

## NATALITY IN DUBLIN IN THE YEARS 1943, 1944 AND 1945.

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The population problem is a subject of the greatest importance to every country. The Government of this country has quite recently appointed a Commission to inquire into the level and trend of Population, with a special reference to Emigration, and some members of this Society are serving on the Commission—one of our Honorary Secretaries is Chairman of the Commission. In the Reports on the Censuses of Population it is stated that this is a country of late marriages but of high fertility, notwithstanding which we are fast becoming a country of elderly people. The statistics of the age structure of the Population in 1936, particularly at the younger ages as compared with 10 years earlier, attracted much attention. Similar figures for ages and conjugal condition were compiled for 1941 from the Register of Population and are available in the Report compiled from particulars obtained from the Register. This Register, it will be remembered, was taken for the special purpose of the issuing of Ration Books during the Emergency period of the World War.

Under existing legislation the birth of each child must not only be registered with the Local Registrar of Births, Marriages and Deaths within a period of three months from date of birth under the Registration of Births and Deaths Act, 1863, but must also be notified within thirty-six hours in accordance with the requirements of the Notification of Births Acts, 1905 and 1917, to the Medical Officer of Health for the area in which the birth takes place by the doctor, midwife or other person present at the birth.

Through the courtesy of Dr. Matthew Russell, Medical Officer of Health for the City of Dublin, I was given access to the actual Notification of Birth returns for the County Borough of Dublin. I have classified and summarised the particulars contained on these records and am able to present some interesting statistics compiled from these *Notification of Birth returns* concerning births in Dublin during the three years period from January, 1943, to December, 1945, inclusive. In a paper read before this Society—May, 1943—I gave corresponding figures for each of the years 1941 and 1942. The main purpose of this paper is to continue the tables contained therein. For comparison some of the Statistics for those earlier years are repeated in some of the tables in this paper. Some tables on the other hand for reasons of space contain the figures for one year only (1945) and others for only two years (1944 and 1945).

The following particulars which had not previously been asked for on the Notification of Births return, were now included on the form :—(1) order of birth of child to mother, (2) age of mother at birth of child, (3) date of present marriage of mother, and, where necessary, of former marriage, and (4) occupation of father. The responsible authorities of the three large Maternity Hospitals in the city, viz., Rotunda Hospital, Coombe Lying-in Hospital, and the National Maternity Hospital, Holles Street, agreed to ascertain and to record these further details. Accordingly, the forms of return for these Institutions as well as those for private

Maternity Nursing Homes and those used by doctors and midwives in the case of private individuals, were revised. Later, in order to provide better statistics, the actual date (day, month and year) and not the year only of marriage has been obtained. This enables accurate statistics to be computed dealing with "duration of marriage" and "age of mother at marriage."

In practically all cases the particulars asked for were furnished on the returns. In the very few cases where there were omissions it was possible from the context to fill in the blank with approximate figures or dates, and accordingly none of the tables which follow includes a "Not Stated" column or line.

### Comparison with the Registrar-General's Figures

The figures for births published in the official vital statistics of the various countries are not always strictly comparable because of different definitions of "births." In France, for instance, all births live and still are recorded, counting multiple births as one; in Germany, all births live and still are recorded but each individual born is counted separately; in Switzerland, only live births are included, counting each individual born. Italy records births by each of these methods as well as by live births only, counting multiple births as one. In England and Wales all births whether live or still are included, counting each individual born. In Eire the method adopted is the same as in Switzerland, viz., taking account of live births only and counting each individual born. There are also other countries in which the births are not recorded unless, and until, the child shall have lived at least a week. Each of these methods has its own particular purpose depending on whether the object is the compilation of statistics for population purposes only or whether the figures are also to be used for a study relating to fertility.

The figures for births published by the Registrar-General in this country are for live births only, whereas the figures derivable from the *Notification of Births returns* include still-births as well as live births. Accordingly in the following comparison between the Registrar-General's Birth Statistics and the Notification of Births figures still-births have been excluded from the latter.

Year	Registrar-General's Figures	Notification of Birth Returns. Live Births only	Difference
1941 ..	13,669	14,286	+ 617
1942 ..	15,146	14,904	- 242
1943 ..	15,014	15,223	+ 209
1944 ..	15,109	15,153	+ 44
1945 ..	15,479	15,437	- 42

The differences in the years 1942 and 1943, and in the years 1944 and 1945 practically cancel out each other. Thus in the four year period 1942-1945, the aggregate totals are 45,748 and 45,717, showing a difference of only 31 between the two sets of returns—of no account statistically.

Considering that there is a permissive interval of three months from the date of birth before registration is compulsory, as compared with thirty-six hours in the case of notification of birth, and that there has always been a time-lag of probably the same duration operating as regards registrations at the beginning and end of the year, it is satisfactory to find such a close correspondence between the two sets of figures compiled from different sources.

### Maternities and Births—Month of Occurrence

It may be convenient to refer here to some of the limitations of the figures which are included in the tables in this paper, particularly if the statistics are used in connection with any study of Fertility. First, they refer to births in Dublin City only, an urban area housing over one-sixth of the total population of Eire, whereas the rest of the country is much more rural in type, and even Cork, the next largest City, had a population in 1946 of only 75,361 compared with 506,635 in the City of Dublin. Secondly, they refer only to those mothers who gave birth to a child in the period under review and take no account either of childless married women or of mothers who had given birth to a child in any earlier year. Thirdly, and this is important from the fertility point of view, no cognisance is taken of miscarriages or abortions, but premature births, i.e., where the foetus is at least of seven month's gestation, are included.

The subject of this paper is divided into the following sub-heads:—

Maternities and Births by months of occurrence.

Birth by age of Mother and by Parity (birth order).

Nuptial Birth by age of Mother at marriage and by order of births.

First Birth (Nuptial) by duration of marriage of the Mother.

Multiple Births.

Ex-Nuptial Births.

Births by Occupation of Father.

Births according to place of residence of Parents.

Births in hospitals, nursing homes or own homes.

The first of the summaries presented is Table I showing for each month in each case of the five years 1941 to 1945 (*a*) the number of maternities, setting out separately those which produced multiple births, and (*b*) the number of children born, classified according to sex, order of birth, whether live or still-born and whether they were nuptial or ex-nuptial births. A "maternity" is the event of giving birth to one or more children alive or still-born and is for statistical purposes synonymous with confinement; whereas a "birth" relates to the individual child whether live or still-born.

There were 14,298 maternities in Dublin City in 1941, producing 14,494 births and 15,693 maternities, producing 15,948 births in 1945. Still-births numbered 580 and 511 in the respective years, leaving 13,914 live births in 1941 and 15,437 live births in 1945. Infant mortality takes a further toll of those viable children. The Registrar-General states that in 1945 there were 1,384 deaths of infants under 1 year old, and that between the ages of 1 year and under 5 years old the numbers of deaths of children were 275 and 198 in the respective years. Maternities producing multiple births were 1.3 per cent. of all maternities in 1941, and 1.6 per cent. in 1945.

The figures for total children born show a very fair degree of correspondence, month by month. When the numbers are reduced to an average per day, as the number of days in the several months vary, we find that in 1945 the numbers were over 45 per day in four of the months, between 40 and 44 in other four months, and under 40 in the remainder. The averages are :

	1945		1945		1945	
January	39.3	May	47.2	September	47.7	
February	40.9	June	47.2	October	44.4	
March	44.8	July	46.6	November	39.7	
April	43.6	August	43.0	December	30.6	

The figures for the five months March to July are probably a reflection of the greater number of marriages in Dublin in the third quarter of the previous year, as it is shown later on that the interval between marriage and first maternity was less than one year in the case of approximately 45 per cent. of all first births. The numbers of marriages in Dublin, according to the Registrar-General's returns, in each quarter in each of the seven years 1940 to 1946 were as follows :

*Marriages in City of Dublin.*

Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
1940	.. 593	847	1,308	727	3,475
1941	.. 587	786	1,252	867	3,492
1942	.. 685	1,122	1,395	874	4,076
1943	.. 802	915	1,541	783	4,041
1944	.. 687	936	1,335	921	3,829
1945	.. 630	985	1,415	1,038	4,068
1946	.. 792	939	1,423	939	4,093

While these figures may offer some explanation, not much weight should be given to any deductions from them as it must be remembered that many people resident elsewhere get married in Dublin, and vice versa, and that the marriages are registered in the place where they are solemnised. They show a greater number of marriages in the third quarters of each year.

The remarkable similarity between the figures for the five years as shown in Table I is most striking. This is best seen by comparing the percentages, whether it be order of birth of children, numbers of ex-nuptial births or the multiple maternities.

The numbers of births of each sex show a slight excess of males. The male children born *alive* were 50.3 per cent. of all nuptial births compared with 46.5 nuptial females in the year 1945. The total figures for children in percentages by order of birth are extraordinarily close in the five years.

The number of still-born (nuptial) recorded was 486 in 1945, representing 3.2 per cent. of all births.

### Age of Mother at Birth of Child

The most important classification of births is perhaps that of Order of Birth combined with Age of Mother at birth of child. This shows not only the age groups of the mothers to whom children are born but also the order of birth of the children born, whether a first child, second child, and so on, of that mother irrespective of whether she was married only once or more than once. In the case of multiple births each child

TABLE I.  
Births by Month of Occurrence and Order of Birth.

MONTH AND YEAR	MATERNITIES				CHILDREN BORN																									
	Total	Single	Multi- ple (See Foot- notes)	Total	NUPTIAL BIRTHS								EX-NUPTIAL BIRTHS																	
					Sex				ORDER OF BIRTH										SEX				ORDER OF BIRTH							
					Males		Females		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th & over	Total	Males		Females		1st	2nd	3rd	4th	5th	6th & over	
Alive	Still- Born	Alive	Still- Born											Alive	Still- Born	Alive	Still- Born													
January	1941	1,157	1,145	12	1,106	523	33	524	26	277	225	159	88	98	73	62	34	30	60	63	23	3	36	1	50	12	—	1	—	—
January	1942	1,168	1,152	16	1,136	563	13	543	17	249	213	159	130	99	77	59	36	37	77	48	23	1	24	—	36	9	2	1	—	—
January	1943	1,274	1,245	29	1,237	628	20	574	15	295	230	183	127	116	77	59	50	28	72	66	30	2	34	—	60	6	—	—	—	—
January	1944	1,267	1,251	16	1,224	618	16	573	17	290	244	167	131	90	82	61	46	46	67	59	28	—	31	—	47	9	2	—	—	1
January	1945	1,196	1,174	22	1,160	586	18	537	19	292	255	161	117	90	82	40	39	22	62	58	20	3	33	2	49	7	2	—	—	—
February	1941	1,078	1,061	17	1,052	498	24	507	23	238	208	152	100	99	61	46	34	32	82	43	29	1	13	—	34	9	—	—	—	—
February	1942	1,035	1,022	13	1,008	499	23	468	18	252	178	155	105	66	71	52	36	27	66	40	19	5	16	—	31	9	—	—	—	—
February	1943	1,124	1,111	13	1,086	530	10	534	12	280	197	161	125	85	55	66	30	18	69	51	27	—	24	—	41	10	—	—	—	—
February	1944	1,241	1,217	24	1,213	617	25	550	21	282	261	174	144	100	88	50	32	29	53	52	27	1	22	2	45	6	1	—	—	—
February	1945	1,125	1,105	20	1,094	555	19	504	16	263	241	158	123	91	62	46	34	26	50	52	27	2	23	—	39	10	1	—	2	—
March	1941	1,303	1,289	14	1,267	616	17	601	33	283	241	184	136	115	77	71	30	34	96	50	25	2	21	2	43	6	1	—	—	—
March	1942	1,300	1,285	15	1,256	620	26	579	31	263	236	196	132	120	88	63	42	35	81	59	36	—	20	3	49	8	2	—	—	—
March	1943	1,334	1,313	21†	1,295	651	23	604	17	332	243	206	135	110	67	50	48	34	70	62	29	1	31	1	48	7	3	3	1	—
March	1944	1,263	1,241	22	1,215	577	31	590	17	314	268	185	134	76	70	46	41	35	46	70	35	1	32	2	58	9	3	—	—	—
March	1945	1,372	1,356	16	1,327	683	22	598	24	344	258	201	160	91	79	46	43	24	81	61	28	—	32	1	54	6	—	—	1	—
April	1941	1,250	1,233	17	1,231	599	25	589	18	366	215	160	139	82	72	67	43	30	57	36	17	—	18	1	32	3	1	—	—	—
April	1942	1,335	1,310	25	1,309	662	29	594	24	294	252	178	145	109	96	67	42	35	91	51	23	5	23	—	40	7	2	—	—	2
April	1943	1,238	1,217	21	1,211	598	22	578	13	315	247	147	123	108	79	54	32	39	67	48	18	—	28	2	41	6	1	—	—	—
April	1944	1,331	1,309	22	1,313	648	24	620	21	334	273	188	162	93	69	52	33	40	69	40	16	—	24	—	32	6	1	1	—	—
April	1945	1,289	1,271	18	1,249	638	16	574	21	356	275	165	116	92	56	71	36	28	54	58	34	1	22	1	39	14	4	—	—	1
May	1941	1,330	1,298	32	1,294	660	16	593	25	343	260	160	155	94	84	54	49	24	71	69	39	2	25	3	58	9	1	1	—	—
May	1942	1,383	1,362	21	1,342	643	28	655	16	333	285	182	128	105	92	49	49	35	84	62	35	1	25	1	55	6	1	—	—	—
May	1943	1,438	1,420	18	1,411	723	24	642	22	376	270	212	142	107	74	66	47	39	78	45	25	2	17	1	40	5	—	—	—	—
May	1944	1,411	1,392	19	1,377	676	34	651	16	376	270	202	134	116	63	50	46	38	82	53	28	1	23	1	47	5	1	—	—	—
May	1945	1,441	1,419	22	1,403	690	14	671	28	364	284	205	136	118	96	62	39	34	65	60	26	2	32	—	53	5	1	1	—	—
June	1941	1,299	1,283	16	1,265	622	30	583	30	341	231	191	128	90	71	61	41	36	75	50	23	—	26	1	47	3	—	—	—	—
June	1942	1,329	1,304	25	1,294	636	19	619	20	361	252	169	122	102	81	66	47	28	66	60	37	1	21	1	53	5	2	—	—	—
June	1943	1,231	1,212	19	1,204	599	19	568	18	351	229	173	136	75	64	53	41	29	53	46	22	5	16	3	41	4	1	—	—	—
June	1944	1,314	1,295	19*	1,274	623	32	603	16	385	237	183	120	92	72	52	32	39	62	60	26	3	29	2	51	6	1	—	—	2
June	1945	1,399	1,384	15*	1,358	678	33	625	22	384	266	194	149	104	76	47	50	29	60	57	26	2	27	2	49	5	2	1	—	—
July	1941	1,328	1,308	20	1,300	690	23	565	22	321	273	200	127	105	75	59	47	28	65	48	22	—	25	1	46	2	—	—	—	—
July	1942	1,312	1,293	19	1,288	610	21	637	20	350	238	174	150	95	68	54	48	34	77	43	23	2	18	—	38	5	—	—	—	—
July	1943	1,307	1,284	23*	1,285	627	27	610	21	366	251	178	109	95	88	49	38	33	78	46	23	—	20	3	38	8	—	—	—	—
July	1944	1,260	1,240	20*	1,239	613	25	585	16	342	238	190	127	78	73	51	37	33	70	42	21	2	18	1	35	4	2	1	—	—
July	1945	1,416	1,389	27	1,399	693	32	659	15	397	299	182	140	106	77	55	47	28	68	44	27	—	16	1	37	3	2	1	—	1
August	1941	1,207	1,192	15*	1,178	575	24	552	27	306	216	155	130	90	73	57	41	33	77	45	21	—	24	—	40	2	2	1	—	—
August	1942	1,205	1,189	16	1,174	585	32	546	11	307	226	175	122	101	69	57	41	22	54	47	22	1	23	1	43	3	—	—	—	—
August	1943	1,223	1,205	18	1,199	602	17	562	18	362	249	151	124	81	74	43	37	27	51	42	13	2	27	—	37	5	—	—	—	—
August	1944	1,201	1,187	14	1,161	602	20	524	15	320	220	160	128	97	62	53	48	19	54	54	27	1	24	2	40	12	2	—	—	—
August	1945	1,304	1,278	26	1,289	648	26	593	22	333	277	195	135	93	73	45	38	27	73	41	17	—	23	1	35	4	1	—	—	1
September	1941	1,127	1,108	19*	1,113	569	22	502	20	261	232	164	131	89	65	43	41	22	65	34	14	—	19	1	31	1	2	—	—	—
September	1942	1,317	1,295	22	1,293	650	23	601	19	289	229	172	141	127	99	59	64	30	83	46	21	1	24	—	37	5	4	—	—	—
September	1943	1,381	1,361	20	1,354	681	17	641	15	346	243	210	142	110	71	59	35	40	98	47	25	1	18	3	38	8	1	—	—	—
September	1944	1,275	1,250	25	1,257	670	20	552	15	313	285	197	139	98	62	47	32	32	52	43	22	—	21	—	38	5	—	—	—	—
September	1945	1,388	1,364	24	1,365	670	20	655	20	356	288	201	150	99	73	52	42	24	80	47	24	—	23	—	38	7	1	—	—	—
October	1941	1,095	1,088	7*	1,054	509	28	497	20	275	215	136	103	87	57	55	41	34	51	40	21	1	27	—	43	6	—	—	—	—
October	1942	1,203	1,189	14	1,165	603	19	523	20	309	224	170	119	78	73	53	46	38	55	52	23	2	27	—	41	10	—	—	—	—
October	1943	1,183	1,166	17	1,156	555	15	571	15	301	245	167	118	82	69	46	33	36	59	44	24	3	17	—	34	8	1	1	—	—
October	1944	1,207	1,181	26	1,186	598	20	550	18	296	231	197	114	92	58	51	52	29	66	47	24	—	22	1	45	6	—	—	—	—
October	1945	1,352	1,329	23†	1,330	680	20	619	11	342	288	188	149	106	64	61	40	27	65	47	28	3	15	1	34	9	4	—	—	—
November	1941	1,023	1,008	15	1,004	522	24	446	12	266	168	151	116	82	65	48	33	26	49	34	15	1	17	1	25	7	2	—		

is counted as an individual birth. For instance, if the fifth pregnancy produced twins, the children would be classified as a fifth and sixth child in parity order.

TABLE II.  
*Births by Age of Mother and by Order of Birth*

Order of Birth	Year	AGE OF MOTHER AT BIRTH OF CHILD							Total Nuptial Births	Total Births	
		Nuptial Births									
		Under 20	20-24	25-29	30-34	35-40	40-44	45+			Total Nuptial
First Child	1943	214	1,324	1,425	621	270	54	3	3,911	511	4,422
	1944	170	1,298	1,321	711	235	64	1	3,800	514	4,314
	1945	180	1,360	1,445	722	261	63	5	4,036	499	4,535
Second Child	1943	30	658	1,042	760	310	58	3	2,861	90	2,951
	1944	35	736	1,084	796	305	56	1	3,013	79	3,092
	1945	30	744	1,177	852	324	79	3	3,209	85	3,294
Third Child	1943	3	276	750	711	306	69	1	2,116	10	2,126
	1944	3	289	723	732	350	71	4	2,172	14	2,186
	1945	2	282	747	742	373	71	2	2,219	19	2,238
Fourth Child	1943	—	109	454	563	309	74	1	1,510	5	1,515
	1944	—	108	458	578	342	65	4	1,557	4	1,561
	1945	—	112	465	626	342	85	6	1,636	3	1,639
Fifth Child	1943	—	55	305	446	273	71	7	1,157	1	1,158
	1944	—	42	274	455	269	56	5	1,101	1	1,102
	1945	—	35	279	452	315	84	4	1,169	4	1,173
Sixth Child	1943	—	10	181	306	266	77	3	843	—	843
	1944	—	18	155	323	237	88	1	820	—	820
	1945	—	8	177	361	259	71	4	880	2	882
Seventh Child	1943	—	2	105	247	231	65	3	653	—	653
	1944	—	2	83	254	228	60	1	623	—	623
	1945	—	3	77	247	210	84	1	622	—	622
Eighth Child	1943	—	2	44	163	173	75	3	460	—	460
	1944	—	—	45	144	195	74	7	465	2	467
	1945	—	2	33	159	194	74	6	468	—	468
Ninth Child	1943	—	—	28	118	150	68	6	370	—	370
	1944	—	—	19	132	158	74	6	389	1	390
	1945	—	—	15	97	151	59	4	326	1	327
Tenth Child and over	1943	—	—	12	153	356	279	25	825	—	825
	1944	—	—	12	126	319	247	25	729	—	729
	1945	—	—	7	145	331	260	27	770	—	770
TOTAL Nuptial	1943	247	2,436	4,346	4,088	2,644	890	55	14,706	—	—
	1944	208	2,493	4,174	4,251	2,638	855	55	14,674	—	—
	1945	212	2,546	4,422	4,403	2,760	930	62	15,335	—	—
Ex-Nuptial	1943	117	245	179	46	24	4	—	—	617	15,323
	1944	102	267	161	57	32	6	—	—	615	15,289
	1945	88	275	166	59	21	9	—	—	613	15,948

Two-thirds of the total number of Nuptial births each year were to mothers whose ages were in the 10 year group 25-34 years of age—the

bulk of the remainder were divided almost equally in the 5 year age groups 20–24 years of age, and 35–40 years of age. Roughly, there were a little over 200 “nuptial” children born each year to mothers under 20 years of age, and in round figures 100 ex-nuptial children to mothers under 20 years of age, and between 55 and 65 nuptial children were born to mothers over 45 years of age at birth of child. Practically all were in the 45 year group—indicating that except in very few instances child bearing of mothers did not go beyond 45 years of age.

The predominance of ex-nuptial births was marked in the 20–24 years of age group; in the age group for unmarried mothers from 25–29 years of age there were roughly 160 ex-nuptial children in each year. It is extraordinary to note the numbers in the 35–44 age group, having 20 to 30 births each year.

As regards parity order, it is only to be expected that there would be a gradual upward movement in the proportion in each order of birth according to ascending ages of mother. Only 16 per cent. were born to mothers in the age group 20 to 24 years in 1945; in England and Wales the corresponding group included 24 per cent. of legitimate births.

The percentages of first born, second born, third born, etc., children distinguishing nuptial and ex-nuptial births, were as follows:—

TABLE III.  
*Percentages of Total Births by Order of Birth.*

	ORDER OF BIRTH										Total	
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th and over		
1944:												
Nuptial ... ..	%	%	%	%	%	%	%	%	%	%	%	%
Ex-nuptial ... ..	25.9	20.5	14.8	10.6	7.5	5.6	4.3	3.2	2.7	4.9	—	100
	83.0	12.8	2.3	0.6	0.2	—	—	0.3	0.2	—	—	100
TOTAL ... ..	28.2	20.2	14.3	10.2	7.2	5.4	4.1	3.1	2.5	4.8	—	100
1945:												
Nuptial ... ..	26.3	20.9	14.5	10.7	7.6	5.7	4.1	3.1	2.1	5.0	—	100
Ex-nuptial ... ..	81.4	13.9	3.1	0.5	0.6	0.3	—	—	0.2	—	—	100
TOTAL ... ..	28.4	20.7	14.0	10.3	7.4	5.5	3.9	2.9	2.1	4.8	—	100

These figures must not be taken as representing the pattern of families in Dublin; they illustrate the annual additions to families rather than types of existing family. To indicate the pattern of families it would be necessary to have available data concerning the deaths, not only of infants, but of all children in parity order according to whether they were first, second or third, etc., children of the family. It would be necessary to take into account also the fact, as has been ascertained in other countries, that infant mortality in the seventh and higher parity orders is much greater than for the earlier parities.

For convenience, the ages of mother in the different cross-classification tables are by quinquennial age groups, but it is of interest to take account of the number of births according to each year of age. These particulars which were taken out for the year 1945 and refer to nuptial births only, are as follows:—

Age of Mother	Children born	Age of Mother	Children born	Age of Mother	Children born
16 years	5	28 years	917	40 years	379
17 "	11	29 "	1,013	41 "	192
18 "	72	30 "	1,127	42 "	202
19 "	124	31 "	731	43 "	103
20 "	256	32 "	936	44 "	54
21 "	344	33 "	760	45 "	47
22 "	510	34 "	809	46 "	6
23 "	664	35 "	705	47 "	5
24 "	772	36 "	596	48 "	3
25 "	847	37 "	483	49 "	1
26 "	801	38 "	551	Not married	613
27 "	844	39 "	425		
				TOTAL	15,948

Comparison with the figures for 1942 shown in my previous paper on Dublin births shows almost similar proportions for each age of mother.

The following comparisons with some other countries of the percentage distribution of (a) nuptial and (b) ex-nuptial *live* births by age of mother were published in the Report of the Registrar-General for England and Wales, 1938, Part 2, and though they refer to countries as a whole it may be of interest to set alongside them the corresponding figures for the City of Dublin. The figures for Bristol City are not segregated by nuptial and ex-nuptial births, but taking the total births in 1932 and 1937, it is found that they bear out almost exactly the pattern shown for England and Wales. These comparisons show that practically everywhere the age group 25 to 29 years produced the greatest number of children.

TABLE IV.  
Percentage Distribution of "Live" Births by Age of Mother.

Country, &c.	Under 20	20—24	25—29	30—34	35—39	40—44	45 and over	Total
	Nuptial							
England and Wales— July-Dec., 1938 ..	3.5	23.3	32.6	23.8	12.6	3.9	0.3	100.0
Bristol, 1937 ..	2.6	20.2	31.8	24.4	14.9	5.7	0.4	100.0
Scotland—July-Dec., 1938 ..	4.2	23.7	30.8	23.5	13.6	3.9	0.3	100.0
Australia, 1938 ..	5.2	26.9	31.3	21.1	11.2	3.9	0.4	100.0
New Zealand, 1938 ..	3.6	25.1	33.1	23.0	11.3	3.6	0.3	100.0
Dublin City, 1945 ..	1.4	16.6	28.8	28.7	18.0	6.1	0.4	100.0
	Ex-Nuptial							
England and Wales— July-Dec., 1938 ..	17.9	31.6	22.1	14.3	10.0	3.8	0.3	100.0
Scotland—July-Dec., 1938 ..	22.2	33.6	20.5	12.8	7.8	3.0	0.1	100.0
Australia, 1938 ..	26.3	36.6	17.5	9.8	6.4	3.0	0.4	100.0
New Zealand, 1938 ..	26.1	33.9	20.1	10.6	6.5	2.7	0.1	100.0
Dublin City, 1945 ..	13.5	44.8	27.1	9.6	3.5	1.5	—	100.0

Amongst nuptial births, Dublin is much lower in the percentage of births to mothers in the under 20 years of age and the 20 to 24 years age



groups and higher in the 30 to 39 years age groups than in any of the other places for which comparisons are shown. The mothers in Dublin bear children mostly from 25 to 35 years of age, whereas in England and Wales and in Scotland, the mothers are mostly in the 20 to 30 age group. The numbers of births to unmarried mothers were mostly in the 20 to 30 years age group in Dublin compared with the 16 to 24 years age group in Scotland, Australia and New Zealand. In England and Wales ex-nuptial births were spread more evenly over ages from 16 to 40 with a preponderance in the 20 to 24 years age group. Only 15 per cent. of ex-nuptial births were to mothers over 30 years of age in Dublin compared with 30 per cent. in England and Wales.

### Age of Mother at Marriage

It must always be remembered that the figures in the paper are subject to the most important qualification that they refer only to those women who have borne at least one child and who have given birth to a child in any of the years 1943 to 1945. Statistics are not available of the possibly large numbers of married women who have not had any child. When a marriage is being registered with the Local Registrar of Births, Marriages and Deaths or his agent, although provision is made in the Registration Act prescribing the particulars to be given, the actual age of the contracting parties is rarely given. The expression "full age" is accepted if the parties are over 21 years of age. Accordingly, it is not possible to classify all married women according to age at marriage from the registrations of marriage. The records of "births notified," however, enable this information to be obtained in almost all cases in respect of all married women who have borne a child and so far as births in the City of Dublin are concerned, the figures are contained in Table V, which shows the number of births according to parity and age of mother at marriage in the year 1945.

TABLE V:

*Nuptial Births in 1945 by Age of Mother at Marriage and by Order of Birth.*

Age of Mother at Marriage	ORDER OF BIRTH										Total
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th & over	
Under 15	1	2	2	2	4	2	1	3	3	4	24
15	3	3	5	8	8	4	6	5	4	17	63
16	12	27	17	10	14	12	16	14	9	21	152
17	50	43	45	34	34	36	34	28	14	59	377
18	121	89	76	80	68	68	40	38	34	82	696
19	190	183	120	94	90	71	59	43	37	98	935
Total under 20	377	347	265	223	218	193	156	131	101	231	2,297
20-24	1,633	1,318	944	749	547	433	305	230	155	364	6,728
25-29	1,293	1,051	737	516	297	203	121	91	57	97	4,463
30-34	508	404	227	121	97	46	33	15	11	25	1,437
35-39	149	82	44	21	10	5	7	1	2	3	324
40-44	25	7	2	1	—	—	—	—	—	—	35
46	1	—	—	—	—	—	—	—	—	—	1
TOTAL	4,036	3,209	2,219	1,636	1,169	880	622	468	326	770	15,335

The figures show that of the married women who gave birth to a child in 1945, approximately 15 per cent. were married when under 20 years

of age, 44 per cent. were married between 20 and 24 years of age, 29 per cent. were between 25 and 29 years of age and 9 per cent. between 30 and 34 years of age. Compared with 1941, it would appear that there is a tendency to marriage at an earlier age.

The tailing-off of fertility with increasing age at marriage will be particularly noted: thus 4th or higher orders of birth in 1945 constituted 57 per cent. of total births in the case of women married under 20 years of age, 41 per cent. for ages 20 to 24, 31 per cent. for ages 25 to 29, 23 per cent. for ages 30 to 34, and 15 per cent. for ages 35 to 40. No figures could be more eloquent of the stimulating effect on fertility of early marriage. The substantial contribution to the aggregate number of births by larger families will be noted: for instance, the number of births of 4th or higher orders in 1945, namely 5,871, was no less than 38 per cent. of total births. The percentage for 1943 and 1944 were 40 and 39 respectively.

### Duration of Marriage

The figures in this section are derived from the answers to the two questions on date of marriage and date of birth of child. It was remarkable that in only very few instances was the reply to the first question inadequate. The section gives some impression of the comparatively big proportion of children born to mothers (a) who had been married less than five years, and (b) who had been married ten years and over when their first child was born.

It has been possible to compile statistics in respect of those mothers who had been married once only. It has seemed desirable to exclude the very few births to remarried widows, because there were probably intervals of varying lengths of widowhood before second or later marriages.

Table VI shows the number of children born in 1944 and 1945 to mothers who had been married once only, classified according to duration of marriage.

TABLE VI.  
*Children Born Classified by Duration of Marriage of Mother.*

Duration of Marriage	1944	1945	Duration of Marriage	1944	1945
Less than 1 year ..	1,880	1,894	Between 6 and 7 years	889	887
Between 1 and 2 years	1,770	1,889	7 " 8	800	812
2 " 3	1,392	1,517	8 " 9	710	725
3 " 4	1,220	1,262	9 " 10	656	666
4 " 5	1,196	1,086	10 yrs. and over	3,172	3,388
5 " 6	959	1,186			
			TOTAL .. ..	14,644	15,312

The similarity between the figures for both years is notable, and in fact the figures for each of the five years 1941 to 1945 show very little variation. It appears that half of the total of children were born to mothers who had been married less than 5 years. The numbers declined progressively as the duration of marriage increased. Parents as defined in this section who had been married for 10 years or over contributed 22 per cent. in 1944 and 24 per cent. in 1945 of the children born to them—a comparatively high proportion.

### Interval between Marriage and First Maternity

Any comprehensive study of fertility of married women should have regard to the interval between the date of marriage and the first maternity.

Such statistics in relation to all births in Dublin are now available. Satisfactory particulars were recorded on the returns furnished by the principal maternity institutions, as well as on the returns from private nursing homes and from midwives. The form of return asked for particulars of date of birth of child, order of birth and date of marriage of the mother. From this data it is possible to determine the interval between marriage and birth of first child.

Table VII shows the number of *first* children born and the duration of marriage before the birth of the first child.

TABLE VII.

*First Births—Nuptial. Interval between Marriage and First Maternity.*

Interval between Marriage and First Maternity	Actual Numbers			In Percentages		
	1943	1944	1945	1943	1944	1945
Less than 6 months .. ..	263	263	273	6.7	6.9	6.8
Between 6 and 8 months ..	278	253	337	7.1	6.7	8.3
Nine months .. .. .	469	454	379	12.0	11.9	9.4
Between 9 and 12 months ..	802	812	791	20.5	21.4	19.6
Total less than 1 year	1,812	1,782	1,780	46.3	46.9	44.1
Between 1 year and 1 year and 3 months .. .. .	667	647	776	17.1	17.0	19.2
Between 1 year and 3 months and 1 year and 6 months	320	343	340	8.2	9.0	8.5
Between 1 year and 6 months and 1 year and 9 months	245	205	217	6.2	5.4	4.4
Between 1 year and 9 months and 2 years .. .. .	158	153	146	4.0	4.0	3.7
Between 2 years and 3 years	294	307	375	7.5	8.1	9.3
Between 3 years and 5 years ..	262	216	234	6.7	5.7	5.8
Over 5 years .. .. .	153	147	163	4.0	3.9	4.0
TOTAL FIRST BIRTHS	3,911	3,800	4,036	100.0	100.0	100.0

Sixty-eight per cent. of all first births take place at public Maternity Hospitals (Rotunda, Coombe, and Holles Street) and amongst *these* the percentage of children born less than 9 months after date of marriage is about 18 per cent. of all first births as against 15 per cent. above. Possibly this percentage (or roughly 1 in every 7) of first births to mothers had been conceived pre-nuptially and this certainly happened in the approximately 7 per cent. for which the interval was less than six months. It is also seen that roughly 45 per cent. of all first maternities occur within the first year of marriage. In only about 18 per cent. of all first births was the interval between marriage and the birth more than two years.

The Registrar-General for England and Wales published some corresponding figures relating to births in 1945. The number of births to marriages of less duration than nine months was 14.7 per cent. of all first births. Proportionally many more parents in Dublin have a child in the first year of married life than in England and Wales. About the same percentage have their first child in the second year of married life, and 38 per cent. of parents in England and Wales compared with 15 per cent. in Dublin do not have their first child till more than 2 years after marriage.

### Multiple Births

In any study of the population problem, especially in relation to fertility, the number of *maternities* in the case of multiple births rather than the number of *children born* is generally taken as the basis for fertility investigation. To a certain extent maternities are susceptible of voluntary control, but there is no such control over the number of extra children born in multiple maternities.

TABLE VIII.

*Sex-distribution of Children born in Twin Maternities.*

Twin Maternities	Nuptial		Ex-nuptial		Totals as Percentage	
	1944	1945	1944	1945	1944	1945
Unlike Sex Pairs .. ..	101	96	2	—	42.9	39.0
Like Sex Pairs .. Male ..	70	69	1	2	29.6	28.9
.. Female ..	65	74	1	5	27.5	32.1
<b>TOTAL TWIN MATERNITIES</b>	<b>236</b>	<b>239</b>	<b>4</b>	<b>7</b>	<b>100.0</b>	<b>100.0</b>

Notwithstanding the smallness of these figures on account of which very reliable conclusions cannot be drawn, there is still a certain consistency between the figures shown for the two years, particularly in the like sex pairs, whether male or female.

In the year 1944 there were only four cases of triple births; in two of these maternities the children were all males, in one all females, and in the fourth two females and one male. In 1945 there were only three triple maternities reported, and there were two cases all males, one of two females and one male. In 1945 there was one case of quadruplets—three males and one female.

The frequency of maternity with multiple births in Dublin was 14 per 1,000. This figure compares with corresponding frequencies in England and Wales, Scotland, South Africa, Italy, Norway, Germany, Australia and U.S.A., countries for which figures are available, where the figures for recent years range between 12 and 14 per 1,000 maternities.

Table IX shows the total number of children born to multiple births distinguishing those which were born alive and those which were still-born.

TABLE IX.

*Multiple Births—Live and Still-born by Sex.*

YEAR	TWINS						TRIPLETS			
	Both Males		Both Females		1 Male 1 Female		All Males		All Females	2 Female 1 Male
	Live	Still-born	Live	Still-born	Live	Still-born	Live	Still-born	Live	Live
1944	129	13	122	10	190	16	3	3	3	3
1945	130	12	150	8	179	13	6	—	—	3

The 4 quadruplets born in 1945—3 males and 1 female were all Live births.

The figures in the above table also show a remarkable consistency. They show further that the risk of still-birth of twins is greater than the risk of still-birth occurring at single births. Still-births amongst twins were 7 per cent. in 1944 and 1945 of all multiple births, whereas for single births still-births represented only 3 per cent. Though the numbers are small they give some indication of a greater likelihood of a multiple birth amongst the higher orders of birth than amongst the lower.

The following were the ages of the mothers and the number of children born in the case of multiple births:—

TABLE X.  
*Multiple Maternities by Age of Mother.*

TYPE	Age of Mother at Birth of Children							Total
	Under 20 years	20-24 years	25-29 years	30-34 years	35-39 years	40-44 years	45 years and over	
TWINS :								
1944 ..	—	22	63	80	52	23	—	240
1945 ..	2	32	70	64	56	22	—	246
TRIPLETS :								
1944 ..	—	—	2	1	—	—	—	3
1945 ..	—	—	—	2	1	—	—	3
QUADRUPLETS:								
1945 ..	—	—	—	1	—	—	—	1

It will be seen that there was not very much difference in the number of multiple maternities according to mothers in the several age groups. The total numbers of twin maternities in the three preceding years 1941 to 1943, were 188, 221, and 242 respectively.

### Ex-Nuptial Births

The numbers of unmarried mothers who gave birth to children in Dublin were 603 (12 of whom had twins and one had triplets) in 1943, 607 (8 of whom had twins) in 1944, and 606 (7 of whom had twins) in 1945.

TABLE XI.

*Ex-nuptial Maternities and Births by Age of Mother and by Order of Births.*

Age of Mother at Birth of Child	Maternities			CHILDREN BORN BY ORDER OF BIRTH								
				1st			2nd and over			Total		
	1943	1944	1945	1943	1944	1945	1943	1944	1945	1943	1944	1945
Under 20 years ...	114	102	82	110	102	80	7	—	3	117	102	88
20 to 24 years ...	242	265	272	215	230	236	30	37	39	245	267	275
25 to 29 years ...	175	149	165	128	115	124	51	30	42	179	151	166
30 to 34 years ...	45	55	58	34	41	39	14	16	20	48	57	59
35 to 39 years ...	23	30	20	20	21	14	4	11	7	24	32	21
40 to 44 years ...	4	6	9	4	5	6	—	1	3	4	6	9
TOTAL	608	607	606	511	514	499	106	101	114	617	615	613

All the multiple births were twins, except in one case of a mother in the group 30-34 years of age who gave birth to triplets in 1943.

The above table shows, according to the age of mother: (1) the number of maternities and (2) the total number of each parity of children born. First births were 84 per cent. in 1943 and 1944 and 81 per cent. in 1945. It was remarkable how close some of the figures were for the three years: for instance, in the age group 20 to 24 years of age, the number of maternities were 242, 265 and 272 and in the age group 35 to 39 years of age, the numbers were 23, 30 and 20. Ex-nuptial births were 3.9 per cent. of the total births in each of the years, a figure which is precisely the same as the average for the whole State, as given by the Registrar-General in his annual reports. The omission from the Registrar-General's figures of the still-births ex-nuptial does not affect these percentages.

For obvious reasons, many unmarried mothers residing in the country come to Dublin for their confinement, and, accordingly, too much reliance ought not to be placed on the figures in the Section referring to Residence of Parents in the case of such mothers. There might, of course, be a corresponding movement in the opposite direction, but it is unlikely that the figures, though small, would cancel each other.

### Occupation of the Father

As an indication of the social grade into which children are born in Dublin the occupation of the husband was obtained in the case of married women. Their children were classified according to the occupational groupings used in the 1936 Census of Population Report. Over 600 different occupations were recorded, but for the purposes of this paper they have been reduced to 4 main groups representing the following social classes. (These groups are almost identical with those used in the case of some recent population surveys for Liverpool and Bristol.)

- Group 1. Professional, Clerical and Commercial.
- „ 2. Skilled Manual Workers and men in Supervisory positions. (Plumbers, Fitters, Compositors, Engine-drivers, Hairdressers, Carpenters, Confectioners, Painters, Bookbinders, etc.)
- „ 3. Semi-skilled Manual Workers. (Carters, Factory-workers, Gardeners, Postmen, Bus Conductors and Drivers, Waiters, Soldiers, etc.)
- „ 4. Unskilled Manual Workers. (Labourers, Dockers, Porters, Seamen, Scavengers, etc.)

While a more detailed classification is shown for Groups I and II in Table XII which follows, not so much reliance can be placed on the figures as on the totals of the groups on account of the difficulty which was experienced in allocating certain specific occupations to particular groups. But when considering the order of birth of children born in the various occupational or social groups it may be worth while to show even approximately the number of births for such groups as clerical or shop assistants and minor commercial separately from the professional classes.

The following table classifies all nuptial births in 1943, 1944 and 1945 by order of birth in each of these four main occupational or social categories.

TABLE XII.

*Births by Occupation of Father and Order of Birth.*

Occupational Group	Total Nuptial Births	ORDER OF BIRTH										
		1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th & over	
<b>GROUP I:</b>												
(a) Professions, Commercial												
1943	593	245	170	85	42	23	11	12	1	2	2	
1944	537	193	171	91	37	24	7	5	5	—	4	
1945	483	175	186	78	46	22	15	7	2	—	2	
(b) Lower Professions												
1943	2,099	718	470	326	188	132	94	57	37	24	44	
1944	2,368	781	603	400	229	128	82	54	30	20	41	
1945	2,598	906	658	384	263	149	85	59	31	20	43	
(c) Clerical												
1943	584	203	153	105	56	22	15	12	4	5	9	
1944	544	181	127	96	66	21	15	16	6	6	10	
1945	595	188	156	110	60	30	19	11	6	5	10	
(d) Insurance Agents, etc.												
1943	44	12	14	7	3	4	1	1	—	—	2	
1944	43	11	13	7	6	2	1	1	—	1	1	
1945	51	13	11	13	4	4	—	—	—	2	—	
(e) Shop Assistants, Minor Commercial												
1943	495	171	121	65	48	34	20	6	12	9	9	
1944	537	191	120	100	42	32	15	19	7	5	6	
1945	497	149	127	75	54	41	24	8	4	5	10	
Total Group I.	1943	3,815	1,349	937	588	337	215	141	88	54	40	66
	1944	4,029	1,857	1,034	694	380	207	120	95	48	32	62
	1945	4,224	1,433	1,088	660	426	246	147	85	43	32	64
<b>GROUP II:</b>												
(a) Manual Workers, Supervisory												
1943	110	33	20	13	13	7	7	6	3	—	8	
1944	153	38	33	26	15	15	10	4	4	3	5	
1945	177	50	45	25	21	10	9	6	3	2	6	
(b) Manual Workers, Skilled												
1943	2,156	569	458	341	226	168	139	76	58	34	87	
1944	2,258	562	481	382	280	172	114	86	63	37	81	
1945	2,283	614	484	345	262	187	155	79	51	39	67	
Total Group II:												
1943	2,266	602	478	354	239	175	146	82	61	34	95	
1944	2,411	600	514	408	295	187	124	90	67	40	86	
1945	2,460	664	529	370	283	197	164	85	54	41	73	
<b>GROUP III:</b>												
Manual Workers, Semi-skilled												
1943	3,980	954	741	564	429	358	226	211	135	116	246	
1944	3,693	896	707	482	390	313	249	172	152	114	218	
1945	4,106	975	821	583	429	326	247	188	170	103	264	
<b>GROUP IV:</b>												
Manual Workers, Unskilled												
1943	4,645	1,006	705	610	505	409	330	272	210	180	418	
1944	4,541	947	758	588	492	394	327	271	198	203	363	
1945	4,545	966	771	606	497	400	322	264	201	150	368	
TOTAL	1943	14,706	3,911	2,861	2,116	1,510	1,157	843	653	460	370	825
	1944	14,674	3,800	3,013	2,172	1,557	1,101	820	628	465	389	7
	1945	15,335	4,036	3,209	2,219	1,636	1,169	880	622	408	326	7

Group I comprised only 27 per cent. of all nuptial births in 1945, the remaining 73 per cent. (i.e., roughly 3 out of every 4 nuptial births) were born to families of the manual worker classes. The unskilled and semi-skilled manual workers account for over half of all births, but for the fourth and subsequent children in order of parity they account for 65 per cent. of all births. The group Professional, Clerical and Commercial, includes a third of all first births, but less than a fourth of the fourth births and in a gradual declining scale by order of birth falls to only one-eighth of seventh births. The "upper" classes gave only just 700 children of seventh and over parity to the population of Dublin in the three years as compared with 6,000 contributed from the "lower" classes.

It is interesting to calculate for each of the main occupational groups the percentage of total births in each class by order of birth. These deduced figures for the year 1945 are shown in the following table.

TABLE XIII.

*Births by Occupation of Father expressed as Percentages by Order of Birth.*

Occupational Group	ORDER OF BIRTH									
	1	2	3	4	5	6	7	8	9	10 and over
I. Professional ... ..	35.5	33.9	29.9	26.0	21.0	16.7	13.7	9.2	9.8	8.4
II. Manual Workers, Supervisory and Skilled ...	16.5	16.5	16.7	17.4	16.8	18.6	13.7	11.5	12.6	9.5
III. Manual Workers, Semi-Skilled ... ..	24.1	25.6	26.1	26.2	28.0	28.1	30.2	36.3	31.6	34.3
IV. Manual Workers, Unskilled	23.9	24.0	27.3	30.4	34.2	36.6	42.4	43.0	46.0	47.8

It will be noted that, whereas the professional classes accounted for 35 per cent. of first births, the unskilled manual labour class accounted for 24 per cent., whereas in the order of births, seventh, eighth and ninth, the proportions are very much reversed. In the eighth and ninth order of birth, the professional classes were less than 10 per cent. of all births in that order, while the unskilled manual labour class were from 43 per cent. to 46 per cent.

It would seem from the above table that there was a definite break in the professional class after the third child, whereas in all other classes the break would seem to have occurred after the sixth child. Notwithstanding these variations, however, if the total number of births are taken into account, it will be found that the number of births in the professional group, as compared with the other groups, is almost proportional to the total number of adult males in each of these occupational groups.

A cross classification of the number of children born, by the age of mother at marriage with the occupation of the father in the nuptial children group shows that, as is generally believed, wives in the non-manual labour social groups marry at a later age than those in the manual labour group. Of those mothers who gave birth to a child in 1945, 69 per cent. of the children born to the unskilled manual labour classes were



to mothers whose age at marriage was less than 25 years of age, whereas in the semi-skilled manual labour group the percentage was 66 and in the skilled manual labour group 58 per cent., while in the professional and clerical group only 41 per cent. were under 25 years of age at marriage. The "age at marriage" group 25-29 years contained 41 per cent. of the professional class, 30 per cent. of the skilled labour class, 24 per cent. of the semi-skilled labour and 23 per cent. of the unskilled. The following are the percentages in each group :—

Age at Marriage	Professional, Commercial and Clerical Workers	Skilled Manual Workers	Semi-skilled Manual Workers	Unskilled Manual Workers
Under 20 .. ..	5	12	19	22
20-24 years .. ..	36	46	47	47
25-29 ,, .. ..	41	30	24	23
30-34 ,, .. ..	15	10	9	6
35-39 ,, .. ..	3	2	1	2
40 and over .. ..	0	0	0	0
	100	100	100	100

It will be seen that the last line is represented by '0.' There were *some* births to mothers whose age at marriage was 40 years or over. The actual numbers of children were 12, 8, 5 and 11 in the respective groups, but when expressed as percentages of the total for each class they were less than one-half per cent. and accordingly as the other percentages are cited in whole numbers they are represented by zero. Only 5 per cent. of the mothers in the under 20 years of age at marriage group were in the professional, commercial and clerical classes whereas there were 36 and 41 per cent. in each of the two following 5 years groups of ages.

### Place of Residence of Parents

Most of the children born in the City of Dublin were to parents whose residence is situate in the City of Dublin, but with the advantage of three first-class public maternity hospitals, together with equally first-class nursing homes and the availability of a great number of maternity doctors in the City, it is only to be expected that numbers of expectant mothers from outside the City would come to Dublin for their confinement. In each of the years under consideration the parents of approximately 20 per cent. of the children born in Dublin, resided outside the City.

Parents residing in County Dublin and in the three neighbouring counties of Meath, Kildare and Wicklow account for more than two-thirds of the births "outside Dublin City." Proportionately more mothers came from the province of Connacht to Dublin for their confinement than from Munster, probably because of the better hospital facilities in Cork for maternity cases than are available in Galway.

The table shows that the place of residence of almost 60 per cent. of the mothers of ex-nuptial children was outside Dublin City as compared with only 20 per cent. in the case of nuptial births.

TABLE XIV.

*Births according to Place of Residence of Parents.*

	Nuptial		Ex-Nuptial		Nuptial		Ex-Nuptial	
	1944	1945	1944	1945	1944	1945	1944	1945
	Actual Numbers				In Percentages			
Dublin City ..	12,007	12,294	282	258	81.8	80.2	45.9	42.1
Outside Dublin								
City:								
Dun Laoghaire	373	486	10	16	2.5	3.2	1.6	2.6
County Dublin	912	1,020	27	25	6.2	6.6	4.4	4.1
Counties, Meath								
Kildare and								
Wicklow ..	615	730	44	64	4.2	4.8	7.1	10.4
Rest of Leinster	372	429	94	94	2.5	2.8	15.3	15.4
Munster ..	96	98	54	42	0.7	0.6	8.8	6.9
Connacht ..	129	124	57	64	0.9	0.8	9.3	10.4
Ulster (3 Counties)	101	90	32	32	0.7	0.6	5.2	5.2
Outside Eire ..	69	64	15	18	0.5	0.4	2.4	2.9
TOTAL ..	14,674	15,335	615	613	100	100	100	100

**Place of Birth—Hospitals and Nursing Homes or own Home**

It is interesting to compare the number of births which took place in the special Maternity Hospitals (Rotunda, Holles Street and Coombe) and private Nursing Homes, with those which took place in the mother's own home. The following were the numbers in the three years:

TABLE XV.

*(a) Place of Birth.*

Year	Total Births	HOSPITALS, NURSING HOMES, ETC.				St. Kevin's	Mother's own Home
		Coombe	Holles Street	Rotunda	Private Nursing Home		
1943	14,706	1,765	2,782	3,434	2,283	14	4,428
1944	14,674	1,663	2,908	3,629	2,437	11	4,026
1945	15,335	1,738	3,156	3,569	2,691	45	4,136

It will be seen that roughly 30 per cent. of the births in each year took place in the mother's own home. Thus while 70 per cent. of births took place in what might be described as professional surroundings with all the amenities of doctors, nursing staffs, attendants, etc., a further 20 per cent. were "Extern" cases attached to one or other of the three principal maternity hospitals in the city where the mothers had been in touch with these institutions for ante-natal care and were attended during confinement by hospital staff, leaving only 10 per cent. of all births as those which were attended by private doctors in the patient's own home.

(b) *Place of Birth and Order of Births.*

	Total	1	2	3	4	5	6	7	8	9	10 and over
Hospitals and Nursing Homes											
1943	10,278	3,520	2,266	1,474	870	625	420	290	221	179	413
1944	10,648	3,488	2,442	1,504	989	631	460	333	235	181	385
1945	11,199	3,716	2,552	1,614	1,055	677	484	295	239	167	400
Parents' own Homes											
1943	4,428	391	595	642	640	532	423	363	239	191	412
1944	4,026	312	571	668	568	470	360	295	230	208	344
1945	4,136	320	657	605	581	492	396	327	229	159	370

The following table shows the number of children born in the mother's own home according to parity or order of birth.

TABLE XVI.

*Births in Mother's Own Home by Order of Birth.*

Order of Birth	Total Births			Children born in Mother's Home			Children born in Mother's own Home as percentage of Total Births		
	1943	1944	1945	1943	1944	1945	1943	1944	1945
First ..	3,911	3,800	4,036	391	312	320	10	8	8
Second ..	2,861	3,013	3,209	595	571	657	21	19	21
Third ..	2,116	2,172	2,219	642	668	605	30	31	28
Fourth ..	1,510	1,557	1,636	640	568	581	42	37	36
Fifth ..	1,157	1,101	1,169	532	470	492	46	43	42
Sixth ..	843	820	880	423	360	396	50	44	45
Seventh ..	653	628	622	363	295	327	56	44	53
Eighth ..	460	465	468	239	230	229	52	50	50
Ninth ..	370	389	326	191	208	159	52	54	50
Tenth and over ..	325	729	770	412	344	370	50	47	48
TOTAL	14,706	14,674	15,335	4,428	4,026	4,136	30	28	27

The columns of percentages above show that 1 out of every 10 first births, 1 out of every 4 or 5 second births, 1 out of every 3 third births, and 1 out of every 2 births from the fifth order of parity onwards, occurred in the mother's own homes. Probably as the result of experience in child-bearing with lessening fears and risks and because of the domestic necessity of being at home to look after the other children and the general maintenance of the house, mothers were less inclined when having a fifth or later child to leave home for their confinement, but in the vast majority of first births in 1945 (roughly 3,700 out of 4,000), the mothers were confined in maternity hospitals or nursing homes.

**Reproduction Rates :**

More recent figures showing the age distribution of the female population of Dublin than those derived from the Register of Population, 1943, are not available. Accordingly it is not possible to bring up to date

the Gross Reproduction and Net Reproduction Rates of 1.27 and 1.01 respectively for Dublin City for that year as mentioned in my previous paper on births in Dublin. It may be as well to repeat the definition of reproduction rates which were given in that paper. The Gross Reproduction Rate means the number of girl children which replace 1,000 potentially child-bearing females (i.e. those between ages of 15 and 50 years) in the previous generation, while the Net Reproduction Rate is based on the Gross Reproduction Rate, allowing for mortality of girls before the age of 15 years and of females between 15 and 50 years of age. The latest figure for England and Wales as published in the Report of the Registrar-General shows for that country a Net Reproduction Rate 0.909 which is less than unity indicating a definite decline in their population in the next generation. The Dublin rate on the other hand points to some slight increase, but after a few years even this small natural increase will cease as a factor in increasing the total population of Dublin unless the population is augmented by immigration from other parts of Ireland or from outside countries.

One last remark. The figures of births in the City of Dublin given in this paper refer to the boundary area of the City as in each of the years. For instance the figures for 1945 include births that occurred in the added area of Howth and district (total population of 5,400) whereas the figures for the earlier years did not include births in that area. If this discrepancy was made right it is not thought that the revised figures would influence the general picture I have attempted to portray.

**Mr. Honohan**, proposing a vote of thanks, said that he envied Mr. Lyon his facility for handling such a vast quantity of statistics. It was high time an improvement was made in our vital statistics, which were deficient in many respects, and those interested were greatly indebted to the author for the trouble and work he undertook in giving information which was otherwise not available.

It was interesting to note that the additional information in regard to births, which was elicited in Britain as a result of the Population (Statistics) Act, 1938, was (a) age of mother; (b) date of marriage; (c) number of children by present husband, and how many still living; and (d) number of children by any former husband, and how many still living. It will be observed that Mr. Lyon's enquiries do not cover anything on the lines of (c) and (d).

A point of growing importance to remember when interpreting illegitimate rates of births (especially in comparison with other countries—and some such comparisons are made in the paper) was that the increasing practice of artificial birth control in other places, and the habit of recording all births to a married woman as legitimate, made it difficult to accept such rates as measures of comparative moral degeneracy.

While the statistics presented had undoubted value and interest, the speaker felt that they threw little light on the question of fertility, which was, after all, the wider context for, and the real objective of, the study of births. The only real measure of fertility in the paper was at the end of the section on "Age of Mother at Marriage" (p. 64), and the significant thing about that was, in the speaker's opinion, not so much the high proportion of high parity births to all births, but the fact that this proportion was going down.

Caution should also be observed in reaching conclusions from Table XIII as regards differential birth rates in view of the fact that the

“exposed to risk” was not taken into account. Comparisons between different social classes with a view to determining their relative fertility should have regard to age, to the proportions married, and, indeed, the numbers in each category. Incidentally, this point is well illustrated in the comparison which is made towards the end of the section entitled “Age of Mother at Birth of Child” (pp. 63-64), that “Dublin is much lower in the percentage of births to mothers in the under 20 years of age and the 20 to 24 years of age groups, and higher in the 30 to 39 years of age groups, than in any of the other places for which comparisons are shown.” This result is undoubtedly due to the different distributions of mothers through the different age-groups rather than to a different fertility.

With regard to the last section of the paper, the Society might profitably note that the reproduction rates heretofore in general use—which were really only a particular measure of fertility—were in recent times subjected to a measure of criticism, principally in the light of a difference between male and female rates—a condition of affairs which could not be justified as a permanent feature. It has been alleged, indeed, that many of the gloomy prognostications as to future populations based on a net reproduction rate for females of less than unity might be found—having regard to the higher male rates—to be unwarranted. Some combined rate may be found to be an improvement. A comprehensive and fully satisfactory measure of fertility should, in fact, be a factor not only of age and duration of marriage, but should also have regard to the size of the existing family and the notion of family-building on the part of the parents, to the relation between the maternal and paternal approaches and to inter-class differentiation. It was distressing to realise that, while in other countries these matters were receiving—one might almost say of necessity—very close study, we could scarcely touch the subject at all, because of our deficient statistics. We were at least fortunate in not having a serious problem of fertility.

**The President (Dr. Geary)** remarked that, as the French say, Mr. Lyon’s paper “falls well” at the present juncture, particularly since the matter with which the paper deals comes within the terms of reference of the Commission of Population. Mr. Lyon has shown the way and the light. What he has done for Dublin must be done officially for the whole state, and this cannot be long delayed.

He (the President) did not agree with Mr. Honohan in his assessment of the value of the approach in this paper. Both the vital statistics and Census approaches are essential: indeed they are complementary. Amongst theorists, the reproduction rate is making heavy weather. As members are no doubt aware, the net reproduction rate is based exclusively on reproductivity of females, and in recent work it is shown that significantly different rates are found if both male and female reproductivity are taken into account. At the same time it is proving difficult to give the new extension the theoretical simplicity the old theory has been shown to possess by Lotka and others. He (the President) was sure, however, that the theoretical difficulty would be resolved.

He (the President) found absorbing interest in some of the tables in the paper. In Table XII, for instance, the relationship between the social group and the order of birth was very apparent. It might be simply illustrated in the following table:—

Social Group	No. of births per cent. of 1st births in order :		
	1st	4th	8th
I. Professional, commercial, etc. ..	100	28	3½
II. Manual workers, skilled ..	100	44	10
III. Manual workers, semi-skilled ..	100	44	16
IV. Manual workers, unskilled ..	100	51	21

It is obvious from these figures that the higher the social grade the higher the proportion of births of the early orders. It was also interesting to know that the percentage of nuptial births borne to mothers under 25 years of age was considerably lower in Dublin than in the other areas shown in Table IV, a reflection, of course, of the late age at marriage even in urban areas in Ireland. The latter factor also probably accounted for the high proportion of ex-nuptial births at ages 20-29.