

THE HEARTH TAXES, 1662-1689

John Patten

John Patten is a lecturer in Geography at the University of Oxford and Fellow of Hertford College, Oxford. He is working on the occupational structure and economic importance of market towns in East Anglia in the sixteenth and seventeenth centuries.

Between the time of their granting by Parliament to an impoverished monarch, Charles II (1), and ultimate repeal (2) a year after the revolution of 1688 by the new king, William III, anxious to consolidate his position, the tax on hearths provided a fairly efficient, if supremely unpopular, instrument of revenue (3). Because of the opportunity afforded for estimating population size from the names of tax payers and sometimes those exempt from it, as well as the numbers of their hearths, these Tax Records have proved of interest since the time of Gregory King (4); they were the subject of discussion in the first issue of *Local Population Studies* (5). Interest shown recently in their evaluation and interpretation for population purposes has concentrated on the size of the multiplier (6) to be used on the sum of tax payers and exempt together, who were the theoretical heads of a household or a family, in order to achieve a population estimate. The numbers of those recorded as paying the tax are added to all those recorded as exempt from payment on grounds of poverty. The resultant total is accepted to be an approximation of the total number of households present in any society and is multiplied by a generally accepted figure of household size, such as 4.5, in order to get an estimate of population. Much of the accuracy of this estimate can depend however just as much on which of the Hearth Tax lists have been used as a basic source of information (7). Some knowledge of the administrative history of the tax is necessary in order to make the best of the available choice, and also to explain the lacunae in the records due to other than loss or damage of the documents themselves. No single comprehensive study of the levying of the Hearth Taxes in England and Wales has been published; indeed such a task would be massive considering the variations that occur in their recording, both from year to year for a single county, and between different counties even for the same year (8). This introduction to them must at best be both general, and to a certain

extent speculative and dependant on future work being carried on for those areas for which no printed edition of any of the Hearth Taxes exist; for these it is necessary to consult the enrolled Assessments amongst the Exchequer papers in the Public Record Office; others may sometimes be found in Local Record offices, usually being the duplicates of the Exchequer returns (9).

The initial act for the imposition of the Hearth Tax was passed in 1662 (10); and it was first collected at Michaelmas 1662, an annual tax of 2s. being levied, half then and half on Lady Day, though with delays and late returns, until total abolition after Lady Day, 1689. This then is the period over which Hearth Tax Records should theoretically be found. In practice, with a few rare exceptions, they only survive for Michaelmas 1662 to Lady Day 1666 and Michaelmas 1669 to Lady Day 1674, the periods when the Taxes were administered directly by the Government and the Assessments and Accounts of the Taxes returned to the Exchequer for auditing, along with evidence or actual certificates of exemption from the Tax on grounds of poverty, and lists of those in arrears. From 1666 to 1669, and between 1674 and 1684 the Tax was 'farmed' (i.e. the right of collection, and therefore its administrative burden sold into different private hands), common practice in the seventeenth century: from 1684-1689 it was controlled by salaried Commissioners. Under these, different types of administration records were kept, but were closer to private business accounts in nature, and as they were outside of the machinery of national Government were not returned to (and therefore preserved by) the Exchequer. For these two periods there are only a very few records in the Public Record Office (11), and the sole hope is of finding original collectors' books locally preserved, often the case when tax accounting procedure is altered, as Dr. Schofield pointed out for the Poll Taxes after 1689 in a comment in Local Population Studies No. 4 (12).

The Exchequer Hearth Tax Records for 1662-6 and 1669-74 vary as to their accuracy, but in most cases the best preserved and most useful types for population purposes are the Assessments, preliminary reckonings of the number of taxable hearths that should be charged for, made at different dates. These then provided the basis on which the taxes were subsequently levied. Records of actual collection, like the day to day and later the final local Accounts of revenue in fact received, the collectors' Accounts of Arrears of payment, etc. are, as working documents often not so well preserved. They also suffer from the drawback that they record only what was in practice

collected, often falling far short of that recorded in the Assessments, and are therefore lacking in cover. They may, on the other hand, contain much of detailed local interest. The Assessments listing the names of payers and their hearths, i.e. what should have been collected, are obviously in most cases going to be more full and accurate than the different lists recording what was paid, and what was not, etc. It is therefore the best surviving Assessments that should always be used when possible, and in practice are most usually found in the Public Record Office; Local Record Offices may yield various documents concerned with earlier stages of assessment, or collection, that have survived, though these are rarely comprehensive.

Although the taxes were collected twice a year they were based on assessments more infrequently made. Those that can be found for England and Wales are usually in groups of counties after 1664; before that date the county framework was used generally, though Cambridgeshire and Huntingdonshire were combined, but certain cities and county boroughs were treated separately. These were Bristol, Canterbury, Chester, Coventry, Exeter, Gloucester, Lichfield, Lincoln, Norwich, Worcester and York; the county boroughs being Berwick, Kingston-on-Hull, Newcastle, Poole and Southampton. In Wales ⁽¹³⁾, Carmarthen and Haverfordwest were treated separately, as were various parts of London, the position with suburbs like Southwark being peculiarly complicated. Those Assessments that do survive should be linked to the administrative machinery by which they were made. These may be divided into 4 groups ⁽¹⁴⁾, viz. a) Those of 1662 and Lady Day 1664 made under the Sheriff's administration, when assessment was done by those officials of the smallest areas of local government, variously called Petty Constables, Tithingmen, etc., acting for the Sheriff or his deputy, the final Assessment being made up by the Clerk of the Peace of each county, and signed at Quarter Sessions.

b) That made at Michaelmas 1664 by the subcollectors acting for professional Receivers appointed by the Government after the machinery of local government had proved inadequate to administer and collect the Tax, itself the subject of revising acts to alter procedure and close loopholes in 1663 and 1664.

c) The one made at Lady Day 1666 by the Farmers of the Tax. These had taken over the administration from the failed government Receivers as a private business enterprise but nonetheless had to complete as part of their contract, and acting just as the Receivers in that one instance, the assessment that the Receivers should have made at that date.

d) After the 3 years hiatus caused by the farmed tax, those taken, perhaps 4 in number for some counties, by the second administration of government Receivers between 1669 and 1674, when amidst renewed charges of maladministration and corruption the government itself for the second time put the tax into the hands of two successive administrations of Farmers, and then one of Commissioners, none of which sent returns to the Exchequer, and so into the Public Records.

It is unlikely that a complete set of all of the assessments for any one county could be made up from the duplicate copies preserved nationally or locally: this was certainly the opinion of C.A.F. Meekings, with unrivalled knowledge of this class of records. Less useful when found are those for 1662, made before the Tax had yet been taken, and at Lady Day 1666 by the Farmers acting for the outgoing administration of Receivers, both of which seem usually to be lists of taxpayers alone. Much more comprehensive are those for Lady Day 1664, which, as required by the acts, included on the enrolled Assessments those certified as exempt; as do those for Michaelmas 1664 taken by the Receivers, at least where Sir Edward Sawyer's detailed instructions as Chief Exchequer Auditor were followed. Those for the period 1669-1674 may similarly also be taken to be usable when they include the numbers of exempt. Two points must be emphasized on the use of the Hearth Taxes in this context. Firstly the assessments, just like the collections themselves, were often made in arrears, as internal evidence reveals, though they were attributed to the statutory dates: they may contain errors of arithmetic and could contain simple direct transcriptions of earlier assessments. Secondly their accuracy at the different dates varies between counties from 1662-1664, and between the groups of counties under the control of different Receivers between 1664-6 and 1669-74⁽¹⁵⁾. Some followed instructions more closely than others; Sheriffs and Receivers alike were at the mercy of their Petty Constables or Sub-Collectors as to the accuracy and up-to-date nature of the records supplied to them. The above remarks on the quality of the Hearth Tax Assessments are general; the critical editions that exist for the Assessments in the Sheriff's Administration for Surrey or Dorset⁽¹⁶⁾, in that of the first Receivers for Somerset, Staffordshire, or Newcastle-on-Tyne⁽¹⁷⁾, or in that of the second Receivers for Bedfordshire and Suffolk⁽¹⁸⁾ can serve at varying levels to illustrate local problems. Only occasionally is all the information from all surviving taxes of the different years available in printed form for even a small area, as in Warwickshire⁽¹⁹⁾. Local examination is necessary for each of the records used, to ensure that they contain,

for instance, no unlikely rise or fall in the numbers of tax payers between different years (20), or omit the poor sector of the community altogether.

Undoubtedly, once the most suitable surviving assessment that meets these requirements has been decided upon, the greatest remaining problem in the evaluation of the information given in them concerns how well they recorded the poor sector of the community; whether those people who were simply below the minimum level for assessment, or the out-and-out parish paupers, actually receiving poor relief. The exempt poor, for the purposes of the Hearth Tax after the revised act of 1664, were taken to be those with two or less hearths who lived in a house worth below £1 a year, and not having any other property exceeding that value, nor an annual income of more than £10. There is as yet little comprehensive evidence to illustrate how often, in the case of the poor, the owner of rented or leased property paid the tax due from his tenants (21). This practice may have varied locally and deserves detailed investigation. These people, hovering on the 'poverty line', which is in itself such a relative and uncertain term for pre-Industrial England, were sometimes, though not invariably, recorded in the returns as exempt, and were named together with the number of their hearths in the same fashion as those actually paying the tax. They had to apply through the mechanisms of local parish government, rather than the 'Chimney-men' or Receivers to the Churchwardens and Minister for a certificate of exemption, and these certificates seemed to be under constant review. These parish officials also returned for those town- and alms-houses that were exempt and in practice certified, as were all charitable institutions worth less than £100 a year, by the terms of the 1662 act. (Town houses were dwellings provided and maintained by the parish for the destitute and aged, where often some trade, like spinning, may have been taught). Those who paid neither church nor poor rate were also exempt, but automatically; for these were usually the paupers "that doe receive collection" and who on occasion may have lived in the 'town' or 'alms house' which was certified but whose inhabitants were not invariably enumerated. Those paupers that inhabited their own hearths were actually enumerated, but very rarely named. Two distinct classes of exempt persons are found therefore, those who were certified as exempt, and usually named; and the paupers who were rarely named but for whom a total may have been recorded. Both classes are to be found on some enrolled returns, as in that for Essex in 1671: for many other counties like Norfolk the latter pauper class were completely ignored in the surviving returns (22), and only

the exempt receive mention. Obviously then in any Hearth Tax listing, where this poorest group does not seem to be accounted for, some allowance should perhaps be made, particularly in the larger towns where the number of paupers may have been high: the poor law of the time makes it uncertain, even when they are recorded in the few surviving early lists of the Overseers for this period, how far each person receiving relief represented a family or household. To this must be added the fact that the granting of certificates was in the hands of one distinct administrative body, the assessment and receiving of the tax in others: communication between them did not always necessarily result in accurate and up-to-date listing.

Some local examples can be used to illustrate such differences between the numbers of those recorded as not paying in the enrolled returns and those stated as exempt in the certificates sent to the Exchequer for the same year. Generally these survive in greatest numbers from the second administration of the Receivers, as from 1670 printed forms or certificates were supplied which were to be filled in by the Parish: stricter penalties were introduced to ensure their return. An examination of boxes of unsorted Hearth Tax exemption certificates bundled by hundreds for Norfolk⁽²³⁾, and one for Suffolk⁽²⁴⁾, revealed many differences between them and contemporary assessments for the same date. They also supplied missing figures for the poor in the most comprehensive roll for Norfolk, that of 1674⁽²⁵⁾, figures that were needed, as the document itself is badly torn and faded, and much information on the poor class is therefore missing. Two sample Hundreds drawn from Norfolk (Table 1) illustrate such inconsistencies, which most often appeared in that county as under-estimates or under-recordings in the enrolled poor, although the reverse does occur on occasion, and no systematic relationship is revealed. The actual reasons for these differences can only be speculated upon, ranging from careless copying and addition by clerks to the simple transposition of earlier returns already in the Hearth Tax Office. Where and when they survive, the original certificates of exemption are probably more reliable, as the Parish officials reviewed the position of those claiming exemption annually as part of the administration of their community. On the other hand, the assessment of the tax on the hearths of individual payers seem sometimes to have been formalized and even the death of a taxpayer not noted for a year or so, as the later addition of a cross by some names may reveal. Annual fluctuation in the poor fraction seem to be much more readily and accurately available from the original certificates returned to the Hearth Tax Office and considerable care appears to have been taken with them,

TABLE 1

The recording of poverty in two Norfolk Hundreds, Diss and North Greenhoe

Diss Hundred in 1674

| | a. Enrolled poor (from E.179.154.697) | b. Poor in the original certificates (from E.179.337) |
|-------------------------|--|--|
| Diss | 107 | 133 |
| Fersfield | 18 | 20 |
| Roydon | 17 | 24 |
| Shelfhanger | 20 | 26 |
| Thelveston | 60 | 7 |
| Thorpe Parva | - | - |
| Scole & Osmondeston | - | 43 |
| Burston | 25 | 54 |
| Gissing | 19 | 21 |
| Tivetshall St. Margaret | 22 | 21 |
| Tivetshall St. Mary | - | 15 |
| Winfarthing | 37 | 45 |
| Shimpling | 13 | 12 |
| Bressingham | - | 24 |
| Dickleburgh | - | 56 |

North Greenhoe in 1674

| | a. Enrolled poor (from E.179.154.697) | b. Poor in the original certificates (from E.179.338) |
|-------------------------------|--|--|
| Great Walsingham | 210 | 331 |
| Little Walsingham | - | 123 |
| Shoring Magna | 32 | 37 |
| Houghton in the Pale | 20 | 30 |
| Wells | 72 | 232 |
| Stiffkey | 21 | 20 |
| Cocksthorpe | 2 | 2 |
| Field Dalling | 24 | 23 |
| Barney | - | 14 |
| Holkham | 61 | 63 |
| Wyghton | 24 | 24 |
| Binham | 39 | 62 |
| Quorles | - | - |
| Egmere | - | - |
| Hindringham | - | 73 |
| Thursford | - | 34 |
| Warham | - | 34 |
| (All Sts. and Mary Magdalene) | | |

as the corrections and additions indicate. There was for example no hundred in Norfolk for which completely identical results were produced in a comparison between the 1674 assessments, where they survive, and the certificates for the same year⁽²⁶⁾, and sometimes the differences are startling, as in the case of Great Walsingham in North Greenhoe hundred.

The situation in the neighbouring county of Suffolk was similar⁽²⁷⁾. In the village of Poslingford in 1674 for example, 34 exempt were recorded in the original certificate, but only 24 were enrolled in the return for that year. In the same year in the urban parish of St. Mary Tower, Ipswich, the figures are 18 and 14. There appears to be no significant relationship between such inaccuracies and the rural, or especially urban nature of parishes in these two counties. Certificates for 1674 and earlier years reveal the care taken in them to achieve accuracy by parish officials on the incidence of poverty in their communities, where neighbours doubtless took a close interest in the evaluation of a man's worth. In 1670 in Wickham Market an extra certificate is appended to account for three people "previously forgotten", while in the case of Thurston earlier certificates do not record the town (or alms) house containing an unknown number of the infirm poor, mentioned in 1674 for the first time. For Sternfield in 1670 eight people appear clearly named; these and two more appear in 1674, together with three more "taking collection" not previously enumerated.

Sometimes much more detail is given for towns, showing a street by street tally of the exempt, as in Wymondham in Norfolk. One certificate dated 13th May, 1672, gives 152 poor, but that for 17th June, 1674 gives 171 with separate columns for "market street", "towne ground", etc. Considerable detail is again included, even on empty houses, e.g. "cottages which before the act of fire hearths and stoves took affect were let to poor people and ever since were exempted from the payment of that duty now void of tenants in no. 11". Further research may reveal details of the internal distribution of poverty within other English towns in such certificates. Sometimes empty houses, which were exempt, are enumerated carefully in the enrolled returns, as the example above shows; and examination of them may often reveal details given for hearths of an industrial character such as Kilns and Furnaces which were exempted by the first acts.

The Hearth Tax lists, once chosen, and the treatment of the poor

fraction decided, may be used to estimate the total order of population size for one or a number of parishes. A multiplier could be applied to the number of hearths per house; this has been discussed by Bradley and Schofield in the article already cited above in Local Population Studies No. 1. There appears to be no systematic relationship between the number of hearths in a dwelling and the number of people in it. For example, an examination of the will and inventory, where surviving, compared with the number of hearths of a particular taxpayer can reveal that somebody with only 2 or 3 hearths may have been quite wealthy and may therefore be, perhaps, expected to have a number of servants that would swell the expected household size, using Gregory King's equivalents. The reverse may also sometimes be true. Detailed work can reveal something of value for socio/economic groupings using numbers of hearths however, and this may be a fruitful line of enquiry, particularly where wills or occupational information are used in conjunction; Hoskins working on the Exeter assessment of 1671 produced a fivefold classification in this way (28). There may well be a correlation on a large scale, as might be expected, between numbers of hearths, wealth, and numbers of people present in a parish; but the uncertainties in this context make the application of differential multipliers on various numbers of hearths a hazardous business in the local study without other supporting information. A change in the number of hearths does not necessarily indicate a change in household size. Perhaps not so seemingly refined, but in practice more generally applicable, is the use of a single multiplier on each of the "Hearth Tax paying units", a term adopted here to avoid the problems of the exact interpretation of "family" or "household". Indeed in dealing with just this problem Peter Laslett wrote "... the household will be taken to mean that unit or block of persons which was recognized by pre-Industrial Englishmen to be distinct from other units or blocks of persons when the inhabitants of a community are listed" (29). The "hearth paying (or exempt) unit" as recognized by receiver and parish constable alike seems to be just such a "block", and almost all the information we have on such "blocks" is on household size. There could, of course, be more than one household inhabiting a single house, and therefore more than one potentially taxable unit in it, but the Assessments seem to be more interested, from their fiscal point of view, in these 'Hearth Tax Paying Units' rather than in houses as such, and thus generally record them all. In towns in particular this may have been a problem with the numerous tenement buildings in poorer parishes, whereas in the richer parishes "house" and "household" actually were synonymous. (30) In Exeter, for example, more

assessments were made than a 1695 rate book enumerated houses. (31) But the major methodological problem is to decide on the size of the multiplier used to convert the Hearth Tax lists. Generally speaking, when applied to the household units that have been collected, it has varied between fairly close limits, most commonly $\times 4.2$ - $\times 4.5$, although some estimates have been higher, of the order of $\times 5.0$. (32) Few have deviated far from King's earliest use of the multiplier however; be it the $\times 4.1$ for persons per house in Eynsford Hundred in Norfolk, or the $\times 4.5$ he found for certain hamlets in Essex. (33) Both he, and J. F. Pound, working over 250 years later, have decided on $\times 4.2$ for Norwich. (34) Most such multipliers depended on the use of knowledge of particular local circumstances, and have varied in town and country alike. Peter Laslett has recently suggested 4.75 as the mean household size for England and Wales over the last three centuries, based on the statistical examination of a hundred lists of inhabitants, of which 31 were for between 1650-1700, in the middle of which period the Hearth Taxes were levied. Of these, 21 are drawn from the years 1695-1700, 9 of these being for urban Parishes in London and 5 for Southampton. It is possible that mean size may be found to be lower than 4.75 for country areas in particular, despite the fact that, as Mr. Laslett points out, "Although the mean and median household size were well below 5, a majority of all persons lived in households of 6 or more". (35) He goes on to state firmly that the suggested mean figure of 4.75 should not be regarded as a universal multiplier. (36) Indeed the search for a precise multiplier for individual places of interest must be very difficult if no population listing of any kind has survived near in time and space. On occasion, the Hearth Tax may be the only and indeed best evidence for a certain place, and so will need to be carefully interpreted both with regard to internal accuracy and the size of the multiplier. It must be recognized that the Taxes themselves give absolutely no information on household size and so, without useful census type listings, virtually the only approach is an application of one of the empirically derived multipliers from what is believed to be a similar place. These taxes do however, with, for example, the Compton Census or, to a lesser extent, the Poll Taxes when available, remain the only useful sources for a (relatively) rapid assessment of the magnitude of population of a regional scale for the later seventeenth century. They retain an even greater value in the local study where parish registers are deficient or lost for considerable periods of time. To the parish register, when surviving, they may add much of interest in the study of the social groups of the community, as well as its actual size. But the individual worker attempting their use and

interpretation must not expect to find this always easy. Undoubtedly many local and regional variations will be found in the Assessments, which can differ widely in accuracy and cover, according to where, when and by whom they were made.

NOTES

1. S. Dowell A History of Taxation and Taxes in England. Vol. II, London, 1888, pages 26-27. (Reprinted, London 1965, in two volumes with a new introduction.)
2. William Kennedy English Taxation, 1640-1799. London, 1913, p.58.
3. In 1689 the Hearth Taxes were estimated to be yielding as much as £200,000 of the total revenue of £1,800,00 from taxes.
Dowell, op.cit., p.38-39.
4. D.V.Glass "Two papers on Gregory King", pages 159-220 in Population in History, Essays in Historical Demography, London, 1965 (ed. D.V.Glass and D.E.C.Eversley.)
5. L. Bradley and R.S. Schofield Estimates of Population Size: Hearth Tax. L.P.S. No. 1 (Autumn 1968), p. 30.4.
6. E.g. the article by D.E.C.Eversley "A survey of Population in an area of Worcestershire", Population Studies, 10, 1957, pages 253-79, discussed by Bradley and Schofield, op.cit., or that by W.G.Hoskins in chapter 4 of "Industry, Trade and People in Exeter, 1688-1800" can serve as examples. They both employed a multiplier of x 4.5.
7. Mostly to be found in the class E.179 in the Public Record Office, where there is a typescript index to them and to the location of the boxes of often unsorted original certificates of exemption, also sent to the Exchequer to be included either as a single total on the return for each township, or actually listed.
8. The scholarly introductions by C.A.F. Meekings to
 - a) "Surrey Hearth Tax 1664", Surrey Record Society Publ.No.17, 1940
 - and b) "Dorset Hearth Tax, 1662-1664", Dorchester, 1951, together with that to vol. 1 of "Hearth Tax Returns", Warwickshire County Records, 1957 by P. Styles do however provide between them a lot of detail on the actual administrative history of the Tax, besides of course being of interest to those particular counties. See also, on the City of London, C.A.F. Meekings 'City Loans on the Hearth Tax, 1664-1660', being pages 335-372 in A.E.J. Hollaender and W.Kellaway(ed) Studies in London History presented to P.E.Jones, London, 1969.

9. As for example, that very comprehensive return to be found in the Essex Record Office for 1671, Hearth Tax Q/Rth 5.
10. 14. Car. II. c.10.
11. Meekings discusses the survival of a collector's book for Worcester between 1679 and 1680, "Dorset Hearth Tax", op.cit., p.xxxii and Styles one for Coventry "Warwickshire Hearth Tax", p. xciv. Both writers felt that this later period of the farming of the Tax may have seen its greatest efficiency, and therefore most recorded names, as these books seem to reveal.
12. Contained in a comment on the Poll Taxes, p. 61. Local Population Studies, No. 4, Spring 1970.
13. Leonard Owen "The Population of Wales in the 16th and 17th Centuries", Trans.Hon.Soc.Cymmrodorion, 1959, pp. 99-113, and
Owen Parry "The Hearth Tax of 1662 in Merioneth", Jnl. of the Merioneth Historical and Record Society, Vol. II, 1953.
For Ireland see, e.g.
R.A. Butlin "The population of Dublin in the late seventeenth century". Irish Geography 5(2), 1965, pp. 51-66 and
E. Machysaght "Seventeenth Century Hearth Money Rolls will full transcript relating to Co.Sligo. Analecta Hibernica xxiv, 1967.
14. On this point see Meekings, "Dorset Hearth Taxes", p.xxxii et sq.
15. For those surviving for one county see, e.g. Meekings, "Surrey Hearth Tax", p.li-liv.
16. Meekings "Surrey" and "Dorset" op.cit.
17. For Somerset see Vol. 1. National Record Society (ed. R.Holworthy and E. Dwelly), London 1916.
For Staffordshire William Salt Archaeological Society Transactions for 1921, 1923 and 1927, and
For Newcastle-on-Tyne Arch.Aeliana, 3rd Series, Vol. viii.
18. For Bedfordshire see Bedfordshire Historical Record Society, Vol. XVI, and for Suffolk see the Suffolk Green Book Series, no. XI, vol. 13, 1905.
19. Styles, op.cit.

20. For a general background to some aspects of both national and local opposition to the Hearth Taxes see L. M. Marshall "The Levying of the Hearth Tax, 1662-1688", Engl. Hist. Rev. Vol. 51, 1936, pages 628-646.
21. E. J. D. Morriss "The Hearth Tax in Chester". Jnl. of the Chester and North Wales Arch. and Hist. Soc. Vol. XXXVI, 1946, p. 31.
22. As in P. R. O. E179/154/697, E179/253/42 and E179/253/45.
23. E179/336, 337 and 338.
24. E179/345. This material for Norfolk and Suffolk is roughly and often wrongly bundled in hundreds for different years: neither the hundreds nor certificates are in any way calendared or indexed, preventing more detailed references being given. The situation is the same in most other counties for which these certificates survive.
25. P. R. O. E179/154/697.
26. P. R. O. E179/154/697 compared with E179/336-8.
27. F. R. Grace "The population of East Bergholt, Suffolk, 1653-1836", an examination of Parish registers, pages 266-272, Suffolk Review, Vol. 3, No. 8, 1970, where especially, page 264, the author discusses the high proportion of exempt households, 57.4%, in the returns for this Suffolk Parish in 1674.
28. W. G. Hoskins "Industry, Trade and People in Exeter, 1688-1800" Manchester, 1935, p. 117.
29. P. Laslett "Size and Structure of the Household in England over Three Centuries". Pop. Studies, 23, no. 2, (July, 1969), 199-233 esp. p. 201.
30. D. Williams "Note on the population of Wales". Bulletin of the Board of Celtic Studies, vol. VIII, pt. IV, 1937, pages 359-363. Especially page 359 "... there is no means of determining whether these figures refer to houses, or tenements, or to families..."
31. "Exeter in the 17th century: Tax and rate assessments, 1602-1699", Devon and Cornwall Record Society, N. S., No. 2., 1957. Similar results were given in a detailed study of Chester, Morriss, 1964, op.cit., p. 37.
32. e.g. by E. C. K. Gonner "The Population of England in the 18th century". Jnl. of the Royal Statistical Society, LXXVI, 1913, pages 261-303.

33. D.V. Glass "Two papers ..." op.cit.
34. J.F. Pound "The Social Structure and Governing classes of Norwich, 1525-1670". Unpub. paper circulated for and read at the meeting of the Urban History Group of the Economic History Society, Norwich 1968.
35. Laslett, P. op.cit., p. 207.
36. Ibid, p. 211.