movements in Thirteenth-Century England', *EcHR* 2nd ser. 22, 1969, 1–16.

*A note on dates:* dates in the form 1180/1 will be used to indicate a period from Michaelmas (29 September) to Michaelmas. This convention agrees with that used by Farmer in 'Prices and Wages', but in his earlier articles he dated most prices by 'harvest year' whereby a price recorded in an account for 1180/1 would be dated as 1180: 'Some Price Fluctuations in Angevin England', 35–6.

series he produced fit broadly into the patterns generated by these two (see Figures 1 and 2).

Looking back from the mid-1190s, it is hard to detect any sort of clear trend in either wheat or oxen prices. There is a suggestion of a period of higher wheat prices from the mid-1170s to the mid-1180s, and a period of modestly higher oxen prices beginning in the mid-1180s. But both of these apparent upward movements seem to have been largely reversed in the 1190s. From 1200 to 1204, however, in the case of wheat, and from 1201 to 1205, in the case of oxen, there is a remarkable surge in prices. This surge in prices is especially evident in the case of wheat, but is still striking in the less volatile oxen series. Both sets of prices fall back to some extent in the following couple of years, wheat more so than oxen. But in neither case do prices return to the general level of prices before 1200. After 1207 the patterns of the two price series diverge somewhat for the rest of the first half of the thirteenth century. Wheat prices remain volatile, but fluctuate around a level somewhat more than twice the general level before 1200. Oxen prices, on the other hand, show a marked, if moderate, upward trend, so that by the 1230s and 1240s they often exceed the levels even of the early 1200s, something that does not happen in the case of wheat. Figure 3 plots indices of the seven-year moving averages of both wheat and oxen prices on a logarithmic scale. This makes the essential similarity between the price series for wheat and oxen much clearer. Although the upward trend in oxen prices between 1207 and 1251 is clear, it can be seen to have been very gradual in terms of the rate of change. Given the greater volatility of wheat prices, it is neither surprising nor particularly significant that no equally clear trend in wheat prices can be discerned. But the surge in prices in the early 1200s and the sustained nature of the consequent shift in prices appears as a striking feature of both series.

While Farmer's work is of great value and fundamental to this subject, it leaves some problems unsolved. The data collected by Farmer is dominated by prices either of food commodities or of livestock involved in the production of food. These are of obvious importance in a medieval economy, but we cannot automatically assume that these food-related prices, subject to particular supply constraints and demand pressures, behaved in the same way as other prices. I will try to make a start on looking at some of these other prices later in this article. A second, perhaps even more important problem concerns the reliability of the picture of food-related prices offered us by Farmer's various price series. Farmer himself was modestly cautious about their accuracy and others, such as A.R. Bridbury and, most recently, J.L. Bolton, have expressed some scepticism concerning the reality of a rapid rise in prices in the early thirteenth century. As the title of Harvey's 1973 article – 'The English Inflation of 1180–1220' – suggests, even historians who have accepted the fact of a significant rise in prices have sometimes been very cautious in trusting what Farmer's price series have to tell us about the timing and rate of price increases. It is this problem of

the reliability of Farmer's food-related price series that I wish to discuss first.<sup>4</sup>

The catalogue of difficulties facing the student of medieval prices is a long and a familiar one, and does not need to be repeated here. What I do want to attempt is a categorisation of the kind of errors that these difficulties can introduce into our perception of prices, and then to assess the likely seriousness of these errors in dealing with Farmer's price series for the late twelfth and early thirteenth centuries. These errors may be divided into three categories, all of which potentially threaten the reliability of Farmer's price series. The first kind of error is that any particular price may be untypical. The restricted sample of prices that is available is likely to give a particular, abnormal price undue weight, and can thus distort any average in which it is used. Such distortions are not easy to identify in what we believe to be often genuinely volatile price series. This kind of error can, however, be mitigated to a considerable extent by comparing the price series of a number of commodities and by averaging prices over a number of years. The broadly consistent patterns generated by Farmer's different crop and livestock price series, and the stability of those patterns when subjected to various techniques and specifications of averaging, would seem to provide adequate reassurance against serious distortion from this kind of error.<sup>5</sup> The second kind of error results from the fact that the samples of prices available to us as evidence are always biased towards particular localities and towards particular contexts within which the transactions have taken place.<sup>6</sup> 'Context' here should be taken to include any factors, aside from geographical location, which might affect the price of any particular item bought and sold. This could include, among other things, the measures used, the identities of the buyer and seller, or the purpose behind the transaction. It is usually impossible to correct either geographical or contextual bias and the limitations that these impose have to be accepted and assessed. If our data comes from a restricted range of contexts and, in some cases, a restricted geographical area, then we should certainly keep this in mind when framing our conclusions. The third kind of error is the most serious because it throws doubt on the whole idea of a continuous price series. Frequent, arbitrary changes in geographical bias or context can be countered in the same way as abnormal, particular prices, but where the geographical or the contextual bias in the sample of prices undergoes

<sup>4</sup> Farmer, 'Prices and Wages', 715, 779–80, 785; Bridbury, 'Thirteenth-Century Prices', 9; Bolton, 'Inflation', 4–5. Harvey writes of the 'chronology and scale of these price rises' as being 'defined with real precision', yet his arguments in the article do not rely on the precise chronology of the price rises: 'The English Inflation of 1180–1220', 3.

<sup>5</sup> Such techniques are not panaceas. Their results can be sensitive to their precise application. Conclusions in the present article have been reached after experimenting with several different specifications of such techniques and always with reference to the underlying data.

<sup>6</sup> For the geographical distribution of evidence in Farmer's work on grain and livestock prices in the thirteenth century, see 'Some Grain Price Movements in Thirteenth-Century England', 210–211; 'Some Livestock Price Movements in Thirteenth-Century England', 1, 11; 'Prices and Wages', 780–1.

a definite and sustained change, there is the risk that the price series before this change cannot be treated as at all comparable to the price series after this change.

From the 1160s to the middle of the thirteenth century all of Farmer's price data comes from two sets of source material – the Exchequer pipe rolls (in some cases up to 1210/11) and the Winchester pipe rolls (from 1208/9). In respect of the sections of price series that are derived from only one of these sets of source material, there is a considerable degree of contextual homogeneity.<sup>7</sup> Within the bounds of each set of source material, it seems unlikely that changes in the context of transactions contribute significantly to the major fluctuations of the price series. While the price data from the Winchester pipe rolls have a distinct geographical bias, it is fairly constant.<sup>8</sup> This is not the case, however, with regard to price data from the Exchequer pipe rolls. It is necessary to consider how far fluctuations in price series derived from these rolls may be explained by changes in geographical bias. That this is potentially a serious problem may be seen from Farmer's own work on regional variations in wheat and oxen prices in the thirteenth and fourteenth centuries.<sup>9</sup>

Tables 1 and 2 show the counties that contribute data from the Exchequer pipe rolls for certain periods of the price series for wheat and oxen. The periods were chosen to match the main fluctuations suggested by the seven-year moving averages of those price series. The results are reassuring, particularly in respect of oxen. Most of the periods draw data from a considerable number of counties, fairly widely distributed around the country. Tables 3–5 take the analysis further, taking the price levels of fixed groups of counties, averaged for each period, and comparing them with each other and with the overall average price levels for the same periods. All of the patterns suggested by the fixed groups of counties match in essence the patterns of the overall average price levels, though the decline of oxen prices in the 1190s, relative to the 1180s, appears less clear in the fixed groups of counties. With this slight exception, it

<sup>7</sup> The prices of grain purchases collected by Farmer from the Exchequer pipe rolls overwhelmingly concern royal purchases of military provisions, though there are a few purchases for seed, neither numerous enough nor anomalous enough to significantly affect the series. The prices of oxen purchases almost invariably represent the buying of working stock for estates in royal hands. For the Winchester pipe roll price data, Farmer was careful to distinguish between purchases of working stock and sales of stock which might be old or of poor quality. Concerning grain prices from the Winchester pipe rolls, he distinguishes sale prices from prices for the purchase of seed: 'Some Price Fluctuations in Angevin England', 34; 'Some Livestock Price Movements in Thirteenth-Century England', 6; 'Some Grain Price Movements in Thirteenth-Century England', 210; 'Prices and Wages', 745.

<sup>8</sup> The Winchester pipe rolls generally contain price data from Berkshire, Buckinghamshire, Hampshire, Oxfordshire, Somerset, Surrey and Wiltshire. See, for instance, the list of manors in *The Pipe Roll of the Bishopric of Winchester 1210–1211*, ed. N.R. Holt, Manchester 1964, 3–4.

<sup>9</sup> Farmer bases his analyses on 'marketing areas' which do not usually coincide with individual counties, but generally include manors from part of one county, or from neighbouring areas within two or three counties: 'Prices and Wages', 743–4, 751, 781.

would seem reasonable to conclude that changes in geographical bias do not significantly distort the price series derived from the Exchequer pipe rolls. Indeed, the patterns generated by the wheat and oxen price data demonstrate an encouraging and perhaps even surprising degree of robustness in this respect.

The risk that a definite and sustained change in geographical or contextual bias occurred is clearly present where reliance for price data on the Exchequer pipe rolls gives way, from 1208/9, to reliance on the Winchester pipe rolls. Although it is impossible to make precise comparisons with regard to the change in geographical bias between the two sets of sources, it is possible to consider separately the Exchequer pipe roll evidence that relates to southern counties, on the basis that the Winchester pipe roll evidence can be taken as broadly representative of southern conditions as a whole, as far as geographical factors are concerned. Tables 4(b) and 5(b) illustrate that the patterns of wheat and oxen prices from the Exchequer pipe roll data for southern counties were similar to the general patterns from those rolls. This in turn suggests that the change in geographical bias, between the data from the Exchequer pipe rolls and the data from the Winchester pipe rolls, does not produce significant distortion.

The most serious danger lies in the differences in context between price data from the Exchequer pipe rolls and the price data from the Winchester pipe rolls. Firstly, the predominant measure for grain changes, or at least its name does. Secondly, purchase prices for grain paid by royal officials to unspecified sellers on the Exchequer pipe rolls are not necessarily comparable with sale prices for grain on the Winchester pipe rolls obtained by the officials of the episcopal estates from unspecified purchasers. It is also true that most of the grain purchase prices on the Exchequer pipe rolls concern the purchase of military provisions, and this contextual factor could conceivably affect the price in a significant manner. Even with regard to the purchase of livestock, which on both sets of rolls has the similar purpose of stocking manors, the particular identities of the purchasers and sellers may have affected the level of the prices. These problems need to be considered.

The most common measure of grain in the Exchequer pipe rolls is the *summ*, though the *quarter* begins to become common by the 1190s and starts to overtake the *summ* in the first decade of the thirteenth century. In the Winchester pipe rolls the *quarter* is always used. Although these two measures are usually assumed to have been generally equivalent, early evidence for this is rare. A reference to the *summ* in the close roll for 1233 suggests that it comprised eight bushels – the same as the most common type of *quarter* – but it is not until the late thirteenth century that more direct evidence equating the two measures is found. The number of examples where it is possible to compare the prices of grain or salt, per *summ* and per *quarter*, in the same year, is small (see Table 6). Given the inherent volatility and variability of the prices, the most one can say is that these few examples do not show any consistent variation or a variation in any consistent direction between *summ* and *quarter*. They offer no reason to abandon the assumption, based on later evidence, that the *summ* and *quarter* were roughly equal in the

twelfth and early thirteenth centuries, though it remains only an assumption.<sup>10</sup>

The overall effect of the other contextual factors on the price data in the Exchequer pipe rolls and Winchester pipe rolls is impossible to quantify directly. We have to accept that the two sets of sources provide us with two different lenses through which to view prices. Yet where the two sets of sources can be used in parallel, they point to generally similar price levels (see Tables 7 and 8). A thorough search of all the Exchequer pipe rolls for the first half of the thirteenth century would yield a fuller comparison, though while most of them remain unedited, it would be a tedious task. Other documents that have been edited offer some help. A Christchurch Canterbury roll of the issues of its lands in Kent in 1207/8 yields average wheat and oxen sale prices well within the range we would expect from the Exchequer pipe rolls and the Winchester pipe rolls.<sup>11</sup> Various edited accounts of lands in the king's hands, applicable to the years 1223/4, 1224/5 and 1232/3, provide a geographically diverse set of price examples. The average prices for wheat and oxen that these documents yield are on the whole close to their Winchester pipe roll counterparts (see Table 9). These examples, limited though they are, do not suggest that either the Exchequer pipe roll or the Winchester pipe roll price data are outrageously peculiar.<sup>12</sup>

The danger that our perception of food-related prices is distorted is real enough, particularly where one possibly idiosyncratic set of sources gives way to another. It seems over-pessimistic, however, to conjure up fears of huge distortions. The few indications that we have of the degree of distortion suggest that it is not large. It seems justifiable to accept provisionally that the price series collected by Farmer correctly delineate the main fluctuations in food-related prices in the late twelfth and early thirteenth centuries, at least for southern counties, and that the surge in these prices, of the years from 1199/1200 to 1204/5, is not just a mirage rising from poor and inconsistent data.

Turning to the problem of prices that are not related to food or food production, it must be admitted at the outset that it is impossible to obtain a fully representative set of price series for such items. What follows concerns very much a mixed bag of items for which I could find reasonable indications of price, paying no regard to the economic importance, or otherwise, of the items. Some of these series, considered individually, could not be said to tell us very much. Yet considered as a group, they represent a varied collection of price series and the results present a consistent enough picture to be used as at least indicative of

<sup>10</sup> *Close Rolls 1231–1234*, 190–1; R.D. Connor, *The Weights and Measures of England*, HMSO, London 1987, 149–51; R.E. Zupko, *A Dictionary of Weights and Measures for British Isles: The Middle Ages to the Twentieth Century*, Philadelphia 1985, 369; W.H. Prior, *Notes on the Weights and Measures of Medieval England*, Paris 1924, 18.

<sup>11</sup> *Interdict Documents*, 69–80. The oxen sale price is perhaps a little higher than one would expect from the sale of obsolete stock, but, given relations between King John and Canterbury at the time, it would not be surprising if many healthy oxen were being sold by the royal administrators.

<sup>12</sup> *Roll of Divers Accounts for the Early Years of the Reign of Henry III*, ed F.A. Cazel, PRS ns 44, 1982, 1–11, 28–30, 37–41, 49, 74–89.

prices unrelated to food. The items concerned are as follows: wool (with sheep prices being used as a surrogate in the twelfth and early thirteenth centuries); the cloth used for the table and curtains at the royal exchequer; linen; wax; lead; wine and palfreys. Except where I have made use of T.H. Lloyd's work on wool prices and Farmer's work on sheep prices, the price series are my own, using evidence taken mainly from the Exchequer pipe rolls, the close rolls and the liberate rolls. Each of these series has its own particular limitations, points of interest and difficulties.

It is unfortunate that we know so little about wool prices before the second decade of the thirteenth century, given the importance of wool in the English economy's external relations. Evidence for the period 1208/9 to 1250/1, taken from the Winchester pipe rolls, suggests a substantial increase in the level of wool prices from the early 1230s onwards. The average price from nine of the years between 1231/2 and 1248/9 is some 46 per cent higher than the average from thirteen of the years between 1208/9 and 1226/7.<sup>13</sup> In the case of sheep prices from the same period, which may be regarded as reflecting the value of wool, this increase in wool prices is substantially reflected in the purchase prices of wethers on the Winchester pipe rolls. The average price of wethers from eight of the years between 1231/2 and 1248/9 is some 36 per cent higher than the average from ten of the years between 1208/9 and 1226/7.<sup>14</sup> Before 1208/9 there is very little to go on as far as wool prices are concerned.<sup>15</sup> The fairly close correspondence between wool and sheep prices from 1208/9 onwards, however, may allow us to use sheep prices from the twelfth and the first years of the thirteenth century as some indication of wool prices before 1208/9 (see Figure 4).<sup>16</sup> The general pattern of sheep prices, both before and

<sup>13</sup> T.H. Lloyd, *The Movement of Wool Prices in Medieval England*, ECHR Suppl. 6, Cambridge 1973, 38–9.

<sup>14</sup> The purchase price of wethers seems the most appropriate basis for comparison. The sale prices of wethers, and the purchase and sale prices of ewes, all show increases (26 per cent, 15 per cent and 39 per cent respectively), but sale prices would be also likely to reflect the residual meat and hide value of old sheep and the price of ewes might be affected by the demand for and supply of breeding stock: Farmer, 'Some Livestock Price Movements in Thirteenth-Century England', 2–5, 7–8. Farmer indexes price data for wethers, ewes and wool in 'Prices and Wages', 799–810.

<sup>15</sup> There are two Exchequer pipe roll entries from 1197/8 and 1201/2 which give wool prices per sack. Making the dangerous assumptions that the sacks contained 26 or 28 stones of 14 lb, these entries would imply prices between 1s 10d and 2s 7d per 14 lb stone. Both of these prices are within the somewhat wide range of the early Winchester pipe roll prices: *PR 10 Richard I*, 182; *PR 4 John*, 129; Lloyd, *The Movement of Wool Prices*, 38–9.

<sup>16</sup> For the sheep prices in Figure 4, I have used, from 1208/9 onwards, wether or ewe purchase prices, which ever is available, or the average of wether and ewe purchase prices where both are available. The reason for this is that, in the Exchequer pipe rolls, sheep purchase price entries mostly record undifferentiated sheep, but it would make little difference if wether prices alone were used from 1208/9. All sheep prices are taken from Farmer, either 'Some Price Fluctuations in Angevin England', 41, or 'Some Livestock Price Movements in Thirteenth-Century England', 2–3. The wool prices are taken from Lloyd, *The Movement of Wool Prices*, 38–9.

after 1208/9, is similar to that of oxen prices. That this should be so is worth noting and is not at all self-evident, if one accepts the role of food prices in determining the price of oxen and of the role of wool prices in determining the price of sheep.

Cloth and clothing figure very frequently in the Exchequer pipe roll price information, but the many differences of type and quality generally make the patterns of prices difficult to discern. For one very particular set of cloth purchases, there is an exceptional series of prices which demonstrates a clear pattern. During each Easter term eight ells of woollen cloth, probably of the type known as *burell*, were purchased for the table of the upper exchequer, together with ten ells of linen cloth to cover the windows.<sup>17</sup> The cost of these purchases is recorded, at first separately but later in combination, for most years from 1180/1 onwards.<sup>18</sup> Figure 5 plots the prices of the combined purchases (table-cloth and curtains) from 1180/1 to 1220/1 (see also Table 10). Up to 1195/6 the level fluctuates gently between 11s 8d and 14s 1d. After that it begins to move up sharply, with a few lulls, more than doubling by 1201/2 and reaching a peak in 1211/12 at 42s 3d. After a few wild movements around the end of King John's reign it settles down again at 40s 1d from 1217/18 to 1220/1. In both 1229/30 and in 1241/2 the price was 40s 2d, barely changed from the beginning of Henry III's reign.<sup>19</sup> Though these purchases of cloth for the Exchequer present us with what is the most continuous of all available price series, it is obviously dangerous to draw broad conclusions from such a special group of transactions. Nevertheless, the stability before 1195/6 and, even more so, after 1217/18 is striking when set against the steep increases and erratic swings of the intervening period.

Nothing like such a clear picture can be obtained from the evidence for the prices of linen purchases, but it is possible to make some comments (see Table 11). It is obvious that the quality of linen could vary considerably even where there is no direct indication of quality in the records. Yet by giving regard to the size of purchases, to the recipients, to the purpose of the linen and, in conjunction with neighbouring prices, the price itself, it is possible to make a reasonable assessment as to which linen was of exceptional quality. Such purchases were necessarily individual and it is no surprise that there does not appear to be any pattern in their prices. For the rest, a pattern does emerge, albeit vaguely. Prices were mostly higher in the period from 1204/5 to 1254/5 than they had been earlier, but on the whole only modestly so. The peak in

<sup>17</sup> *Dialogus de Scaccario*, 6; PR 27 Henry II, 157; PR 29 Henry II, 161; PR 33 Henry II, 39.

<sup>18</sup> The form of the entries varies, and in particular appears to be abbreviated in later years, but nevertheless seems to represent a consistent series. See for example: PR 1 Richard I, 224; PR 2 Richard I, 156; PR 10 Richard I, 167; PR 1 John, 129; PR 10 John, 166; PR 3 Henry III, 74; PR 5 Henry III, 100.

<sup>19</sup> PR 14 Henry III, 98; PR 26 Henry III, 283. I have not checked the unedited Exchequer pipe rolls of the first half of the thirteenth century.

prices, such as it is, occurs not in the 1240s or 1250s but in the years 1204/5 and 1205/6.<sup>20</sup>

Wax was bought, often from abroad, in increasingly large quantities by representatives of the king for sealing documents and for candles and tapers.<sup>21</sup> Many of these purchases and the prices paid are recorded on the Exchequer pipe rolls and, in the thirteenth century, on the early close rolls and on the liberate rolls (see Table 12 and Figure 6).<sup>22</sup> That wax prices, after remaining fairly steady in the 1170s, had increased substantially by 1200/1, seems clear. Unfortunately, the gap in the evidence between 1179/80 and 1200/1 leaves us ignorant as to whether this change was gradual or abrupt. From 1200/1 to 1225/6 there is little sign of a clear trend, but from 1226/7 to 1250/1 there is more than a hint of a downward drift that continues and becomes more definite in the 1250s.

Gaps in the evidence also hamper the analysis of lead prices (see Table 13 and Figure 7).<sup>23</sup> Between 1187/8 and 1210/11 there is only one, possibly anomalous, example and none at all between 1229/30 and 1243/4.<sup>24</sup> The picture is further obscured by the probable variability of the principle measure for lead – the *caretata* or cartload.<sup>25</sup> In spite of these difficulties, it does seem clear that

<sup>20</sup> On Table 11 I have marked those purchases that can be tentatively placed in the category of ‘exceptional quality’ linen. The 200 ells bought at 9d per ell in 1205/6 ‘ad opus Regis’ is something of a borderline case. Only the price marks it out as exceptional and it is possible that this is an exceptional price rather than exceptional linen. If so, it would accentuate the ‘peak’ in prices around 1204/5 and 1205/6.

<sup>21</sup> 1000 lb of wax were bought as early as 1157/8; 7000 in 1178/9; 10100 in 1204/5, and over 13000 in 1244/5: *PR 4 Henry II*, 112; *PR 25 Henry II*, 125; *PR 7 John*, 101, 113; *CLR*, ii, 285, 295, 298, 302, 309–10, 312, 320. See also M.T. Clanchy, *From Memory to Written Record*, 2nd edn, Oxford 1993, 78–80.

<sup>22</sup> It is often not clear exactly what number of pounds is represented by the various terms for hundred-weights and thousand-weights of wax. A hundred-weight could represent 100 lb, 108 lb, 112 lb or, conceivably, 120 lb and it is not even self-evident that a thousand-weight comprised always only ten hundred-weights: Connor, *The Weights and Measures of England*, 135–6; Zupko, *A Dictionary of Weights and Measures for the British Isles*, 190, 408; Prior, *Notes on the Weights and Measures of Medieval England*, 12. For simplicity I have treated all hundred-weights as 100 lb and all thousand-weights as 1000 lb, but it would be prudent to allow for the possibility that many of the prices given in Table 12 and Figure 6 may in truth be anything up to twenty per cent less than stated.

<sup>23</sup> The prices shown are taken from the printed Exchequer pipe rolls, from the early close rolls, from the liberate rolls, and from *Building Accounts of King Henry III*, ed. H.M. Colvin, Oxford 1971. Figure 7 shows all the different prices known for each year. In order to give greater weight to larger purchases, the seven year moving average is weighted over the seven years, rather than being a simple moving average of the weighted averages for individual years.

<sup>24</sup> In 1199/1200 10 *quadrigatas* of lead were purchased. The *quadriga* was a particular type of cart, but it is not clear whether the *quadrigata* was an unusual measure or just an unusual name for the normal *caretata* or cartload: *PR 2 John*, 89.

<sup>25</sup> At least three capacities of cartload are described with reference to Edward I’s reign: the cartload of 2100 lb (30 fotmals, each of 70 lb); a cartload referred to as the great cartload of London of 1500 lb, and a cartload of the Peak that was much less. Evidence from Henry III’s reign recognises the 2100 lb cartload, but also a *carrata minor* of 1680 lb

lead prices in the latter part of John's reign and the early years of Henry III's reign were significantly above those of the 1170s and 1180s, though exactly when and how abruptly this increase took place is hidden. The evidence also suggests that lead prices were tending to rise during the period from 1210/11 to 1250/1.

In certain contexts it might be appropriate to treat wine as a food, but not in the context of prices. Not only was it a luxury even to many among the upper ranks of society, but, owing to the potential for imports, its supply was increasingly unconstrained by limitations on domestic production. Thus, in terms both of demand and of supply, it differed quite radically from basic foodstuffs. In government records from the 1170s onwards there are a reasonable number of references to the prices paid for wine by the king.<sup>26</sup> There is, however, a problem peculiar to these purchases which arises from the prise of wine, the king's right to take a certain amount of wine from imported cargoes at a preferential price. In the late twelfth and early thirteenth century, the prise normally consisted of the right to take two tuns from each cargo and the price paid was in most cases twenty shillings per tun. Sometimes, for better wines, particularly wines of Auxerre, a price of two marks (26s 8d) per tun was paid, and on at least one occasion a price of 15s per tun was paid in respect of wines imported through the port of Bristol.<sup>27</sup> To use the prices of royal wine purchases as a surrogate for the prices of wine in general – a dangerous enough procedure in itself – it is desirable to try to exclude prices that were paid for wine taken under the

(24 fotmals of 70 lb). A cartload of 24 fotmals of unspecified size is also found in the accounts for building works in Henry III's reign: Connor, *The Weights and Measures of England*, 320; Zupko, *A Dictionary of Weights and Measures for the British Isles*, 87–8, 152, 154–5; Prior, *Notes on the Weights and Measures of Medieval England*, 11, 15; I.S.W. Blanchard, 'Derbyshire Lead Production 1195–1505', *Derbyshire Archaeological Journal* 91, 1971, 138–8; *Building Accounts of King Henry III*, 146–7, 148–9. A number of Derbyshire prices per cartload at 5s 0d and 6s 8d when other prices were between 9s 0d and 14s 7d per cartload in Henry II's reign suggests that the smaller 'Peak cartload' had a long history: *PR 14 Henry II*, 109; *PR 18 Henry II*, 7; *PR 23 Henry II*, 57; *PR 25 Henry II*, 30; *PR 26 Henry II*, 75, 137; *PR 28 Henry II*, 47, 102; *PR 29 Henry II*, 1; *PR 30 Henry II*, 2, 29; *PR 34 Henry II*, 199.

<sup>26</sup> There are only five references to the prices paid for wine before 1170 and three of these give the price in terms of the *modius*, the relationship of which to the later, more usual measure, the tun, is unclear: *PR 2–4 Henry II*, 112; *PR 6 Henry II*, 13; *PR 12 Henry II*, 100; *PR 13 Henry II*, 3. There are only a few later references to the *modius* as a measure for wine: *PR 21 Henry II*, 16; *PR 22 Henry II*, 12, 199; *PR 23 Henry II*, 177.

<sup>27</sup> The best account of the history of the wine prise is still N.S.B. Gras, *The Early English Customs System*, Harvard Economic Studies XVIII, Cambridge, Mass. 1918, 37–41. A.L. Simon, *History of the Wine Trade in England*, 3 vols, London 1906, is also useful, if unreliable. Neither Gras nor Simon notice the 26s 8d rate for the prise, though several instances make it clear: for example, *PR 12 John*, 193; *PR 14 John*, 98. The evidence for the 15s rate at Bristol in King John's reign rests on one Exchequer pipe roll entry: 'pro 4 tonellis de vino rubeo de prisā 60s scilicet 15s pro tonello' (*PR 12 John*, 111). It is doubtful, however, that this was a rate consistently used at Bristol. For example, two entries in 1199/1200 suggest wines bought at 20s per tun, although admittedly these are not explicitly *de prisā* (*PR 2 John*, 126).

prise. This task is complicated by the fact that not all such prices are identified explicitly and, particularly in the twelfth century, the level of the price itself does not always make it clear that the prise is involved. Where transport costs are or may be included, a definite identification of a price as a *de prisā* price is even more difficult.<sup>28</sup> Table 14 shows a series of weighted averages of wine prices.<sup>29</sup> It excludes all instances of prices that are identified explicitly as *de prisā*. It also excludes instances which, while not explicitly *de prisā*, seem likely to have been so, on the grounds that they match one of the prise prices or, where transport costs are or may be included, that they are very close to one of the prise prices. The overall effect of the exclusion of these doubtful cases is small. The series includes only purchase prices. For a number of reasons sale prices are generally much lower than purchase prices and as a group are clearly not comparable.<sup>30</sup> Figure 8 plots the series from Table 14. Two things are striking about the pattern of wine prices that it shows. Firstly, the general level of prices for the period from 1206/7 to 1250/1, while higher than that of the last thirty years of the twelfth century, is considerably less than double the level of prices in that earlier period. Secondly, something exceptional clearly happened to wine prices during the early years of King John's reign. Only rarely before the thirteenth century does the evidence providing these prices give an indication of the region of origin of the wines purchased. The relative importance of the different sources of wine probably changed in the late twelfth and early thirteenth centuries and, as wines of different regions were valued differently, this may affect the series.<sup>31</sup> A comprehensive history of the attempts by twelfth- and

<sup>28</sup> See, for example, two entries in 1176/7: 'pro 10 tonellis vini missis ad Windr' contra Natale £10 12s 4d' and 'pro 2 tonellis vini missis ad Gaitinton 46s 8d': *PR 23 Henry II*, 198.

<sup>29</sup> Prices are taken from the printed Exchequer pipe rolls, from the early close rolls, and from the early and later liberate rolls. Additionally a few prices are taken from the *Patent Rolls of the Reign of Henry III preserved in the Public Record Office*, ii, 1225–1232, 1903, 415–17.

<sup>30</sup> Wine might be sold at a low price because it was old; medieval wines do not seem to have kept well: Simon, *History of the Wine Trade in England* i, 262–3. It is also possible that the king, on occasion, sold cheap English wine produced on lands he controlled, whereas most of his purchases were of imported wine. For example, this might be the explanation for the series of low-priced sales (from 16s 8d per tun to 26s 8d per tun) in 1209/10: *PR 12 John*, 3, 57–8, 82, 162, 192. The lower price of English wine is suggested by the isolated purchase at 10s per tun of wine specified as English in 1183/4: *PR 30 Henry II*, 113. The massive sale of wines by King John in 1201/2 is a special and interesting case, though again the average sale price is low: *PR 4 John*, 82–84.

<sup>31</sup> There must remain many uncertainties here. For instance, the predominance of Gascon wines is often linked to the capture of La Rochelle by the French in 1224, but they were already imported in large quantities earlier in the century. The largest single purchase of identified wines in King John's reign was of Gascon wines: *PR 13 John*, 110. It is also worth noting that the merchants buying grain in Kent in 1207/8 were from Bayonne: *Interdict Documents*, 71–2, 76. When, in the thirteenth century, it becomes practicable to produce separate series of prices for wine from Gascony and Anjou and, to a lesser extent for other particular wines, they do not deviate markedly from the pattern for wines as a whole.

thirteenth-century kings of England to regulate wine prices is still to be written and it is too complex a subject to be tackled fully here. While one would not want to discount automatically the effectiveness of these attempts, which were mostly aimed at the retail trade, there are signs that market pressures could overwhelm them.<sup>32</sup>

In the twelfth and thirteenth centuries, when a good war-horse might cost over one hundred times as much as a plough-horse, a horse was anything but just a horse. Plough-horses, as a substitute for oxen, fall within the class of food-related items and, as one would expect, the prices of plough-horses behaved in a manner similar to that of the prices of oxen. As for cart-horses, while they were not used exclusively in the production and distribution of food, the Winchester pipe roll evidence suggests that their prices maintained a level roughly double that of plough-horses for the period 1208/9 to 1250/1, thus fitting comfortably within the general pattern of agricultural livestock prices.<sup>33</sup> Outside of agriculture a broad range of types of horses occurs in the sources: pack- or sumpter-horses; rounceys; palfreys; hunters; chasers; destriers, and many beasts of widely differing value, described unhelpfully as 'horses'. The quality of these animals varies too much for the whole range to be treated as a single category, but for most individual types the number of examples is too small to produce meaningful price series. One of these types, palfreys, does, however, deserve some attention, not only because the palfrey is the most common type specified in the records, but also, as the staple riding-horse of lords, knights and officials, it constituted a normal and important expense for the upper ranks of society.

Two categories of palfrey prices in the sources will be considered here. Firstly there are prices that are, or at least approximate to, actual purchase prices. Secondly there are prices that represent expected prices or what were perceived to be reasonable prices. This kind of price is most evident when money is allocated for the purpose of purchasing palfreys. These categories are not strictly comparable, but it is often difficult to distinguish with certainty between them, nor does there seem to be any systematic difference between

<sup>32</sup> King John's wine assize of 1199 had to be revised immediately because the merchants would not tolerate it: *Howden*, iv, 99–100. Even after this the very numerous amercements for contravening the assize at this time may reflect the fact that the revised assize too was unrealistic, at least in its first few years of operation. In 1236 the assize in Oxford was suspended because of a shortage of wine, an event which roughly coincides with a period of high prices paid by the king in the mid-1230s: *Close Rolls*, iii, 333. Later levels of maximum prices under the wine assize in Henry III's reign, set either for individual boroughs or more widely promulgated, were sometimes, though not always, more generous than King John's revised assize: *ibid.*, i, 192, 230, 389, 576, 593; ii, 134, 142, 326–7; iii, 386, 407, 413, 512, 522–3.

<sup>33</sup> Farmer, 'Some Price Fluctuations in Angevin England', 41; 'Some Livestock Price Movements in Thirteenth-Century England', 2–3, 7; 'Prices and Wages', 799–806.

their prices.<sup>34</sup> Table 15 and Figure 9 include prices from both categories. It is likely that much of the volatility of the price series shown reflects a degree of variation in the quality of palfreys which the relatively small number of examples is insufficient to dampen.<sup>35</sup> It would be wrong to place too much weight on the lesser fluctuations in this series, but even if the timing and degree of the change in prices cannot be confidently asserted from this evidence, there seems little doubt that the prices of palfreys had risen significantly between the 1180s and the 1240s. An indication that the market in palfreys may at times have been distorted in John's reign is provided by an entry in 1209/10: 'Johannes filius Roberti debet 20m quia contra prohibitionem emit palefridum Regis.'<sup>36</sup> If this indicates that the king had reserved all purchases of palfreys to himself, it may help to explain the relatively low palfrey prices shown on Table 15 and Figure 9 for the latter part of John's reign, though there is no telling from the entry how long this prohibition lasted or how local it might have been.

The price series for wool and sheep, exchequer cloth and linen, wax, lead, wine and palfreys contain many weaknesses and uncertainties. The dangers of distortion are as great if not greater than for food-related prices, but the paucity of evidence and the limitations of the sources make these dangers harder to minimise. While further research and analysis is both possible and desirable, some provisional conclusions can be ventured. The general pattern of prices

<sup>34</sup> Prices that belong or may belong to the first category can be found on the Exchequer pipe rolls, the early close rolls and on the liberate rolls. An untypically clear and detailed example occurs in the Exchequer pipe roll for 1197/8 – 'Pro 20 palefridis emptis ad opus Regis ad feriam Sancti Yvonis £54 18s 4d. Et in custodia predictorum 20 palefridorum per 4 dies 19s 5d': *PR 10 Richard I*, 161. Most entries on the Exchequer pipe rolls that appear to refer to actual purchases provide much less detail, for example, 'In emptione 15 palefridorum ad opus Regis £17 16s' or, in the most common and least definite form, 'Pro palefrido ad opus Regine £2' (*PR 16 John*, 20; *PR 18 Henry II*, 79). Writs of Liberate on the liberate rolls also occasionally make it clear that they concern actual purchases, though often these include the cost of delivering the horse within the price: for example, *CLR*, iii, 82. Examples that probably belong to the second category of price are found on the Exchequer pipe rolls: for example, 'Normano de Camera eiunti in Alemanniam £4 ad unum palefridum emendum ad opus Regis Otonis' (*PR 5 John*, 9). They are, however, more commonly found in the form of writs of Liberate on the liberate rolls: for example, *CLR*, i, 37, 113, 118–119, 159. A third, interesting but distinct category concerns prices implied by the amounts for which debts to the king, expressed in terms of palfreys, could be commuted for cash. This practice, and especially its proliferation in King John's reign, contains many fascinating aspects, but will not be considered here, both for reasons of space and because the relationship between these 'prices' and market-prices was clearly indirect.

<sup>35</sup> In order to minimise the problem of varying quality as much as possible, the seven year moving average on Figure 9 is weighted over the seven years rather than being a simple moving average of the individual weighted annual averages. Also, so as not to extend unnecessarily the y-axis on Figure 9, the exceptional price of twenty marks for a single palfrey in 1249/50 is not shown, though it is included in the moving average (*CLR*, iii, 271).

<sup>36</sup> *PR 12 John*, 67. In September 1241 Henry III issued an order to seize all the suitable palfreys at Winchester fair and pay for them (*CLR*, ii, 73).

which emerges from the study of these commodities confirms rather than contradicts the more soundly based conclusions concerning food-related prices. As with food-related prices, there is little sign of a substantial, sustained rise in prices before John's reign. From 1198/9 to 1205/6, sheep prices, exchequer cloth prices and wine prices indicate a steep rise similar to that suggested by grain and food-related livestock prices. Linen prices, lead prices, wax prices and palfrey prices are all compatible with the notion of a general price surge during these years, even if they offer little positive evidence as to its timing. Thereafter, from 1206/7 to 1250/1, there is less consistency between the price patterns of different commodities. This should be no surprise. We should not expect the prices of very different commodities, subject to many special factors in their own particular markets, to move in concert in any but exceptional circumstances. Overall, it might be possible to say that, after a somewhat chaotic period in the latter part of John's reign, price trends were mostly either unclear or upwards – with only the price series for wax suggesting the gentlest of declines – and that the general level of these prices was substantially higher than before John's reign.

Caution is always advisable in dealing with medieval price series, but scepticism should be kept within reasonable bounds. There is a certain safety in numbers as far as price series are concerned. There is no indication that the shifting peculiarities of the sources create large distortions in terms of the very modest degree of accuracy that we might reasonably expect. Within the somewhat restricted range of contexts from which the data comes, the patterns of prices that were suggested by D.L. Farmer's figures would seem to deserve more trust than even he himself would have given them. The other price series introduced here not only offer some further evidence of the same patterns, but also suggest that these price patterns were not limited to food and food production. If we can conclude from this that an especially rapid, substantial and, as far as we can tell, fairly general, rise in prices did take place in the early years of King John's reign, and that this change in the price level was sustained thereafter, then we can move on to arguing from relatively firm ground about its causes and consequences, and also its relationship with the contemporary struggle to defend the lands of King John in France.

Table 1. The Geographical Distribution of Wheat Price Data from the Exchequer Pipe Rolls 1165/6–1210/11

| Counties                     | 1165/6-<br>1171/2 | 1172/3-<br>1184/5 | 1189/90-<br>1192/3 | 1199/1200-<br>1210/11 |
|------------------------------|-------------------|-------------------|--------------------|-----------------------|
| Berkshire                    | X                 | X                 |                    | X                     |
| Cambs. & Hunts.              | X                 |                   |                    |                       |
| Cumberland                   |                   |                   |                    | X                     |
| Dors. & Som.                 | X                 | X                 |                    | X                     |
| Essex & Herts.               | X                 | X                 | X                  | X                     |
| Gloucestershire              | X                 | X                 |                    |                       |
| Hampshire                    | X                 | X                 |                    | X                     |
| Herefordshire                | X                 |                   |                    |                       |
| Kent                         | X                 | X                 | X                  | X                     |
| Lancashire                   |                   |                   |                    | X                     |
| Lincolnshire                 | X                 |                   |                    |                       |
| London & Middx.              | X                 | X                 |                    |                       |
| Norfolk & Suffolk            |                   | X                 |                    | X                     |
| Northamptonshire             | X                 |                   | X                  |                       |
| Notts. & Derbys.             | X                 | X                 |                    |                       |
| Oxfordshire                  | X                 | X                 |                    | X                     |
| Shropshire                   |                   | X                 |                    |                       |
| Staffordshire                | X                 |                   |                    |                       |
| Surrey                       |                   | X                 |                    |                       |
| Sussex                       | X                 |                   | X                  |                       |
| Warws. & Leics.              | X                 | X                 |                    |                       |
| Wiltshire                    | X                 | X                 | X                  | X                     |
| Worcestershire               | X                 | X                 | X                  |                       |
| Yorkshire                    |                   | X                 |                    | X                     |
| Total Number<br>of Counties: | 18                | 16                | 6                  | 11                    |

Table 2. The Geographical Distribution of Oxen Price Data from the Exchequer Pipe Rolls 1162/3–1210/11

| Counties                     | 1162/3-<br>1181/2 | 1182/3-<br>1188/9 | 1192/3-<br>1198/9 | 1200/1-<br>1210/11 |
|------------------------------|-------------------|-------------------|-------------------|--------------------|
| Bedfordshire                 | X                 | X                 | X                 |                    |
| Berkshire                    | X                 |                   | X                 | X                  |
| Buckinghamshire              | X                 | X                 | X                 |                    |
| Cambridgeshire               | X                 |                   | X                 |                    |
| Cornwall                     |                   | X                 | X                 |                    |
| Cumberland                   |                   |                   | X                 |                    |
| Derbyshire                   |                   |                   | X                 | X                  |
| Devon                        | X                 | X                 | X                 | X                  |
| Dorset                       |                   | X                 | X                 | X                  |
| Durham                       |                   |                   |                   | X                  |
| Essex                        | X                 | X                 | X                 |                    |
| Gloucestershire              |                   | X                 | X                 | X                  |
| Hampshire                    |                   | X                 | X                 | X                  |
| Herefordshire                |                   |                   | X                 |                    |
| Hertfordshire                | X                 |                   | X                 |                    |
| Huntingdonshire              | X                 |                   |                   | X                  |
| Kent                         | X                 | X                 | X                 |                    |
| Lancashire                   |                   |                   |                   | X                  |
| Leicestershire               | X                 | X                 |                   | X                  |
| Lincolnshire                 | X                 |                   | X                 | X                  |
| Middlesex                    |                   |                   | X                 |                    |
| Norfolk                      |                   |                   | X                 |                    |
| Northamptonshire             | X                 | X                 | X                 | X                  |
| Northumberland               | X                 | X                 | X                 |                    |
| Nottinghamshire              | X                 | X                 | X                 | X                  |
| Oxfordshire                  | X                 |                   | X                 | X                  |
| Shropshire                   |                   |                   |                   | X                  |
| Somerset                     | X                 | X                 | X                 |                    |
| Staffordshire                | X                 |                   | X                 |                    |
| Suffolk                      | X                 |                   | X                 |                    |
| Surrey                       |                   |                   | X                 |                    |
| Sussex                       | X                 | X                 | X                 | X                  |
| Warwickshire                 |                   | X                 | X                 | X                  |
| Wiltshire                    | X                 | X                 | X                 |                    |
| Worcestershire               | X                 |                   | X                 |                    |
| Yorkshire                    | X                 | X                 | X                 | X                  |
| Total Number<br>of Counties: | 22                | 18                | 31                | 18                 |

Table 3. Wheat and Oxen Prices 1162/3–1210/11: Overall Average Price Levels for Selected Periods

a) Wheat

Overall Average Prices for Each Period (pennies per summ/quarter)

| 1165/6-<br>1171/2 | 1172/3-<br>1184/5 | 1189/90-<br>1192/3 | 1199/1200-<br>1210/11 |
|-------------------|-------------------|--------------------|-----------------------|
| 18.5              | 26.4              | 19.6               | 61.0                  |

b) Oxen

Overall Average Prices for Each Period (pennies per ox)

| 1162/3-<br>1181/2 | 1182/3-<br>1188/9 | 1192/3-<br>1198/9 | 1200/1-<br>1210/11 |
|-------------------|-------------------|-------------------|--------------------|
| 36.5              | 51.4              | 40.8              | 78.2               |

Table 4. Exchequer Pipe Roll Wheat Prices 1165/6–1210/11:  
Selected Counties/ Selected Periods

a) Counties with data for all periods

| County                | Weighted Average Prices for Each Period<br>(pennies per summ/quarter) |                   |                    |                       |
|-----------------------|---|-------------------|--------------------|-----------------------|
|                       | 1165/6-<br>1171/2   | 1172/3-<br>1184/5 | 1189/90-<br>1192/3 | 1199/1200-<br>1210/11 |
| Essex & Hertfordshire | 15.6  | 22.6              | 17.9               | 55.6                  |
| Kent                  | 20.3  | 30.8              | 22.0               | 71.9                  |
| Wiltshire             | 23.4  | 40.3              | 25.8               | 96.0                  |
| Average (unweighted)  | 19.8  | 31.3              | 21.9               | 74.5                  |

b) Counties with data for the first, second and fourth periods (These counties also represent all the southern counties which have data for the fourth period.)

| County                | Weighted Average Prices for Each Period<br>(pennies per summ/quarter) |                   |                    |                       |
|-----------------------|---|-------------------|--------------------|-----------------------|
|                       | 1165/6-<br>1171/2   | 1172/3-<br>1184/5 | 1189/90-<br>1192/3 | 1199/1200-<br>1210/11 |
| Berkshire             | 14.0  | 20.1              | ---                | 80.0                  |
| Dorset & Somerset     | 23.0  | 25.6              | ---                | 39.1                  |
| Essex & Hertfordshire | 15.6  | 22.6              | 17.9               | 55.6                  |
| Hampshire             | 13.9  | 19.5              | ---                | 50.8                  |
| Kent                  | 20.3  | 30.8              | 22.0               | 71.9                  |
| Oxfordshire           | 17.2  | 22.7              | ---                | 80.0                  |
| Wiltshire             | 23.4  | 40.3              | 25.8               | 96.0                  |
| Average (unweighted)  | 18.2  | 25.9              | 21.9               | 67.6                  |

c) Counties with data for the first, second and third periods

| County                | Weighted Average Prices for Each Period<br>(pennies per summ/quarter) |                   |                    |                      |
|-----------------------|---|-------------------|--------------------|----------------------|
|                       | 1165/6-<br>1171/2   | 1172/3-<br>1184/5 | 1189/90-<br>1192/3 | 1199/1200<br>1210/11 |
| Essex & Hertfordshire | 15.6  | 22.6              | 17.9               | 55.6                 |
| Kent                  | 20.3  | 30.8              | 22.0               | 71.9                 |
| Wiltshire             | 23.4  | 40.3              | 25.8               | 96.0                 |
| Worcestershire        | 17.8  | 21.4              | 14.6               | ---                  |
| Average (unweighted)  | 19.3  | 28.8              | 20.1               | 74.5                 |

Table 5. Exchequer Pipe Roll Oxen Prices 1162/3–1210/11:  
Selected Counties/ Selected Periods

a) Counties with data for all periods

| County           | Average Prices for Each Period (pennies per ox) |                   |                   |                   |
|------------------|---|-------------------|-------------------|-------------------|
|                  | 1162/3-<br>1181/2                               | 1182/3-<br>1188/9 | 1192/3-<br>1198/9 | 1200/1<br>1210/11 |
| Devon            | 36.0  | 48.0              | 43.2              | 63.3              |
| Northamptonshire | 36.0  | 48.0              | 48.0              | 73.9              |
| Nottinghamshire  | 48.0  | 60.0              | 48.0              | 87.7              |
| Sussex           | 36.0  | 48.0              | 48.0              | 83.0              |
| Yorkshire        | 39.0  | 60.0              | 48.0              | 77.1              |
| Average          | 39.0  | 52.8              | 47.0              | 77.0              |

b) Southern counties with data for the third and fourth periods, and one or more other periods

| County          | Average Price for Each Period (pennies per ox) |                   |                   |                   |
|-----------------|--|-------------------|-------------------|-------------------|
|                 | 1162/3-<br>1181/2                              | 1182/3-<br>1188/9 | 1192/3-<br>1198/9 | 1200/1<br>1210/11 |
| Berkshire       | 36.0   | ---               | 43.2              | 60.0              |
| Devon           | 36.0   | 48.0              | 43.2              | 63.3              |
| Dorset          | ---  | 48.0              | 36.0              | 72.1              |
| Gloucestershire | ---  | 48.0              | 48.0              | 74.1              |
| Hampshire       | ---  | 36.0              | 40.0              | 68.9              |
| Oxfordshire     | 36.0   | ---               | 47.5              | 66.8              |
| Sussex          | 36.0   | 48.0              | 48.0              | 83.0              |
| Average         | 36.0   | 45.6              | 43.7              | 69.7              |

Table 6. A Comparison of Prices per Summ and per Quarter in the Exchequer Pipe Rolls and the Winchester Pipe Rolls

| Year             | Exch. Pipe Rolls<br>Pennies Per Summ | Exch. Pipe Rolls<br>Pennies Per Qtr | Win. Pipe Rolls<br>Pennies Per Qtr |
|------------------|--------------------------------------|-------------------------------------|------------------------------------|
| a) <u>Wheat</u>  |                                      |                                     |                                    |
| 1170/1           | 18.0                                 | 17.8                                | ----                               |
| 1192/3           | 22.0                                 | 12.0                                | ----                               |
| 1206/7           | 47.3                                 | 52.0                                | ----                               |
| 1213/14          | 24.0                                 | 29.7                                | 27.5                               |
| 1214/15          | 24.0                                 | 32.0                                | ----                               |
| 1217/18          | 51.2                                 | ----                                | 60.5                               |
| b) <u>Barley</u> |                                      |                                     |                                    |
| 1192/3           | 12.0                                 | 7.0                                 | ----                               |
| c) <u>Oats</u>   |                                      |                                     |                                    |
| 1205/6           | 20.6                                 | 20.1                                | ----                               |
| d) <u>Beans</u>  |                                      |                                     |                                    |
| 1192/3           | 12.0                                 | 10.0                                | ----                               |
| e) <u>Salt</u>   |                                      |                                     |                                    |
| 1210/11          | 15.2                                 | 19.9                                | 12.2                               |

Table 7. Wheat Prices: Printed Exchequer Pipe Rolls Compared with Winchester Pipe Rolls

| Year    | Exchequer Pipe Rolls:<br>(pennies per summ/qtr.) |       | Winchester Pipe Rolls:<br>(pennies per quarter) |       |
|---------|--|-------|---|-------|
|         | Purch.   | Sales | Both  | Sales |
| 1208/9  | ----   | ----  | ----  | 31.5  |
| 1209/10 | 51.8   | 17.6  | 43.3  | ----  |
| 1210/11 | 48.0   | ----  | 48.0  | 41.8  |
| 1211/12 | 80.0   | ----  | 80.0  | 31.3  |
| 1212/13 | ----   | ----  | ----  | ----  |
| 1213/14 | 27.4   | 28.6  | 27.8  | 27.5  |
| 1214/15 | 29.3   | ----  | 29.3  | ----  |
| 1215/16 | ----   | ----  | ----  | 39.5  |
| 1216/17 | ----   | ----  | ----  | ----  |
| 1217/18 | 51.2   | ----  | 51.2  | 60.5  |
| 1218/19 | ----   | ----  | ----  | 63.8  |
| 1219/20 | ----   | ----  | ----  | 44.0  |
| 1220/1  | ----   | ----  | ----  | 62.5  |
| 1229/30 | 48.0   | 80.0  | 64.0  | ----  |
| 1241/2  | 47.0   | ----  | 47.0  | ----  |

Table 8. Oxen Prices: Printed Exchequer Pipe Rolls Compared with Winchester Pipe Rolls

| Year    | Exchequer Pipe Rolls:<br>(pennies per ox) |       | Winchester Pipe Rolls:<br>(pennies per ox) |       |
|---------|---|-------|--|-------|
|         | Purchases                                 | Sales | Purchases                                  | Sales |
| 1207/8  | 73.8                                      | ----  | ----                                       | ----  |
| 1208/9  | 79.7                                      | 64.8  | 84.5                                       | 61.8  |
| 1209/10 | 81.7                                      | ----  | ----                                       | ----  |
| 1210/11 | 70.2                                      | ----  | 73.8                                       | 65.8  |
| 1211/12 | 73.8                                      | ----  | 79.5                                       | 59.3  |
| 1212/13 | ----                                      | ----  | ----                                       | ----  |
| 1213/14 | 88.1                                      | 104.0 | 92.3                                       | 68.5  |
| 1214/15 | 76.0                                      | ----  | ----                                       | ----  |
| 1215/16 | ----                                      | ----  | 75.8                                       | 55.5  |
| 1216/17 | ----                                      | ----  | ----                                       | ----  |
| 1217/18 | ----                                      | ----  | 88.3                                       | 60.3  |
| 1218/19 | ----                                      | ----  | 80.8                                       | 75.5  |
| 1219/20 | ----                                      | ----  | 91.8                                       | 78.5  |
| 1220/1  | ----                                      | ----  | 96.0                                       | 73.5  |
| 1229/30 | 94.5                                      | 70.5  | ----                                       | ----  |
| 1241/2  | 82.7                                      | 90.4  | ----                                       | ----  |

Table 9. Wheat and Oxen Prices: Miscellaneous Accounts Compared with the Winchester Pipe Rolls

a) Wheat

| Year   | Lands of Fawkes de Breaute<br>(pennies per quarter) |       |      | Winchester Pipe Rolls<br>(pennies per quarter) |
|--------|---|-------|------|--|
|        | Purch.  | Sales | Both | Sales  |
| 1223/4 | ----  | 33.0  | 33.0 | 31.3   |
| 1224/5 | 60.8  | 51.3  | 51.5 | 71.5   |
|        | Accounts of Escheats<br>(pennies per quarter)       |       |      | Winchester Pipe Rolls<br>(pennies per quarter) |
|        | Purch.  | Sales | Both | Sales  |
| 1232/3 | 40.0  | 38.6  | 38.8 | 42.3   |

b) Oxen

| Year   | Lands of Fawkes de Breaute<br>(pennies per ox) |       | Winchester Pipe Rolls<br>(pennies per ox) |       |
|--------|--|-------|---|-------|
|        | Purchases                                      | Sales | Purchases                                 | Sales |
| 1223/4 | 90.0   | 60.8  | 92.8                                      | 77.0  |
| 1224/5 | 67.0   | ----  | 90.3                                      | 77.3  |
|        | Accounts of Escheats<br>(pennies per ox)       |       | Winchester Pipe Rolls<br>(pennies per ox) |       |
|        | Purchases                                      | Sales | Purchases                                 | Sales |
| 1232/3 | 87.8   | 49.3  | 101.5                                     | 88.5  |

Table 10. Exchequer Cloth Prices 1180/1–1241/2  
(cloth for table and for windows combined)

| Year      | Price   | Year    | Price    |
|-----------|---------|---------|----------|
| 1180/1    | 14s 0d  | 1203/4  | 30s 10d  |
| 1181/2    | 12s 6d  | 1204/5  | 30s 1.5d |
| 1182/3    | 11s 8d  | 1205/6  | 32s 1d   |
| 1183/4    | ----    | 1206/7  | 32s 1d   |
| 1184/5    | 12s 9d  | 1207/8  | 36s 11d  |
| 1185/6    | 11s 8d  | 1208/9  | 32s 1d   |
| 1186/7    | 14s 1d  | 1209/10 | 33s 6d   |
| 1187/8    | 12s 9d  | 1210/11 | 36s 3d   |
| 1188/9    | 14s 1d  | 1211/12 | 42s 3d   |
| 1189/90   | 12s 1d  | 1212/13 | ----     |
| 1190/1    | 12s 3d  | 1213/14 | 41s 3d   |
| 1191/2    | 12s 10d | 1214/15 | 33s 2d   |
| 1192/3    | 14s 6d  | 1215/16 | ----     |
| 1193/4    | ----    | 1216/17 | 33s 2d   |
| 1194/5    | ----    | 1217/18 | 40s 1d   |
| 1195/6    | 13s 8d  | 1218/19 | 40s 1d   |
| 1196/7    | 16s 0d  | 1219/20 | 40s 1d   |
| 1197/8    | 19s 0d  | 1220/1  | 40s 1d   |
| 1198/9    | 20s 0d  |         |          |
| 1199/1200 | 20s 0d  | 1229/30 | 40s 2d   |
| 1200/1    | 20s 0d  |         |          |
| 1201/2    | 30s 0d  | 1241/2  | 40s 2d   |
| 1202/3    | 30s 9d  |         |          |

Table 11. Linen Purchases 1155/6–1254/5

| Year     | Number<br>of Ells | Pennies<br>per Ell | Notes  |
|----------|-------------------|--------------------|--|
| 1155/6   | 200               | 3.0                | for napkins  |
| 1180/1   | 10                | 2.4                | exchequer curtains   |
| 1181/2   | 10                | 3.0                | exchequer curtains   |
| 1184/5   | 10                | 2.5                | exchequer curtains   |
| 1185/6   | 10                | 2.0                | exchequer curtains   |
| 1186/7   | 10                | 2.5                | exchequer curtains   |
| "        | 60                | 8.0                | for the daughter of the duke of Saxony †                       |
| 1187/8   | 10                | 2.5                | exchequer curtains   |
| 1188/9   | 10                | 2.5                | exchequer curtains   |
| 1195/6   | 10                | 3.6                | exchequer curtains   |
| 1198/9   | 2000              | 2.5                | for the coronation of King John                                |
| 1203/4   | 100               | 2.4                |  |
| "        | 100               | 2.2                |  |
| 1204/5   | 400               | 5.0                | for the Christmas feast  |
| "        | 200               | 5.1                | for the Easter feast   |
| "        | 60                | 12.6               | 'delicate' †   |
| 1205/6   | 200               | 9.0                | for the king †   |
| "        | 500               | 5.5                | for Easter feast   |
| "        | 60                | 8.0                | for the countess of Gloucester †                               |
| "        | 500               | 4.2                | for the king   |
| 1207/8   | 800               | 4.3                | for the Christmas feast  |
| 1209/10  | 940               | 3.6                | for the king for Christmas                                     |
| 1211/12  | 986               | 3.5                | for the king's napkins for Christmas                           |
| 1220/1   | 500               | 4.1                | for the king's napkins for Christmas                           |
| 1229/30  | 69                | 3.0                |  |
| 1242/3 * | 47                | 7.0                | for sheets, etc for Prince Edward and<br>Margaret his sister † |
| 1243/4 * | 48                | 6.0                | to go round the king's bed †                                   |
| 1248/9 * | 2000              | 4.3                |  |
| 1253/4 * | 600               | 3.3                | for napkins  |
| 1254/5 * | 566               | 3.5                |  |

\* Entries marked with an asterisk are from the liberate rolls. All the rest are from the Exchequer pipe rolls.

† 'Exceptional quality' purchases (?)

Table 12. Wax Prices 1157/8–1257/8

| Year    | Weighted Av. Price -<br>pennies per lb | Year    | Weighted Av. Price -<br>pennies per lb |
|---------|--|---------|--|
| 1157/8  | (2.46)                                 | 1226/7  | 5.23                                   |
|         |  | 1227/8  | 6.73                                   |
| 1171/2  | (3.00)                                 | 1228/9  | 6.52                                   |
|         |  | 1229/30 | 6.34                                   |
| 1174/5  | (3.00)                                 |         |  |
| 1175/6  | (3.12)                                 | 1232/3  | 5.61                                   |
| 1176/7  | (3.40)                                 |         |  |
| 1177/8  | (3.43)                                 | 1234/5  | 6.00                                   |
| 1178/9  | 3.26                                   |         |  |
| 1179/80 | (3.00)                                 | 1236/7  | 5.70                                   |
|         |  | 1237/8  | 7.23                                   |
| 1200/1  | (4.80)                                 | 1238/9  | 5.99                                   |
| 1201/2  | (7.32)                                 | 1239/40 | 4.63                                   |
|         |  | 1240/1  | 5.79                                   |
| 1203/4  | (7.32)                                 | 1241/2  | 5.76                                   |
| 1204/5  | 4.81                                   | 1242/3  | 6.20                                   |
|         |  | 1243/4  | 6.22                                   |
| 1206/7  | (7.43)                                 | 1244/5  | 5.83                                   |
|         |  | 1245/6  | 5.88                                   |
| 1208/9  | (6.00)                                 | 1246/7  | 6.13                                   |
|         |  | 1247/8  | 5.70                                   |
| 1210/11 | 4.03                                   |         |  |
| 1211/12 | 3.76                                   | 1249/50 | 5.72                                   |
|         |  | 1250/1  | 5.27                                   |
| 1213/14 | 8.92                                   | 1251/2  | 5.52                                   |
| 1214/15 | 5.70                                   | 1252/3  | 5.72                                   |
|         |  | 1253/4  | (5.00)                                 |
| 1219/20 | 4.86                                   | 1254/5  | 4.96                                   |
|         |  | 1255/6  | 4.77                                   |
|         |  | 1256/7  | 4.19                                   |
|         |  | 1257/8  | 4.35                                   |

Figures enclosed in brackets are from a single entry.

Table 13. Lead Prices 1167/8–1258/9 (shillings per cartload)

| Year      | Price or<br>Range of Prices | No of<br>Cartloads | Weighted<br>Average |
|-----------|-----------------------------|--------------------|---------------------|
| 1167/8    | (9.0)                       | 55                 | (9.0)               |
| 1171/2    | (5.0)                       | 40                 | (5.0)               |
| 1176/7    | (6.7)                       | 20                 | (6.7)               |
| 1178/9    | (13.3)                      | 100                | (13.3)              |
| 1179/80   | 6.7 - 13.3                  | 240                | 9.4                 |
| 1181/2    | 12.5 - 22.0                 | 44                 | 13.4                |
| 1182/3    | (7.0)                       | 30                 | (7.0)               |
| 1183/4    | 12.5 - 14.6                 | 75                 | 13.7                |
| 1187/8    | (6.7)                       | 100                | (6.7)               |
| 1199/1200 | (20.0)                      | 10                 | (20.0)              |
| 1210/11   | 23.8 - 27.7                 | 80.5               | 24.2                |
| 1213/14   | (40.0)                      | 4                  | (40.0)              |
| 1219/20   | (28.5)                      | 4                  | (28.5)              |
| 1220/1    | 30.0 - 38.2                 | 6.5                | 30.6                |
| 1221/2    | 28.0 - 36.0                 | 25.1               | 29.8                |
| 1222/3    | 28.8 - 29.0                 | 19.5               | 28.8                |
| 1223/4    | (27.3)                      | 20                 | (27.3)              |
| 1226/7    | (48.0)                      | 3                  | (48.0)              |
| 1228/9    | (44.0)                      | 3                  | (44.0)              |
| 1229/30   | 31.6 - 35.0                 | 40                 | 33.2                |
| 1243/4    | (46.5)                      | 14                 | (46.5)              |
| 1248/9    | (40.8)                      | 4                  | (40.8)              |
| 1252/3    | 43.5 - 45.3                 | 63                 | 44.5                |
| 1257/8    | (46.0)                      | 1                  | (46.0)              |
| 1258/9    | (42.0)                      | 4                  | (42.0)              |

Figures in brackets are taken from a single entry.

Table 14. Wine Prices 1159/60–1253/4

| Year      | Weighted Av.<br>Price per Tun | Year    | Weighted Av.<br>Price per Tun |
|-----------|-------------------------------|---------|-------------------------------|
| 1159/60   | (17s 0d)                      | 1217/18 | (39s 2d)                      |
|           |                               | 1218/19 | (40s 0d)                      |
| 1166/7    | (41s 0d)                      |         |                               |
|           |                               | 1220/1  | 32s 9d                        |
| 1172/3    | (24s 0d)                      |         |                               |
| 1173/4    | (24s 0d)                      | 1226/7  | 29s 6d                        |
| 1174/5    | 36s 7d                        | 1227/8  | 30s 10d                       |
| 1175/6    | (32s 2d)                      | 1228/9  | 29s 5d                        |
| 1176/7    | (26s 5d)                      | 1229/30 | 34s 0d                        |
|           |                               | 1230/1  | 41s 9d                        |
| 1180/1    | (20s 10d)                     |         |                               |
|           |                               | 1232/3  | 33s 2d                        |
| 1183/4    | 25s 7d                        |         |                               |
| 1184/5    | 24s 5d                        | 1236/7  | 41s 10d                       |
|           |                               | 1237/8  | 45s 11d                       |
| 1186/7    | (25s 0d)                      | 1238/9  | 28s 7d                        |
| 1187/8    | (33s 4d)                      | 1239/40 | 28s 5d                        |
|           |                               | 1240/1  | 36s 3d                        |
| 1189/90   | 24s 1d                        | 1241/2  | 34s 4d                        |
|           |                               | 1242/3  | 36s 1d                        |
| 1193/4    | 30s 4d                        | 1243/4  | 38s 3d                        |
|           |                               | 1244/5  | 34s 4d                        |
| 1199/1200 | 37s 9d                        | 1245/6  | 37s 7d                        |
| 1200/1    | 43s 6d                        | 1246/7  | 40s 8d                        |
| 1201/2    | (50s 0d)                      | 1247/8  | 33s 6d                        |
| 1202/3    | 51s 11d                       | 1248/9  | 30s 7d                        |
| 1203/4    | 50s 3d                        | 1249/50 | 34s 5d                        |
| 1204/5    | 70s 9d                        | 1250/1  | 31s 5d                        |
| 1205/6    | 55s 1d                        | 1251/2  | 32s 11d                       |
| 1206/7    | 36s 10d                       | 1252/3  | 36s 2d                        |
| 1207/8    | 37s 3d                        | 1253/4  | 37s 0d                        |
| 1208/9    | 31s 8d                        |         |                               |
| 1209/10   | 33s 0d                        |         |                               |
| 1210/11   | 37s 3d                        |         |                               |
| 1211/12   | 38s 1d                        |         |                               |
| 1213/14   | 30s 0d                        |         |                               |
| 1214/15   | 36s 7d                        |         |                               |
| 1215/16   | 36s 4d                        |         |                               |

For the prices included in the above weighted averages, see the text of the article. Figures in brackets are taken from a single entry.

Table 15. Palfrey Prices 1156/7–1259/60

| Year    | Weighted<br>Av. Price | No. | Year    | Weighted<br>Av. Price | No. |
|---------|-----------------------|-----|---------|-----------------------|-----|
| 1156/7  | (27s 0d)              | 1   | 1226/7  | 78s 4d                | 2   |
| 1157/8  | 20s 0d                | 2   | 1228/9  | 66s 8d                | 2   |
| 1162/3  | (20s 0d)              | 1   | 1229/30 | (66s 8d)              | 1   |
| 1165/6  | (44s 5d)              | 3   | 1232/3  | (66s 8d)              | 1   |
| 1171/2  | (40s 0d)              | 1   | 1236/7  | (66s 8d)              | 1   |
| 1173/4  | (26s 8d)              | 1   | 1237/8  | (66s 8d)              | 1   |
| 1174/5  | (10s 0d)              | 1   | 1238/9  | 93s 4d                | 5   |
| 1175/6  | (15s 7d)              | 3   | 1239/40 | (40s 0d)              | 1   |
| 1176/7  | 28s 5d                | 3   | 1240/1  | 100s 0d               | 2   |
| 1188/9  | (43s 4d)              | 1   | 1241/2  | 116s 8d               | 2   |
| 1189/90 | 32s 3d                | 6   | 1242/3  | (100s 0d)             | 1   |
| 1190/1  | (40s 0d)              | 1   | 1243/4  | 57s 9d                | 3   |
| 1195/6  | (66s 9d)              | 1   | 1245/6  | 105s 4d               | 5   |
| 1197/8  | (54s 11d)             | 20  | 1247/8  | 146s 8d               | 3   |
| 1201/2  | (40s 0d)              | 1   | 1248/9  | 83s 4d                | 2   |
| 1202/3  | (80s 0d)              | 1   | 1249/50 | (266s 8d)             | 1   |
| 1204/5  | (26s 8d)              | 1   | 1250/1  | 84s 0d                | 5   |
| 1210/11 | (26s 8d)              | 1   | 1251/2  | (133s 4d)             | 1   |
| 1211/12 | 32s 4d                | 12  | 1252/3  | 83s 4d                | 2   |
| 1213/14 | (23s 9d)              | 15  | 1254/5  | 57s 9d                | 3   |
|         |                       |     | 1255/6  | 147s 5d               | 7   |
|         |                       |     | 1256/7  | 98s 4d                | 2   |
|         |                       |     | 1258/9  | (173s 4d)             | 1   |
|         |                       |     | 1259/60 | 100s 0d               | 3   |

Bracketed figures are taken from a single entry.

Figure 1. Wheat Prices 1165/6–1250/1

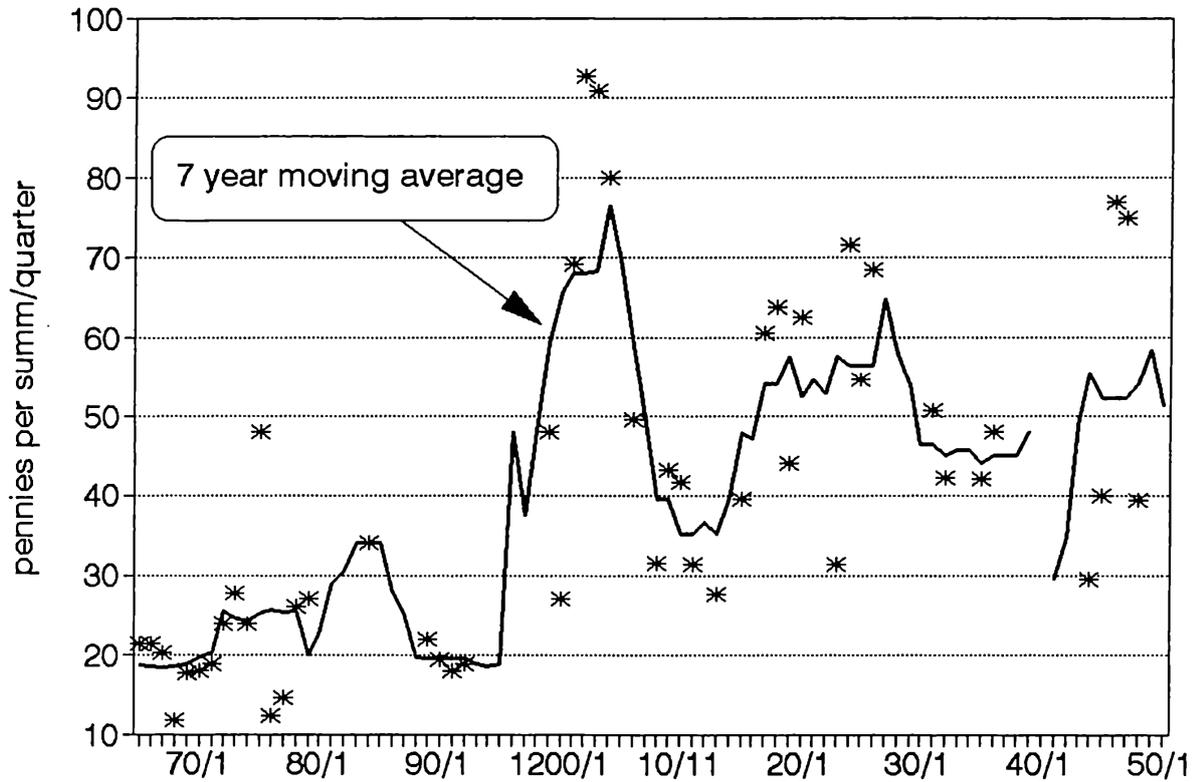


Figure 2. Oxen Prices 1162/3–1250/1

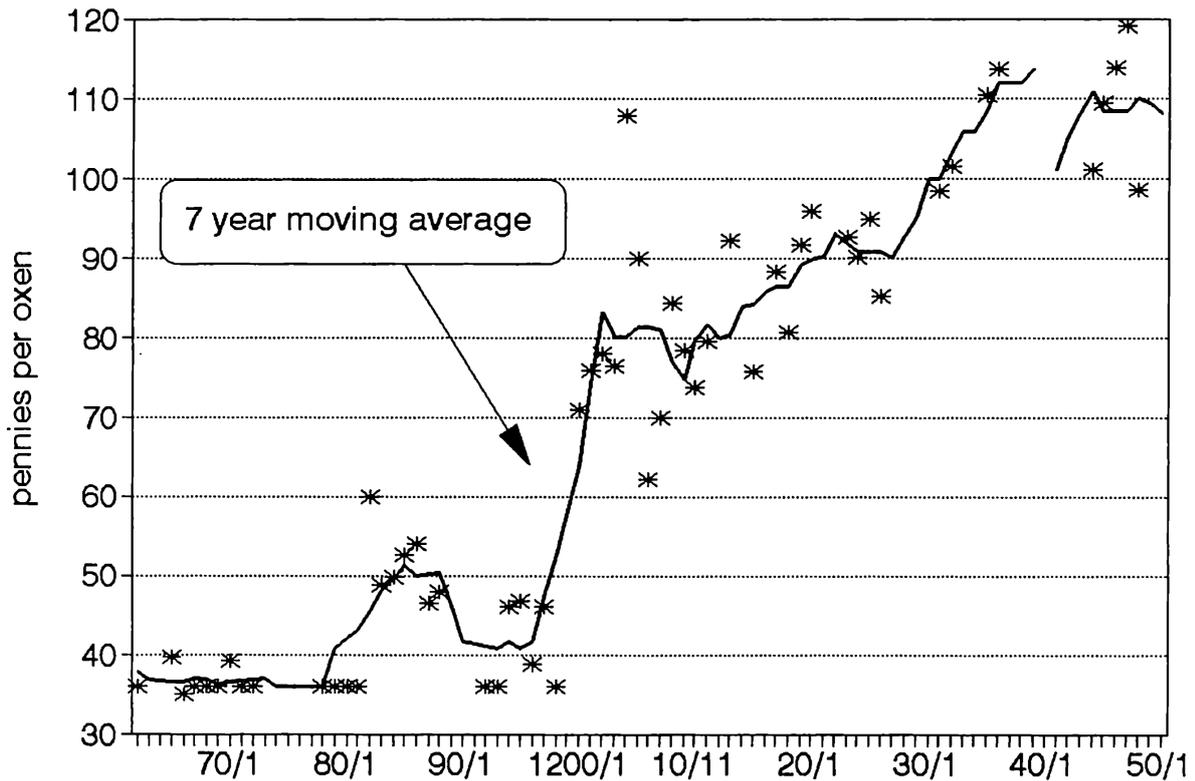


Figure 3. Wheat and Oxen Prices 1165/6–1250/1

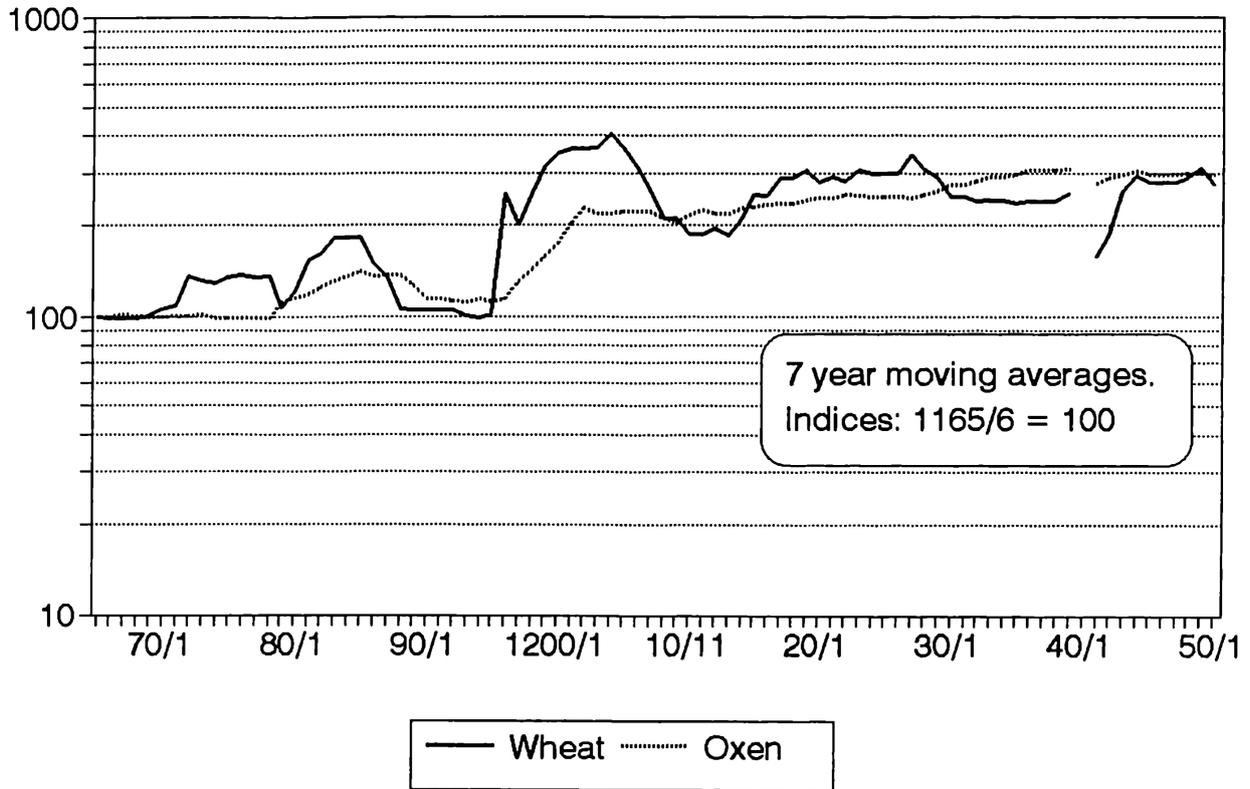


Figure 4. Sheep and Wool Prices 1162/3–1250/1

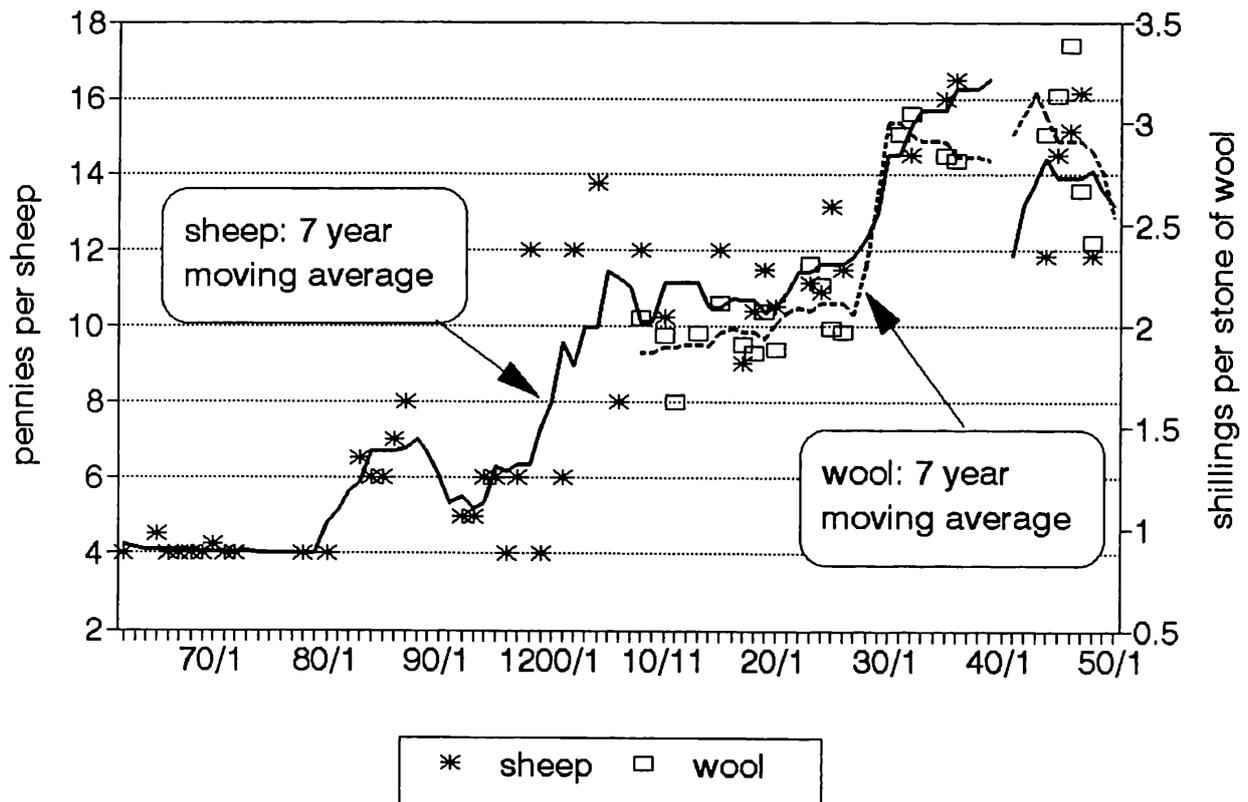


Figure 5. Exchequer Cloth 1180/1–1220/1

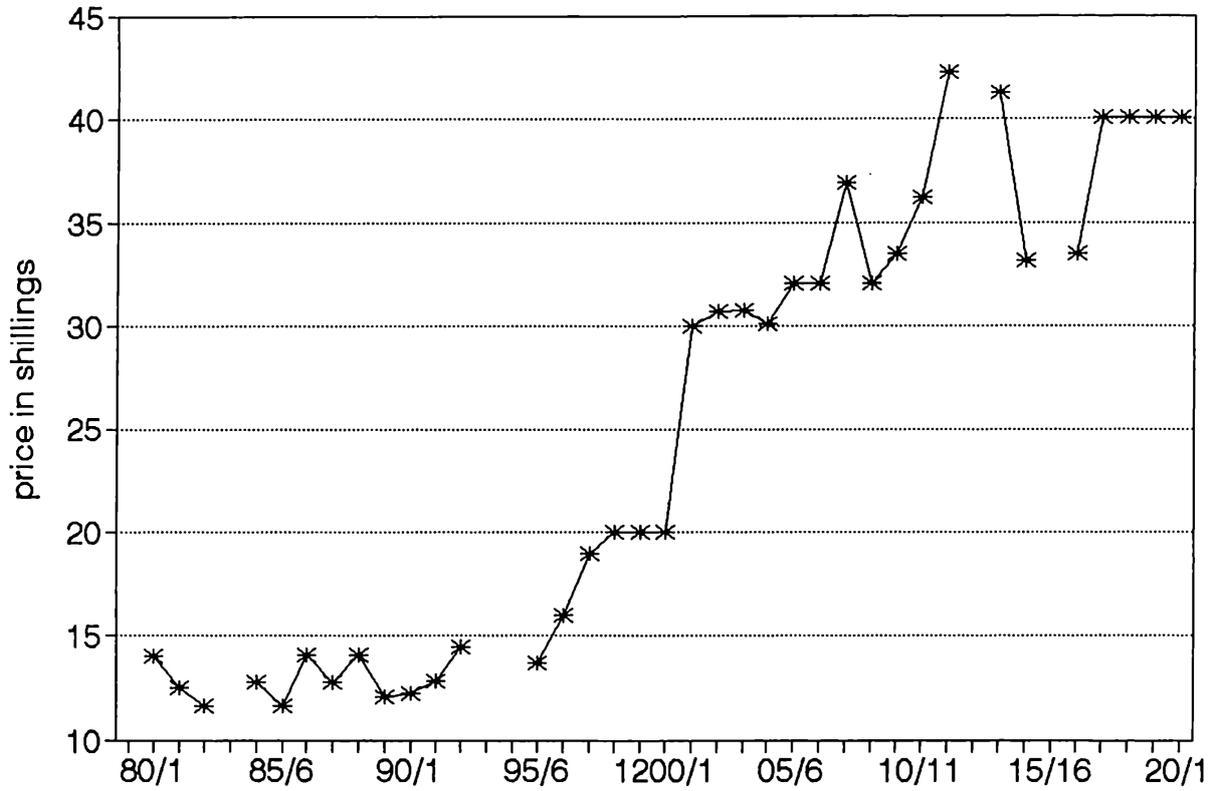


Figure 6. Wax Prices 1171/2–1250/1

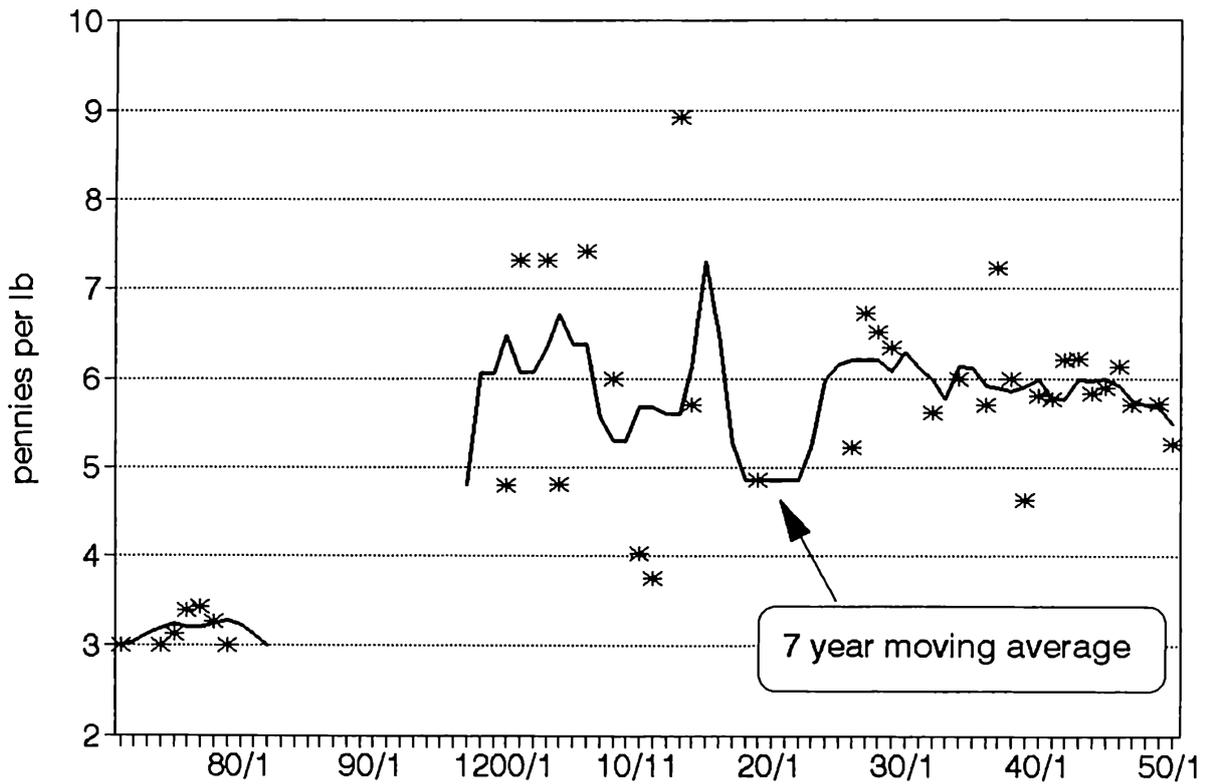


Figure 7. Lead Prices 1167/8–1250/1

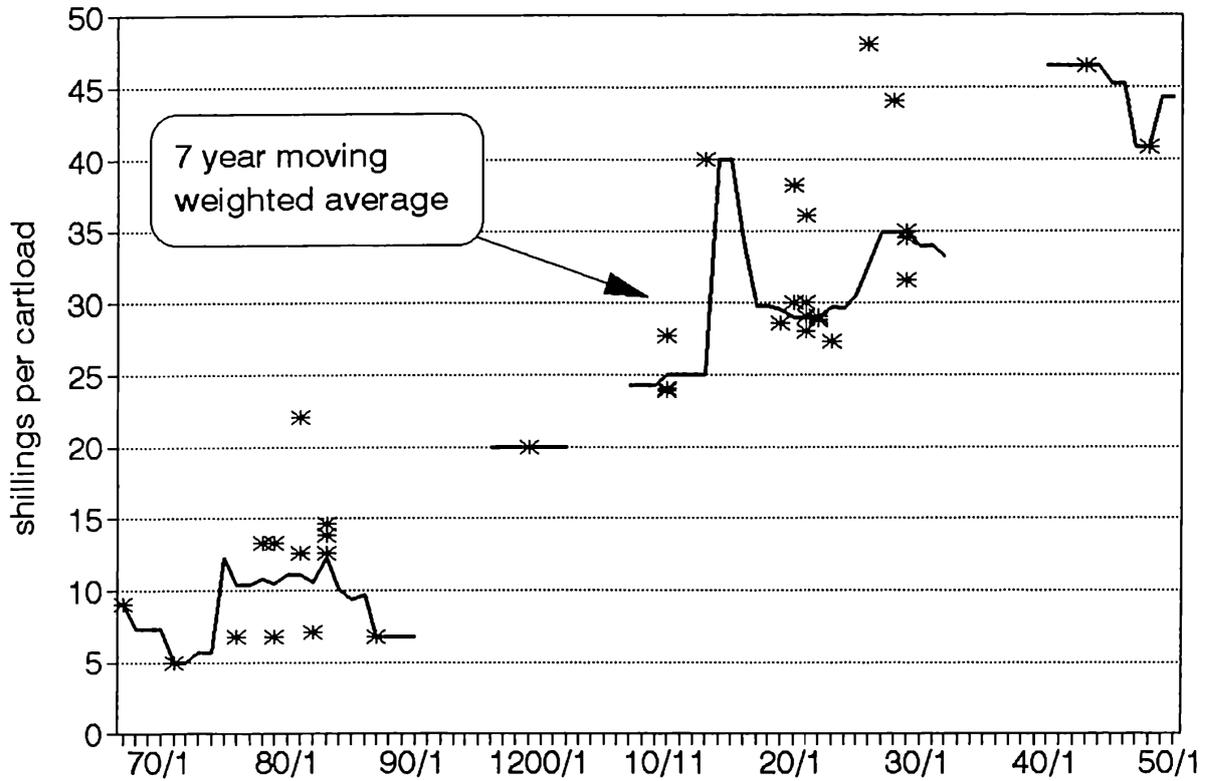


Figure 8. Wine Prices 1170/1–1250/1

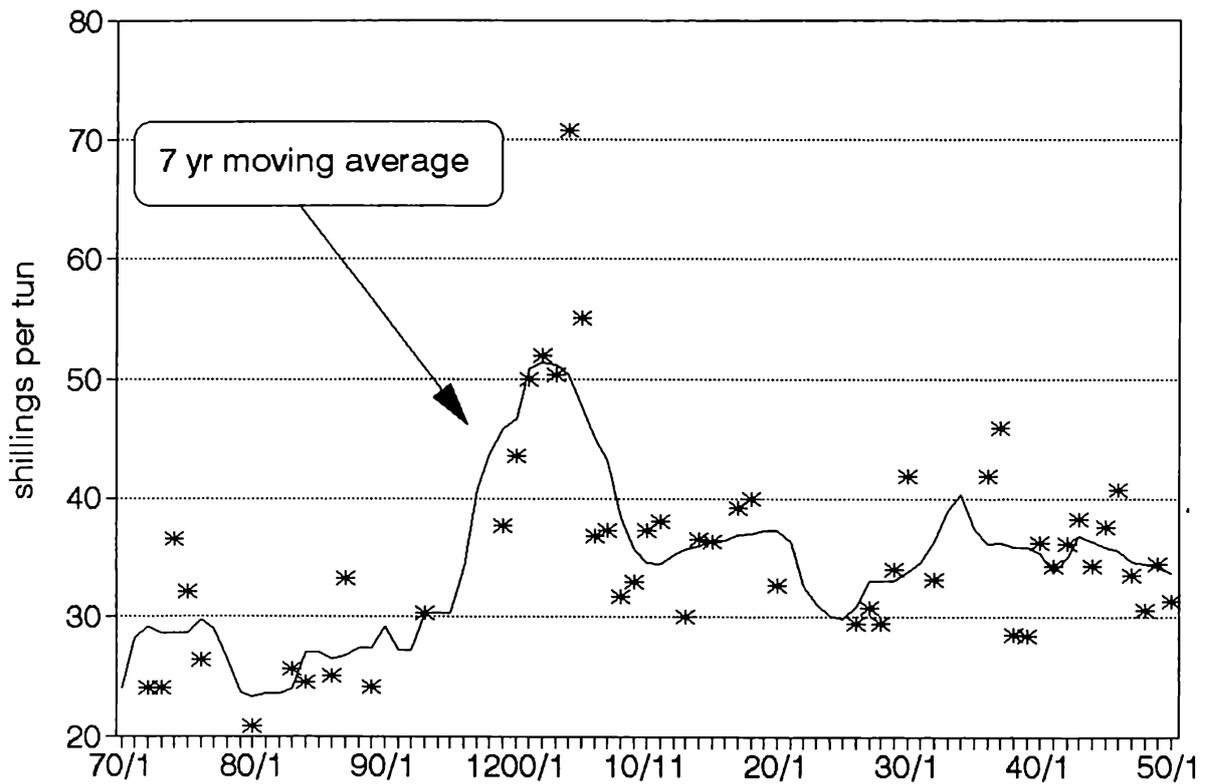


Figure 9. Palfrey Prices 1156/7–1250/1

