

Marriage and Fertility in Nineteenth Century Londonderry

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Introduction

The change in the age of marriage among the Irish, which occurred some time in the nineteenth century, is well known. Before the Great Famine early marriage was the rule; and this early marriage was associated with a rapid increase in population. Also connected with it was the subdivision of agricultural holdings since, in the late eighteenth and early nineteenth centuries, a father was prepared to provide for his children merely by dividing his farm—a process made easier by the general adoption of the potato as the dominant subsistence crop.¹ Even before the potato failure of the 1840s jolted the structure of Irish rural society, a change-over to later marriage was noticeable in some parts of Ireland;² but broadly the Great Famine may be thought of as marking the end of subdivision and thus, indirectly, the end of youthful marriage.

In a paper read to this Society K. H. Connell has made some interesting suggestions about the mechanism of the change.³ He suggested that rising standards of living were set for the Irish rural people by a greater knowledge of the outside world, a product of improved literacy, better communications and the adoption of a money economy. To the small farmer, with his relatively poor agricultural techniques, it seemed to be imperative to obtain a larger holding if he was to secure these improved standards for himself—greater extent rather than greater intensity was his aim. Thus after the potato had been displaced from its position in the agricultural economy and after the possibility of an improved standard of living had been promulgated, the willingness of both parents and children to subdivide was removed. Farms became larger and, paradoxically enough in a time of falling population, scarcer. Clearly this had an influence on emigration, but, more relevant here, it had a profound effect on the average age of marriage of the rural population. While his brothers and sisters emigrated, the son of a house would not—indeed, could not—marry until he had a farm of his own, which usually meant waiting for the death or retirement of his father. A cynic might suggest that, after such a long delay, marriage could be found more tolerable with a woman reasonably close to a man's own age. In any case with the growing desire for a higher standard of living, marriage had a new function in late nineteenth century Ireland, signifying the maintenance of an undivided family holding, rather than the consummation of a mutual passion. The wife's dowry was a vital instrument in this,

since it took care of the other brothers and sisters who had a claim on the farm. At least it would help them to emigrate, or it might be enough to provide a man's sisters with dowries in their turn, or a man's brothers with businesses in the country town. On occasion, too, the dowry might take the form of additional fields or would serve to increase the working capital of the holding. The age of marriage thus became later in rural Ireland—the delay applying both to men and women, and bringing a fall in the proportion of the population which eventually married.

My own interest in these matters was stimulated by making a study of the historical geography of Londonderry in the nineteenth century,⁴ a particularly suitable county because its variations in farming skills, in the agricultural potential of the soil and in the density of rural population, present in a microcosm the various conditions of Irish rural life. Clearly the age of marriage was important in such a study since it was connected with the end of subdivision and the enlargement of holdings, as well as possibly with changing land-use. Further, as this alteration in social habit must have been of some importance in limiting the rate of natural increase, it was effective in making emigration a more efficient means of removing population from the land—very much a geographical topic. Finally, it seemed reasonable to guess that the importance of the phenomenon was not the same in every part of Ireland, making it tempting to search for regional differences.

A brief examination of the statistics showed that the change in the age of marriage took place in Londonderry, as in all other counties. In 1841, for example, 5.4% of all married men were under 25 years old, but this percentage had been halved by 1901. Similarly, 10.2% of all married women were under 25 in 1841, but only 6.7% in 1901. Thus there was encouragement to proceed to make the partial examination of the available statistics which is presented in this paper. In particular an attempt has been made to indicate the periods at which changes in the incidence of marriage took place, to focus attention on its demographic effects, and to place these statistics in their Irish context by examining the regional expression of such changes over the whole country.

An indication of the age of marriage

Such a statistical study can begin only after 1841 with the taking of the first Irish census of modern accuracy.⁵ But even given the necessary statistics, it is a major problem to find a method of indicating any variation in the age of marriage, applicable to all the censuses up to 1901.

While at first sight it would seem useful to know the average age of marriage for men and women in Londonderry, it may be doubted if in fact "average" age means very much. For example, if there were a number of early marriages balanced by an equal number of relatively late ones, this would give an average figure which could easily be produced by quite another demographic situation. In any case, the difficulty is purely academic since the figure cannot be calculated with any precision. Marriages were not officially registered for the whole population until 1864⁶, although parish registers were kept long before that time. Unfortunately, access has not yet been gained

to all the available parish registers for the county, which has meant that this examination cannot take into consideration those local differences which are of some importance in a county like Londonderry. Access to these registers, however, would not solve the major problem, as more often than not the ages of the couples marrying were not recorded. Occasionally something can be done to rectify this omission by cross-reference to baptismal records, but it is clear that this onerous and frequently unsatisfactory method does not allow the calculation of an average age of marriage.⁷

Turning elsewhere, the marital status of the population by age groups was given in the Irish census reports. An approximate guide to the age of marriage might be derived from this information, as it can be used to reconstruct the marital status of the population at any census date. Unfortunately in some of the earlier censuses the ages of the people do not appear to have been reported very accurately. Often in rural society, particularly if there is a fairly high degree of illiteracy, people tend to report their ages to the nearest tenth year⁸, and this seems to have happened here. Thus in Londonderry in 1841, when only 20% of the women over 5 years old could both read and write, a selection of their ages was:⁹

Age	28	29	30	31	32	38	39	40	41	42
Number	1,980	898	3,827	770	1,310	1,220	601	3,637	595	1,028

Obviously some different indication of the age of marriage is needed.

One of the most important features in the structure of any population is the number of women of child-bearing age, as that group is directly responsible for the reproduction of the next generation. Taking this further, because of the low illegitimacy rate in Ireland attention can largely be concentrated on the number of married women of fertile age. It can be assumed, too, that the number of women in this group would become smaller as their age of marriage became later or as celibacy increased. Since this paper is focused on demographic changes, an index derived from the number of married women of fertile age has been adopted as an indication of the changing age of marriage in nineteenth century Londonderry, it being assumed that a complete avoidance of marriage is merely an extreme case of delay.

The ages 15 and 45 have been taken as the limits within which women are capable of bearing children, and while these are only rough limits, they have the advantage of fitting neatly into the available population statistics. Certainly it would be valuable to examine the ages of married women in greater detail, but although their fertility must vary within the child-bearing period, the ages of the population have not been collected accurately enough to permit this and the total number of married women between 15 and 45 has had to be used. Even so, there is still the possibility of error at the extreme limits of this broad group. Fortunately, women in nineteenth century Ireland did not marry before they were capable of bearing children, and thus all young married women can be confidently included.

At the other extreme, too, the error must be small. It seems reasonable that only an insignificant number of women over 45 years old would group themselves as being 40. Perhaps this last assumption takes too naïve a view of woman's honesty about her age, but the enumerators were local policemen who would surely know their area and its inhabitants. Similarly, female vanity should prevent many under 45 rounding off their age as 50.

Changes revealed by the index

The decline in the number of married women was not steady (Table 1 and Figure 1a). The greatest drop was between 1841 and 1851, but this fall levelled off sharply in the next decade. Then the rate of decline gradually steepened again, particularly after 1881. Between 1841 and the end of the century, as table 1¹⁰ shows, the number of married women of fertile age was almost halved; and, assuming their fertility to have been constant, the power of the population to produce children was proportionally reduced.

TABLE 1.—NUMBER OF MARRIED WOMEN AGED 15-44 (INCLUSIVE) TAKING 1841 AS 100

1841	1851	1861	1871	1881	1891	1901
100	76	73	69	64	55	51

But even if there had been no change in the pattern of marriage the number of married women would have fallen, since emigration over the century lowered the total population of the county. Was there

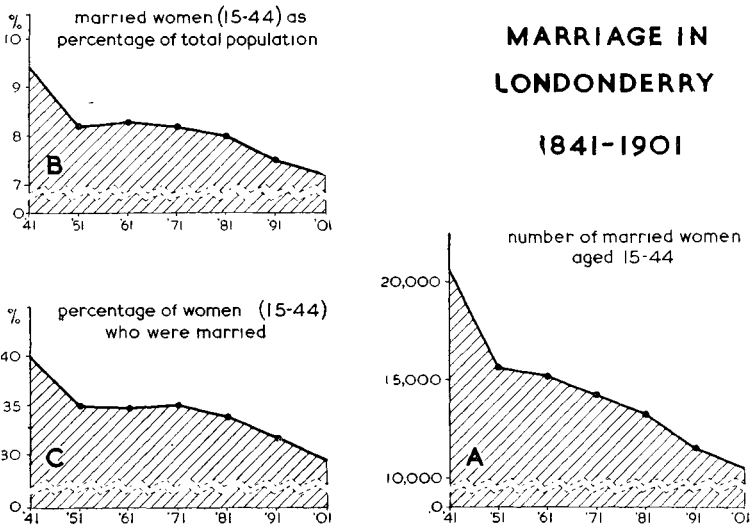


FIGURE 1

in fact any variation in the proportion of fertile married women in the total population? The results of assessing the statistics in this different way are given in figure 1*b* and in table 2, which indicates that the power of the whole population to reproduce itself dropped most sharply between 1841 and 1851, but that this decline did not continue. Indeed, the proportion of married women from 15 to 44 years old remained stable over two decades and only a slight fall was recorded over a third. It was not until after 1881 that any further falling-off became noticeable, presumably influenced by the fall in agricultural prices at the time.

TABLE 2.—PROPORTION OF THE TOTAL POPULATION OF LONDONDERRY MADE UP OF MARRIED WOMEN AGED 15-44

1841	1851	1861	1871	1881	1891	1901
9.4%	8.2%	8.3%	8.2%	8.0%	7.5%	7.2%

How important were varying marriage rates in causing these changes? To focus attention on this particular aspect yet another percentage has been calculated: the proportion of all women in the 15-44 age group who were married. Certainly it can be argued that variations in the number of married women emigrating could affect this index, but in fact this influence does not seem to have been important. Although it is difficult to be sure, it seems likely that the proportion of married women among the emigrants did not increase as the century proceeded. The results of this calculation (Table 3 and Figure 1*c*) reflect those already found. Not only was the

TABLE 3.—PROPORTION OF WOMEN IN LONDONDERRY AGED 15-44 WHO WERE MARRIED

1841	1851	1861	1871	1881	1891	1901
39.9	34.9	34.7	35.0	33.9	31.7	29.4

sharp decline between 1841 and 1851 faithfully mirrored, but also the steepening of the rate of decline after 1881.

These changes could have been produced by a postponement of marriage or by a complete abstinence from it, but it is difficult, if not impossible, to make any categorical statement about their relative importance. However, some hint of the influence of celibacy can be gained if it is assumed that once a woman had passed the age of 45 there was relatively little likelihood of her ever marrying. Table 4 gives the result of examining the importance of spinsters in the 45-54 age group.

TABLE 4.—NUMBER OF WOMEN IN LONDONDERRY IN THE 45-54 AGE GROUP WHO WERE UNMARRIED

	Unmarried	Married	Widowed	Total	Percentage Spinsters
1841*	1441	5555	1590	8586	16.8
1851	1742	5786	1746	9274	18.8
1861	1896	5667	1501	9064	20.9
1871	1772	4607	1216	7595	23.3
1881	1775	4480	1315	7570	23.4
1891	2147	4704	1387	8238	26.1
1901	2248	3984	1241	7473	30.1

* In 1841 the age group was 46-55.

From these figures it is obvious that celibacy grew substantially in importance over the century, and that this change was closely connected with the other changes in the number of fertile married women already noted. Nevertheless, the absolute figures make it clear that the increase in celibacy was not sufficient on its own to explain the differences in the number of married women between 1841 and 1901. A calculation to illustrate this can best be made starting in 1851, since the number of married women aged 15-44 was only estimated in 1841 and the number of spinsters over marriageable age recorded in that same year was for a slightly different age group. Between 1851 and 1901 the total number of women aged 15-44 fell by about 9,000, a matter of 20%. Thus, all things being equal, it would be expected that the number of married women in the same age group would fall by a similar amount, bringing their total down by about 3,000 to 13,000. In fact there were just over 10,000 of them in 1901, which leaves an additional fall of 3,000 married women to be accounted for. The absolute number of spinsters passing through to the next age group would be expected to fall by about the same amount, and thus a figure of 1,400 spinsters, aged 45-54, would have been normal in 1901. Actually there were over 2,200, about 800 more than expected. If it is assumed that these 800 would have married at 25—a somewhat generous allowance—it is reasonable to guess that an abstention from marriage of this order of magnitude would have reduced the total number of fertile married women by about 1,600,¹¹ leaving 1,400 still to be accounted for. These figures are obviously a very rough estimate, correct perhaps to the nearest thousand, but still the conclusion seems reasonable that postponement of marriage must also have been a factor, and, indeed, that both these factors were about equally important.

Rural-Urban Contrasts

So far the examination of the available statistics has been applied to the county as a whole, but, taking as a guide the percentage of women in the child-bearing ages who were married, can any regional differences be detected?

From 1841 to 1861 it is only possible to distinguish between rural and civic districts. These civic districts consisted of towns with over 2,000 inhabitants, and in Co. Londonderry only Limavady, Coleraine and the city of Derry fell into this category. Over the twenty years.

covered by table 5 (and the relevant part of figure 2) both rural and civic districts showed a decline in the percentage of married women. The rural decline, however, was much more marked, particularly between 1841 and 1851. While before the potato failure the percentage of married women was slightly higher in the rural districts, the position was reversed in 1851. The greater amount of marriage in civic than in rural districts, which was reached at the end of the Famine decade, was confirmed in 1861.

TABLE 5.—PERCENTAGE OF WOMEN IN LONDONDERRY AGED 15-44 WHO WERE MARRIED

	Civic	Rural	County
1841	38.2	40.2	39.9
1851	36.1	34.7	34.9
1861	35.6	34.5	34.7

Although from 1871 statistics are available by Poor Law Unions, there is no marked advantage in this greater detail, as it is no longer possible to distinguish between urban and rural areas. Even so something can be done. From 1871 to 1901 the percentage of women of fertile age who were married fell in all Poor Law Unions; but the decline was not identical in all parts of the county, as two examples will show. The Union of Londonderry was the most heavily urbanised in the county, containing as it did the city of Derry. Here the proportion of married women increased slightly to 1881 and then fell only relatively slowly to the end of the century—so slowly in fact

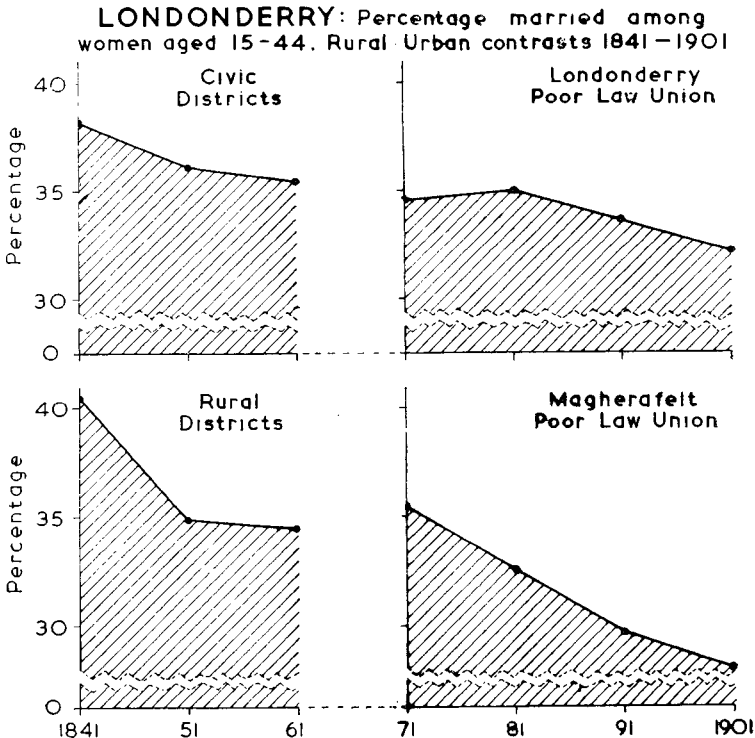


FIGURE 2

that it had a greater percentage at that date than any other Union, although in 1871 its proportion of married women was not outstanding. At the other extreme the Poor Law Union of Magherafelt had no civic districts within its boundaries. In 1871 it had a rather higher percentage of married women than Londonderry Union, but a steady decline resulted in Magherafelt having the lowest percentage in the county by 1901. (Table 6 and figure 2.)

TABLE 6.—PERCENTAGE OF WOMEN IN LONDONDERRY, AGED 15-44, WHO WERE MARRIED (1871-1901)

Poor Law Union	1871	1881	1891	1901
Londonderry ..	34.6	34.8	33.5	32.1
Magherafelt	35.5	32.4	29.7	28.0
County	35.0	33.8	31.7	29.4

The number of marriages registered

The facts which have just been presented were derived from census statistics, but can any lead be obtained from the Registrar General's annual returns of vital statistics?¹² All Protestant marriages had to be officially registered after 1845, but Roman Catholic marriages were still uncounted, and parish registers are too incomplete to allow the calculation of a county total. As a result this aspect cannot be examined satisfactorily until after the general registration of Irish vital statistics in 1864.¹³

Even then, however, boundary changes hinder an exact comparison of the figures for Londonderry between 1864 and the end of the century.¹⁴ Hence, to serve as some sort of a check on the interpretation of local returns, the figures for all Ireland have been abstracted and processed. The resulting graph (figure 3) is drawn on the basis of five-year running averages, i.e. the value for a particular year is the average for the five years in which it is centred. This method of

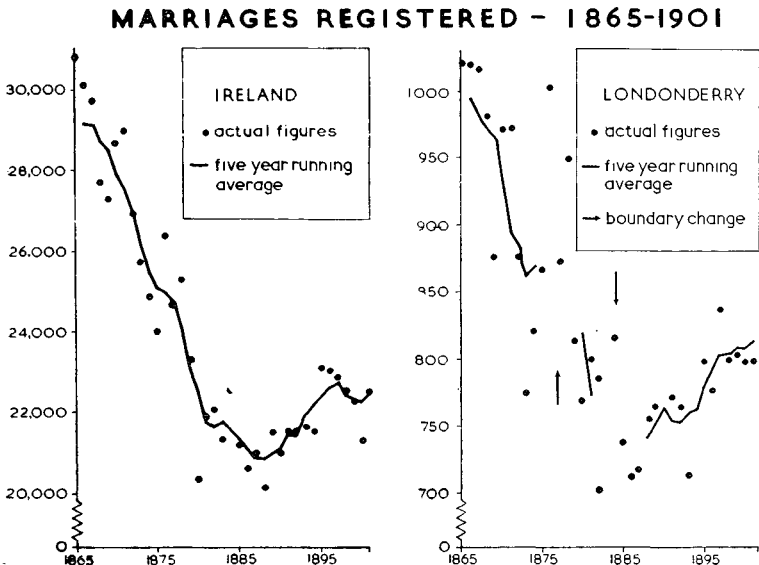


FIGURE 3

presentation has the advantage of emphasising general trends by smoothing out fortuitous year-to-year variations in the number of marriages registered.

On examination, the figures are somewhat different from what might be expected. First, reasonably enough, there was a fairly steady decline in the number of marriages recorded from the beginning of registration until 1888. But then the number of marriages began to rise again, a fact which is even more curious when it is recalled that the total population of Ireland was steadily falling.

At the census years it is possible to make an allowance for the general fall in population by relating the number of marriages registered to the total number of people in the country. Although such a calculation can only be made every tenth year, the result gives a clearer indication of the relative incidence of marriage (Table 7). These figures confirm the impression gained from the absolute statistics that after an initial fall to 1881 the registration of marriages increased again towards the end of the century. Indeed, the marriage rate was nearly as high in 1901 as it had been in 1871.

TABLE 7.—IRELAND : MARRIAGES REGISTERED PER 1,000 OF THE POPULATION¹⁵

	1871	1881	1891	1901
	5.1	4.2	4.6	5.0

Allowing for the difficulties caused by boundary changes, the graph of the absolute figures for Londonderry is roughly similar to that for the whole of Ireland (Figure 3). Although it is unfortunate that a major boundary change was made just at the moment of an upward swing in marriage registrations, the increase seems to occur at roughly the same date on both the Irish and Londonderry graphs. When the relative figures are calculated, however, the position is less comparable. Certainly the marriage rates for the county bear a family resemblance to those for all Ireland; but with the difference that the figures show a greater rise towards the end of the century. This rise was so great that the relative incidence of marriage was distinctly higher in 1901 than in 1871. (Table 8.)

TABLE 8.—LONDONDERRY : MARRIAGES REGISTERED PER 1,000 OF THE POPULATION

	1871	1881	1891	1901
	4.9	4.5	5.0	5.8

There seem to be several possible reasons for the higher rate in 1901. For one thing there may have been a deficiency in the statistics. If the recording of marriages became more efficient as time went on, an apparent rise in the relative number of marriages would be produced. Even though the accumulated experience of the English registrar

general's office was available to its Irish counterpart, and although statistical tests based on the census returns suggest that the registration of births and deaths was reasonably accurate, the civil registration of marriages in Ireland was open to greater possibility of error. However, at least it can be said that there is no positive evidence of a change in the completeness of the records during the period of the nineteenth century in which they were taken.

Another possibility is that emigration had some influence on the figures. After the impulse given by the potato failure, intercontinental emigration from Londonderry fell to a low point about 1862. Then it increased again to reach a maximum roughly about 1880.¹⁶ If, after 1880, there was a tendency for these emigrants to marry immediately before leaving home, it would explain why there was an increase in the registration of marriages without any corresponding rise in the number of fertile married women remaining in Londonderry. Emigrants from Londonderry may have been more prosperous than the general run of those leaving Ireland, and it is reasonable enough that such people would be more likely to emigrate in family groups. But, attractive as it is to explain all Irish problems by emigration, for such an explanation to work it would be necessary to show that there was a clear increase in the number of married couples leaving the county after 1881. Of this no evidence at all has been discovered so far.

Two possible explanations remain which appear more acceptable, and the truth may contain an element of both.

If there was a general delay in entering marriage rather than a total abstinence from it, a fall in the number of marriages being contracted would be expected at first. After a certain period, when a new average age of marriage had been attained, there would be a tendency for the number of marriages to pick up again after the initial delay. Perhaps this goes some way towards explaining the trend of marriage registration in all of Ireland. In Londonderry, however, it is not so applicable, since a mere recovery from the low point in marriage registration would not produce a higher marriage rate than existed before.

An additional explanation of the higher rate in 1901 may thus be suggested. It is possible that the figures for 1871 did not represent conditions before the trend towards a later age of marriage began. In other words, although the relative number of marriages was greater in 1901 than in 1871, the marriage rate may have been substantially higher earlier in the century before statistics were collected. As it has already been indicated that the change in the pattern of marriage began to take effect during the potato failure, if not before, this possibility seems very acceptable and makes an apparently anomalous situation more comprehensible.

An indication of the level of fertility

It has been assumed in all the calculations presented so far that the fertility of married women stayed relatively constant, but elsewhere in Europe, particularly after 1880, there was a drop in fertility owing to a more general adoption of birth control.¹⁷ Even if this factor was unlikely to be important in rural Ireland, there was another influence which could have altered fertility. If the average

age of married women within the 15-44 age group increased, then there is a possibility that the fertility of that group, considered as a whole, would have fallen. Some attempt must be made, therefore, to examine the level of fertility among women.

Such a task presents several statistical difficulties, but these points of demographic detail are overshadowed in practice by more fundamental deficiencies in the returns. Like marriages and deaths, births were not officially registered until 1864 and their number cannot be calculated until then. Similarly, a distinction between legitimate and illegitimate children cannot be made until that date. The difficult changing boundaries of the "registration" as opposed to the "census" counties have already been mentioned; and, further, the introduction of compulsory registration did not completely solve the problem of ascertaining numbers as it is likely that a smaller proportion of illegitimate births would have been registered. But if the technical offence of omitting to register the birth of a child could have passed unnoticed, there was much less chance that such a child would have escaped enumeration at the decennial censuses.

For these reasons, census statistics have been preferred to the registrar general's annual returns, particularly because they are available for the unchanging administrative county from 1841 on. The index of fertility has been calculated from the number of children under five years old at a particular census and the average number of married women aged 15-44 at that and the preceding census, the aim being to relate the children to the approximate number of women who must have borne them. While there is a fundamental inaccuracy in connecting only married mothers with all the children born in Londonderry, the error is not as great as might be expected. The number of illegitimate births in nineteenth century rural Ireland was relatively low: for example, the average from 1871 to 1880 was 1.63% of the total recorded births.¹⁸ In any case, as the incidence of illegitimacy remained fairly steady in the period after 1864, any error produced by not considering unmarried mothers is a constant one.

When calculated out the level of fertility in 1851 was the lowest recorded in the second half of the century (Table 9). This is hardly

TABLE 9.—FERTILITY OF MARRIED WOMEN IN LONDONDERRY, 1851-1901

Year	No. children under 5	Average no. married women between censuses	Index of Fertility
1851	19,539	18,175	1.07
1861	21,358	15,444	1.38
1871	20,243	14,712	1.37
1881	17,858	13,729	1.30
1891	15,259	12,351	1.24
1901	14,309	10,967	1.30

surprising since the five years previous to 1851 were likely to have caused an increase in the number of deaths among young children, thus distorting the index. These years contained the critical period

of the potato blight and its aftermath ; and although it can be shown that the failure of the potato in Londonderry did not bring a famine comparable to that in many of the western counties of Ireland, there is no doubt that it did bring hardship to many cottiers and small farmers.¹⁹ In addition the fever epidemics, which accompanied the potato failure in other parts of Ireland, did not leave Londonderry unscathed. While these epidemics may not have been devastating in the county, they certainly filled its workhouse hospitals.²⁰ As a result an unusually large number of people died during these five years,²¹ and it seems reasonable to suppose that very young children would have been more susceptible to the hazards of the time than their mothers, thus giving an apparent fall in fertility. Similarly, the index may have been distorted by emigration immediately following the Famine. The removal of population in this way may mean that the average number of married women between 1841 and 1851 does not give a faithful indication of the number of women who bore the children remaining in the county in 1851.

Although the relatively low figure for 1851 may be explained in these ways, the possibility that there was an actual fall in fertility in the midst of the potato failure cannot be ruled out. Some evidence, gathered admittedly in the special conditions of the laboratory, suggests that human fertility decreases under starvation ;²² but direct field evidence on changes in fertility under famine conditions is difficult to find, if only because conditions during such periods are not conducive to orderly statistical studies. Perhaps some lead may be derived from happenings in the Netherlands during the Second World War. In Rotterdam, for instance, there was no significant change in the birth rate from 1939 until 1944. Food was moderately restricted over this period, but the shortage became greater from January to April 1945. In July of the same year the birth rate started to fall and by October 1945 the number of births was less than half that normally expected. The birth rate thus reflected the food conditions prevailing about nine or ten months previously.²³ It is not unreasonable that something similar may have happened in the distressed Ireland of the 1840s.

By 1861 fertility had risen substantially, the figure for that year being the highest recorded between 1851 and 1901. Taking the period as a whole, the fertility of the married women of Londonderry stayed remarkably constant apart from the exceptional year of 1851. Certainly, as shown by this index, no distinct upward or downward trends can be distinguished.

The very stability of the index is somewhat surprising, since the average age of married women was increasing, making a fall in fertility likely. Admittedly, using this rather crude index, a reduction in infant mortality could counteract the effect of an actual fall in fertility, but in fact there does not seem to have been any such decline.²⁴ At the moment no totally convincing explanation can be suggested for the maintenance of fertility, although the problem can be reduced in size by stressing again that the reduction in the number of married women of fertile age was caused to some considerable extent by an increase in celibacy among women, as well as by a later age of marriage.

In theory a more accurate indication of fertility can be used for the period after 1871 by relating the number of married women in the

child-bearing ages to the number of legitimate births registered in the year immediately following. The difficulties produced by boundary changes make this impossible; but at least it is possible to calculate the crude birth rate (i.e. the number of births registered for every thousand of the total population). The resulting figures do not refer to precisely the same area each time, but as they are ratios, not absolute figures, they give a good idea of trends in the general Londonderry area (Table 10). The fall in the crude birth rate does not

TABLE 10.—LONDONDERRY: CRUDE BIRTH RATE, 1871–1901

Year	Population of Registration County	Births Registered	Births per 1,000 of the population
1871	184,099	4,968	27.0
1881	174,614	4,199	24.0
1891	152,009	3,574	23.5
1901	144,404	3,349	23.2

imply any drop in the fertility of child-bearers, but, at least, these figures give some quantitative indication of the effect of the decline in the number of married women during the closing decades of the century.

Summary for Co. Londonderry

This analysis has shown that there was a drop in the proportion of married women of fertile age in the population of nineteenth century Londonderry, occurring particularly between 1841 and 1851, and after 1881. It is suggested that this change was a product of later and less frequent marriage, although emigration was also active in producing a decline in the absolute number of married women. The variation in the incidence of marriage has been shown to be rural rather than urban, but the percentage of married women also fell slightly in urban areas. It is clear, too, that the rural trends dominated the county totals. With the exception of the period 1841–51, the fertility of married women remained stable, but the fertility of the population as a whole reflected the drop in the number of married women. Finally, the changes described seem to be connected with periods of agricultural difficulty; first with the potato failure and its associated readjustments; then, less dramatically, with the downward movement of agricultural prices which began in the 1870s and continued until 1896.²⁵

Marriage in all of Ireland

To broaden this limited study an attempt has been made to look at some of these statistics for the whole country, and to produce a series of maps illustrating regional variations. Such maps must be based on county boundaries and as a result they are somewhat unsatisfactory, because conditions within an individual county often vary considerably. Even so, maps drawn on such a basis should give the broad general picture.

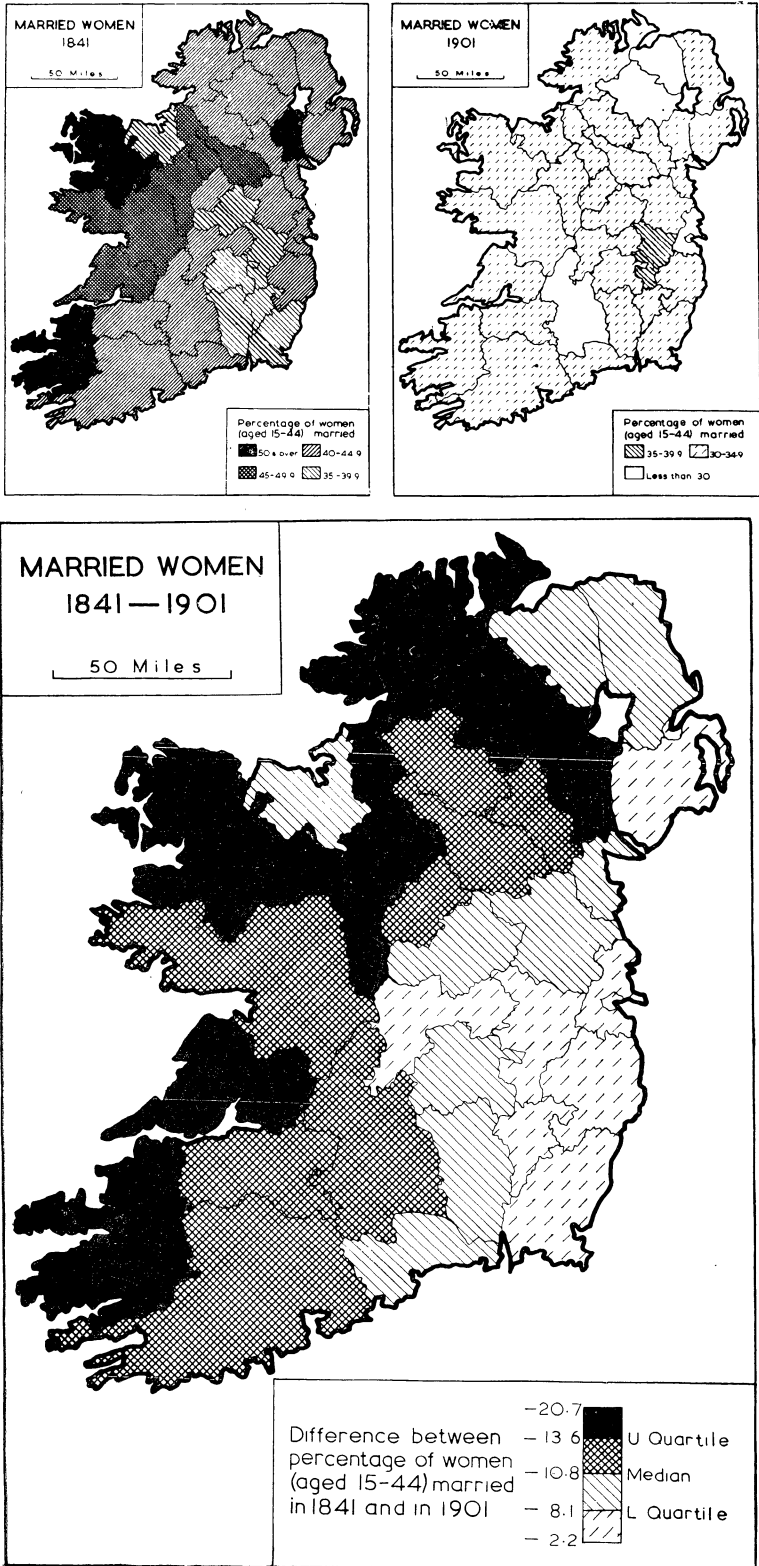


FIGURE 4

Certainly the map for 1841, showing the proportion of women aged 15-44 who were married, reveals considerable variations in different parts of Ireland, although these are difficult to explain. (Figure 4.) Thus in 1841 marriage was most frequent in the western counties, presumably in the poorest areas. Broadly speaking, the central and south-eastern part of Ireland stood out as having the least frequent marriage. All the north of Ireland (except Co. Armagh) and the more fertile parts of the south-west lay in an intermediate position, although the factors involved in each of these areas may have been different. The north-east, for instance, had fewer people employed in agriculture than elsewhere in Ireland,²⁶ while the south-west was perhaps more remote from urban influence, both of which facts may be relevant.

A map of the same information for 1901 shows startling differences. All of Ireland had the same incidence of marriage, and the regional distinctions which were noticeable in 1841 had completely disappeared. Bearing in mind the theories which Connell has advanced, it is tempting to claim that these changes illustrate the diffusion of new urban standards of living and the delay in marriage necessary to attain them. In 1841, this diffusion was only partly under way, but during the second half of the nineteenth century it extended over the whole country (Figure 4).

A similar state of affairs is shown when the distribution of marriage among men is examined. The simple index which is presented on Figure 5 is not the most precise possible, since boys under 15 might have been omitted from the calculation. Nevertheless, the maps provide a good idea of the decline in the incidence of marriage and confirm the impression given by the distribution of married women.

What effect had this decline in marriage on the fertility of the population of Ireland between 1841 and 1901? It seems to be impossible to separate out the effect of the age of marriage from the parallel

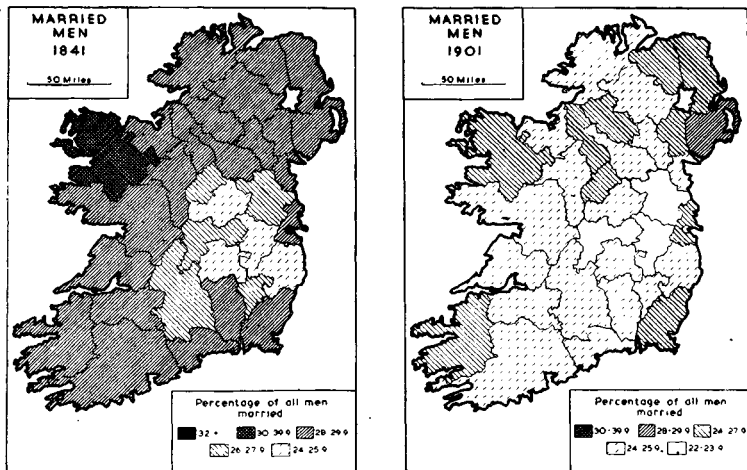


FIGURE 5

influences of increasing celibacy and the removal of fertile women by emigration. As a result maps have been drawn of what is basically the total number of married women aged 15-44, with some allowance being made for the increasing age of married women within the child-bearing age group. Both the censuses of 1841 and 1911 allow fertility to be calculated in a rough way (Tables 11 and 12), and from these statistics the conclusion has been reached that married women over 35 were about half as fertile as younger women. Hence it was decided to use as an "index of fertility" the total number of married women up to 35 and to add to these only half the married women remaining in the child-bearing age group. More refined methods might be devised to allow for the increasing age of married women, but it may well be that the information on fertility is of insufficient accuracy to make any more sophisticated calculation worth while.

TABLE 11.—RURAL IRELAND: SURVIVING CHILDREN TO MARRIAGES OF TWO YEARS AND UNDER THREE YEARS DURATION, 1911*

	Age of Wife at Marriage						
	under 20	20-24	25-29	30-34	35-39	40-44	45-50
Number of marriages	685	4,027	4,754	3,065	1,417	438	215
Number of surviving children	682	3,984	4,447	2,446	835	106	34
Surviving children per marriage	1.0	.99	.93	.80	.59	.24	.16
			.88		.51		

* Rural Ireland in this table is the total for all Ireland minus the total for Co. Boroughs. Those marriages counted are where the husband and wife are returned on the same family form on census night, 2nd April, 1911.

Source: *Census of Ireland, 1911, General Report*, tables 165c and 166c.

TABLE 12.—RURAL IRELAND: NUMBER OF FIRST MARRIAGES, 1839, AND THE NUMBER OF CHILDREN BORN TO THESE MARRIAGES BY 1841*

	Age of Wife at Marriage				
	Under 17	17-25	26-35	36-45	46-55
Number of Marriages ..	442	23,089	9,230	722	98
Children in 1841	266	20,759	8,399	401	10
Children per Marriage ..	.60	.90	.91	.56	.10

* Rural Ireland in this table is the total for all Ireland minus the total for 'civic' districts. Only first marriages by both parties included.

Source: *Census of Ireland, 1841*, op. cit pp. 460ff.

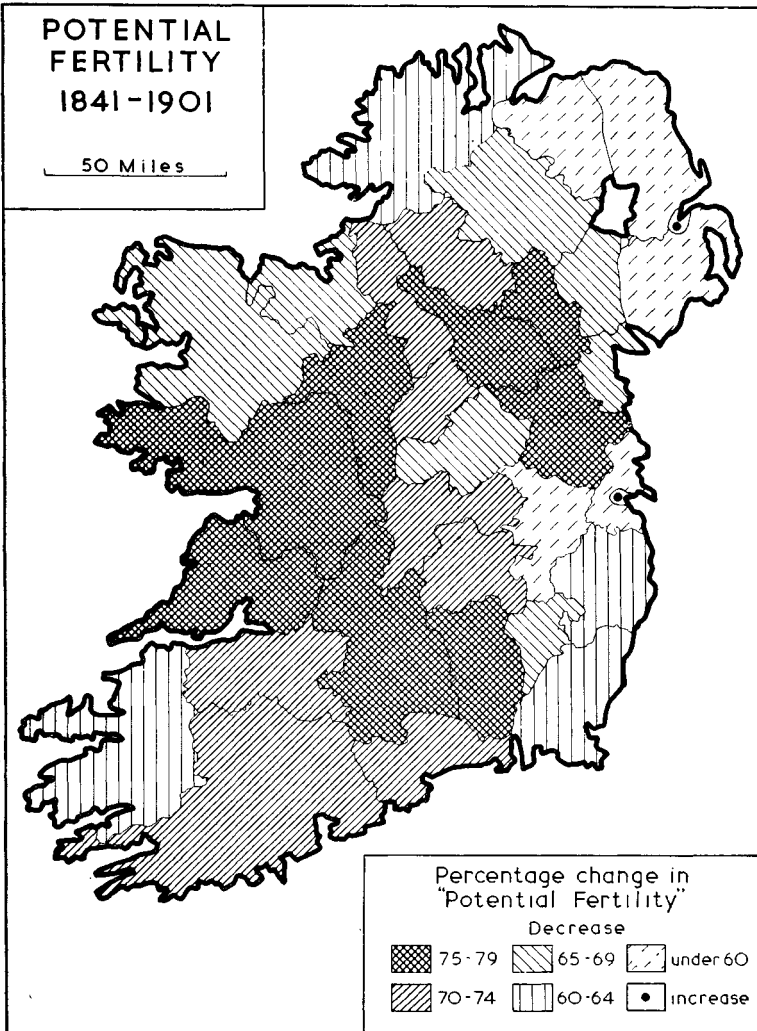
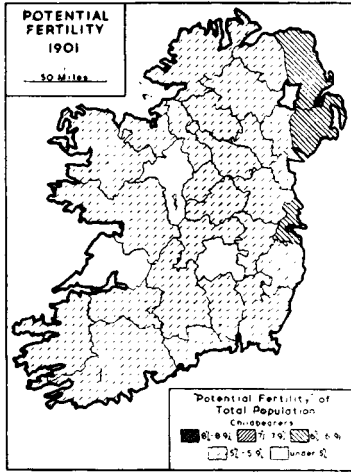
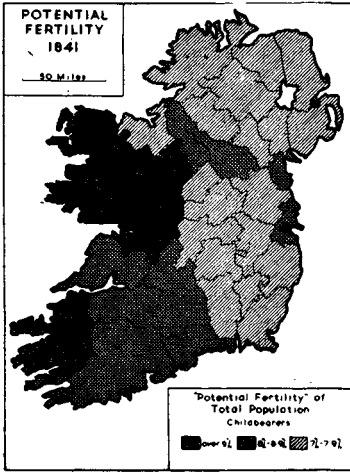


FIGURE 6

When plotted on a map (Figure 6) the data gained in this way shows that the potential ability of the population to reproduce itself had fallen most in west-central Ireland, with the least decline in the area round Dublin, the Belfast district and part of the Atlantic fringe.

Conclusion

This account has revealed both the strength and limitations of presenting a series of statistics. On the debit side is the lack of explanation that it has been possible to furnish, since many pertinent questions remain unanswered. On the other hand, to the credit of these figures is the precise statement of conditions which they yield. Assuming them to have been carefully gathered and truthfully presented, they indicate a number of trends which cannot be doubted, although an examination of what has been preserved of nineteenth century folk custom might well enlighten their further interpretation.²⁷

References.

¹ An argument developed in K. H. Connell, *The Population of Ireland, 1750-1845* (Oxford, 1950).

² For an example from Londonderry see, *Ordnance Survey Memoirs, Kilrea*, box 42.

³ K. H. Connell, "Marriage in Ireland after the Famine: the diffusion of the match," *Journ. Stat. Soc. Inquiry Society of Ire.*, vol. XLIX (1955-56), pp. 82-103. See also, Connell, "Peasant Marriage in Ireland after the Great Famine," *Past and Present*, no. 12 (November, 1957), pp. 76-90.

⁴ The research embodied in this paper is part of a project aided by a grant from the Central Research Fund of the University of London. Although Londonderry is the official name of the county, it is known to its inhabitants as "Derry." However, this term has been kept for the City of Londonderry (here called "Derry") and the county has been given its full title.

⁵ Capt. J. Larcom, "Observations on the Census of Population of Ireland in 1841," *Jour. Statistical Society*, vol. VI (London, 1843), pp. 323-351.

⁶ 26 and 27 Vic., c. 90.

⁷ For information on Londonderry parish registers I have to thank Mr. B. Trainor of the Public Record Office, Belfast. For an example of what can be done with complete parish returns see D. MacCarthaigh, "Marriage and Birth Rates for Knockainy Parish, 1822-1941," *Jour. Cork Hist. and Arch. Soc.*, vol. XLVII (1942), pp. 4-8.

⁸ R. R. Kuczynski, *The Measure of Population Growth: Methods and Results* (London, 1935), p. 27.

⁹ These and the following statistics on the ages and marital status of women are derived from the successive census volumes. In particular, information has been drawn from *Census of Ireland, 1841* (Dublin, 1843), pp. 340-341; 1851, *Part VI* (Dublin, 1856), p. 487; 1861, *Part V* (Dublin, 1864), p. 347; 1871, *Part I, vol. III* (Dublin, 1875), p. 716; 1881, *Part I, vol. III* (Dublin, 1882), p. 716; 1891, *Part I, vol. III* (Dublin, 1892), p. 716; 1901, *Part I, vol. III* (Dublin, 1902), p. 49.

¹⁰ In 1841 the appropriate statistics were given for the age group 17-45 inclusive, and so a correction had to be made. It was estimated that there were 852 married women aged 45, and this figure was subtracted from the total for the 17-45 age group. On the other hand, there were 8 women under the age of 17 who were married. These were assumed to be over the age of puberty and were added to the total. The figures for 1851 were for the 17-44 age group, and thus the only adjustment necessary was to add the 4 married women shown by the census to be under 17.

¹¹ This is just an informed guess which takes no account of mortality. The assumption is made that if there were 800 more spinsters in the ten-year age

group 45-54, there might well be 800 fewer married women aged 35-44, and a similar number fewer aged 25-34.

¹² 7 and 8 Vic., c. 81.
¹³ Registrar General of Ireland, *Annual Report* (Dublin, 1869 and following years). The volume for 1869 contained statistics from 1864 on.

¹⁴ Throughout the century the boundaries of the administrative county of Londonderry, by which census statistics were published, remained constant. Vital statistics, however, were published by the "registration" county, which consisted of a group of Poor Law Unions and only roughly corresponded with the administrative county. There was a minor change in the boundaries of the "registration" county in 1877, but a major reorganisation took place in 1885. After this latter date the presentation of Irish vital statistics was made more rational, and they were published by administrative counties.

¹⁵ The average number of marriage registrations in the five years in which the census year was centred has been used in this calculation and also in table 8.

¹⁶ *Census of Ireland, 1911, General Report* (Dublin, 1911), Table 144. pp. 292-3; *Census of Ireland, 1891, Part I, vol. III* (Dublin, 1892), p. 759. This is a topic of considerable complexity which cannot be developed here. For further details on Irish emigration see G. R. C. Keep, "The Irish Migration to North America in the Second Half of the Nineteenth Century," Ph.D. Thesis, University of Dublin, 1951. One of the best short published accounts is Rumold Fennessy, "L'Emigration Irlandaise: phénomène démographique et problème social," *Bull. de l'Inst. de Recherches Econ. et Sociales*, vol. XVII (1951), pp. 711-753.

¹⁷ Warren S. Thompson, *Population Problems* (3rd Ed., New York, 1942), Table 47, p. 152. The drop in fertility in western and northern Europe in the late 1870s and early 1880s was no greater than had occurred on numerous previous occasions, but the decisive factor was that the decrease did not stop in the 'eighties and proved to be continuous, see Kuczynski, *op. cit.*, p. 103.

¹⁸ Republic of Ireland, *Reports of Commission on Emigration and other Population Problems, 1948-1954* (Dublin, 1955), Statistical Appendix, table 11, p. 295.

¹⁹ J. H. Johnson, "The Population of Londonderry during the Great Irish Famine," *Economic History Review*, Second Series, vol. X (1957-58), pp. 273-285.

²⁰ *Correspondence relating to the State of the Union Workhouses in Ireland*, Second series, *Parl. Papers*, 1847, LV, p. 417.

²¹ *Census of Ireland, 1851, Part V, Table of Deaths* (Dublin, 1856), vol. II, p. 546-7.

²² Ancel Keys *et al.*, *The Biology of Human Starvation* (Minneapolis, 1950), vol. I, p. 751.

²³ *Ibid.*, vol. I, pp. 761-63; vol. II, pp. 822-3.

²⁴ *Commission on Emigration* (1955), *op. cit.*, table 11, pp. 295-6.

²⁵ J. Johnston, *Irish Agriculture in Transition* (Dublin, 1951), p. 6. See also, Hans Staehle, "Statistical Notes on the Economic History of Irish Agriculture, 1847-1913," *Jour. Stat. and Soc. Inquiry Society of Ire.*, vol. XVII (1950-51), pp. 447-471.

²⁶ T. W. Freeman, *Pre-Famine Ireland* (Manchester, 1957), fig. 10, p. 57.

²⁷ The author would be grateful to hear from any readers who have this type of information in their possession, which they would allow to be examined. It need not necessarily refer to Co. Londonderry.

An Analysis of the Irish Census of Distribution, 1951

By PROFESSOR B. F. SHIELDS, M.A., D.ECON.SC.

(Read before the Society on April 25th, 1958)

To me the official Census of Distribution has a special personal interest. On the invitation of the Committee of Section F of the British Association which held its meeting in September, 1937, in Nottingham, I delivered a lecture before the members on the first Irish Census of Distribution, 1933. The major part of this discourse was printed in the *Journal of the Royal Statistical Society*, Vol. C.1, part 1, 1938. It was not until 1950 that the first British Census of Distribution was undertaken.

The 1951 Census was conducted by post from the Central Statistics Office. Questionnaire forms were sent at the end of January, 1952, to nearly 51,000 trading establishments on the register. As a result of replies, almost 7,000 names and addresses were deleted from the register, as they were not primarily engaged in activities covered by the proposed Census. In all, a total of 44,139 enumerated establishments remained on the register, and of these 36,850 or 83.5% submitted a return which was included in the Census. In a subsequent inquiry covering a sample of non-respondents excluded from the Census, it was shown that about one-sixth were outside its scope. The effective rate of response in numbers of establishments was 87.6%, and in terms of turnover 93.4%.

The following questions were required to be answered in the forms by retailers, wholesalers and those engaged in certain services: (1) The return should relate to the calendar year 1951, or if the business year did not conform to this, the return should be completed for a business year most nearly conforming to the calendar year. (2) The usual description of the business, and a list of goods in order of importance of sales are to be given. (3) The number of persons engaged in the business in the week ended April 7th, 1951, divided into males and females, who were further sub-divided into proprietors working in the business, members of the proprietors' family, but not paid a definite salary or wage, and the number of working employees paid a definite salary or wage. In this list, a distinction was to be made between the full and part-time working personnel. (4) The amount of wages, salaries and commission paid to employees, including salaries and commissions drawn by working directors of limited companies for the week ended April 7th, 1951, and the amount of annual wages and salaries. (5) Rent and rates including ground rent, and a statement of the poor law valuation. (6) The separate values of retail and wholesale sales, and of meals and refreshments on the premises. (7) The values of goods purchased including cost of materials. (8) The values of goods on hand for sale at the end of 1950 and 1951.