

THE ECONOMIC & SOCIAL RESEARCH INSTITUTE

Religion and Demographic Behaviour
in Ireland

by
BRENDAN M. WALSH

With Appendix
Migration Between Northern Ireland and
the Republic of Ireland

by
R. C. GEARY and J. G. HUGHES

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in Ireland

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Religion and Demographic Behaviour in Ireland

BRENDAN M. WALSH*

IN culturally divided communities differences in demographic behaviour frequently become a focal point of prejudice and controversy. The higher birth rate generally found among the poorer or disadvantaged group is typically seen as a threat of eventual outbreeding by the rest of the population. On a world-wide scale it is true that the less developed nations are increasing their share of total population due to their very rapid rate of natural increase. Examples of similar shifts in population proportions within countries come readily to mind—the black/white ratio in the United States or the French/English balance in Canada, for instance. Fear of a comparable situation exists in Northern Ireland today, where the Catholic minority is sometimes depicted as inexorably outbreeding the Protestant majority, while in the Republic of Ireland the demographic strength of the Catholic majority may create the impression of a threat to the viability of the numerically very small religious minority.

There is a limited amount of objective material available on the demographic aspects of the Irish religious question. Park's study of human fertility in Northern Ireland appeared before the publication of the detailed results on the 1961 Census, but the fertility data from the Census have been used by Robinson to construct a picture of the regional variations in birth and fertility rates.¹ The Geary and McCarthy addendum to the Emigration Com-

*B. M. Walsh is a Research Officer of the Economic and Social Research Institute. The paper has been accepted for publication by the Institute. The author is responsible for the contents of the paper including the views expressed therein.

¹A. T. Park, "An Analysis of Human Fertility in Northern Ireland", *Journal of the Statistical and Social Inquiry Society of Ireland*, 1962-3 XXI, pp. 1-13. Alan Robinson, "The Geography of Human Fertility in Northern Ireland (1961)", *Irish Geography*, Vol. V. No. 4, (1967) pp. 302-310.

mission is a valuable summary of the situation in the Republic down to 1946.² Partly as a consequence of the dearth of available studies, the debate on the population aspects of the religious situation is all too often uninformed or misinformed.³ The aim of the present study is modest, namely, to use the published data sources to construct as complete a picture as possible of the demographic behaviour of the religious groups in both parts of Ireland. For the most part, the facts are presented without commentary, although some of the more obvious implications are underlined. While it emerges from the present study that the use of religion to classify the population of Ireland is meaningful from a demographic point of view (since there is a sharp contrast in the demographic behaviour of Catholics and the rest of the population), this need not be taken to imply that religion is the only, or even the most important, source of social conflict in Ireland today.

THE BROAD OUTLINE

In the last hundred years the population of Ireland has fallen sharply, but most of this reduction has occurred in the area now forming the Republic of Ireland (RI). Over the same period there have been substantial changes in the religious composition of the Irish population. Table 1 is designed to summarize these events. The steady decline in the percentage of the population of RI that is in the Other Denominations (OD) is very striking. The marked decline in the percentage of the Northern Ireland (NI) population that was (Roman) Catholic (RC)⁴ between 1861 and 1937 is frequently overlooked on account of the rise in this percentage since 1937. A remarkable aspect of the situation is the virtual stability of the religious distribution of the population of "all Ireland" since 1861, and even in the actual numbers in each religion since 1911. This reflects the general tendency for the proportion of the population that is OD to rise in NI at the same time it was falling in RI. As may be seen from the last part of the Table, the trend has been a steady rise in the concentration of the Irish OD population in NI, especially over the years 1911-1926. This phenomenon is discussed at greater length in the Appendix, in the context of the movement between RI and NI.

Our main interest lies in the more recent period, 1946-1961. (The 1966 Census of Population did not contain a question on religion in either NI or RI, so 1961 is the latest date for which detailed information on our subject is available.) Over the post-war period there was only a slight increase in the

²Reports of the Commission on Emigration and Other Population Problems, (Dublin, 1954) Addendum No. 2, by R. C. Geary and M. D. McCarthy.

³A dispassionate study of the situation in Northern Ireland, which contains some information on population questions, may be found in Denis P. Barritt and Charles F. Carter, *The Northern Ireland Problem: A Study of Community Relations*, (London, 1962).

⁴The decision to designate the two religious groups "Other Denominations" and "Roman Catholic" was partly dictated by acoustic considerations, partly by a desire to use official NI and RI Census of Population terminology as far as possible.

ERRATA

RELIGION AND DEMOGRAPHIC BEHAVIOUR IN IRELAND

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p7.

Table 1: The Population of Ireland by Religion 1861-1961
(Thousands)

Column referring to 1911 should read:-

<u>Area</u>	<u>Religion</u>	<u>1911</u>
NI	RC	430
	OD	821
RI	RC	2,813
	OD	327
All Ireland	RC	3,243
	OD	1,148

RC Population as Percentage of Area's Total Population at Each Date

NI	34.4
RI	89.6
All Ireland	73.6

Percentage of All Ireland's Population Living in NI

OD	71.5
RC	13.3
All Religions	28.5

TABLE 1: *The Population of Ireland by Religion 1861-1961*
(Thousands)

	Date	1861	1911	1926	1936-7	1946	1951	1961
Area	Religion							
	RC	572	494	421	429		472	497
NI	OD	824	757	836	851		901	928
	RC	3,934	2,813	2,751	2,774	2,786		2,673
RI	OD	468	327	221	194	169		145
	All Ireland	4,506	3,307	3,173	3,203			3,170
	OD	1,262	1,084	1,056	1,045			1,073

RC Population as Percentage of Area's Total Population at Each Date

NI	41.0	39.5	33.5	33.5		34.4	34.9
RI	89.4	89.6	92.6	93.5	94.3		94.9
All Ireland	78.1	75.3	75.0	75.4			74.7

Percentage of All Ireland's Population Living in NI

OD	65.3	69.8	79.2	81.4			86.5
RC	12.7	14.9	13.3	13.4			15.7
All Religions	24.2	28.5	29.7	30.1			33.6

A question on religion was asked in the NI censuses of 1926, 1937, 1951 and 1961 and the RI Censuses of 1926, 1936, 1946 and 1961.

RC proportion of the population of both RI and NI, although the RC share in the population of "all Ireland" fell due to the substantial loss of RC population from RI. This general near-stability is somewhat surprising in the light of the presumably large religious differentials in the vital rates that underline population change, so it will be helpful to examine these rates *seriatim* and to explore the extent to which the differentials are mutually cancelling.

BIRTH RATES

The crude birth rate reflects three aspects of a population's demographic structure: its marriage rates (or nuptiality), its marriage fertility and its age structure. In the special case where the populations being compared are defined in terms of religious affiliation, the question of marriages across religious boundaries ("mixed marriages") must also be considered. These topics will now be discussed in turn.

Marriage Fertility

A simple summary measure of marriage fertility is the annual number of legitimate live births per 1,000 married women of child-bearing age. Births are not registered by religion in either part of Ireland, but it is possible to distribute the births occurring in or near a Census year between the religions on the basis of the religious composition of the population aged under one year as recorded in the Census.⁵ Part A of Table 2 records marriage fertility by religion, calculated in this manner, for NI in 1950-2 and 1960-2, and for RI in 1946 and 1960-2. At both dates RC fertility was about 80 per cent higher than OD fertility in NI, while a similar though slightly smaller differential existed in RI. This measure of marriage fertility is affected by the age structure of the married population being considered. In order to remove this influence from the comparison, and thus isolate the difference in fertility at each age, the following attempt at age-standardization has been undertaken: using the England and Wales 1964 age-specific (five year intervals) legitimate fertility rates, the number of births expected in each population of married women in Table 2 has been calculated; the actual number of recorded births has been expressed as a percentage of the expected number and this "standardized fertility ratio" presented in Part B of the Table.⁶ This ratio expresses actual births as a percentage of those expected on the basis of English age-specific fertility rates: it is not a "births per 1,000 married women" concept, and care must be taken not to compare the figures in Part A with those in Part B of the Table. An immediate consequence of age-standardization is to eliminate the discrepancy between RC fertility in NI and RI, making it clear that the higher figure recorded for the RC population of NI in Part A is a reflection of the younger age structure of the RC married female population in NI compared with RI. Some narrowing of the RC/OD differential in NI between 1950-2 and 1960-2 is also apparent from the standardized data.

A clear picture of a considerable excess of RC over OD fertility in both areas emerges from Table 2. Since, however, marriage fertility varies greatly between social groups, it is important to try to establish to what degree the contrast in marriage fertility is attributable to the different occupational distribution of the religions. This is facilitated by the detailed tabulations contained in the 1961 *Fertility Reports* compiled from the Census returns. From a study of these tables it is clear that in both areas for any age at marriage and duration of marriage the average family size of the RC population is considerably higher than that of the OD population in each social group: the general tendency is for completed family size to be about 50 per cent higher among the RC population. Consequently, even if both religions were equally

⁵This procedure is inaccurate to the extent that infant mortality and/or net migration differs between the two religions, an effect that is probably negligible. In RI the population aged 0-2 years has to be used since there is no more detailed breakdown of the total population by age and religion.

⁶The need for this indirect standardization technique arises due to the absence of age-specific fertility rates by religion for Ireland.

TABLE 2: A: *Estimated Number of Legitimate Live Births per 1,000 Married Women Aged 15-44 by Religion (Annual Average)*

	Date	RC	OD
NI	1950-2	280.9	150.4
NI	1960-2	287.9	163.4
RI	1946	275.4	179.2
RI	1960-2	254.6	151.3

B: *Standardized Fertility Ratios*

		RC	OD
NI	1950-2	243	127
NI	1960-2	240	134
RI	1960-2	250	149

Data Sources: NI: Census of Population, 1951 and 1961, *General Reports*. Fortieth Annual Report of the Registrar General, 1961, Table A.

RI: Census of Population, 1946, Vol. III, pt. 1. Census of Population, 1961, Vol. XII, pt. 1. Report on Vital Statistics 1965, Table XIII; Statistical Abstract.

represented in all social groups, the fertility of the whole RC population would remain considerably above that of the OD. This point is made more precisely with the aid of NI data in Table 3, where fertility data for all marriages of "completed fertility" (i.e. where the wife was aged over 45 in 1961, but had married before reaching age 45) are summarized. The "occupation-standardized" RC average family size was computed by applying the average RC family size in each social group to the OD population of that group and summing for all groups, thereby obtaining the total number of RC children expected if the RC fertility remained unchanged within each group but the RC population was redistributed according to the present OD distribution by social group. This total of children was then converted to an average family size by dividing it by the total number of OD families. The OD occupation-standardized family size was similarly calculated, this time by imposing the RC occupational distribution on the OD married population, and assuming the OD fertility to remain unaltered in each social group. It may be seen from the Table that occupational standardization has very little effect on the OD/RC differential in family size; regardless of whether column (3) is compared with column (2) or column (4) with column (1), the differential is not much reduced from its level between column (1) and (2).

TABLE 3: *Average Family Size, Families of Completed Fertility, NI, by Religion.*

	OD (1)	RC (2)	"occupation-standardized"	
			OD (3)	RC (4)
Children (Thousands)	228.3	133.4		
Families (")	79.3	28.5		
Average Family Size	2.88	4.69	3.09	4.59

Data Source: NI, Census of Population 1961, *Fertility Report*, Table 7.

Thus very little of the excess of RC over OD fertility in NI is attributable to the concentration of the RC population in high fertility social groups. A caveat must, however, be entered regarding the currency of these data: figures for completed family size of necessity refer to the behaviour of the last generation.

The fertility figures by social group facilitate detailed comparisons of the level of fertility in each religion in NI and RI. Some adjustments, however, are required to achieve comparability between the classification of social groups used in the two areas. It was not considered feasible to reconcile the following groups: Employers, Large and Small Establishments; Personal Service Workers; Own Account, Non-Professional (NI categories); Employers and Managers; Other Non-Manual Workers (RI categories). Some of the remaining groups in each area have been amalgamated in the belief that the broadly defined groups are more nearly identical in coverage between the two areas. The results of these comparisons are presented in Table 4. The data refer to all ages at marriage under 45 years, and no account is taken of the slight variations between areas in the age at marriage within each religious-social group. It should also be kept in mind that the occupational grouping is based on the husbands' occupations, while the religion of the wife determines the family's religion for Census purposes.

The RC/OD differentials in each occupational group are consistent in both areas, and the very high relative fertility of the RC population is once more apparent. It is also clear that the social group differentials follow the same general pattern in each area and religion, with the professional group having the lowest, and unskilled labourers the highest, fertility. There is a slight tendency for RC fertility in each occupational group to be higher in NI than in RI, with an even weaker indication of a similar pattern for OD fertility.⁷

⁷A more detailed comparison of the two areas by religion, occupation and age at marriage shows that the NI/RI differential is not attributable to earlier marriages in each occupation in NI.

TABLE 4: *Average Family Size, Marriages of Completed Fertility in 1961, Selected Occupational Groups by Religion, NI and RI, 1961*

	Social Group		Average Family Size	
	Number	Identification	RC	OD
NI	13+14	Farmers	4.62	3.32
RI	1		4.23	3.10
NI	15	Farm Labourers	4.72	3.79
RI	2		4.30	3.38
NI	3+4	Professional	3.61	1.98
RI	3+4	(Higher and Lower)	3.55	2.04
NI	5+6	Non-Manual	4.14	2.39
RI	6+7	Employees	3.60	2.07
NI	8+9	Skilled Manual	4.82	2.87
RI	9	Workers	4.31	2.68
NI	10	Semi-Skilled Manual	4.64	3.06
RI	10	Workers	4.57	3.08
NI	1	Unskilled Manual	5.11	3.49
RI	11	Workers	4.82	3.69

Data Sources: NI Census of Population, 1961, *Fertility Report*, Table 7.

RI Census of Population 1961, Vol. VIII *Fertility of Marriage*. The relevant cells of Table 15 have been summed for each religion and occupation.

The difficulties of reconciling the occupational classifications used in the two areas make this finding very tentative, but it is worth drawing attention to the absence of evidence that the legal or cultural ethos of RI tends to raise marriage fertility over its NI level, due allowances having been made for the occupational and religious distribution of the populations.

Nuptiality

From the viewpoint of the birth rate and its determinants, the marriage rate (or nuptiality in general) is important only to the extent that a married woman is more likely to bear children than an unmarried one. In both parts of Ireland this is, of course, very much the case: the ratio of annual births per 1,000 married women (aged 15-49) to births per 1,000 unmarried women (aged 15-49) is 29.6 in NI and 40.8 in RI. (The comparable ratio in England and Wales is much lower, standing at 5.3). Thus marriage rates are very important as a determinant of Irish birth rates.

Attention has previously been drawn to the lower nuptiality of the RC (compared with the OD) population in both NI and RI.⁸ The data of Table 5 summarize marriage levels by area and religion. It may be seen that the gap between the two religions was smaller in RI than in NI, due to the fact that OD nuptiality was lower in RI than in NI. This may be a reflection of the very small size of the OD community in RI, combined with a desire to avoid inter-marriage. In both areas the RC married population was on average slightly older than the OD married population, while there was a striking contrast in the age structure of the married populations between NI and RI, with much larger percentages of the married women of both religions in the 15-29 age group in NI than was the case in RI. (This contrast between the age structures of the married populations in each area was reflected in the contrast between the crude and age-standardized fertility rates noted in Table 2). The difference in age structure of the married population between the areas is probably more a consequence of differences in past migration rates than evidence of higher age- and religion-specific marriage rates in NI. From Table 5 it is clear that the gap between the nuptiality of the two religious groups narrowed somewhat in both areas over the post-war period.

TABLE 5: *Nuptiality by Religion, NI and RI*

Area and Date	Married Women Aged 15-44 as Percentage of All Women Aged 15-44		Married Women Aged 15-29 as Percentage of Married Women Aged 15-44	
	RC	OD	RC	OD
NI 1951	41.7	54.4	30.2	31.9
NI 1961	47.1	58.6	31.7	32.2
RI 1946	38.9	44.8	27.2	23.0
RI 1961	46.6	51.2	24.2	24.3
Leinster 1961	46.6	51.0	27.0	24.9
Dublin C.B. 1961	43.3	44.4	29.6	28.4

Data Sources: NI Census, General Reports.
RI Census, Vol. VII, pt. 1.

There may be some tendency for RC nuptiality to be higher in NI than in RI, although Table 5 shows only a slightly higher percentage of RC females to be married in RI than in NI, and the contrast in the age structure of the married populations cannot be taken as conclusive evidence of higher age-

⁸Cf. Brendan M. Walsh, *Some Irish Population Problems Reconsidered*, (Dublin, ESRI, 1968), Table 9.

specific marriage rates. Data for Leinster and Dublin have been included in the Table to allow comparison between NI and regions of RI that are highly urbanized and have experienced relatively low net emigration rates in the past. It may be seen that in these areas nuptiality is either almost the same or somewhat lower than in all of RI, and that the RC/OD differential is greatly reduced from its RI level in the case of Dublin.

Birth Rates

These religious differentials in marriage patterns are opposite in direction from the fertility differentials as regards their impact on the birth rate. It does not seem likely, however, that the nuptiality differential is large enough to more than partially offset the higher fertility of the RC married population. On the basis of the procedure used to distribute births by religion for Table 2 it is possible to construct a crude birth rate by religion, which is recorded in Table 6 (for this Table, of course, both legitimate and illegitimate births have been distributed). In NI the RC birth rate was about 40 per cent higher than the OD rate in both 1950-2 and 1960-2. The rise in both religions' rate over the decade is a reflection of the higher nuptiality prevailing at the end of the period. In RI, on the other hand, while the RC/OD birth rate differential in 1946 was almost the same as that found in NI in 1950-2 and 1960-2, the gap widened considerably in the years after 1946, and in 1960-2 the RC rate was 67 per cent higher than the OD rate. This increase in the RC/OD birth rate differential in RI may be in part attributed to the larger increase in RC nuptiality over the period (a 20 per cent rise, compared with 14 per cent for OD, cf. Table 5, left panel) and the greater fall in OD marriage fertility (18 per cent, compared with 8 per cent for the RC population, cf. Table 2-A). The incomplete nature of the data makes it impossible to estimate precisely the contribution of each of these factors to the widening of the differential in the birth rate, but the 20 per cent reduction in the OD rate over the period seems larger than would be expected on the basis of the estimated changes in OD fertility and nuptiality. Another curious aspect of the data in Table 6 is the much larger RC/OD birth rate differential in RI than in NI (1960-2): the ratios are 167 per cent and 145 per cent respectively. The marriage fertility

TABLE 6: *Crude Birth Rates (Annual, Per 1,000 Population) by Religion*

<i>Area</i>	<i>Date</i>	<i>RC</i>	<i>OD</i>
NI	1950-52	25.9	18.3
NI	1960-62	28.3	19.5
RI	1946	23.4	16.0
RI	1960-62	22.0	13.2

differential is roughly equal in the two areas (the RC/OD ratio is 168 per cent in RI and 176 per cent in NI: cf Table 2-A), so the main burden of the explanation would have to be borne by the difference in the nuptiality differentials in the two areas. The RC/OD ratio of proportions married (females, aged 15-44) is 91 per cent in RI compared with 80 per cent in NI, and the ratio of percentages of married females that are aged 15-29 (i.e. the third column of Table 5 divided by the fourth) is 99.6 per cent and 98.4 per cent in RI and NI respectively. It seems unlikely that these differences in the RC/OD differentials in percentages married are large enough (i) to offset the slight tendency for the RC/OD marriage fertility differentials to be smaller in RI than in NI and (ii) to give rise to the much greater excess of the RC birth rate over the OD rate in RI compared with NI. The data on birth rates by religion therefore suggest the operation of an influence such as mixed marriages in which the children of some married members of OD are raised (or returned in the Census) as RC.⁹ This factor appears to have greatly risen in importance in RI since 1946, but it does not seem to be at all important in NI. This topic will be taken up in more detail below.

The OD birth rate of 13.2 estimated for RI 1960-2 is extremely low by any standards. A search of the international data reveals that Hungary in the early 1960's was the only country with a lower rate (13.1 from 1963 to 1965), and the Hungarian rate has now risen to over 14.¹⁰ The low OD birth rate obviously raises the question whether the population is being replaced. It is not possible to estimate the death rate by religion, but since the crude rate for RI was 12.3 per 1,000 in 1961, the very much older than average age structure of the OD population (see below) makes it very likely that the OD death rate is higher than 13.2 and hence that this population experiences an excess of deaths over births (or natural decrease). For the fifteen-year period 1946-61 this question has been explored in detail using the data recorded in Table 7. The main tool used in the construction of this Table was cohort analysis of the 1946 population by religion and of the births (distributed by religion) occurring between 1946 and 1961. It may be seen from the Table that the experience of the 1946-61 period confirms our expectation of a natural decrease in the OD population of RI. The extraordinary contrast between the RC and OD demographic patterns is brought home by comparing the 9.7 annual average rate of natural increase of the RC population with the

⁹This phenomenon would also have some impact upon our measures of fertility. The data on average family size are classified by religion according to the wife's religion, so that a Protestant woman married to a Catholic man whose children were raised as Catholics would appear in our average family size data as OD. The impact of this on the average family size data could not be very great however, since the only distortion involved is the extent to which such marriages differ in average size from those where both husband and wife are the same religion. The "births per 1,000 married women" data would, however, be more seriously distorted in the case just considered, because an OD married woman is recorded as having no (OD) children. For the case where the mother is RC and the children are raised as RC, both our fertility measures are distorted only to the extent that the fertility of such marriages differs from that of RC marriages in general. Thus it is clear that the impact of mixed marriages on the OD birth rates is much greater than it is on either of our measures of fertility.

¹⁰United Nations, *Demographic Yearbook* 1967, Table 7.

TABLE 7: *Natural Increase of the Population, RI 1946-1961, by Religion*

	RC			OD		
	Males	Females	Total	Males	Females	Total
(1) Alive in 1946	1,413,071	1,372,962	2,786,033	81,806	87,268	169,074
(2) Expected Survivors to 1961	1,159,667	1,151,041	2,310,708	62,540	66,664	129,204
(3) Estimated deaths from 1946 pop. = (1) - (2)			475,325			39,870
(4) Estimated births 1946-61	463,951	439,565	903,516	17,787	16,365	34,152
(5) Expected Survivors to 1961 from (4)	438,180	419,937	858,117	16,776	15,617	32,393
(6) Deaths from (4) 1946-61 = (4) - (5)			45,399			1,759
(7) Total Estimated Deaths = (3) + (6)			520,724			41,629
(8) Estimated Deaths in Ireland = (7) × .971098			505,674			40,426
(9) Estimated natural increase in Ireland = (4) - (8)			+ 397,842			-6,274
(10) Annual Rate of Natural increase = (9) ÷ (Average of Actual 1946 and 1961 Populations) × 1,000 ÷ 15			9.7			-2.7

Basic Sources: RI Census of Population 1946, Vol. III, pt. 1; 1961, Vol. VII, pt. 1. Survivorship probabilities calculated for five-year age groups from data in *Census of Population 1966*, Vol. II, Table XIII.

Notes: (i) Line (8): .971098 is the ratio of the number of deaths actually recorded in RI between 1946-61 (546,100) to the total estimated in this Table (562,353). (ii) No attempt is made to estimate births among the emigrant population. The "natural increase" figures recorded refer to the natural increase of the relevant population in RI only.

2.7 annual average rate of natural decrease among the OD population. The growth potential (in the absence of net migration) of the RC population is thus 12.4 per 1,000 per year greater than that of the OD population. The demographic weakness of the OD population revealed in these data is due to the combined impact of the factors discussed earlier in this paper, namely, a very low marriage rate (by international standards), a high death rate (due to the age structure of the population), and the effect of mixed marriages in which the children are raised RC.

Another striking feature of the data in Table 6 is the extraordinarily high birth rate of the RC population of NI. At 28.3 this is higher than any recorded in Europe in recent years, with the exception of Albania. It is strikingly higher than the rate estimated for the RC population of RI because of the somewhat higher nuptiality and considerably different age structure of the NI RC population. Despite the high birth estimated for the RC population in NI, the contribution made by the lower RC (compared with OD) nuptiality in NI to holding the RC birth rate down is considerable. This point is illustrated by calculating the RC birth rate that would be found in NI on the assumption that actual (1961) RC fertility were to be combined with (1961) OD nup-

tiality.¹¹ This exercise leads to an expected birth rate of 34.2 per 100—extremely high by world standards, and some 25 per cent above the actual 1960–2 rate. Thus non-marriage is very important among the RC population of NI in offsetting the effects of its high marriage fertility.¹²

Age Structure

The age structures of the religious groups in NI and RI may be briefly considered. Table 8 records the levels of young, old and total dependency in each population. The level of total dependency in the RC population of both areas is much higher than that of the OD population, due exclusively to the excess of RC young dependency. In the case of NI the data show that there are 78 RC in the dependent age groups for every 100 RC in the active ages, compared with 57 per 100 in the OD population. On the other hand, the OD old dependency ratio is very high, especially in RI: with 17 per cent of its population aged 65 and over this population is older than that of any country in the world today, the highest country value being for the German Democratic Republic (14.5 per cent aged 65 and over). These levels of young and old dependency are the consequence of past levels of natural increase and actual population growth, and they in turn have an impact on current crude birth and death rates.

TABLE 8: *Age Structure by Religion 1961*

<i>Percentage of Total Population Aged</i>	<i>NI</i>		<i>RI</i>	
	<i>RC</i>	<i>OD</i>	<i>RC</i>	<i>OD</i>
0–14	35.2	25.5	31.7	20.9
65 and over	8.6	10.9	10.9	17.0
(0–14) + (65 and over)	43.8	36.4	42.6	37.9

NET MIGRATION RATES

In view of the much higher birth rate of the RC population in NI, the small rise in the RC percentage of total NI population since 1951 points to a much

¹¹The details of the calculation are as follows: taking the age-specific legitimate and illegitimate fertility rates for RI (1961) as an approximation to the NI RC rates, two hypothetical totals of live births were obtained, the first on the basis of the actual distribution of the NI RC female population by age and marital status, the second on the basis of the NI RC female population distributed between marital statuses in each age group in accordance with the (NI) OD percentages married and unmarried. The ratio of the latter expected number of births to the former (120.8 per cent) was then applied to the estimated RC birth rate to obtain the hypothetical rate quoted in the text.

¹²It is extremely unlikely that the RC population's birth rate would ever reach 34.2 since a case can be made which ascribes the present relatively low RC nuptiality to the relatively high RC fertility, and thus it may be expected that fertility will decline with rising marriage rates. Cf. Walsh, *op. cit.*

TABLE 9: *Estimated Net Emigration Rates by Religion, Sex and Age, NI, 1951-1961*
(Per 100 expected population)
+ = net immigration

Age in 1961	Males		Females	
	RC	OD	RC	OD
0-9	2.1	2.7	1.3	3.0
10-14	4.3	0.8	3.4	1.3
15-19	12.9	5.1	7.9	2.5
20-24	28.6	9.5	22.1	8.6
25-29	31.7	19.3	25.3	11.7
30-34	18.5	10.1	20.1	8.5
35-39	10.1	4.2	13.1	3.9
40-49	6.9	2.1	8.9	1.9
50-59	4.7	0.1	6.3	0.6
60-69	0.0	+ 1.2	+ 2.6	+ 5.6
0-69	10.1	4.5	8.8	3.0

higher net emigration rate among the RC population. This is generally presumed to be the case, and Barrett and Carter provide approximate estimates which substantiate this claim.¹³ In this section the religious differentials in net migration in both parts of Ireland will be explored in some detail.

Net migration between two census dates by religion, age and sex can be estimated by the following procedure: applying ten-year (or fifteen-year) survivorship ratios calculated from Life Tables to the 1951 (or 1946) population by age, an expected 1961 population may be calculated. The difference between this expected population and the population actually recorded in 1961 provides an estimate of net migration, which may be converted to a migration rate by division by the expected population.¹⁴

¹³*Op. cit.*, p. 107.

¹⁴Some of the technicalities of the calculations may be summarized here. For NI the basic source for the survivorship ratios was the NI Life Table 1950-2. Unfortunately 1950-2 was a period of unusually high mortality, as well as which there was a strong downward trend in mortality over the following decade. The result is that use of the 1950-2 Life Tables leads to a considerable overestimation of deaths between 1951 and 1961, most of which is concentrated in the older age groups. To avoid the major part of this distortion the calculation of migration rates for NI has been limited to the population aged 0-69 in 1961. Thus it has not been feasible to cross-check our estimates of NI migration with the Census totals, and some caution must be exercised in using the actual rates recorded. Our main concern is not with the rates themselves, however, but with the ratio of the rates between the religions, and this is not likely to be seriously affected by this problem.

For RI survivorship ratios were far more accurately estimated on the basis of those implied in Tables X-XIII of the Census, 1966, Vol. II, which employed three different Life Tables, one for each five years of the intercensal period. Hence the concordance between our estimates of net migration for RI and the Census totals is very close.

Births were assigned to each religion over the intercensal periods in accordance with the religious composition of the population aged under one year (or 0-2 years in RI) at each Census date, and mortality among the infant population was estimated from the Life Tables.

The migration estimates reflect any net movement between the religions that may have occurred, as well as movement by members of a religion out of the country.

TABLE 10: *Estimated Net Emigration by Religion, Sex and Age*
 RI 1946-61
 (Rate Per 100 Expected Population, + = net immigration).

Age in 1961	Males		Females	
	RC	OD	RC	OD
0-4	+3.0	2.5	+2.9	0.8
5-9	3.0	10.5	3.3	9.0
10-14	3.4	7.2	4.0	7.0
15-19	18.9	13.1	20.3	16.9
20-24	40.5	19.0	40.6	29.4
25-29	45.4	28.8	42.8	35.7
30-34	40.0	28.1	36.1	29.5
35-39	29.0	18.6	22.7	16.6
40-44	15.6	8.1	14.9	11.5
45-54	9.2	5.3	12.6	8.2
55 and over	0.7	+0.7	1.7	+1.2
All Ages	15.8	9.9	15.4	10.8

Table 9 records the estimated net emigration rate by religion, age and sex for NI, 1951-61. The age structure of net migration is similar in each sex and religion, with heavy net migration confined to those aged 15-39 years. A very much higher RC net emigration in both sexes is immediately clear from the Table, the RC rate for all ages 0-69 being more than twice the corresponding OD rate. The situation in RI is summarized in Table 10. (The different age groupings used in Tables 9 and 10 are explained in footnote 14 above). It is quite surprising to record a higher net emigration rate for the RC than for the OD population of RI. The common assumption seems to be that the OD population of RI experiences a higher net emigration rate and a number of reasons are often advanced to explain why this might be so: the small absolute size of the OD community in RI, the putatively stronger cultural ties of this community with Great Britain and NI, the low marriage rate in Ireland, and the possibility of religious and political discrimination. Our finding in Table 10 suggests either that these factors are not important or that they are more than outweighed by the greater urbanization and more favourable economic position of the OD community in RI. However, it is also true that the pattern revealed in Table 10 is in fact a reversal of migration differentials that existed before 1946, when the OD community had a net emigration rate from RI approximately 50 per cent above the RC rate.¹⁵

A complete picture of the components of population change by religion,

¹⁵Cf. Censuses of Population of Ireland, 1946 and 1951, *General Report*, (Dublin, 1958), Table 155.

1946-61, may be drawn for RI on the basis of our calculations of birth rates and net migration. (The corresponding picture for NI cannot be obtained due to our inability to obtain accurate estimates of net migration in the older age groups, and the generally lower accuracy of the estimate of migration numbers for this area: footnote 14 above). Numbers and rates of births, deaths and net migration are presented in Table 11: the rates have been expressed per 1,000 average (1946-61) population and relate to the entire intercensal period, and on both these accounts they differ from those presented in earlier Tables. The demographic weakness of the OD, *vis á vis* the RC, population may be seen to lie in a low birth rate and a high death rate, but not in a high emigration rate. The reasons for the high OD death rate and low birth rate have been discussed above.

The religious differentials in net emigration are so pronounced in both RI and NI that it is worth attempting to shed further light on the situation by comparing rates within regions in each part of Ireland. The RC population of NI is relatively concentrated in the poorer regions "west of the Bann", whereas the OD population of RI is relatively highly urbanized and concentrated in the Dublin region. For NI therefore the counties of Fermanagh and Antrim have been selected as representative of the poorest and richest areas, while for RI county Cavan has been selected as a poor area with a reasonably large OD population. Calculation of net migration rates for these counties serves as a crude attempt to remove the effect of the different occupational

TABLE 11: *Components of Population Change by Religion RI 1946-61*

	<i>Estimated Numbers (Thousands)</i>				<i>Population 1961</i>
	<i>Population 1946</i>	<i>Births</i>	<i>Deaths</i>	<i>Net Emigration</i>	
OD	169.1	34.2	40.4	17.9	144.9
RC	2,786.0	903.5	505.7	510.4	2,673.5
Total	2,955.1	937.7	546.1	528.3	2,818.4

	<i>Estimated Annual Average Rates Per 1,000 Average Population</i>			
	<i>Births</i>	<i>Deaths</i>	<i>Net Emigration</i>	<i>Population Decrease</i>
OD	14.5	17.2	7.6	10.3
RC	22.1	12.4	12.5	2.7
Total	21.7	12.6	12.2	3.2

Notes on derivation are contained in text and at end of Table 7.

distributions of the two religious groups, and is of interest in itself from the viewpoint of the regional distribution of the two populations.

From Table 12 it is clear that the religious differentials in migration found in NI as a whole are intensified in Fermanagh. Of course, greater caution is needed in using these estimates of county net migration: in the first place, the use of national Life Tables to calculate county death rates is inappropriate in view of probable regional variations in the death rate, and secondly "net migration" on the county level refers to movement into and out of the county regardless of destination (thus a Fermanagh resident who moves to Belfast is counted as an "emigrant" in Table 12), and finally, special factors affect the rather small numbers in some of the age-sex categories examined (the net inflow of young OD males to Fermanagh is probably due to the attraction of the boarding school Portora). In contrast with the Fermanagh experience, in Antrim the net inflow rates were almost the same for both religions over the decade. However, the calculation of net immigration rates is necessarily ambiguous: in Table 12 the base used is the expected (in the absence of net migration) population, but it could be objected that the migrants are not drawn from this population. The use of an alternative base (such as the population of NI less Antrim) would be even less meaningful, but it should be noted that if this base were employed the OD immigration rate to Antrim would be higher than the RC rate. Despite these qualifications it may be said that the contrast in net migration rates by religion is most marked in the poorer western counties, and least marked in a wealthy, rapidly growing county, where the net inflow of RC population was about equal to that of the OD population (when both inflows are expressed as a proportion of the population of the same religion already in the area). The contrast between Fermanagh and Antrim in migration differentials is reflected in the fact that between 1951 and 1961 the RC percentage of Fermanagh population fell from 55.6 to 53.2, while that of Antrim rose from 22.1 to 24.4.

In Cavan there was approximate equality between the RC and OD migration rates, 1946-61. That the OD rate was not higher is surely surprising in view of the proximity of the county to NI, with its very large OD population, and the very small absolute size of the Cavan OD population: in 1961 there were only 6,625 persons recorded as OD in Cavan (and only 885 OD single males aged 15-44). The higher net emigration of the OD population aged 0-14 is probably a reflection of the attraction of NI schools, but the near-equality of rates in all other age groups is both remarkable in itself and in marked contrast with the situation in neighbouring Fermanagh.

Some comparisons between NI and RI net emigration experience may be made at this stage. Between 1951 and 1961 the net emigration rate for RI (population aged 0-69 in 1961) was 16.3 for males and 14.7 for females.¹⁶

¹⁶Based on data in C. E. V. Leser, "Recent Demographic Developments in Ireland", *JSSISI*, *XXI* (III), Table 18.

TABLE 12: *Estimated Net Emigration Rates by Religion*

+ = net immigration

<i>Age in 1961</i>	<i>Fermanagh 1951-61</i>			
	<i>Males</i>		<i>Females</i>	
	<i>RC</i>	<i>OD</i>	<i>RC</i>	<i>OD</i>
0-9	3.5	3.1	3.6	5.3
10-14	5.9	+10.0	5.5	2.0
15-19	22.2	+3.1	23.3	12.0
20-24	44.0	2.6	50.0	20.7
25-29	39.3	17.3	44.8	17.4
30-34	28.7	12.5	21.5	1.4
35-39	15.1	4.8	11.2	+0.6
40-49	11.0	2.3	11.1	3.5
50-59	5.7	1.7	9.0	2.9
60-69	+4.3	+7.6	+2.2	+5.4
0-69	14.4	2.0	15.2	4.6

<i>Age in 1961</i>	<i>Antrim 1951-61</i>			
	<i>Male</i>		<i>Female</i>	
	<i>RC</i>	<i>OD</i>	<i>RC</i>	<i>OD</i>
0-9	+12.5	+4.8	+12.0	+4.8
10-14	+13.7	+5.4	+10.2	+7.0
15-19	+4.7	2.0	+5.1	+3.9
20-24	9.3	4.9	0.9	+4.8
25-29	6.9	0.8	+2.4	+10.8
30-34	+15.4	+12.8	+8.1	+11.5
35-39	+14.4	+9.6	+6.7	+6.7
40-49	+10.0	+6.1	+2.7	+5.1
50-59	+5.2	+5.3	+2.1	+4.0
60-69	+3.5	+7.0	+8.6	+11.2
0-69	+8.4	+4.4	+6.8	+6.5

<i>Age in 1961</i>	<i>Cavan 1946-61</i>			
	<i>Males</i>		<i>Females</i>	
	<i>RC</i>	<i>OD</i>	<i>RC</i>	<i>OD</i>
0-14	0.0	7.6	0.6	12.4
15-19	30.9	26.5	40.3	47.9
20-24	54.6	52.1	63.9	59.4
25-29	56.7	53.1	59.1	62.4
30-34	46.9	49.9	45.8	41.0
35-39	40.1	29.1	27.2	21.6
40-44	21.8	20.3	17.8	24.2
45-54	15.6	15.2	16.1	20.5
0-54	26.5	27.1	27.0	31.9

These rates for the combined religious populations of RI may in fact be taken as a good approximation to the RC rates, since well over 95 per cent of the emigration was from the RC population and even a very large RC/OD migration differential would cause the combined rate to differ very little from the RC rate (the approximation is necessary because the 1951 Census did not contain a question on religion). It is clear that these approximate rates for the RC population of RI, 1951-61, are very much higher than the RC rate from NI calculated in Table 9, last row. Thus, even though the RC emigration rate from NI was substantially greater than the OD rate from this area, it was lower than that for the RC population of RI over the same period. For the situation 1961-6, however, the position appears to have been reversed: with the net emigration for RI (all religions) only marginally higher than the corresponding NI rate (2.7 per cent of expected population compared with 2.5 per cent), if the same RC/OD migration differentials persisted in this period in NI as documented for the 1951-61 period, it is evident that the NI RC rate would have been substantially above the RI RC rate.

The picture emerging from this detailed discussion of the net emigration rates is simple enough: in NI the higher RC emigration almost fully offsets the relatively high RC rate of natural increase and the result is comparative stability in the religious composition of the total population. In RI on the other hand the lower net emigration of the OD population only partially offsets its lower rate of natural increase and thus its share in the total population has fallen steadily. Indeed the negative rate of natural increase documented for the OD population of RI indicates that their numbers are unlikely to grow in the absence of a substantial net inflow either from abroad or through change of religion.

In view of the importance of the OD/RC emigration differential in maintaining population balance in NI, it is of interest to explore the consequence of a hypothetical equalization of emigration rates. Population projections have been prepared under the following extreme set of assumptions, which are the most favourable possible from the viewpoint of the expansion of the RC share in total population: given the present (1960-2) birth rate differentials, equalize the net emigration rates at the rates experienced by the whole population between 1961 and 1966, and prepare projections of the population of each religion by age and sex. In Table 13 the results of this exercise are presented for the total and for the adult (aged 20 and over) population. A commentary on the social significance of the findings in Table 13 is best left to the concluding remarks, below, but some purely technical matters may be noted here. The increase in the RC share tends to accelerate over time, as the effect of lower emigration makes itself felt on the birth rate (the OD net emigration is actually raised over its present level in this exercise, hence the number of OD births falls for the earlier part of the projection). The RC share of the total population rises more rapidly than that of the adult population, a reflection of the younger age structure of the RC population. Finally, it should be recalled

that these projections start from the actual 1961 population, and that even the figures for 1966 are projections and are not at all likely to correspond to the actual (unknown) religious composition of the 1966 population.*

TABLE 13: *Projection of NI Population by Religion on Assumption of Equal Net Emigration Rates and 1961 Birth Rate Differentials*

(Thousands)

<i>Actual</i>										
	1961	1966	1971	1976	1981	1986	1991	1996	2001	2006
<i>Total Population</i>										
RC	497.5	538.1	581.3	628.6	681.8	742.3	810.7	887.7	973.7	1,069.9
OD	927.5	949.2	966.8	981.2	995.0	1,009.5	1,025.6	1,043.1	1,063.4	1,086.0
Total	1,425.0	1,487.3	1,548.1	1,609.8	1,676.8	1,751.8	1,836.3	1,930.8	2,037.1	2,155.9
% RC	34.9	36.2	37.6	39.1	40.7	42.4	44.2	46.0	47.8	49.6
<i>Population aged 20 and over</i>										
RC	277.6	293.2	312.9	333.3	357.7	387.5	419.9	456.3	498.7	547.6
OD	615.2	626.8	634.4	635.8	640.8	651.0	659.4	667.2	677.5	690.8
Total	892.8	920.0	947.3	969.1	998.5	1,038.5	1,079.3	1,123.5	1,176.2	1,238.4
% RC	31.1	31.9	33.0	34.4	35.8	37.3	38.9	40.6	42.4	44.2

NOTES: Projections calculated by applying the actual "Survivorship in NI" ratios for the total population, 1961-66, by age and sex, to the 1961 population by religion, and repeating this process for the succeeding intervals.

Births have been projected by applying the 1960-2 "births per 1,000 women aged 15-44" rates by religion to the average projected populations of women for each intercensal period. Infant mortality has been ignored.

OCCUPATIONAL DISTRIBUTION

The question of the occupational distribution of the two religious groups has arisen in connection with fertility and net migration differentials, and is obviously of interest in itself. Detailed tables of occupations by religion and sex were published in the 1961 RI Census (Volume VIII, Part I, Table 11) but no comparable data have been released for NI. In this connection an obvious point about the preparation of Census material should be made: while it may be questioned whether the inclusion of a question on religion in the Census is appropriate in the first place, it seems clear that given such a question has been asked, the returns should be processed to give an accurate and complete profile of the religions, and this implies compiling the occupational distribution of the population cross-classified by religion. The omission of these cross-classifications from the NI published returns is unfortunate. It is, however, possible to get some idea of the religious distribution by occupation

*While the present study was in proof stage, my attention was drawn to a forthcoming study by F. W. Boal and P. A. Compton in which the topic of projecting the religious composition of the NI population is explored in detail.

on the basis of the *Fertility Reports*, in which families are classified by religion and social group. Although the resulting figures relate only to wives aged over 45 in 1961 (and married before reaching age 45), classified by their husband's occupation, they constitute a more complete picture of the occupational distribution of the religions than can be compiled from any other source. A very clear pattern emerges from Table 14 with the RC population conspicuously underrepresented in the Employer, Professional and Foreman groups, and overrepresented in the Agricultural Labourers, Personal Domestic Service and Unskilled groups. It is important to recall that these data under-report any group in which celibacy is unusually common, domestic service or agricultural labouring for examples, so that the actual concentration of the RC population in these occupations is probably much greater than indicated in Table 14.

TABLE 14: *Occupational Distribution of Married Women (Aged 45 or over in 1961, and under 45 at marriage) by Religion, NI, 1961 (Classified by Husband's Occupation)*

<i>Group</i>	<i>% of RC Population</i>	<i>% of OD Population</i>
I. Employers—Large Establishments	1.50	5.74
II. Employers—Small Establishments	4.29	5.82
III. Professionals—Self-employed	0.40	1.36
IV. Professionals—Employees	0.36	1.32
V. Intermediate—non-manual	2.20	3.24
VI. Junior—non-manual	6.60	10.83
VII. Personal Service Workers	1.32	0.45
VIII. Foremen and Supervisors—Manual	1.72	3.66
IX. Skilled manual workers	15.51	22.03
X. Semi-skilled manual workers	10.92	12.12
XI. Unskilled manual workers	22.29	12.90
XII. Own A/C non-professional	6.12	4.56
XIII. Farmers—employers, managers	1.94	2.96
XIV. Farmers—own A/C	18.49	10.43
XV. Agricultural workers	6.34	2.58
	100.0	100.0

Data Source: As Table 4.

A comparison between the occupational distribution of the two religious groups in NI and RI is feasible if some adjustments are made to the occupational groupings similar to those performed in connection with Table 4, above, to achieve rough comparability between the RI and NI groupings. Data on this basis are set out in Table 15. (As far as RI is concerned it should be recalled that a far more complete and meaningful picture of the occupational distributions by religion is provided in the Census volume mentioned above). An important showing of Table 15 is that the pattern of religious over- and

under-representation in occupational groups is broadly the same in both RI and NI. The occupational distribution of the OD population of Dublin has already been commented on and attributed largely to an inherited advantage.¹⁷ There are, however, some striking and important differences between the situation in the two areas. Higher percentages of both religions are in farming occupations in RI. RI apparently offers a greater opportunity for professional employment, perhaps due to the existence of a national governmental structure in Dublin.¹⁸ The concentration of the OD population of RI in "non-manual employees" is remarkable, and fully borne out by the more detailed Census tabulations referred to above. In two groups, namely, skilled and semi-skilled manual workers, the RC/OD differentials are reversed between NI and RI. Although a judgement as to the reasons for this contrast between the regions is necessarily subjective, the Table suggests that in the case of skilled manual workers the small number of RC in this group in NI is the "abnormal" case, while with semi-skilled workers the almost complete absence of an OD "working class" in RI accounts for the contrast.

TABLE 15: *Comparison of NI and RI Occupational Distribution by Religion on the Basis of Fertility Data*

Occupational Group	Number of each religion in each group as percentage of total number in that religion			
	NI		RI	
	RC	OD	RC	OD
Farmers	23.5	16.0	38.2	31.0
Farm Labourers	7.3	3.1	8.9	2.9
Professional	0.9	3.2	5.1	11.7
Non-manual Employees	10.1	16.9	14.9	41.0
Skilled Manual Workers	19.9	30.8	14.3	10.1
Semi-skilled manual Workers	12.6	14.5	7.1	1.7
Unskilled manual Workers	25.7	15.5	11.5	1.6
	100.0	100.0	100.0	100.0

Sources: as for Table 4.

Note: The groups covered in this Table do not include a number of those used in Table 14, due to difficulties of reconciling NI and RI definitions.

¹⁷Cf. Bertram Hutchinson, *Social Status and Inter-Generational Social Mobility in Dublin*, (Dublin, ESRI paper no. 48, 1969), Table 5.

¹⁸Cf. *Ibid.*, Table 3. There is, however, some tendency for the NI definition of "professional" to be more exclusive than that applied in RI: in NI this classification is restricted to "work normally requiring a university degree", whereas in RI it includes nurses, teachers and some others who may not be graduates.

Mortality

It has been assumed throughout this paper that age-specific mortality rates are identical in both religious groups. This was necessary in order to allow the calculation of net migration rates on the basis of one Life Table for each area. There is no information available on the subject of religious differences in mortality, but in view of the very considerable contrast between the occupational composition of the two groups it is worth drawing attention to Park's study of occupational mortality differentials in NI.¹⁹ Excluding agricultural occupations, there seems to be a fairly close relationship between age-specific mortality and skill level, with relatively high mortality among labourers and unskilled manual workers. The occupational distribution of the RC population in NI and RI would therefore appear to predispose it to above average mortality, although the existence or importance of this differential cannot be documented. If such a differential does exist then we shall have very slightly over-estimated the RC/OD migration differential in NI, but this effect is most probably insignificant.

MIXED MARRIAGES

Marriages between religious groups are likely to be most important when one religion is very small percentage of the total population: the restricted choice of partners available within a numerically and proportionally very small group increases the likelihood of marriage across traditional boundaries. Thus the impact of mixed marriages would be expected to be greater on the OD population of RI than on that of NI, even if the levels of religious segregation were equal in the two areas, while it is unlikely to be important for the RC population of either area.²⁰ Our concern with mixed marriages derives solely from the impact of the *Ne Temere* decree on the religion of the offspring, since if a member of the OD population marries and raises his children as members of the RC community this marriage contributes nothing to the OD birth rate. The loss of OD children in this manner could have a substantial impact on the OD birth rate in RI, but in view of the relative sizes of the RC and OD communities it is unlikely to have a noticeable impact on the RC rate.

No data are published or obtainable on this question, but indirect evidence can be adduced as to the importance of the phenomenon. In connection with our discussion of the birth rate attention was drawn to a greater disparity between the OD rate in NI and RI than seemed attributable to the recorded differences in the nuptiality and fertility of the OD population in the two areas. Mixed marriages in which one parent is OD but all the children are

¹⁹A. T. Park, "Occupational Mortality in Northern Ireland (1960-62)", *JSSISI*, 1965/6, XXI (IV), 24-42.

²⁰Mixed marriages are, however, believed to be an important factor in the demographic position of the RC population in Britain. Cf. J. A. Jackson, *The Irish in Britain*, (London, 1963), p. 148.

RC would have accounted for the anomaly. More direct evidence on the subject is available from a consideration of marriage rates and nuptiality by religion. Attention has previously been drawn to the paradox that, although the OD marriage rate is lower than the RC rate in RI, the percentage of the adult population that is unmarried is higher among the RC than among the OD population.²¹ This paradox was attributed to the effects of higher OD net emigration, a solution that is now seen to be erroneous (i) because in fact the OD emigration rate was lower in the post-war period than the RC rate, and (ii) since it is probable that the proportion of unmarried persons in the Irish emigrant stream is higher at each age than it is in the remaining population, the higher RC emigration rate should tend to lower the proportion of the remaining RC population that is unmarried. Thus, the solution to the puzzle cannot lie in differential migration rates.

Examination of the data presented in Table 16 shows that the discrepancy between marriage rates and marriage levels by religion found in RI does not exist to any appreciable extent in NI. The reconciliation of the RI data on marriages can be achieved by considering the effect of mixed marriages: the marriage rate by religion calculated in Table 16 is based on the assumption that the number of OD brides and grooms equals the number of brides and grooms in marriages celebrated in an OD ceremony. If, for example, a Protestant man married a Catholic woman in a Catholic ceremony, this would show as an RC bride *and groom* in our data. But the Protestant groom, who has not been included in our data on OD marriage rates, will be recorded as a married OD male in the Census data. Thus the OD marriage rate is understated to the extent that mixed marriages occur in Catholic ceremonies (and these are the only mixed marriages of interest in the present contest), while the Census data on percentages married will contain no such bias. To estimate the impact of this phenomenon on the OD population, it seems safe to assume that the true OD marriage rate is at least as high as the RC rate (in view of the higher percentages of the OD population that are "ever-married"). Thus the OD marriage rate recorded in Table 16 should be raised from 30 to 42 for males and from 44 to 55 for females. This implies that somewhere in the region of 200 OD grooms and 125 brides were married to RC partners in 1961, amounting to almost 30 per cent of all OD grooms and 20 per cent of all OD brides. While these calculations are quite tentative and approximate, they do serve to establish conclusively that, in 1961 at least, mixed marriages had a major impact on the demographic position of the OD population of RI. It is also clear that this impact is greatest on OD males, a finding that might have been expected on the basis of the presumed greater eagerness of RC women to marry (or reluctance of RC males) and the general tendency for women to marry upward socially,²² which in RI would entail marriage to OD grooms

²¹Cf. Walsh, *op. cit.*, p. 12.

²²Cf. Jerzy Berent, "Social Mobility and Marriage: A Study of Trends in England and Wales", in *Social Mobility in Britain*, (London, 1954), edited by D. V. Glass, p. 326. I am indebted to my colleague Bertram Hutchinson for this reference.

more frequently than would be the case with marriages at random in the population. It is also clear that the impact of mixed marriages on the RC population is trivial, since the estimated numbers of OD brides and grooms in these marriages amount to less than 2 per cent of all RC grooms and brides.

There is a further source of evidence on mixed marriages, although one which must be interpreted with some care. It has generally been observed in Ireland that there is an excess in the number of wives over the number of husbands recorded in each Census. The Emigration Commission *Report* commented on this as being "in large measure" probably due to "male emigration, especially seasonal emigration" (Table 56, note (b)). In 1961 there was an excess of 14.6 thousand females over males in the married RI population, equal to 3.1 per cent of married females (a surprisingly high percentage to be affected by migration, especially in April when seasonal movements are at a minimum). When broken down by religion, however, it may be seen that the excess for the RC population was 15.9 thousand (or 3.75 of RC married females), whereas there was a deficit of OD married females over males amounting to 1.3 thousand, or 4.4 per cent of OD married males. Whether the entire excess of females in the married RC population can be attributed to seasonal or other migration cannot be decided here, but it seems unlikely that the entire deficit of females in the married OD population is due to this cause. No doubt some of the deficit is attributable to the excess of married male over married female OD visitors in the country (e.g. commercial travellers), but it is also plausible to accept the deficit of OD wives as evidence of a surplus of OD males married to RC females over RC males married to OD females. Thus the data on the marital status of the population by religion provide some further, if very tentative, support for the thesis that mixed marriages are more frequently contracted between OD males and RC females than *vice versa*.

The impact of mixed marriages on the OD birth rate cannot be numerically estimated, but its direction is clear, and analogous to a fall in OD marriage rates. A secondary impact, whose magnitude we are also unable to estimate, is the increased probability that one partner in a mixed marriage will change his or her religion as a consequence of the marriage: at least in the United States this has been found an important phenomenon,²³ and in Ireland to the extent that it operates it may be presumed to result in a net movement from OD to RC.

Table 16 also reveals that the NI situation is not similar in regard to mixed marriages to that found in RI. The NI data on marriage rates (calculated by religion on the basis of the type of ceremony) agree very closely with the Census data on marriage levels. The apparent unimportance of mixed marriages in NI may be due either to a lower level of social integration between the two groups or to the much larger absolute and relative size of the religious minority in NI than in RI.

²³Cf. Gerhard Lenski, *The Religious Factor: A Sociological Study of Religion's Impact on Politics, Economics, and Family Life*, (Garden City, N.J., 1961), p. 49.

TABLE 16: Comparison of Marriage Rate and Percentage Married Data by Religion, RI and NI, 1961.

Area	Marriages Registered by Form of Ceremony		Marriage Rate Per 1,000 Unmarried Pop. 15-44		Percentages married, Population Aged 15-44		Ratio (OD/RC) of			
	Grooms Aged 15-44	Brides Aged 15-44	Males	Females	Males	Females	Marriage Rates	Percentages Married		
RI	RC	13,651	14,249	42.0	54.6	33.4	46.6	Male	0.712	1.099
	OD	491	520	29.9	44.1	36.7	51.2	Female	0.808	1.099
NI	RC	Grooms (All Ages) 3,285	Brides (All Ages) 1,285	59.5	64.1	39.8	47.1	Males	1.202	1.259
	OD	6,576	6,576	71.5	84.3	50.1	58.6	Females	1.315	1.244

Sources: RI: Census of Population, 1961, Vol. II. Report on Vital Statistics, 1961, Tables 41 and 42.

NI: Census of Population 1961, General Report. Fortieth Annual Report of the Registrar-General, Table D.

Note: For NI, data by age at marriage and form of ceremony are not available. 1961 was a year of apparently unusually low OD marriage rate in RI. If the average of the years 1960-2 is taken, the ratio in the second last column rises somewhat to 0.772 for males and 0.825 for females.

RECENT TRENDS

The 1961 Censuses of Population in NI and RI are the most recent sources of detailed information on the religious composition of the Irish population, and all of the discussion up to this point of the present paper has been concerned with 1961 or earlier. The possibility of major changes in demographic behaviour by religion since 1961 cannot be ruled out and it would obviously be desirable to have some notion of developments during the 1960's. This section tries to draw together some piecemeal evidence for the period 1961-66.

There were no very marked changes in the overall level of the vital rates in either part of Ireland between 1961 and 1966. In both areas the marriage rate rose slightly, and the birth rate also increased by a small percentage of its 1961 value. Marriage fertility declined slightly. The most important change of all, however, was the substantial reduction in net emigration rates from RI, a reduction that almost equalized RI and NI emigration rates and led to a significant rise in the population of RI.

Unless some rather improbable combination of events occurred, the overall stability in birth, marriage and fertility rates in both areas is evidence of a similar stability in the vital rates within each religious group and consequently indicates an approximately unchanged differential between the religions. In the case of NI it is possible to select a few areas that were predominantly RC or OD in 1961 and to compare the situation in these areas in 1966 to ascertain whether any evidence of a change in the differentials can be found. The only check that can be performed for RI with the available data is to examine trends in the religious composition of the national school enrolments and marriages. Obviously, both these attempts to establish the 1961-66 trend are very crude and approximate indeed.

Table 17 presents the NI data. Taking Ballyclare and Bangor as OD areas and Strabane and Newry as RC areas, the overall contrast remains much the same in 1961 and 1966. The small changes in nuptiality and fertility that are recorded between the two dates are hardly significant evidence of a narrowing of the religious differential because they could easily be accounted for in terms of extraneous factors (such as the changing religious composition of the areas, or differences in net migration over the intercensal period). It is, however, worth calling attention to the fact that nuptiality rose much more rapidly in the RC areas, while RC fertility appears to have fallen somewhat and no reduction occurred in OD fertility. If these changes were representative of developments in the province as a whole they could point to a slight narrowing of the religious differential in these rates. From line (4) of the Table, however, it is clear that in all areas the rising marriage rates more than offset the falling marriage fertility, and a general rise in birth rates was experienced, with no tendency for the religious differentials in birth rates to narrow. Our data allow of no test on the probable course of net migration rates by religion over the period since 1961.

TABLE 17: *Some Indicators of Demographic Trends by Region in NI 1961-66*

Predominant Religion:		OD				RC			
Area		Ballyclare UD (County Antrim)		Bangor MB (County Down)		Strabane UD (County Tyrone)		Newry UD (County Down)	
Date		1961	1966	1961	1966	1961	1966	1961	1966
[1]	% of Area's Population RC	5.5	n.a.	9.1	n.a.	78.1	n.a.	83.8	n.a.
[2]	Married Women 15-44 as percentage of All Women 15-44	60.1	61.5	59.1	62.4	51.1	57.3	45.2	48.7
[3]	Children 0-4 per 1,000 Married Women 15-44	667	672	659	697	1,334	1,293	1,204	1,148
[4]	Children 0-4 per 1,000 (total) women 15-44	401	413	389	435	681	739	544	559

n.a. = not available.

Data Source: NI, Census of Population, 1961 and 1966, County Reports.

There are no areas of RI sufficiently OD for similar calculations to be made for the 1961-66 period. Some very indirect and tentative evidence on recent trends is, however, available from figures on national school enrolment by religion of pupils. These data are summarized in Table 18. It may be seen that the OD enrolment declined both absolutely and as a percentage of the total between 1961 and 1966. It also appears that all of this contraction occurred outside the Dublin area: in Dublin OD enrolment grew by over 400 pupils and remained almost unchanged as a percentage of the total. Of course the fall in OD national school pupils between 1961 and 1966 could be explained by factors other than a fall in the number of OD children in the country: for example, the percentage of OD children in national schools may have fallen (in 1961 OD national school pupils amounted to only 62.4 per cent of the OD population aged 5-14, compared with a figure of 88.2 for RC). The most that can be concluded on the basis of the data in Table 18 is that they provoke no suspicion of a dramatic reversal of earlier trends in the OD population. It is however particularly important to note that a large influx of foreign-born OD parents might have had little impact on national school enrolment, and thus this possibly significant source of numerical strength to the OD population of RI would not be registered in the data of Table 18.

The number of marriages in OD ceremonies in RI has risen from 557 in 1961 to 706 in 1969, an increase of 27 per cent (marriages in RC ceremonies rose from 14,772 to 19,157 over this period, or by 16 per cent). This substantial rise in the number of OD ceremonies could indeed indicate a reversal of the trends documented in the present study for the period 1946-61, but factors other than a rise in the OD population of RI may also be at work. First, the

TABLE 18: *RI National School Enrolment by Religion of Pupils, 1961 and 1966*

Area	Year	Thousands			% OD
		RC	OD	Total	
Dublin City and County	1966	121.9	3.9	125.8	3.12
	1961	109.0	3.4	112.4	3.13
Rest of RI	1966	372.3	8.1	380.4	2.13
	1961	381.2	9.6	390.8	2.52
RI	1966	494.2	12.0	506.2	2.38
	1961	490.2	13.0	503.2	2.58

Source: An Roinn Oideachais, Tuarascail, 1960/61, Table 14; 1965/66, Table 16.

increase in OD weddings is probably in part a reflection of the presumably rising level of OD nuptiality. Secondly, some of the increase could be due to a decline in the importance of mixed marriages, although there are no data on which to base this assumption. Finally, since a very high percentage of the partners in OD ceremonies declare an intended future residence "outside Ireland", it is obvious that care must be exercised in projecting the implications of a rise in OD weddings for the future OD population of RI. In short, then, the trend in marriages by form of ceremony since 1961 suggests that the downward course of the OD population of RI may have been checked, but the available evidence is very incomplete.

The present demographic situation among the RC population of RI is probably very unstable: marriages have been rising very rapidly (an increase of 18 per cent between 1966 and 1969), while the number of births recorded in 1969 was only 1 per cent above the number for 1966. It is impossible to evaluate the long-run implication of these figures for the religious differential in fertility in RI until more complete data become available.

SUMMARY OF MAIN FINDINGS

On the basis of Census of Population and Vital Statistics data it has proved possible to compile a fairly complete picture of the demographic behaviour of the two religious communities in both parts of Ireland. The main points of contrast between these communities may be summarized under the following headings:

1. In both NI and RI, RC marriage fertility is about 50 per cent higher than that of the OD population. This is reflected in average family size by occupation

(completed families, 1961), and by the more current data on births per 1,000 married women. The contrast in the occupational distributions of the two religious groups accounts for very little of the aggregate fertility differential.

2. In both areas the RC population has a lower nuptiality than the rest of the population, with a larger percentage remaining unmarried at all ages. It was not possible to compare nuptiality by occupation and religion.

3. In 1961, the RC birth rate was 50 per cent higher than the OD rate in NI, but 70 per cent higher in RI. The OD death rate in RI was considerably above the RC rate, and the combined effect of these differentials was to give the RC population a rate of natural increase greatly above that of the OD population. In RI between 1946 and 1961 the OD population actually experienced a natural decrease (that is, an excess of deaths over births).

4. In NI the net emigration rate, 1951-61, was very much higher among RCs than ODs—more than twice as high for males, and almost three times as high for females. Even more pronounced differentials were recorded at the county level for Fermanagh, but for Antrim the differential was reversed. In RI the net emigration rate, 1946-61, was also higher among the RC population, but here the excess amounted to only 50 per cent of the OD rate for males and females.

5. One reason for the extremely low OD birth rate in RI appears to be the prevalence of mixed marriages in which children with one OD parent are raised RC. It was estimated that about 30 per cent of all OD grooms and 20 per cent of OD brides married Catholics in Catholic ceremonies in RI in 1961.

6. The overall effect of these differentials in demographic behaviour has been to maintain approximate stability in the religious composition of the NI population in recent decades, while the OD proportion of the RI population has fallen steadily.

Although the primary focus of this paper has been on the religious differentials within each part of Ireland, some comparisons between the behaviour of the religions in the two areas may also be drawn.

1. There is a general similarity of demographic behaviour within each religious group between the two areas of Ireland. This is particularly true with regard to marriage fertility.

2. There was a slight tendency for the RC population to have a higher level of nuptiality in NI than in RI and this combined with the more favourable age structure of the RC population in NI resulted in a considerably higher RC birth rate in NI compared with RI.

3. OD nuptiality in RI was very much below its level in NI, presumably a reflection of the small absolute and relative size of the RI OD community.

4. The religious minority in RI had a below average net emigration rate, in contrast with NI where the religious minority's emigration rate was over twice the majority's rate. On the county level, the enormous migration differential found for Fermanagh was not found in Cavan, where approximate equality in migration rates by religion prevailed.

5. Mixed marriages appeared to be a far more important phenomenon for the OD population of RI than for either religious group in NI.

Finally, an examination of some limited evidence for the year 1966 suggests that the trends documented for the post-war period have not been dramatically reversed or modified in the period since 1961.

CONCLUDING COMMENTARY

This paper began with a reference to the fear of "out-breeding" common among the more prosperous sections of culturally divided communities. Such fears reflect, of course, essentially subjective judgements of a social situation which cannot be justified or dissipated by an objective statement of the facts. In a similar manner, the facts presented in the present study cannot answer the question whether the Catholic population of Ireland is "outbreeding" the Other Denominations: the inferences drawn from the data can vary according to the reader's *parti pris*. Nonetheless, it is possible to conclude with a commentary based on the more or less indisputable implications of our findings.

It is very clear that Ireland is at present composed of two religious communities with strikingly different patterns of demographic behaviour. The religious division of the country into Roman Catholic and Other Denominations is, from a demographic viewpoint, far more real than the political division into Northern Ireland and the Republic. The net result of the contrasting marriage and fertility patterns of the religious groups is to give the RC population far greater strength than is shown by the OD. In both parts of Ireland, but most strikingly in Northern Ireland, the RC population's higher rate of natural increase is counteracted by a higher net emigration rate. The outcome of this situation in recent decades has been approximate stability in the religious distribution of the population of Ireland.

The most striking demographic feature of the religious situation in the Republic is the extremely weak position of the OD. This weakness is far more serious than a mere failure to match the demographic strength of the RC population: any population which experiences a substantial natural *decrease* over a fifteen-year period, as we have estimated was the case for the OD in the Republic between 1946 and 1961, is obviously in serious danger of eventual extinction. It has been shown in this study that the OD difficulties are not the result of a high emigration rate, since the natural decrease is the result of birth and death rates alone, and in any event the OD emigration rate from the

Republic is below the RC rate. The natural decrease reflects a low marriage rate, moderately low marriage fertility, an abnormally old population age structure (the consequence of a falling population in previous decades), and the impact of mixed marriages in which all the offspring are raised as Catholics.

The prognosis for the Other Denominations in the Republic must be gloomy. The forces at work could not be expected to reverse themselves either suddenly or fully. It is true that a growth in secularism may swell the numbers returning "No Religion" or "No Statement" in the Census and thereby increase the number recorded in "Other Denominations", and that the probably greatly increased inflow of foreign-born persons to Ireland since 1961 will also add numerical strength to the religious minority, but it is obvious that both these sources of growth imply drastic changes in the nature of the Other Denominations community.

In Northern Ireland rather different issues are at stake. Neither community is as weak demographically as the religious minority in the Republic. From Table 1 it was clear that the long-run trend in Northern Ireland does not show a growing proportion of Catholics in the population: the most striking aspect of the last hundred years is the substantial fall in the Catholic proportion after 1861, compared with which the rise in this proportion since 1937 has been slight. Park's study revealed that the RC/OD fertility differential only became substantial after 1937, and may even have been in the reverse direction (that is, RC fertility lower than OD fertility) between 1871 and 1901.²⁴ The rapid fall in the RC share in total population between 1871 and 1901 seems to have been due to a combination of above average RC emigration and a level of RC fertility that was at least no greater than the national average. The slow increase in the RC share of total population since 1937 seems to reflect the emergence of a fertility differential great enough to offset the high RC emigration rate, and this fertility differential emerged, not as a result of a rise in RC fertility, but due to a fall in OD fertility.

The evolution of the present situation in Northern Ireland, in which there is a gradual rise in the Catholic share in total population, must be kept in mind in trying to anticipate future developments. In Table 13 population projections were presented to illustrate the impact of an extreme set of assumptions on the religious composition of the NI population. From this exercise it emerged that 45 years after the equalization of emigration rates, assuming existing birth rate differentials are maintained, the RC share in total population would have risen to approximately 50 per cent, while in another 10 years the RC population would constitute a majority of the adult population. These projections are highly unrealistic, of course. The emigration differential will not disappear suddenly, and if it is reduced this may well happen in an atmosphere that will imply a substantial reduction in the birth rate differential. Ironically, the conditions that would lead to the removal of the emigration differential (that is, the disappearance of the contrast in the occupational

²⁴Cf. "An Analysis of Human Fertility", *op. cit.*, p. 4 and Table 4.

distribution of the two religions) might also entail a growing indifference to the question of the religious composition of the population.

It is true that there is some evidence to suggest that even in situations where religion is not a major source of social conflict, Catholic marriage fertility remains well above average (due allowances having been made for income level, etc.)²⁵ Our own exercise in "occupation-standardizing" the fertility rates for Northern Ireland resulted in little reduction in the religious differential, suggesting that even if the two religions were equally distributed by occupational groups, the fertility of the Catholic population would remain relatively very high. Of course such a drastic occupational restructuring of the population will probably only occur in the course of a number of generations and during this interval the overall NI fertility level, as well as that of the RC population, may well fall substantially: obviously, the simple statistical exercise of occupation-standardizing fertility rates is little guide to the probable course of events over a number of decades.

On balance it seems probable that greater equality of opportunity for the RC population of NI—with its concomitant of equalized emigration rates—would lead to a more rapid rise in the RC share in total population that has been occurring in recent decades. This prospect should, however, be seen in a number of perspectives. In the first place, NI would by no means be unique in experiencing a substantial shift in the religious composition of its population: in the Netherlands, for example, the RC share in total population rose from 35 per cent in 1889 to 40 per cent in 1960, without serious social conflict.²⁶ Secondly, the course of RC fertility in a situation of equal economic opportunity is impossible to forecast, but it is not unimaginable that the sharp fall in fertility experienced in countries such as Italy and Spain since the war could be replicated among the RC population of Ireland in the not-too-distant future. If this occurs, then, of course, the equalized emigration rates would no longer imply an increasing RC share in total population. Finally, our calculations show that even under assumptions extremely favourable to the growth of the RC population it would be some 25 years before its share had regained the level it held in 1861, and about 50 years before it reached a majority. It is scarcely too much to hope that, by this time, the religious division of the Irish population would have ceased to be a source of social conflict.

²⁵Cf. Thomas K. Burch, "The Fertility of North American Catholics: A Comparative Overview," *Demography*, Vol. 3, No. 1 (1966) pp. 174-187.

²⁶Cf. Alfred Sauvy, *The General Theory of Population*, (London, 1969), p. 376.

APPENDIX

Migration between Northern Ireland and the Republic of Ireland

R. C. GEARY and J. G. HUGHES*

There were twice as many persons born in the Republic of Ireland (RI) living in Northern Ireland (NI) as *vice versa*, 53,124 compared to 27,129 in 1961, despite the fact that the population of RI is about twice that of NI.

TABLE A1: *Persons Born in Irish Republic Living in Northern Ireland (Out) and Persons Born in Northern Ireland Living in Republic (In), 1961. Numbers and Percentages of Population. Male, Female, Persons*

<i>Direction</i>	<i>Male</i>	<i>Female</i>	<i>Persons</i>
	<i>Number</i>		
Out	20,796	32,328	53,124
In	12,872	14,257	27,129
	<i>% Population of Republic</i>		
Out	1.52	2.39	1.95
In	0.94	1.06	1.01
	<i>% Population of Northern Ireland</i>		
Out	3.00	4.42	3.73
In	1.85	1.95	1.90

Basic Sources: NI: CP 1961, General Report, Tables 2 and 17. RI: CP 1961, Vol. VII, Part II, Table 1A.

The percentages in relation to population of area of origin are much more alike (1.95 and 1.90 for Persons) than are those of destination (1.01 and 3.73). An outstanding showing of Table A1 is the RI females in NI greatly outnumber males.

*R. C. Geary is a Research Consultant and J. G. Hughes is an Assistant Research Officer of the Economic and Social Research Institute. The appendix has been accepted for publication by the Institute. The authors are responsible for the contents of the appendix and the views expressed therein.

At first sight the great excess of the number out is curious because persons (with certain exceptions, including persons in the service of religion, government, university, medicine¹) going from RI to jobs in NI require Work Permits, whereas movement in the contrary direction is completely unrestricted. Furthermore, NI, like RI, is an area with an endemically high unemployment rate. In fact, in many demographic features, NI is similar to the province of Leinster.

In this appendix we devote considerable attention to the following problem: is the movement between counties of RI and of NI similar or dissimilar to movement between counties of RI², in nature and in degree? Otherwise: does the Border exist, demographically speaking?

NI is a region where religious affiliation has almost more social significance than anywhere else in Europe. We emphasize, however, as B. M. Walsh has done, that in what follows our concern is not with the political or religious aspects of the distinction between OD and RC but only with the fact that the demographic characteristics of the two classes of the population (of RI and NI) are markedly different in some important respects. It fortunately happened that in the NI Census of 1961 immigrants were classified dually by birthplace and religion. These statistics shed a flood of light on the basic cause for a large part of that migration stream from RI—and it is in causes or explanations we are solely interested in this appendix, apart from descriptive features.

In All-Ireland there is a great concentration of members of denominations (OD) other than Catholic (RC) in NI. Thus, in 1961 in All-Ireland, the

TABLE A2: *Persons Born in RI Residing in NI in 1961. Number and Percentages of Population of Similar Religions*

<i>Religion</i>	<i>Male</i>	<i>Female</i>	<i>Persons</i>
RC	8,707	14,753	23,460
OD	12,089	17,575	29,664
<i>% of population of similar religion in RI</i>			
RC	0.65	1.04	0.88
OD	16.92	23.94	20.48
<i>% of population of similar religion in NI</i>			
RC	3.58	5.80	4.72
OD	2.68	3.69	3.20

Basic Sources: NI: CP 1961, General Report, Tables 17 and 19. RI: CP 1961, Vol. III, Part I, Table 1A.

¹Safeguarding of Employment Act (Northern Ireland), 1947.

²Internal migration in RI has been dealt with in [1].

proportion of OD in the population was 25 per cent; it was 65 per cent in NI and only 5 per cent in RI.

While at first sight it seems surprising that migration to NI contains as high a proportion of OD as 56 per cent, the analysis of Table A2 makes the phenomenon seem much more natural. Obviously the combination of a small number of OD in RI and a large number in NI sets up a strong force of attraction. The excess of OD females over OD males born in RI and residing in NI in 1961 may be due to many of the OD females finding husbands of the same religion in NI. Notwithstanding the latter consideration it is curious that females outnumber males in this migration Out in much greater degree amongst RC females than OD.

OD Migration Out to NI

From the last two rows of Table A2 it will be observed that RC migrants to NI are proportionately more numerous than OD. This is due to the far larger *population* of OD than RC in NI, in turn mainly due to large immigration from Britain in centuries past.

The outstanding feature of the table is, however, that OD born in RI and residing in NI are equivalent to 20 per cent of home-based OD. Clearly "emigration" of OD to NI is an important part of the total stream out of RI. Between 1926 (the first Census year after Independence) and 1961 the OD population of RI declined by one-third—from 220,723 to 144,868. A completely different picture emerged for All-Ireland as Walsh (Table 1) has shown.

It is most remarkable that there was scarcely any change in the number of both RC and of OD in All-Ireland over the whole period of 35 years: we may add that, as regards church government, the Border is non-existent. At each of the three intercensal periods, for which statistics on religion are available, OD in RI declined regularly by about 1 per cent a year and the end is probably not yet.³ Almost *pro tanto* their number in NI increased.

Walsh (Table 10) has also shown that in 1946–1961 net emigration (to all destinations) from RI is much lower amongst OD than RC. We infer that the OD stream Out (from RI) during this period contained a far higher *proportion* to NI than was the case with the RC stream Out. If the stability in the All-Ireland figures be regarded as the norm, the disproportionate number of OD out from RI can be interpreted as a process of adjustment or polarization.

Movement of RI-born Out to NI

We address ourselves specifically to the following question:— Does the land Border exist *de facto* as far as movement Out from RI is concerned? Our method will be to estimate the number of RI-born migrants expected in each county of NI if movement across the Border were similar in degree and kind to

³Walsh (p. 34) has also noted that "any population which experiences a substantial natural *decrease* over a fifteen year period as we have estimated was the case for the OD population in the Republic between 1946 and 1961 is obviously in danger of eventual extinction."

movement within the counties of RI. We shall compare the resulting numbers with the actual numbers residing in NI, in 1961.

Our method consists in estimating the expected number of persons (males and females separately) *born* in each county of RI *residing* in each county of NI, 364 figures in all (Belfast Co. Borough is regarded as a separate county), having regard to contiguity and zonal distance,⁴ and relations between counties of RI alone: it is assumed, therefore, that demographic behaviour in this matter in RI applies equally to NI. While our use of contiguity and zonal distance systematized the calculations to a certain extent, the work was onerous. For example, the calculations for Louth are shown in Table A3:—

TABLE A3: Example. Estimation of Number of RI Males Born in County Louth Expected to Live in Each NI County, 1961

<i>NI County or County Borough.</i>	<i>Zonal Distance</i>	<i>RI ratio Males 1961</i>	<i>Male Population of NI County, 1961</i>	<i>Estimate of Expected No. (Louth Born males)</i>
(1)	(2)	(3)	(4)	(5)
Antrim	3	·000926	133,531	124
Armagh	C	·027784	57,857	1,607
Belfast County Borough	1½	·007934	196,202	1,557
Down	C	·027784	130,216	3,618
Fermanagh	2½	·004102	26,887	110
Londonderry	3	·000926	81,404	75
Tyrone	2½	·004102	68,127	279

Basic Sources: NI: CP 1961, General Report, Table 4. RI: CP 1961, Vol. VII, Part II, Table 4.

NOTES

Col. 2: See [1]; C = contiguous to county Louth. The ratio in col. 3 for counties which contain a ½ in the zonal distance measure is calculated by taking the average of the number of migrants and the male populations of the two zones which straddle the county, e.g., the ratio for zonal distance 1½ is calculated from zones 1 and 2 together.

Col. 3: Ratio of Louth-born male migrants resident in RI counties which are the same zonal distance from Louth as the NI counties, as a proportion of the male populations in the respective zones.

Col. 5: Product of Col. 3 × Col. 4.

⁴We have used the concepts of contiguity and zonal distance in our analysis of internal migration between RI counties in [1]. Contiguity refers to migration to or from adjoining (i.e. contiguous) counties. The concept is used because a substantial proportion of total internal migrants move only a short distance from their county of birth. Zonal distance refers to the distance between counties. It is calculated by drawing concentric circles around the mid-point of the county of reference with an initial radius equivalent to thirty miles and additions of thirty miles for each circle thereafter. Counties, the greater part of whose area is in the inner ring, are given the zonal distance of one; counties in the second ring are given the zonal distance of two and so on until each county has been assigned to a zone.

Different from the treatment in [1], and for greater accuracy, halves were used for zonal distances to NI counties and dealt with as indicated in the Notes. As NI statistics of RI-born migrants are not classified by RI county of birth, comparison of actual with expected can be made only at the aggregate level. The results are shown in Table A4.1 (expected rounded to nearest 100).

TABLE A4.1: Comparison of Actual and Expected RI-born Migrants Residing in Each County of NI, 1961

County of Residence	Males		Females		Persons	
	Actual	Expected	Actual	Expected	Actual	Expected
Antrim	2,581	5,000	4,163	6,200	6,744	11,200
Armagh	1,835	6,300	2,769	7,800	4,604	14,100
Belfast County Borough	4,943	12,000	8,276	15,600	13,219	27,600
Down	3,521	10,300	5,583	12,700	9,104	23,000
Fermanagh	2,014	3,300	2,600	3,800	4,614	7,100
Londonderry	3,341	3,700	5,360	4,400	8,701	8,100
Tyrone	2,561	5,500	3,577	6,200	6,138	11,700
Total	20,796	46,100	32,328	56,700	53,124	102,800

Basic Sources: NI: CP 1961, Counties of Antrim, Armagh, Down, Fermanagh, Tyrone; Belfast County Borough, County and County Borough of Londonderry and General Report. Table 15 in all reports.

If internal migration behaviour of RI-born migrants extended to NI we would expect to find 102,800 RI-born persons residing in NI. The actual number was only 53,124. The Border therefore acts as a deterrent to the movement of RI-born persons. The effect is much more emphatic in the case of males, with actual only 45 per cent of expected, compared with 57 per cent for females, probably because movement Out of women on marriage is unrestricted. The pattern of excess of expected is common throughout the NI counties, the only exception being Derry. The excess of actual females over expected in Derry is very marked. Curiously enough, on an expected basis, Donegal is not the main RI source of the supply of Derry immigrants. Dublin is far and away the main RI county of origin of immigrants into NI, accounting on an expected basis of course, for 25 per cent for males and 22 per cent for females.

The view might be taken that because the population of RI is 95 per cent RC, as the basis of the ratios in Table A3 is predominantly this RC population, and for historical reasons, the calculation of expected numbers should be

confined to the RC population alone. Instead of using the total population of each NI county to calculate the expected numbers we use the RC population of each NI county. The results are shown in Table A4.2.

TABLE A4.2: Comparison of Actual and Expected RC born in RI and Residing in Each County of NI, 1961

County of Residence	Males		Females		Persons	
	Actual	Expected	Actual	Expected	Actual	Expected
Antrim	997	1,200	1,672	1,500	2,669	2,700
Armagh	1,026	3,000	1,672	3,700	2,698	6,700
Belfast County Borough	1,805	3,300	3,102	4,300	4,907	7,600
Down	1,194	2,900	2,152	3,600	3,346	6,500
Fermanagh	848	1,700	1,224	2,000	2,072	3,700
Londonderry	1,653	1,800	3,001	2,300	4,654	4,100
Tyrone	1,184	3,000	1,930	3,500	3,114	6,500
TOTAL NI	8,707	16,900	14,753	20,900	23,460	37,800

Basic Sources: As for Table A4.1.

Judged on the basis of the results in Table A4.2, the Border appears to act as a deterrent to movement of RC migrants born in RI to NI. However the validity of the results depends on one's view regarding the distributor which should be used to calculate the religious composition of the expected number of migrants from RI to NI. Three distributors that can be used are (1) the religious composition of the *county of destination* of the migrants. The determinant of the religious composition of migrants in this case is the force of attraction of the two main religious groups in NI—the attractive force being positively related to the proportion of each county's population in each group; (2) the religious composition of the *county of origin* of the migrants. In this approach one regards the migrant population as a random sample from the population at the point of origin; (3) the religious composition of the *combined* population of the county of origin and the county of destination. Here one has regard to the potential number of RC and OD migrants from each RI county and the force of attraction of the two religious groups in each NI county. In Table A5 we show the results for these three distributors.

The expected number of migrants is of course the same whichever distributor is used, but the religious composition of the expected number depends on the distributor selected. Distributors 1 and 2 clearly reflect the religious composition of the area used as a distributor. The actual/expected comparison for distributor 1 is 62.1 per cent for RC and 45.6 per cent for OD while for distributor 2 it is

TABLE A5: Comparison of the Religious Composition of the Expected Number of RI-born Migrants to NI using as Distributors the Religious Composition of the Migrants (1) County of Destination, (2) County of Origin and (3) County of Destination and County of Origin (Combined Population)

Distributor	RC		OD		Total	
	Actual	Expected	Actual	Expected	Actual	Expected
Religious composition of:—						
1. County of destination	23,460	37,800	29,664	65,000	53,124	102,800
2. County of origin	23,460	96,200	29,664	6,600	53,124	102,800
3. County of destination and of origin	23,460	57,700	29,664	45,100	53,124	102,800

Basic Source: NI: CP 1961, General Report.

24.4 per cent for RC and OD migrants are almost $4\frac{1}{2}$ times more than one would expect. (Of course the expected number of RC migrants from using distributor 1 above is the same as the expected number of RC migrants shown in Table A4.2.) The result of using distributor 3 does not, as might be thought, simply reflect the religious composition of the whole island—RC expected is 56 per cent of the total not 75 per cent which is the percentage for All Ireland. The actual/expected comparison using this distributor is 40.7 per cent for RC and 65.8 per cent for OD.

The results of the actual/expected comparison for the three distributors are consistent for RC migrants—actual always being less than expected. Thus the Border acts as a deterrent to migration and it effects RC migrants with greater force than OD migrants.

Our analysis so far in this section has been based on a comparison of what one would expect to find under "ideal" conditions and the actual situation. Departures from the ideal position, it is inferred, are due to special circumstances which effect the behaviour of migrants. Some additional light may be shed on these circumstances if we examine the relationship between one of the factors which, we assumed in our analysis, effects the migration process and the number of migrants from RI residing in each county in NI. This factor is the religious composition of the county of destination in NI—our assumption is that there should be a positive relationship between the percentage of each county's population which is RC or OD and the proportion which the migrants form of each county's population. Using as our dependent variable (Y) the number of RC and OD migrants in each county as a percentage of the popula-

tion of similar religion in the county and as our independent (X) the percentage of each county's population which is RC or OD we computed four regression equations (males and females separately) the results of which are given in Table A6.

TABLE A6: *Regression of Number of RC and OD Migrants from RI Residing in Each NI County as a Percentage of the Population of Similar Religion in Each NI County in 1961 (X) on the Percentage of RC and OD in Each NI County Population in 1961 (X); Males and Females*

Religious Group—		Constant	Coefficient of X	r	s
RC:	Male	1.61	0.0528 (2.306)	.69	0.91
	Female	2.38	0.0907 (2.584)	.73	1.44
OD:	Male	11.99	-0.1379 (2.978)	-.77	1.85
	Female	16.20	-0.1861 (3.117)	-.79	2.45

Note: The number of observations is 8 (6 Counties plus 2 county boroughs).
t-values in brackets () under coefficients.

The correlation coefficient for RC males is not significant at $P = .05$, while it is significant for the other three regressions (including both negative OD regressions). The contrast between the relationship for RC and OD is striking—indicating as it does that the proportion of RC migrants born in RI and residing in each NI county will increase as the proportion of the RC population in each NI county increases, and that the proportion of OD migrants in each county in NI is inversely related to the percentage OD in each county. It would appear from these results that OD migrants from RI to NI help to maintain a balance between the religious groups in those counties where the OD population is less than the RC population. The higher r 's and larger values of the regression coefficients for the OD regression equations indicate that the OD population of NI is a greater force of attraction for OD migrants from RI than is the RC population of NI for RC migrants from RI.

Our work on this particular aspect of our enquiry has led us far afield, with results which are somewhat conflicting. Nevertheless, the answer to the question posed at the outset of this section must be an emphatic affirmative. Probably this phenomenon of lower, and, as we think, diminishing association, has lasted for hundreds of years.

Migrants In From NI

As we have seen, the number In from NI is very small, only 27,129 (12,872 males and 14,257 females) in 1961. Despite the small number involved it is worth asking whether migrants In from NI favour any particular area in RI? We have found it useful in [1] to use three destination categories (i.e. (i) contiguous counties, (ii) Dublin, (iii) Elsewhere in RI) in examining internal migration in RI. Accordingly we (a) assign these totals to these three types of residence in RI: (i) contiguous county, (ii) Dublin, and (iii) Elsewhere; (b) assuming that if NI-born migrants do not favour any particular areas in RI to which to migrate, they would be distributed throughout RI in proportion to the population of each RI county, we distribute the totals according to the *population* of the three types of residence; and (c) calculate the ratios of (a) to (b); for the three types we obtain the results shown in Table A7.

TABLE A7: *Persons Born in NI and Residing in RI 1961, Classified According to Three Types of Residence: (a) Actual, (b) Calculated, and (c) Ratio (a) to (b)*

Type of Residence	Contiguous county	Dublin	Elsewhere	Total
	<i>Males</i>			
(a) Actual	4,384	5,516	2,972	12,872
(b) Calculated	1,500	3,044	8,328	12,872
(c) Ratio	2.92	1.81	0.36	1
<i>Females</i>				
(a) Actual	5,275	6,093	2,889	14,257
(b) Calculated	1,560	3,898	8,799	14,257
(c) Ratio	3.38	1.56	0.33	1

Basic Source: RI: CP 1961, Vol. VII, Part II, Table 4.

It is obvious that contiguity (e.g. Derry to Donegal) exercises a strong influence. Nevertheless the contiguity ratios for males and females are smaller than for those internal to the Republic, 4.27 and 5.25 respectively ([1], Table 19), as one would expect from our finding above that the Border acts as a deterrent to migration. The two streams to Dublin and Contiguous counties account for three-quarters of the total migrants from NI.

Dublin Effect, In From NI

NI-born residing in Dublin in 1961 numbered 5,516 males, 6,093 females, only 1.6 per cent for each sex of the respective populations. Do these figures bear any relation to what might be expected if the Border did not exist?

The NI counties are non-contiguous to Dublin. As regards males, 47,185 born in the 22 non-contiguous counties (with a male population of 984,501) resided in Dublin in 1961. The male population of NI in 1961 was 694,224. Hence the expected number of NI-born males would be 33,300 ($694,224 \times 47.2/984.5$). The corresponding figure for females is 46,300. These are crude estimates: zonal distance should be allowed for. Using equations No. 8 in Table 10 of [1], however, for the zonal distances of Northern counties from Dublin (ranging from $2\frac{1}{2}$ to 4), the two correction factors are found to be so near unity that the crude estimates may be regarded as corrected for zonal distance.

Comparing these estimates with actuals, NI-born in Dublin number only about one-seventh of what one would expect. One surmises that Belfast (a city much nearer which, with environs, has a population about the same as Dublin) is the more powerful counter-attraction.

We have no figures for Dublin-born residing in Belfast: in 1961 the numbers of Belfast CB residents born in RI were 4,943 males and 8,276 females. The numbers of Dublin CB residents born in NI were 3,846 males, 4,118 females (of which only 933 persons were born in Belfast!). While the Belfast situation is "better" in this respect than Dublin's, it is evident that, at least up to 1961, neither city held much attraction for those born in the other.

Migration Flow In to RI From NI

So far in this appendix analysis has been based on the stock position, mainly in 1961. These stock totals are so small as to make one doubt whether cohort flow analysis is worthwhile. However, we give, in Table A8, the results, in very summary form.

TABLE A8: *Derivation of Net Migration in Broad Age Groups in the 15 Years 1946-61 Amongst Persons Born in NI Residing in RI*
(— = net emigration)

<i>Age in 1961</i>	<i>Net immigration 1946-61 (15 Years)</i>	
	<i>Male</i>	<i>Female</i>
0-14	1,595	1,417
15-54	-1,284	-608
55 +	-479	-486
All Ages	-168	323

Basic Sources: RI: CP 1946, Vol. III, Part II, Table 10; CP 1961, Vol. VII, Part II, Table 7.

Note: Cohort deaths derived from Irish Life Table 1960-66, survivorship ratios applied to detailed age distribution 1946. Deaths may be understated (and net emigration overstated) in age group 55 or over.

When one considers that deaths in the 15 years amongst NI-born males alive in 1946 are estimated at 3,268 (= decline in population 3,436—net emigration 168), net migration was negligibly small for both males and females. As we have noted in [1] in connection with flow analysis within RI, the flow for NI-born was characterized by a migration of children In nearly cancelled by a net movement Out at later ages. Of course, the net figures shown may conceal relatively larger gross flows at ages 15 or over, e.g., migration to Britain. The lower net emigration for women at ages 15–54 (in 1961) may be due to the In movement of NI-born on marriage.

Trend since 1911

We have shown that in 1961 numbers born in RI and living in NI, and *vice versa*, are far fewer than might be expected if movement between the two regions was similar in degree to that obtaining within RI. Are these phenomenon due to the political changes in 1921, whereby the Border came formally into being? Or did the Border exist *de facto* for a longer period? We set out in Table A9 certain aggregates which should be revealing in this regard.

TABLE A9: *Number of Persons (1) NI-born Residing in RI, (2) RI-born Residing in NI, (3) RI-born Residing in RI Outside County of Birth, 1911–1961*
Thousands

	1911	1926	1936–37	1946–51	1961
(1)	(2)	(3)	(4)	(5)	(6)
(1) NI-born in RI	35.0	35.1	35.1	33.5	27.1
(2) RI-born in NI	57.2	63.9	59.3	61.1	53.1
(3) RI-born residing in RI outside County of Birth	325.0	344.6	371.2	400.8	397.6

Basic Sources: NI: Census Reports for 1926, 1937, 1951, 1961; RI: Census Reports for 1926, 1936, 1946, 1961; The 1911 figures are from the Census of Ireland, 1911.

Note: In columns 4–5, the NI Census year 1937 and 1951 apply to row (2), the RI Census years 1936 and 1946 to rows (1) and (3).

During the period 1911–1961 the population figures were so stable that in Table A9 we need not have recourse to rates of any kind. The row (3) figures are supplied for comparison, to indicate the trend in general propensity to migrate within the area of RI, characterized by a strong tendency to increase from 1911 to 1946 (as we might expect with improving communications), with no significant change thereafter; we recall that in the 15 years 1946–1961 emigration out of the country was of huge dimensions, probably lessening the tendency to move from one RI county to another.

As regards our question at the outset of this section, there was little sign of change in migration behaviour occasioned by the Treaty. Table Ag shows that up to 1946 the number of NI-born in RI remained very stable. Numbers of RI-born in NI were less stable but with no significant change in general level. In the period 1946-1961 there can be no doubt about the significance of the decline in both totals. The fall in number of RI-born in NI may have been due partly to the NI Work Permit regulation of 1947. Anyway, this kind of inter-communication between the two regions was on the wane.

The year 1961 marked the beginning of a great economic upsurge in RI and it will be interesting to observe the effect on the two trends at the Censuses of 1971.

Occupations of NI-born Residing in RI and RI-born Working Population by Industry in NI

The actual numbers in Table A10 are an abridgment of two very useful 1961 RI Census tables.

TABLE A10: Males and Females Born in NI Residing in RI in 1961, Classified in 14 Main Occupational Groups. Numbers in and Percentages in Corresponding Groups of the Population.

Main occupational group	Males			Females		
	Population (000)	Born in NI	Per cent	Population (000)	Born in NI	Per cent
1. Agriculture	350.6	1,260	0.36	42.1	236	0.56
2. Other producers	130.2	1,541	1.18	40.7	211	0.52
3. Labourers	87.3	429	0.49	3.0	10	0.33
4. Transport	70.8	687	0.97	10.7	34	0.32
5. Clerks, typists	31.6	757	2.39	46.3	642	1.39
Commerce:—						
6. Managerial	26.5	697	2.63	12.0	194	1.62
7. Other	39.4	645	1.64	26.7	217	0.81
8. Services	16.1	282	1.76	60.9	570	0.94
9. Administration	12.4	641	5.15	0.9	44	4.68
10. Professions	37.7	1,618	4.30	41.2	1,011	2.46
11. Other GO*	19.0	446	2.35	2.1	20	0.96
Total GO*, 14+	821.5	9,003	1.10	286.6	3,189	1.11
Not GO*, 14+ :—						
12. Home duties	—	—	—	601.4	8,367	1.39
13. Other	176.0	2,469	1.40	113.1	1,421	1.26
14. Under 14 years	419.1	1,400	0.33	400.7	1,280	0.32
TOTAL	1,416.5	12,872	0.91	1,401.8	14,257	1.02

*GO=Gainfully Occupied.

Basic Source: RI: CP 1961, Vol. VII Part II, Tables 9A and 9B.

The main showing of the table is that the socio-economic status of NI-born is much above the general average. Thus, for men, the percentage for administration, professions and managerial in commerce are far above the general

average for gainfully occupied (1.1 per cent) and labourers well below it. A rather similar picture emerges for women. The percentages for non-agricultural producers are surprisingly low, since NI is a storehouse of skilled industrial manpower. Men in religion (professional group) have the highest percentage (7.11 per cent) amongst the occupations detailed in the Census report.

Corresponding figures on occupations of RI-born residing in NI are not available from the NI Census of 1961 but figures are available on an *industry* basis for RI-born aged 15 or over and working in NI on Census date 1961. We reproduce the figures in Table A11 using 24 main industrial classifications.

TABLE A11: *Males and Females Aged 15 and over Born in RI Residing in NI in 1961, Classified in 24 Main Industrial Groups. Numbers in and Percentages of Corresponding Groups of the Population*

Industry	Males			Females		
	Total	Born in RI	Percentage	Total	Born in RI	Percentage
I Agriculture, forestry fishing	68,020	2,122	3.12	3,197	149	4.66
II Mining and quarrying	691	19	2.75	17	1	5.88
III Food, drink and tobacco	17,059	555	3.25	9,012	140	1.55
IV Chemicals and allied industries	1,818	72	3.96	250	16	6.40
V Metal manufacture	254	4	1.57	16	—	—
VI Engineering and electrical goods	16,139	267	1.65	3,957	61	1.54
VII Shipbuilding and marine engineering	21,870	290	1.33	453	8	1.77
VIII Vehicles	8,370	176	2.10	819	16	1.95
IX Metal goods n.e.s.	1,652	54	3.27	306	15	4.90
X Textiles	20,931	323	1.54	31,366	390	1.24
XI Leather, leather goods and fur	378	3	0.79	247	3	1.21
XII Clothing and footwear	3,055	89	2.91	21,571	504	2.34
XIII Bricks, pottery, glass, cement, etc.	4,619	114	2.47	531	10	1.88
XIV Timber, furniture, etc.	4,230	103	2.43	534	10	1.87
XV Paper, printing and publishing	3,822	104	2.72	2,422	34	1.40
XVI Other manufacturing industries	812	15	1.85	1,113	13	1.17
XVII Construction	41,349	1,184	2.86	1,037	33	3.18
XVIII Gas, electricity and water	6,614	132	2.00	444	9	2.03
XIX Transport and communication	27,765	1,044	3.76	2,612	97	3.71
XX Distributive trades	48,380	2,031	4.20	29,035	1,106	3.81
XXI Insurance, banking and finance	5,419	495	9.13	3,104	152	4.90
XXII Professional and scientific services	18,781	1,774	9.45	27,145	3,035	11.18
XXIII Miscellaneous services	24,005	1,215	5.06	26,137	2,286	8.75
XXIV Public administration and defence	26,919	1,450	5.39	6,455	308	4.77
Industry not stated or place of work outside U.K.	781	105	13.44	189	37	19.58
All Industries	373,733	13,740	3.68	171,969	8,433	4.90

Basic Sources: NI: CP 1961, General Report, Tables 31 and 33.

The major feature of this table is the unusually high percentage of RI-born males in the Insurance, banking and finance, Professional and scientific

services and Public administration and defence industries. While the two tables for RI and NI are not comparable, as one is on an occupational and the other on an industrial basis, the agricultural, administrative and professional groups do have common elements whether categorized by industry or occupation. In these three groups RI-born residing in NI are better represented than NI-born residing in RI. One reason for the substantial number of RI-born males in the Professional and personal services group is that many of its sub-groups (e.g. medical and dental and educational services) are exempt from the safeguarding of Employment Act. Representation of RI-born Females is also unusually high in the Professional and scientific services industry and the Miscellaneous services industry. Over 80 per cent of RI-born females in the Miscellaneous services group are working in private domestic service or catering. In contrast to the low representation of NI-born in agriculture in RI the RI-born (male and female) working in NI in agriculture are well up to the general average. RI representation in the typical NI industries of Shipbuilding and Textiles is very small.

Movement between NI and RI is clearly a movement of the better educated (compared with the native born county populations). In this respect the movement is similar to that within RI as shown by Hannan from his Cavan survey [2] and Gillman for internal migration to Dublin ([1], Appendix).

REFERENCES

- [1] Geary, R. C., and Hughes, J. G. with an Appendix by Gillman, C. J., "Internal Migration in Ireland" *ESRI* Paper No. 54. Dublin: *ESRI*, 1970.
- [2] Hannan, D. *Rural Exodus: A Study of the Migration Decisions of Irish Rural Youth*. London: Chapman, 1970, (In Press).

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