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# DEMOGRAPHIC STRUCTURE IN NORTHERN IRELAND AND ITS IMPLICATIONS FOR CONSTITUTIONAL PREFERENCE

EDGAR F. JARDINE
Department of Finance and Personnel, Belfast

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#### 1. INTRODUCTION

An awareness of the dynamics of demographic change is fundamental to the provision of public services and an indispensable weapon in the armoury of the policy-maker. Demographic structure as reflected in the shape of a population pyramid can be a sensitive indicator of socio-economic circumstances and is thus a telling sign of need for service provision and public expenditure priorities. The point is well illustrated at the extremes if, for example, the population pyramid for the Philippines is compared with that for the United Kingdom (Figure 1). The former has a high proportion of young people with consequential need for education and child care services and a burgeoning workforce while the UK and many other Western countries anticipate a rapidly increasing number of elderly people in the population being sustained by a contracting workforce. Northern Ireland (NI) and the Republic of Ireland (RoI) share broadly similar demographic structures with a high proportion of young people (particularly in the RoI) and fewer elderly (Figure 2) and thus contrast with those of other countries in the European Union where an ageing population tends to be the norm.

However, within Northern Ireland the changing demographic structures within the two main religious traditions are of additional interest because of the constitutional preferences assumed to be associated with each. The paper will therefore take an historical view of the changing balance between the two communities, assess their relative size as measured in the 1991 Census of Population, which estimated the population of Northern Ireland as a whole at just under 1,580,000, and attempt to project how the balance might change in the future. Finally, the paper will draw on data from a range of sources to explore the links between religious affiliation and constitutional preferences.

Figure 1 Population Pyramids (percentages)

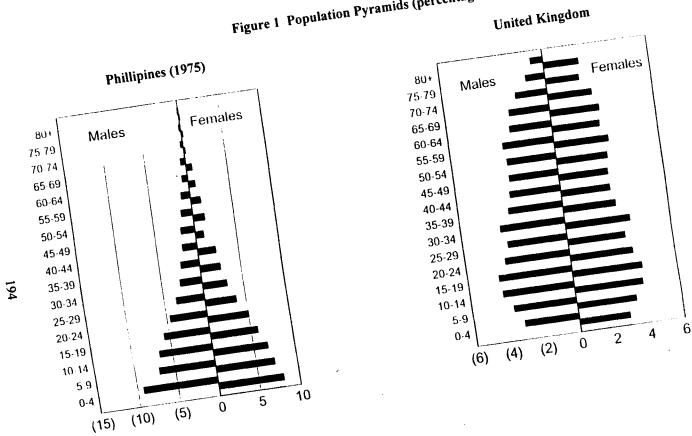
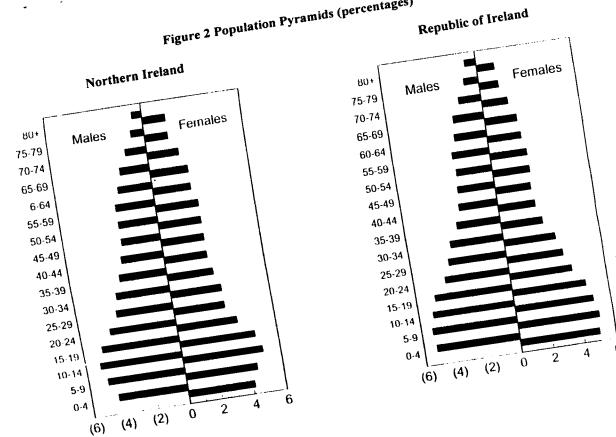


Figure 2 Population Pyramids (percentages)



#### 2. DEMOGRAPHIC CHANGE 1861-1991

A question on religious affiliation has been asked in Censuses in Ireland since 1861 and it is thus possible to examine how religious balance in the population has changed over some 130 years by comparing the proportions of the population classifying themselves as Catholic or non-Catholic (only a small minority of whom are other than Protestant) on Census returns. The question is voluntary but nevertheless normally achieves a high response rate. Exceptions were 1971 and 1981 when the Census was taken in a very difficult political climate resulting in localised but significant non-cooperation with the Census in general and relatively high non-response to the religion question. However, the most recent Census taken in 1991 seems to have been successful in achieving virtually total coverage of the NI population. The response to the voluntary religion question was also higher than expected with just 3.7 per cent of respondents using the "None" option and 7.3 per cent failing to state a religious denomination. Thus in the 1991 Census of Population some 38 per cent described themselves as Catholic and 51 per cent non-Catholic (of whom less than 0.5 per cent stated a non-Christian religion).

There is some evidence from the geographical spread of the "nones" and "nonstateds" that this was a more common phenomenon in predominantly Protestant (particularly Protestant middle-class) areas. This would be consistent with the findings of other research that religious adherence as measured by attendance at services of worship is much higher among Catholics than among Protestants. By attempting to attribute a community background to those not stating a religious denomination a best estimate for the relative strengths of the Catholic and non-Catholic communities in Northern Ireland in 1991 can be computed. The estimate is derived by allocating the "not stated" and "nones" to Roman Catholic and non-Roman Catholic community backgrounds pro rata to those who did respond to the religion question; this was performed at Enumeration District, an administrative unit below electoral ward level, and summed. The outcome of this exercise gives an estimate for Northern Ireland in 1991 of 42.1 per cent Catholic and 57.9 per cent non-Catholic. This estimate is in line with those arising from sample surveys of households where a response rate in excess of 95 per cent to the religion question is not unusual.

The changing balance of the two communities between 1861 and 1991 is illustrated in Table 1. Perhaps surprisingly this shows that the population balance in Northern Ireland today is not markedly different from that 130 years ago. The situation has not however been constant. The proportion of the population of Northern Ireland which was Catholic declined rapidly in the latter half of the last century and continued to decline during the first quarter of this century before stabilising in the 1930s and then gradually increasing until the present day.

Table 1 Percentage share of Northern Ireland population by religion

Year	Roman	Non-Roman
	Catholic	Catholic
1861	40.9	59.1
1871	39.3	60.7
1881	38.0	62.0
1891	36.3	63.7
1901	34.8	65.2
1911	34.4	65.6
1926	33.5	66.5
1937	33.5	66.5
1951	34.4	65.6
1961	34.9	65.1
1971	36.8	63.2
1981	38.4	61.6
1991	42.1	57.9

As Table 2 shows, the upward trend has been particularly marked over the past 30 years. The problem of non-response to the religion question together with significant under-enumeration in 1981 makes precise estimation of the relative size of the two communities impossible. While as noted above, it is believed that non-response was more prevalent among non-Roman Catholics in 1991, in the 1971 and 1981 Censuses of Population it was predominantly Roman Catholics who failed to state a religion.

Table 2 Roman Catholics as a percentage of total population in Northern Ireland

Year	Percent
1961	34.9
1971	36.8
1981	38.7
1991	42.1*

<sup>\*</sup> PPRU estimate

Northern Ireland, in common with the Republic, has a relatively young population with 24.2 per cent of the population under 15 compared with, for example, 19.2 per cent aged under 15 in England and Wales. The difference is also well illustrated against the average for EU countries of which 18.1 per cent of the population is under 15. The corollary of course is that both parts of Ireland have a lower proportion of elderly people. However these gross figures obscure quite significant

differences in the age profiles of the Catholic and non-Catholic communities in Northern Ireland. This is illustrated in Table 3.

Table 3 Roman Catholics as a percentage of total population classified by age group, 1991

Age group	Percentage
0-4	48.7
5-9	50.4
10-14	50.2
15-19	47.4
20-24	43.7
25-29	41.8
30-34	41.0
35-39	40.0
40-44	38.0
45-49	35.7
50-54	35.2
55-59	34.8
60-64	33.3
65-69	32.2
70-74	31.5
75+	28.5

Thus while the proportion of the elderly population (i.e. aged 70 years or more) which is Catholic is around 30 per cent, the proportion amongst those of school-age is nearer 50 per cent. Comparing the 1991 age-profile with that in 1971, Table 4 shows that the increase is evident in all age-bands. However, closer examination of the youngest age-groups demonstrates that while more than 50 per cent of 9 year-olds are Catholic, the proportion in each single age-cohort thereafter declines so that among the youngest children enumerated the proportion which is Catholic drops below 50 per cent (Table 5).

Table 4 Roman Catholics as a percentage of total population classified by age group, 1971 and 1991

Age group	1971	1991
0-4	44.8	48.7
5-9	44.3	50.4
10-14	43.8	50.2
15-19	41.8	47.4
20-24	35.7	43.7
25-29	33.4	41.8
30-34	33.2	41.0
35-39	33.3	40.0
40-44	32.6	38.0
45-49	31.4	35.7
50-54	32.0	35.2
55-59	30.2	34.8
60-64	29.2	33.3
65-69	28.7	32.2
70-74	29.7	31.5
75+	29.3	28.5

Table 5 Roman Catholics as a percentage of total population classified by single year of age 0-9 years, 1991

Age in years	Percentage
0	48.9
1	49.9
2	50.2
3	50.2
4	51.4
5	51.2
6	51.5
7	52.2
8	52.2
9	52.5

#### 3. PROJECTING DEMOGRAPHIC CHANGE

Demographic change in a population is of course a product of changes in birth rates, death rates and migration. Projections are therefore subject to change in any of these variables and while death rates can be predicted with some degree of certainty, birth rates are more variable. Migration on the other hand can be subject to significant fluctuation. Recent decades have seen remarkable changes in fertility rates in developed countries with very rapid declines in the 1970s and early 1980s followed by moderate stability and, more recently, in some cases small increases. As Table 6 shows, it is now the norm for total period fertility rates (TPFRs) in many European countries to have settled below replacement levels usually considered to be about 2.1.

Table 6 Total period fertility rates for countries in Europe 12

Country	1975	1980	1985	1988	1989	1990	1991	1992
Belgium	1.74	1.69	1.51	1.58	1.59	-	-	-
Denmark	1.92	1.55	1.45	1.56	1.62	1.67	1.67	-
France	1.93	1.95	1.81	1.80	1.79	1.78	1.77	•
Germany, FR	1.45	1.45	1.28	1.41	1.39	1.48	-	-
Germany, DR	1.54	1.94	1.73	1.67	1.57	1.40	-	-
Greece	2.37	2.23	1.68	1.52	1.43	1.42	-	-
Ireland	3.40	3.23	2.50	2.18	2.11	2.19	2.18	2.11
Italy	2.21	1.69	1.41	1.34	1.33	1.29	1.26	-
Luxembourg	1.52	1.50	1.38	1.51	1.52	1.62	1.60	-
Netherlands	1.66	1.60	1.51	1.55	1.55	1.62	1.61	-
Portugal	2.52	2.19	1.70	1.53	1.48	1.54	1.51	-
Spain	2.79	2.22	1.63	1.43	1.38	1.30	1.28	-
United Kingdom	1.81	1.89	1.80	1.84	1.81	1.84	1.82	1.80
Northern Ireland	2.61	2.60	2.46	2.37	2.20	2.21	2.17	2.09

These trends are also evident in Ireland North and South. While the RoI has traditionally had a higher birth rate than the North, the two rates converged through the 1980s and indeed in 1986 for the first time birth rates in the Republic dipped below those in Northern Ireland (Table 7). Indeed the birth rate in Northern Ireland per 1000 population is the highest of any region in the European Community. Birth rates by religion cannot be estimated directly since religion is not recorded at birth, but crude birth rates for the non-Catholic and Catholic communities can be calculated from Census of Population data. These calculations (Table 8) show contrasting patterns for the two communities. While Catholic birth rates remain significantly higher than those for non-Catholics, the former have been on a steep decline since 1971. Non-Catholic rates, however, following a decline between 1971 and 1981, now seem to have stabilised. The convergence of Catholic and non-

Catholic fertility rates, while occurring more slowly and more recently in Ireland than in other Western countries, (Compton 1989) is none the less clear. A critical factor in the changing balance of the two main communities in Northern Ireland will be the rate at which fertility rates continue to converge.

Table 7 Total period fertility rates for the countries of the British Isles

Year	Northern	Republic of	Great
	Ireland	Ireland	Britain
1975	2.61	3.40	1.79
1980	2.60	3.23	1.87
1985	2.46	2.50	1.78
1986	2.47	2.44	1.77
1987	2.41	2.34	1.80
1988	2.37	2.17	1.81
1989	2.20	2.10	1.80
1990	2.21	2.20	1.82
1991	2.17	2.18	1.81
1992	2.09	2.11	1.79

Table 8 Estimated birth rates per 1,000 population

Year	Catholic	Non-Catholic	Total
1971	25.4	17.9	20.7
1981	23.6	14.1	17.8
1991	19.5	14.4	16.5

In contrast to the uncertainty surrounding the future behaviour of fertility rates, death rates are rather more predictable. While standardised mortality rates among the Catholic community are generally found to be higher than among Protestants, linked to a different social class profile, higher levels of socio-economic disadvantage and higher rates of ill-health, crude mortality rates are much more influenced by the age-structure of the population. As demonstrated earlier, the Protestant community has a much higher age profile accounting for 70 per cent of the Northern Ireland population over 75 years of age in 1991. This is reflected in an age-specific death rate for Protestants of just under 12 per 1,000 of the population compared to about 7 per 1,000 for Catholics (Table 9). These death rates are derived by applying the age-specific death rates of the overall Northern Ireland population independently to the age profiles of the two communities in order to calculate the total number of deaths occurring in each community in any one year.

Table 9 Death rates per 1,000 population, 1991

Roman Catholic	7.4
Protestant	11.6

The third determinant of future population is migration. The factors influencing migration patterns are not well understood and almost certainly change over time. Researchers at the Northern Ireland Economic Research Centre are developing some work on aggregate migration patterns which is expected to link peaks in net outward migration in the early 1970s and 1980s to the effects of the security situation while the "Lawson boom" in Britain may have been a more potent influence in the late 1980s. In Northern Ireland, as in the Republic, the UK recession at the turn of the decade undoubtedly was a factor in reversing historical trends of net outward migration. Within the changing aggregate picture a more stable trend in Northern Ireland has been the movement of young people in their late teens to GB in order to take up places in Higher Education (HE). Approaching 4,000 students are estimated to have taken up HE places in GB in 1992/93 representing almost 40 per cent of Northern Ireland's HE entrants in that year (Department of Education for Northern Ireland).

Migration is thus the most difficult variable on which to obtain robust data both at an aggregate level and as it affects the two communities. Like the RoI, Northern Ireland has historically experienced net outward migration which has ranged from around 5,000 per annum at its lowest to as high as 24,000 in 1972-73. The lower rates have been more typical with peaks in the 1950s and 1970s - the latter coinciding with high levels of activity in the terrorist campaign (Table 10).

Table 10 Average intercensal net outward migration from Northern Ireland, 1871-1991

Intercensal period	000	
1871-1881	15.9	
1881-1891	14.1	
1891-1901	6.8	
1901-1911	6.5	
1911-1926	7.2	
1926-1937	5.2	
1937-1951	4.8	
1951-1961	9.2	
1961-1966	7.5	
1966-1971	5.0	
1971-1981	11.1	
1981-1991	7.8	

However, crude annual averages in the 1981-1991 intercensal period obscure a fluctuating pattern throughout the decade with a rapid decline in annual net-outward migration from 1987/88 converting into net-inward migration of around 2,000 in 1990/91 (Table 11) - a pattern which is also replicated in the RoI. Estimates for 1991/92 (and 1992/93) suggest that this has continued although the projection is for the position to return to the traditional pattern of net-outward migration in subsequent years.

Table 11 Net outward migration from Northern Ireland, 1980/81 to 1990/91

Year	000s
1980/81	6.1
1981/82	9.9
1982/83	5.3
1983/84	4.0
1984/85	4.5
1985/86	3.6
1986/87	5.6
1987/88	8.7
1988/89	6.6
1989/90	4.1
1990/91	-2.0

In terms of the future religious balance of the NI population (as opposed to its absolute size) a critical issue is the religious make-up of the migrant group. A number of academics have addressed themselves to this question. Barritt and Carter have estimated that between 1937 and 1961 the net-outward migrants were 60 per cent Catholic and that between 1961 and 1971 this may have reduced to 54 per cent. Compton has calculated that this may have further reduced to 50 per cent by the 1971-1981 inter-censal period and his estimate is that the percentage has continued at about this level (Table 12).

Table 12 Net migration - estimated breakdown by religion

Period	Percent Catholic
1937-1961	60
1961-1971	54
1971-1981	50
1981-1991	50*

<sup>\*</sup> possibly

However even assuming that there is a return to modest net-outward migration and that Catholics continue to account for half of this group, this is on a smaller

denominator and hence of proportionately greater effect. Projecting future migration patterns is further complicated by the fact that whereas in the past Irish emigration (North and South) has traditionally been mainly to Great Britain and the United States, with the advent of the European Single Market, the prediction of future migration patterns is much more problematic.

To draw these threads together, estimating the future religious composition of Northern Ireland depends largely on three factors: birth rates, death rates and migration. Of the three, death rates are the easiest to predict reliably as the basis is the present age structure of the two communities. In relation to birth rates, the data indicate that while traditionally Catholic fertility has been higher than non-Catholic fertility, the gap is narrowing. Catholics have historically accounted for a higher proportion of migrants but it is now assumed that those leaving Northern Ireland are split evenly on denominational lines. Academics differ on the relative importance of these factors. Compton has argued that birth rates are the critical component whereas Eversley (1989) views the level and composition of the migrants as critical. Only time will tell although recent evidence would suggest that migration has the potential to be the more important given the wide fluctuations experienced in recent years.

It is however possible to attempt to model future religious composition by making some assumptions about the three key variables in the equation. This is illustrated in Table 13.

Table 13 Estimated current demographic changes

Influencing factors	Catholic	Non-Catholic
Births	+13,000	+13,000
Deaths	-5,000	-11,000
Migration	+1,000	+1,000
Net change	+9,000	+3,000
Difference	+6,000	(2% of total)
Current Difference	280,000	

Assuming that the 26,000 annual births split 50/50, that there are 11,000 Protestant deaths annually and 5,000 Catholic deaths, and that migration will affect each religious group in broadly similar absolute levels, Table 13 shows that the populations will converge at the rate of 6,000 per year. The 1991 Census of Population suggests that there is a gap of 250,000 to make up with the result that convergence could take around 40 years. A further period would elapse before a change in the religious balance of the population generally would translate into a

change in the voting age population.

Professor Richard Breen at the centre for Social Research at Queens has arrived at a similar conclusion (Breen 1994). Depending precisely on the estimated community affiliation of those not responding to the religion question, Breen calculates that the two populations are unlikely to be in balance before the second quarter of the next century (Figure 3). More realistically he concludes that the date is sufficiently far into the future to be beyond the point of reasonable prediction.

As noted earlier, the projections are sensitive to assumptions about fertility and migration. Table 14 illustrates the linkages between the relative proportions of Catholics and non-Catholics of child-bearing age and fertility rates in the two communities. In 1991 with a 30 per cent excess of non-Catholic females aged 15-44 and a Catholic birth-rate 25 per cent higher than the non-Catholic rate there were a similar number of births to each community. On the plausible assumption that the Catholic birth-rate will continue to converge towards the Protestant rate to, say an excess of 15 per cent by 2001 (Option B) when there will still be an excess of 15 per cent non-Catholic females of child-bearing age, the outcome will continue to be a similar number of Catholic and non-Catholic births. Varying the fertility assumption will of course change this outcome as demonstrated in Options A and C.

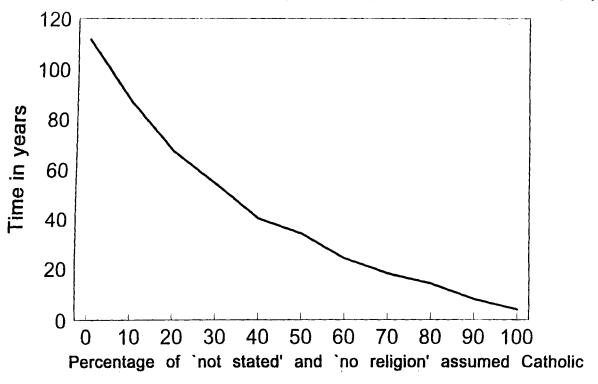
Table 14 Birth rates per 1,000 females aged 15-54

Year	Females aged 15-44	Birth rate	Number of births
	Non-Catholic	Catholic percentage	
	percentage excess	excess	
1981	55	60	Similar
1991	30	25	Similar
2001A	15	25	More Catholic
2001B	15	15	Similar
2001C	15	0	More Non-Catholic

### 4. RELIGION AND CONSTITUTIONAL PREFERENCE

Both political and popular interest in the demographic balance of the two communities in Northern Ireland has been fuelled by the hypothesised links between religious affiliation and constitutional preferences. Protestants it is assumed are predominantly if not exclusively unionist in their outlook while the Catholic community is traditionally considered nationalist. However these assumptions have been shown in successive surveys and opinion polls to be too simplistic, particularly as they apply to the Catholic community.

Estimate of approximate time (years) required for Catholic majority



Source: Breen 1994 Figure 3

The late John Whyte addresses this issue in his book "Interpreting Northern Ireland". Whyte compared the sparse survey material available pre-Troubles (1967-1968) with a significant volume of polls and surveys conducted between 1973 and 1989. The contrasts between the pre-Troubles period and the later period are remarkable. Whyte quotes from a survey reported in the Belfast Telegraph on 7 December 1967 which found that some 50 per cent of Catholic respondents and between 32 per cent and 45 per cent of Protestants (depending on denomination) thought that a united Ireland linked to Britain represented the best constitutional arrangement. Just over half of Protestant respondents and 20 per cent of Catholics questioned in the survey expressed a preference for the status quo. Only 3 in 10 of Catholics gave an independent united Ireland as their preferred constitutional arrangement.

Reviewing twenty-five polls conducted between 1973 and 1989, Whyte concluded that despite periods of significant upheaval, the attitudes of the Northern Ireland public to a range of possible constitutional options remained remarkably constant. While the proportion of Protestants expressing a preference for a United Ireland in the short-term is typically less than 5 per cent, even in the long-term just 18 per cent in 1974 and 8 per cent in 1982 thought this would be best for Northern Ireland.

In contrast a significant majority of Catholic opinion is in favour of a united Ireland as a long-term option. However in only one poll between 1973 and 1989 did a majority of Catholics (51 per cent) record a united Ireland in some form as their preferred option in the short-term.

The results of the Northern Ireland Social Attitudes Surveys for 1989-1991 paint a similar picture. For example in the 1991 Survey (Table 15) just over half of Catholics (53 per cent) said that they thought there should be a united Ireland (compared with 4 per cent of Protestants) while 35 per cent said that the union with the United Kingdom should be maintained (the Protestant figure was 92 per cent). These results confirm that, while this series of studies also shows that formal religious adherence in the Protestant community has declined more significantly than among Catholics, this is not associated with a greater diversity of views among Protestants about constitutional issues.

Table 15 Attitudes to constitutional change, 1991

Do you think the long-term policy for Northern Ireland should be for it?	Protestant %	Catholic %
To remain part of the United Kingdom	92	35
To reunify with the rest of Ireland	4	53
Other / don't know	4	12

#### 5. CONCLUSION

The paper has attempted to look at historical changes in the religious balance of the population of Northern Ireland and to project future composition. Despite a relatively rapid change in demographic balance over the last thirty years, the evidence would not seem to point to an early turnover in the religious balance of the two communities. However the implications of this finding for constitutional preferences are perhaps not so critical as once thought as the consistent evidence of surveys and opinion polls is that while the Protestant community remains virtually monolithic in its adherence to the union with Great Britain, there is significantly more diversity among Catholics about their constitutional preferences. Whyte makes the point succinctly: (pp 83) "one conclusion ... seems inescapable: that Catholics are less determinedly in favour of a united Ireland than Protestants are against it".

In conclusion, while the balance of the two communities within Northern Ireland will continue to change as the proportion which is Catholic increases, the timing of any possible Catholic majority is fraught with uncertainty. Furthermore, the significance of population balance as an indicator of constitutional preference has been demonstrated to be fundamentally flawed by a consistent run of survey data which challenges the assumed correspondence between religious affiliation and constitutional preferences among the Catholic community.

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#### DISCUSSION

Brendan Walsh': Religious affiliation is a central issue in the appalling conflict that has continued for so long in Northern Ireland. While it is true that the conflict is not primarily religious in any theological sense, it is equally true that people are being killed daily simply because they are from a Catholic or Protestant background, just as surely as in Rwanda they are being killed simply because they belong to the Hutu or Tutsi tribes. It is timely for the Statistical and Social Inquiry Society to study the composition of the population in Northern Ireland as revealed in the Census of Population and to hazard a forward look at the likely trend in the coming generation. Mr Jardine's paper is a welcome and valuable contribution in this area and it gives me great pleasure to propose the vote of thanks to him on behalf of the Society.

Attention has been focused on the share of Roman Catholics in the total population. Figure 1 summarises the situation as revealed in the Census. The lower line shows the proportion of the population of Northern Ireland that has been declared "Roman Catholic" at successive Censuses since 1861. As Mr Jardine points out, there was a steady decline in this proportion between 1861 and 1926 - from 40.9 to 33.5 per cent. It bottomed out in the 1930s and a slow increase was recorded the second world war. By 1961 it had reached 35 per cent.

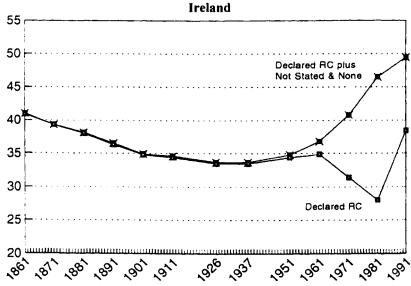


Figure 1 Roman Catholics as a percentage of Total Population - Northern

Since 1961 the picture has become clouded by the sharp increase in the proportion returning "Not Stated" in the religious question of the Northern Ireland Census, which reached 18.5 per cent in 1981 and was 7.3 per cent in 1991. The picture was

further complicated by the fact that in 1991 for the first time a significant proportion - 3.7 per cent - returned themselves as "No Religion". None the less, the proportion declared Catholic had reached 38.4 per cent in 1991. This represented 43.1 per cent of those declaring a religion in the Census.

There is a case for not analysing the "Not Stated" and "No Religion" population any further, on the grounds that this is the preferred status of the respondents, who do not wish to be recorded as belonging to any religious group. But there is a sense in which in Northern Ireland a person must be from either a Catholic or Protestant community, and the religious question is of most interest as a clue to the distribution of the population between these communities. There is obvious interest, therefore, in trying to allocate the "Not Stated" and "No Religion" respondents by religious affiliation. Furthermore, on purely statistical grounds it would be unsatisfactory to ignore the big dip in the declared proportion Catholic in 1971 and 1981, followed by a recovery in 1991. Clearly, there was a marked tendency for Catholics not to declare a religion in 1971 and 1981 and a great deal of interest centres on the question of the extent to which this has been corrected in the 1991 Census.

Evidence on this point is provided by the correlation between the proportion not declaring a religion and the proportion declared Catholic across the 26 Local Government Districts (LGDs). In 1971 the simple correlation coefficient between these two proportions was +0.70, which was widely taken to indicate that most of the "Not Stated" were Catholics. In 1991, however, this correlation had changed to -0.73, which has led some observers to believe that there is now a much higher proportion of Protestants in this category. In fact nothing can be inferred conclusively about the composition of the "Not Stated" and "No Religion" groups from correlations across spatial units with the proportions declaring themselves Catholic. While it is plausible to allocate them in accordance with the distribution of those declaring a religion in each LGD, or in each Enumeration District, as Mr Jardine has done, this method may be misleading. It is advisable to supplement this approach by looking at other characteristics of the non-respondents to see if anything can be inferred about their possible religious background.

In view of the significant differential in family size between Catholics and Protestants in Ireland, both North and South, it is interesting to note that the fertility of the "Not Stated" and "No Religion" categories is similar to that of the Catholic population.

The data at LGD level shows that the fertility of the "Not Stated" and "No Religion" was almost universally higher than that of the Protestant denominations and, intriguingly, in many areas higher than that of the Catholic population. The same patterns hold up when the comparison is based on marital fertility, that is the number of children 0-4 per 1,000 married women aged 15-44. While some of the contrast may be due to the concentration of those not returning a religion in the

younger half of the 15-44 age group, it is hard to avoid the conclusion that their high fertility indicates that they are predominantly of Catholic background.

Children aged 0-4 per 1,000 women aged 15-44, Northern Ireland

Religion	1971	1981
Roman Catholic	649	424
Church of Ireland	461	298
Presbyterian	442	329
Not Stated	653	480
None		392

Some further, if rather indirect, evidence on the background of the "Not Stated" and "None" population is provided by an analysis of the responses to the question on the Irish language in the 1991 Census. If we assume that all those professing a knowledge of the Irish language were Catholics, we find that 23.4 per cent of the Northern Catholics claimed some knowledge of the language. It seems reasonable to assume that this ratio would be highest in the areas where the Catholic share of the population is greatest and in fact the correlation between Irish speakers and the proportion Catholic across LGDs is +0.22. If, however, we include the "Not Stated" in both measures (defining the ratio of Irish speakers as a proportion of the Catholic plus Not Stated population) the correlation between this ratio and this group's share of the population rises to +0.63.

The implications of adding these categories to the Catholic population for the share of "Catholics" in the total population are shown in the upper line in Figure 1, which adds the proportions "Not Stated" and "No Religion" to the proportion declared Catholic. The smooth, if steep, increase in the upper line is striking. While not suggesting that the proportion of the Northern population of Catholic background has in fact risen to 49.4 per cent in 1991, as suggested by this curve, I am suggesting that there are grounds for believing the estimate proposed by Mr Jardine, 42.1 per cent, is conservative.

As Mr Jardine points out, the two key determinants of the Catholic share in the total population are differential migration and fertility. We have seen that the Catholic birth rate remained significantly above that of the rest of the population in 1991. This differential would have led to a growing Catholic share long before the 1960s had it not be offset by the much higher rate of net emigration among Catholics. Between 1951 and 1961, for example, the Catholic net emigration rate was more

than double the Protestant rate [Walsh, 1970, Table 9]. The accelerated growth of the Catholic population after 1971 suggests that the traditional migration differential has been reduced or reversed. Unfortunately, calculating migration rates by religious denomination since 1971 is bedevilled by the "Not Stated" and "No Religion" problem. If we concentrate on those declaring a religion, we can see from variant (i) in the following table that the cohort depletion rate of the main Protestant denominations was almost double that of the Catholics over the two decades 1971-1991. If alternatively, as in variant (ii), we assume that two-thirds of the "Not Stated" and "None" population were Catholics in 1971 and one half in 1991 - a combination that will tend to bias our estimates of Catholic emigration downwards - we still obtain a slightly higher Catholic emigration rate. Clearly there was a dramatic reversal of the traditional high emigration rate among Catholics after 1971.

## Cohort depletion rates for the population aged 0-19 in 1971 over the period 1971-91

Denomination	Variant (i)	Variant(ii)
Catholic	17.6	19.3
Protestant	31.8	21.3

Note: The cohort depletion rate is calculated as follows: (Population aged 20-39 in 1991 minus Population aged 0-19 in 1971)/(Population aged 0-19 in 1971). Variant (i) considers only those declaring a religion in both Censuses. Variant (ii) allocates two-thirds of the Not Stated in 1971, and one half in 1991, to the Catholic population.

Interest naturally centres on the future population of Northern Ireland and its religious composition. Projections are hazardous in the social sciences but I was surprised to note that, working with the data from the 1961 Census, I projected that the proportion Catholic would rise to 44.2 per cent by 1991, which seems remarkably close to the "true" figure as far as we can assess it from the 1991 Census returns. I also projected that this share would be just short of 50 per cent by 2006 [Walsh, 1970, Table 13]. This is very much to the lower end of the time frame for a Catholic majority envisaged by Mr Jardine. The projections are very sensitive to the three factors: (a) treatment of the "Not Stated" and "None" population, (b) differential migration and (c) differential fertility and birth rates; and the outcome depends on the assumptions about these components of population change.

I have already indicated that I believe Mr Jardine may tend to understate the extent to which the "Not Stated" and "No Religion" categories in the 1991 Census were from the Catholic community. Thus the starting point may be a proportion Catholic above the 42.1 per cent he uses. On the question of differential birth rates, the future trend in both the Catholic and Protestant fertility is uncertain. I agree that Catholic fertility in Northern Ireland is likely to continue to decline, especially in view of the fact that it is now significantly higher than Catholic fertility in the Republic of Ireland. However, Protestant fertility in the North is also relatively high, compared

with Britain or with (predominantly Catholic!) southern European countries. It is possible that the birth rate in both communities will continue to fall, but that the Catholic rate will continue to lag behind the Protestant, as happened during the 1980s. With regard to differential migration, we should bear in mind that the high emigration of Catholics in the immediate post-war decades was facilitated by the existence of full employment and abundant opportunities for unskilled and unqualified workers in Britain. Conditions have changed now and it is the better educated who face better prospects abroad. This will tend to encourage Protestants to emigrate more than Catholics. Added to this is the possibility that vigorous enforcement of equal employment legislation, leading to a constriction of the employment opportunities for Protestants, and pessimism about the constitutional status of Northern Ireland would result in a relatively high rate of Protestant emigration. Taking all these considerations together, I believe that Mr Jardine has understated the prospect of further significant increases in the proportion of the Northern Ireland population that is of Catholic background<sup>2</sup>.

In conclusion, I would like to thank Mr Jardine for raising many stimulating questions concerning the demography of Northern Ireland and providing the Society with a most valuable analysis of the topic.

#### **Footnotes**

- 1. This note draws on material contained in O Gráda and Walsh, 1994.
- 2. The recently-published "official" population projections for the constituent countries of the United Kingdom assume a resumption of net emigration from Northern Ireland in the 1990s, albeit at a relatively low rate [Shaw, 1993]. It would be helpful if the very detailed approached used by the Government Actuary's office were applied to the population disaggregated by religion

#### References

Ó Gráda, C. and Walsh, B., 1994. "Recent Trends in Fertility and Population, North and South", Department of Economics, University College, Dublin, Centre for Economic Research, Working Paper.

Shaw, C., 1993. "1991-Based National Population Projections for the United Kingdom and Constituent Countries", *Population Trends*, No. 72 (Summer), pps. 45-50.

Walsh, B., 1970. Religion and Demographic Behaviour in Ireland, Dublin: The Economic and Social Research Institute, Paper No. 55.

Garret FitzGerald: Mr Jardine's paper is most timely. However the whole subject is bedevilled by the much increased proportion of Religion Not Stated and No Religion. I will raise some of these problems first before attempting more substantive comments.

Walsh and O Gráda have given reasons why prima facie indications that the above two categories are mainly Protestant in background may not be correct; the presence of very high birth rates and Irish-speaking capacity.

Table A shows the scale of the problem. It is not clear to me how the figures in Table 5 of the paper, including the 48.9 per cent Catholic estimate for the 0-1 age group in 1991, are derived (cf. Age 0 figures in Table A). Why were there no NI totals for Religion in the Census? Were they hoping no one would add them up?!

Table A: Percentage distribution of Northern Ireland population according to alternative allocations of None/Not Stated, 1991

Method	Catholic	Protestant*	None/Not
			Stated
Total Population	38.4	50.6	11.0
Pro Rata (NI level)	43.1	56.9	•
Pro Rata (Ward level)	42.1	57.9	-
Equal (NI level)	43.9	56.1	•
60% Catholic (NI level)	45.0	55.0	-
Population aged 15-44	40.3	48.2	11.5
Pro Rata (NI level)	45.5	54.4	-
Equal (NI level)	46.0	54.0	-
60% Catholic (NI level)	47.2	52.8	-
Population aged 0-1	44.7	39.3	16.0
Pro Rata (NI level)	53.2	46.9	•
Equal (NI level)	52.7	47.3	-
60% Catholic (NI level)	54.3	45.7	-

<sup>\*</sup> Including other religions

There is also the puzzle of the higher birth rate for None and Not Stated than for Catholics or Protestants (see Table B). Part, or even all, of the answer *may* lie in tendency of younger people to give higher proportion of None and Not Stated - 20-34 age group is more representative of women having babies than 15-44 and may have higher proportion of None/Not Stated (even in the Republic with its exceptional number of post age 34 births, 75 per cent in 1990 were to women aged 20-34).

Table B: Ratio of 0-1 age group to 15-44 age group in 1991 Census

Religion	Ratio (%)
Catholic	7.98
Church of Ireland, Presbyterian and	
Methodists	5.79
Others	6.25
None	8.9
Not Stated	10.4

#### More substantively:

On the basis of the estimates of the Catholic share of population by age in the paper, the years 1990-1993 should have seen an increase in the Catholic proportion of the 15-44 age group from 42 per cent to 44.5 per cent - viz. 6 per cent increase in Catholic share - although this exaggerates the increase in the Catholic share of birthgiving women because the increase in 20-34 year age group would only have been about 3 per cent. But either way if fertility was static, this would have meant a fractional *increase* in births. But the number of births *fell* by 6 per cent from 26,500 to 24,900. In the previous decade the Protestant birth rate rose slightly (see Table 9 in paper). If it at least remained static between 1990 and 1993, then the Catholic birth rate would have fallen 12 per cent - viz. 4 per cent per annum as against c. 2 per cent per annum between 1981 and 1991. At that rate the Catholic birth rate would fall to the Protestant level by 1996.

Probably, however, there has been some fall in the Protestant birth rate too - but these figures suggest that the Catholic and Protestant birth rates could be around the same level by around 2000. I agree with the estimate in the paper that other things being equal this would reduce the annual Catholic population gain by 1,500 to 4,500.

But I do not agree that, on the basis of the paper's assumptions re None/Not Stated, Catholic births will equal Protestant births. Figures in Table 5 of the paper show the Catholic population share falling steadily from 52.5 per cent to 48.9 per cent from age 9-10 to age 0-1 - and on the basis of the sharp fall in births since 1990, the

Catholic share must have fallen a good deal since then. It is unlikely to jump again before 2000.

In this connection the figures in the latter part of Section 3 of the paper in the paragraph commencing "As noted earlier..." seem to me to need some adjustments. The excess of Protestant females aged 15-44 in 1991 appears to me to have been 35 per cent, not 30 per cent. On the other hand the Catholic birth rate appears to have been 30 per cent, not 25 per cent, higher than the Protestant birth rate. Combining these two figures gives a figure of 13,000 Catholic births to 13,500 Protestant births in that year, with the gap widening in favour of Protestants since - in line with what I said earlier.

If, as seems to me likely, the birth rates of both communities are around the same level by 2000, then even allowing for a rise of 2.5 points in the Catholic proportion of the 15-44 age group, Protestant births should account for 53 per cent of all births around that time - moving back towards equality a decade or so later and in the next generation rising again to around 53 per cent. All this assumes, of course, continuing parity in Catholic and Protestant birth rates.

On this basis, as the numbers in the "dying" age groups equalise in about half a century, the population ratio would stabilise with a small Protestant majority.

All this, I reiterate, is based on the paper's assumptions about the allocation of the No Religion/Not Stated categories. The joker in this pack, however, is emigration and here we are faced a flat contradiction between the Compton estimate, cited by Mr Jardine, of equal Catholic and Protestant emigration in the 1970s and 1980s and the Walsh/O Gráda age-depletion calculation which suggests that Protestant emigration during this period was higher than Catholic emigration - and at the extreme could even have been up to double its level. That ratio would be more in line with anecdotal evidence, including the high proportion in particular going to Britain for third level education, most of whom apparently do not return to Northern Ireland. Such a pattern would also fit with the process of rectifying the underrepresentation of Catholics in various employments.

Positive factors working to reduce emigration from Northern Ireland in the years immediately ahead could be faster economic growth in response to recovery in Britain and elsewhere, and possibly later, in response to the ending of violence there - in addition to which the lower and still falling birth rate since 1988 will reduce the flow into the labour market from about 2006 onwards. But linked negative factors could be a fall in security employment after the ending of violence, and the greater pull of jobs in Britain as the economy there recovers.

On balance one must fear a differential negative effect on the Protestant population arising from higher emigration in the years ahead - possibly heightened by

psychological/political factors. While in the longer run economic growth plus a lower inflow into the labour force should reduce job-seeking emigration and could re-stabilise the situation, it would be important that factors possibly leading to higher Protestant emigration in the short-run should not be allowed to develop in such a way as to lead to a longer-run differential emigration situation deriving from non-economic factors. That could be deeply de-stabilising for Northern Ireland and could in my view pose a much greater threat to the Protestant/Catholic balance in Northern Ireland than differences in fertility or death rates.

Reply by Mr E. F. Jardine: I am grateful to Professor Walsh and Dr Fitzgerald for their considered responses to my paper and to the others who contributed to the debate during the course of the evening.

Much of the argument about the future demographic balance within Northern Ireland arises from alternative attribution to the Catholic or non-Catholic communities of those not stating a religious denomination. Professor Walsh takes the view that the composition of the "Not Stated" and "No Religion" groups is more likely to be predominantly Catholic in background while both Dr Fitzgerald and myself tend to allocate them disproportionately to a Protestant background. Migration is also commonly recognised to have an important part to play in changing the demographic balance of the two communities. While accepting the uncertainties surrounding the extent of net outward migration and the difficulty in determining the religious composition of migrants, I have estimated the effect to be broadly neutral while both Professor Walsh and Dr Fitzgerald assume that the historic patterns of higher levels of Catholic migration have ceased and that Protestants may now have a greater propensity to migrate.

Professor Walsh bases his case for the allocation of the "Not Stated" and the "No religion" group on the observation that the fertility rates of the "Not Stated" and the "No Religion" categories are more similar to those of the Catholic population than of the Protestant population. A second argument hinges on the analysis of responses to the question on knowledge of the Irish language.

The evidence on fertility rates does indeed on initial inspection appear to support Professor Walsh's position. However this interpretation is based on the assumption that children who are not assigned a religious affiliation are the off-spring of parents who are also categorised as "Not Stated" or "No Religion". This proposition can be tested in a number of ways. First, the highest percentage of persons with no stated religion ("None" plus Not Stated) are found in the 0-4 years age group (9.5 per cent) with the highest prevalence (10.7 per cent) amongst those aged '0' years. Assuming the majority of the parents of these children are in their late twenties/ early thirties it is interesting to note that just 8 per cent of this age group are recorded as "None" or "Not Stated". This would suggest therefore that there are about 25 per cent more births occurring with children recorded "None" or "Not Stated" than there are adults

with no stated religion having these children. This seems to confirm a suggestion made by Dr Fitzgerald that there are adults recording a religious affiliation who are recording their children as "Not Stated" or "No religion". Indeed if the birth rate of the "Not Stated" population is factored down by 25 per cent this gives a figure much more in keeping with the overall population.

A second way of addressing fertility patterns is to examine the number of children born alive to 'ever married' women. This analysis clearly demonstrates that the fertility patterns exhibited by Catholics is remarkably different from all other religious groups including those of the "Nones" and "Not Stated". Conversely the fertility patterns of the latter are remarkably similar to those exhibited by non-Catholic groups.

The fertility data are thus more consistent with the "Not Stated" and "No religion" respondents being more predominantly from a non-Catholic background.

Professor Walsh has also examined responses to the Irish language question and has found that the correlation between Irish speakers and the proportion of Catholics at Local Government District level is +0.22 and that this increases to +0.63 if the "Not Stated" are included in both measures. However, a more direct way of examining the link between religious affiliation and knowledge of the Irish language is to compare the Catholic, non-Catholic, "None" and "Not Stated" groups in terms of their knowledge of Irish. Such an analysis reveals that while 22 per cent of the Catholic community claim "some knowledge of Irish", this is true of just 0.7 per cent of non-Catholics and, respectively, of 4.7 per cent and 6.7 per cent of the "None" and the "Not Stated" group suggesting that, contrary to Professor Walsh's conclusion, the latter groups are more likely to be predominantly non-Catholic.

Apart from fertility, migration is the second major variable influencing the demography of Northern Ireland. Both Professor Walsh and Dr Fitzgerald suggest that net outward migration may be weighing more heavily on the Protestant community than my paper allowed for. Professor Walsh has calculated cohort depletion rates between 1971 and 1991 and concluded that, depending on the assumptions made, the depletion rate for Protestants could have been almost double that for Catholics. However, if the community background of those not stating a religion in 1991 is assumed to be more predominantly Protestant than those who do declare a religious affiliation, as my earlier arguments suggest is plausible, then a more neutral impact on cohort depletion seems reasonable. The direction of net migration and its composition are however likely to be subject of a range of political and economic influences and are difficult to predict with any degree of accuracy.

In conclusion, while some uncertainty will inevitably remain about the religious composition of the population of Northern Ireland at any point in time the best evidence available does seem to be consistent with a narrowing of the gap between

the proportion of the population which is Catholic and that which is non-Catholic. However, the point at which the population balance will change from majority non-Catholic to majority Catholic, if at all, is unlikely to be before the second quarter of the next century.