

**THE ECONOMIC AND SOCIAL IMPLICATIONS OF DEMOGRAPHIC
CHANGE***

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1. INTRODUCTION

This Society was founded in the midst of the population crisis caused by the Famine. No crisis on the scale of the Famine occurred again in the Society's history, but various forms of demographic "weakness", such as high emigration, low natural increase and falling population totals, recurred frequently both as facts of life in Ireland and as concerns of the Society. At certain points in the present century, concerns about demographic weakness surfaced elsewhere in Europe, particularly in connection with the widespread fertility decline and the consequent fears of population decline which occurred in a number of European countries between the first and second world wars. More typically, however, Ireland was exceptional for the extent and duration of its population problems, of which its inability to sustain, much less increase, its population numbers was the most fundamental.

Since the 1960s, population decline has halted and, apart from a brief interruption in the late 1980s, has turned into steady if unspectacular population growth (total population increased by 28 per cent in the period 1961-1996). With that, Ireland has ceased to be the 'sick man' of western demographic regimes and its population patterns are converging on the European norm. This convergence is far from complete, if only because the legacy of past distinctiveness still lives on in a number of aspects of present-day population structure in Ireland. For example, the emigration surge among young people of the 1950s now means that Ireland has a disproportionately small cohort on the verge of old age. The baby boom of the 1970s to early 1980s (which occurred some three decades later than the post-war baby

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boom in Europe and North America) means that we have a large adolescent and young adult population. These features together give Ireland today a more youthful population structure than the rest of Europe and hold out the prospect of disproportionate growth of numbers in the active ages in the years ahead. In contrast to past differentials between Ireland and other countries, these distinctive features are to Ireland's advantage and give an unaccustomed positive gloss to Ireland's demographic situation.

As was so often the case in the Society's exploration of demographic issues in the past, our underlying concern here is with the implications of current demographic trends for the future of Irish social and economic life. Under that heading, we adopt a particular focus on issues relevant to future labour supply, taking account both of the quantity and quality of the labour supply, provide a descriptive account of recent trends and by way of conclusion to the paper draw out some implications for a range of policy areas. Education is a central component of what we now routinely consider as population quality, and also is an important influence on other aspects of population behaviour, such as fertility and migration. That is the first issue we deal with. We then turn to fertility (a major component of population quantity) and to new patterns of family formation, such as unmarried parenthood and marital breakdown, which are often thought to have major long-term implications for population quality. Migration remains an important factor in Irish population and labour supply trends, albeit in ways that are quite different from those of the past, and that is the next topic we deal with. We then take up the issue of female labour force participation, since that has now emerged as a key component of labour force growth. The implications of the analysis are considered in the final section of the paper.

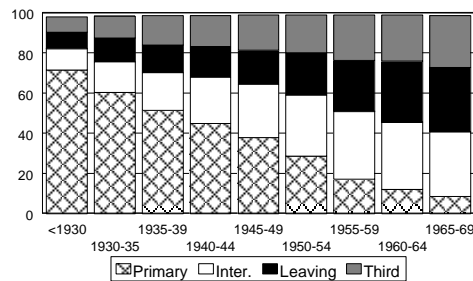
2. EDUCATION

In her history of the Society, Daly (1997) comments that it was exceptional among societies of its type in the 19th century in not discussing education. This lack of attention was not confined to the Society as the independent state equally neglected education after 1922, reflecting the more pressing concerns of the immediate post-civil war years. Following the second world war, all Northern European countries, with the exception of the Republic of Ireland, made major changes in their educational systems. In Ireland, major reform of the educational system was delayed until the 1960s but even so, participation improved steadily in the 1940s and 1950s. As a result, while education in Ireland lagged behind that of many countries in continental Europe, it was by no means the worst off. The 1966 *Investment in Education* report noted that participation rates in full-time education among 16-year olds in the Republic (at 36.7 per cent) were much higher than in England and Wales (22.5 per cent), Scotland (20.4 per cent) and Northern Ireland (22.7 per cent) (OECD 1966, p. 20).

Improvements in participation that were already in train over preceding decades meant that the major reforms of the 1960s, of which the introduction of free second

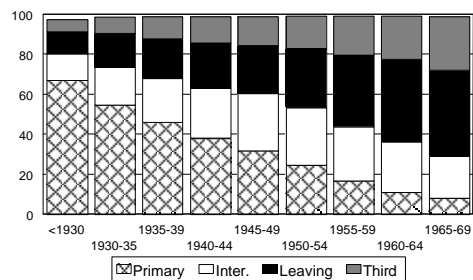
level education in 1967 was the most central, served to carry forward existing trends rather than radically transform them. This is evident from Figures 1 and 2 which use retrospective data from the 1994 Labour Force Survey to track developments in educational participation through successive birth cohorts. The later portion of the birth cohort of 1950-54 was the first to benefit from free second level education, but is clear that much progress had already been achieved in earlier cohorts and that the improving trend was not noticeably intensified in later cohorts. While these retrospective data may distort the educational record by failing to take account of excess emigration in the past (and perhaps also excess mortality) among those with poor education, the long-term continuity of progress is nevertheless striking.

Figure 1
Educational Attainment, Males
1994, by age, % of population



Source: Labour Force Survey

Figure 2
Educational Attainment, Females
by year of birth, % of total living in Ireland



Source: Labour Force Survey, 1994

In any event, overall progress has been great. For those born 65 years ago, who are now reaching retirement age, approximately two thirds of the cohort, left school with only primary education. On average women have been slightly better educated than men in the Republic throughout the last two generations, but the gap has been relatively small.

For those born in the late 1960s, aged 25 to 30 in 1994, early school leavers were down to only 10 per cent of the cohort with around 60 per cent having at least a leaving cert. and around a quarter having some form of third level education. This increase in participation rates has continued apace with around 80 per cent of the 1995 school-leaving cohort having a leaving cert. and over 50 per cent continuing on to some form of third level education. The forecasts to the year 2011 shown in Figure 3 assume little change in current levels of participation. This figure illustrates how the impact of past increases in participation rates is still only feeding through into the labour force and will continue to do so for some considerable time to come.

Figure 3
Educational Attainment of Labour Force



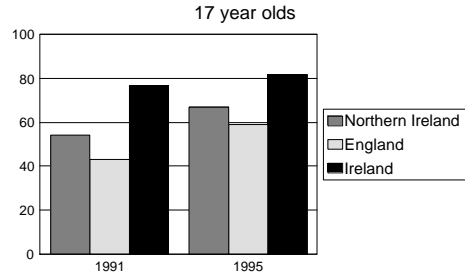
Source: Labour Force Surveys and ESRI Forecast

The educational system continues to develop and the cohort leaving school in September 1995 showed very much higher participation rates in third level education than the cohort leaving education five years previously. At present between 40 per cent and 50 per cent of those leaving the educational system have experienced third level education and over 80 per cent of the population have reached Leaving Certificate standard. This further rise in participation in the 1990s is quite striking and means that Irish participation rates continue to preserve their longstanding advantage over Britain and Northern Ireland, even though the gap appears to be narrowing (Figure 4).

Much of the policy advice over the last 10 years concerning the problem of structural unemployment has concentrated on the need to reduce the numbers leaving the educational system with no qualifications. Figure 3 shows the considerable success that has been achieved in this area and this has important labour market implications. The numbers who are still failing to achieve a minimum of a junior certificate on leaving formal education, while small, represent a fairly concentrated group which has multiple social problems and further progress with this group is likely to prove difficult in the future.

Figure 4

Participation in Education



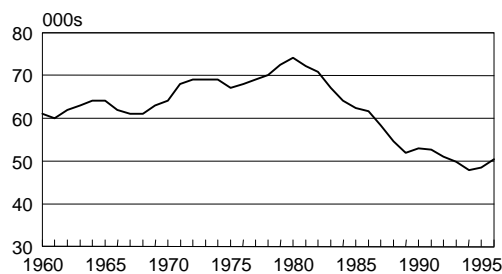
Source: Census, Dept. of Education Statistics, & Armstrong, 1997

3. FERTILITY AND FAMILY FORMATION

The basic outlines of Ireland's recent fertility history are well known. The 1960s and 1970s produced a marriage boom (the highest number of marriages of the present century took place in 1974, with almost 23,000 marriages in that year). That in turn led to a fertility increase, with a peak in birth numbers for the century occurring in 1980, at 74,000 (Figures 5 and 6). By 1993, marriages had fallen to below 16,000 (a decline of almost one-third from the 1974 peak) and births had fallen to just below 50,000 (a decline of one-third from the 1980 peak), though the indications since are that the downward trend has since bottomed out.

Figure 5

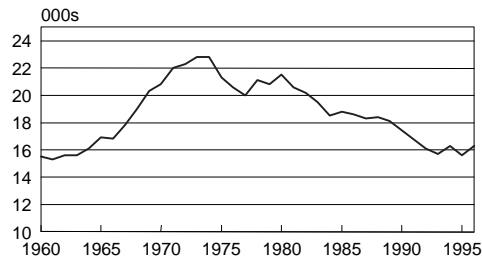
Births 1960-1996



There has been little attempt to decompose or explain these dramatic ups and downs in recent years, and we will not attempt to make good that deficit here. Rather, we concentrate on the equally dramatic change which has occurred in the social conditions of fertility and family formation. A central element in that change is a transformation in the role of marriage in reproduction and child rearing. That transformation can be seen in the first instance in the changing balance of fertility

inside and outside of marriage — marital fertility showing a steady decline, non-marital fertility showing a sharp increase.

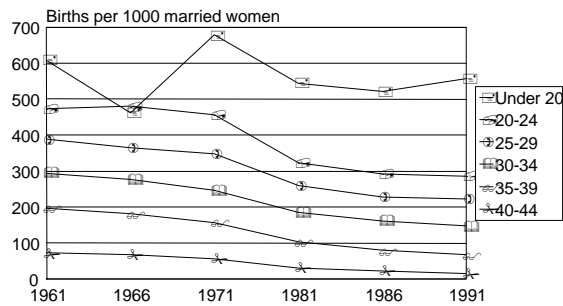
Figure 6
Marriages 1960-96



Fertility trends

The surge in births up to 1980 occurred in spite of a continuing decline in marital fertility rates — in fact, at all ages over 20, age-specific marital fertility rates declined substantially during the ‘baby boom’ of the 1970s (Figure 7).

Figure 7
A. Marital



At the same time, non-marital fertility rates began to rise sharply and continued to do so during the 1980s (Figure 8). The initial rise in non-marital fertility rates in the 1960s was enough to counter-balance some of the decline in marital fertility rates among younger women — overall fertility rates increased among 20-24 year olds and 25-29 year olds in the 1960s (Figure 9). Since the early 1970s, however, overall fertility rates for all ages over 20 have been consistently downwards, despite increasing non-marital fertility, and for teenagers these rates have been slightly downwards since a peak in the early 1980s.

Figure 8
B. Non-marital

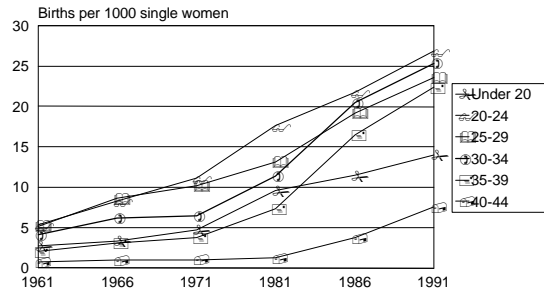
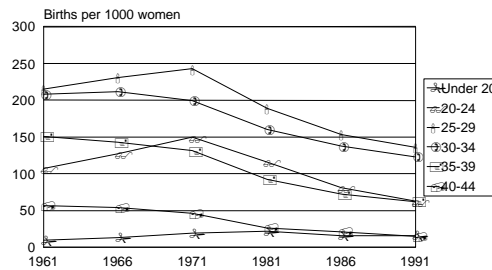


Figure 9
C. Total



The impact of fertility trends on family size is indicated in Figure 10, which shows the number of births by birth order in the period 1960-1996. The baby boom of the 1970s and early 1980s was reflected in a surge of lower order births — mainly first births, but with increases evident up to fourth births. Since 1980, first order births have fluctuated somewhat but without a major consistent decline, whereas third and fourth births have declined by 36 per cent and 55 per cent respectively. Higher order births declined continuously over the period since 1960 (for example, sixth births in 1996 were less than 20 per cent of what they had been in 1960).

Non-marital fertility

Rising rates of non-marital fertility have been reflected in the large increase in the share of births accounted for by non-marital fertility. Non-marital births as a proportion of all births rose from less than 2 per cent in 1961 to 24.8 per cent in 1996 (Figure 11). It is even more revealing to look at the trend in first births inside and outside of marriage and to relate these to the number of marriages per year (Figure 11). Until the 1970s, the number of marriages each year comfortably exceeded the number of first births, and the share of first births occurring outside of marriage remained below 10 per cent. By 1993 (the latest year for which the relevant data are available), the number of first births had risen above the number of

marriages, and 36 per cent of first births had taken place outside of marriage. This indicates an even sharper decline in the role of marriage as a gateway to family formation than the share of non-marital fertility in overall fertility would suggest.

Figure 10
Births by birth order 1960-1993

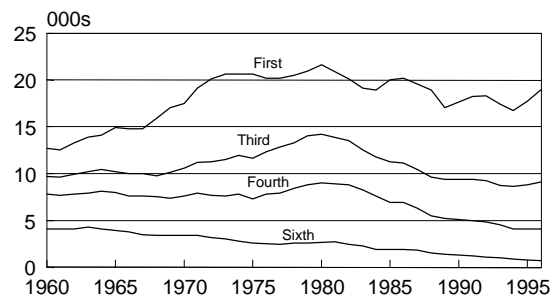
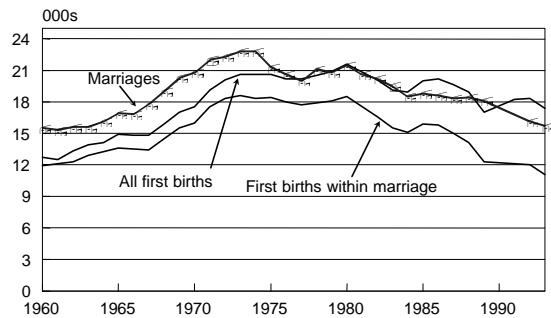


Figure 11
Marriages and first births



The growth of non-marital fertility has been heavily concentrated among young women (Figure 12a). By 1996, 95 per cent of births to teenagers occurred outside of marriage (compared to 24 per cent in 1971). Among 20-24 year olds, 68 per cent of births occurred outside of marriage (compared to 5 per cent in 1971). Among women aged over 30, by contrast, only 7-8 per cent of births in 1996 occurred outside of marriage. The modal age-range for non-marital births in 1996 was 20-24, while the modal age for marital births was 30-34 (Figure 12b).

Figure 12a
Non-marital births by age-group of mother

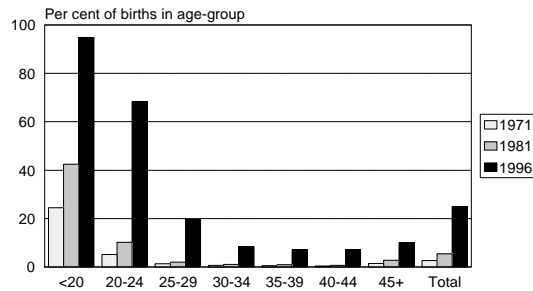
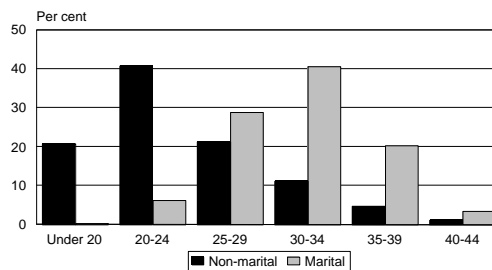


Figure 12b
Age Distribution of Non-marital and Marital Fertility, 1996

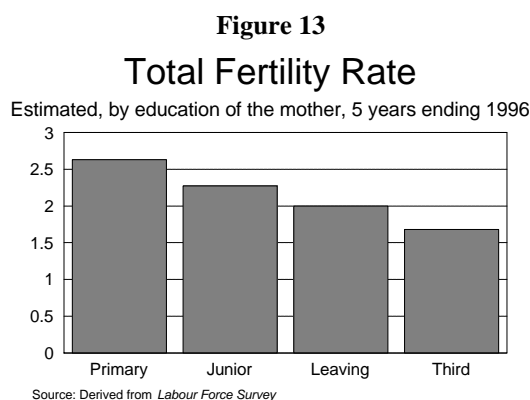


The large increase in non-marital fertility does not necessarily entail a complete rejection of marriage among the mothers involved. O'Grady's (1992) study of claimants for Unmarried Mother's Allowance in the late 1980s suggested that a large proportion moved off the benefit within a few years of first claiming it, mainly because they got married. More recent data confirm that many of those who give birth outside of marriage do not continue as unmarried lone parents for the long term. In the fifteen years from 1981 to 1995 (inclusive), a cumulative total of 103,000 children were born outside of marriage. However, in 1996, unmarried mothers claiming Lone Parents Allowance (who numbered 37,506) had a total of only 51,664 child dependants (Department of Social Welfare, 1997 - Table C10). The 1996 Labour Force Survey microdata files give a considerably lower estimate of unmarried lone parenthood, namely, 20,600 unmarried lone parents with some 30,000 child dependants. While it is known that the Labour Force Survey undercounts unmarried lone parents to some degree as it does not always identify unmarried mothers living in their own parents' households and while sampling error may have some effect on the estimates, it is not clear why such a gap should arise

between administrative data and survey data on this question. Whichever of these measures of unmarried lone parenthood is taken as the more accurate, it is clear that the actual numbers in that state are far below the potential numbers represented by accumulated births outside of marriage.

Social differentials in fertility

One of the major gaps in our knowledge of fertility trends in recent years is the lack of information on differentials in fertility by social class or other measures of social standing. This gap arises in part because of the lack of appropriate data — for example, no recent census of population has included a question on fertility and we have had no fertility surveys in Ireland of the kind which have now become common in other countries. In an attempt to contribute some insight on this question, we utilised the data contained in the 1996 Labour Force Survey microdata files in order to derive an estimate of period fertility rates classified by mother's educational level (Figure 13)¹.



This estimate suggests that there is a marked differential in period fertility rates by mother's educational level, ranging from a rate of 2.6 in the case of women with primary education only to 1.7 in the case of women with university education. However, it might be thought even more remarkable that the rate for women with primary education only is so low in absolute terms — it exceeds the replacement rate of 2.1 by a relatively small amount. To the extent that having primary education only can be taken as a proxy for lower social class position, this would suggest that the large working class family is disappearing almost as fast as its middle class counterpart.

Marital breakdown

There are no comprehensive, reliable data on the incidence of marital breakdown, mainly because there is no standard mechanism for registering marriage breakdowns in Ireland. Census of Population data on marital status provide the best indicator

(Table 1), though these data do not take account of those who have entered second unions following a marriage breakdown, nor do they make clear why the number of separated women (47,118 in 1996) should be so much higher than the number of separated men (30,887 in 1996).

Table 1 Marital Status of Ever-married Women and Men, 1986-1996

Marital Status	Women			Men		
	1986	1991	1996	1986	1991	1996
Ever-married (excl. widowed)	676,193	700,844	733,789	700,844	683,727	710,616
Separated	22,607	33,793	47,118	14,638	21,350	30,887
Deserted	9,038	16,904	16,785	2,584	6,781	6363
Marriage annulled	540	722	1287	443	499	920
Legally separated	3,888	5,974	14,616	3,299	5,178	11863
Other separated	6,792	7,195	14,430	6,090	5,787	11741
Divorced in another Country	2,169	2,998	5,013	2,222	3,105	4774
Intercensal increase in numbers separated		11,186	13,325		6,712	9,537
Annual average increase		2,237	2,665		1,342	1,970
Separated as % of total	3.30	4.80	6.40	2.20	3.10	4.30

Source: *Census of Population, Vol. II, 1986, 1991; Census 96 Principal Demographic Results*

In 1996, according to Census data, separated women accounted for 6.6 per cent of ever-married women, in comparison to 3.3 per cent ten years earlier. However, the average annual increase in the numbers of separated women did not seem to rise very much over the ten-year period — it was not greatly higher in the years 1991-96 than it was in the years 1986-91. This would seem to suggest that the stock of separated women is growing but the rate of inflow into that state is relatively stable. However, one would need to know more about the rate of outflow from the separated state (that is, through entry into subsequent unions) before one could draw any conclusions about underlying trends in the marital breakdown rate from these numbers.

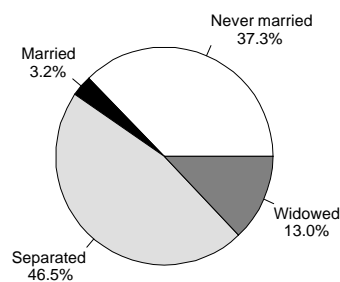
Apart from the limited amount the Census data tell us about the incidence of marital breakdown, these data are also interesting for what they tell us about the apparently low recourse to legal separation among those whose marriages broke down. In 1996, for example, less than one third of women who were de facto separated reported themselves as legally separated, while a further one-tenth had a foreign divorce. This leaves about six out of ten de facto separated women whose formal legal status is unclear. They classify themselves under the headings 'deserted' and 'other separated' on the census forms but since these terms have no precise definition it is not clear what they mean. There is some indication that, prior to the introduction of divorce, demand for the then available formal legal remedies to marital breakdown

was limited, especially among lower class couples (Fahey and Lyons, 1995). Preliminary indications from the Department of Justice, Equality and Law Reform suggest that this pattern may still hold — only 1300 applications for divorce were received in the period March-December 1997.

Lone parenthood

The 1996 Census of Population showed that there were 56,112 lone parent families with children aged under 15 (Census 96, Vol 3, p. 105). These amounted to 14 per cent of families with children aged under 15. The 1996 Labour Force Survey microdata give an indication of the marital status of lone parents. Almost a half are separated, well over a third are unmarried and the balance are widowed (Figure 14). The same data source suggests that unmarried lone parents generally have smaller families — 1.4 child dependents on average — than separated lone parents — 2.5 child dependents on average. An interesting possibility which we have not been able to explore here is that unmarried lone parenthood, paradoxically, may have a fertility limitation effect. The day to day burdens of being a lone mother may reduce social involvement and the chance to form a further sexual relationship, thus reducing the exposure to conception. Unmarried parenthood is concentrated among those with poor educational attainment and among those aged under 25 — groups which, in the past, might have married young and had large families. The growth of non-marital fertility among this group may thus contribute to the reduction in fertility which, noted above, has been almost as dramatic among the poorly educated as among the well educated.

Figure 14
Marital Status of Lone Parents with
Child Aged < 15



CSO 1996 Labour Force Survey microdata

Emigration

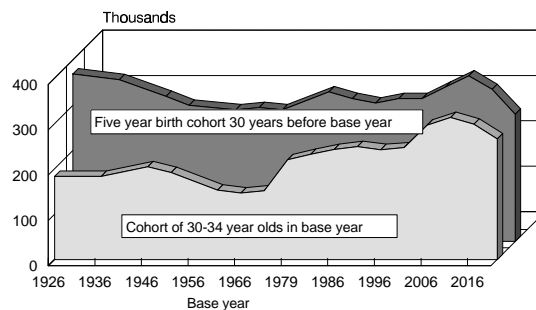
The significance of emigration both as a social and an economic phenomenon has been reflected frequently in the past proceedings of this society². However, it is the gradual alteration in the nature of that experience which is both a symptom and a

cause of the many of the changes that have occurred in Ireland over the last 50 years. Up to the 1930s the American wake was still a feature of Irish life; the family mourned the emigration of one of their children who would probably never be seen again. However, even in the 1930s the nature of the grief expressed at the wake was changing as the emigrants went to England and Scotland rather than to the United States (Freeman, 1938-39 and Commission on Emigration, 1954). Even if they would never live in Ireland, they would, in all probability, be seen again on occasional holidays. The attitude of the emigrants was also changing. The contrast in the 1950s between the burgeoning economies of the UK, Germany and France and the economic depression of an Ireland where they could not find jobs left them bewildered and angry.

Since the 1950s, the experience of emigration has changed greatly³. To-day emigration is still part of the experience of up to a quarter of each generation (and of every family) but the difference is that the emigrants of to-day are seen more as homing pigeons. The “best and the brightest” may still emigrate but the expectation and the experience suggests that the bulk of them will return. As shown in Figure 15 this is a very different situation from the first 50 years of independence.

Figure 15

Birth cohort survivorship to age 30-34 in Ireland



Emigration reached a peak in the 1950s (Figure 16) with the number going in 1958 being roughly equal to the number of births in that year. In the 1960s the numbers leaving fell quite rapidly so that by the early 1970s there was net immigration. The net flows hid a continuing gross outward flow of young labour market entrants, which was counterbalanced by a larger inflow, many of whom were emigrants of the 1950s. This pattern repeated itself in the 1980s when emigration again reached very high levels in 1988 and 1989, only to be followed by net immigration in the 1990s.

In Figure 17 we give a rough estimate of the stock of recent emigrants who left in the previous 15 years. The numbers peaked at over 500,000 in the early 1960s and it

fell to the end of the 1970s⁴. For the most recent census period 1991-96 there has been significant immigration by people who were not born in Ireland and they must be taken into account in deriving the stock figures shown here. This would suggest that the emigration of the 1980s resulted by 1996 in a stock of between 200,000 and 250,000 emigrants living abroad aged under 40⁵. This crude estimate is confirmed by a more detailed analysis that shows that in 1996, making the same allowance for immigrants, between 200,000 and 250,000 emigrants aged between 15 and 40 were living abroad. The results are shown in Figure 18 with the stock classified by when those emigrants left the country.

Figure 16
Net Emigration

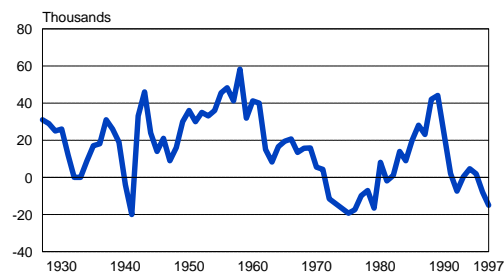
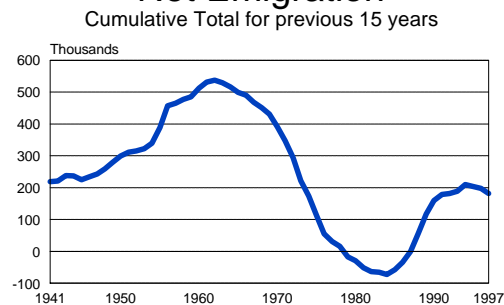


Figure 17
Net Emigration



Traditionally those who emigrated were predominantly unskilled, many of them from an agricultural background. This continued until very recent times. Analysis of those who emigrated during the war years showed that two thirds of them were labourers (Commission on Emigration, 1954). Set out in Figures 19 and 20 is an analysis of net emigration, classified by educational attainment, for selected years since 1966⁶. In the late 1960s almost two thirds of emigrants had at most a junior (inter) cert. level of education. The proportion with third level education was under 20 per cent. By the early 1980s the balance between those with leaving certificates and those with lower (or no) qualifications had shifted but the proportion of

emigrants with third level qualifications had actually fallen. The second half of the 1980s saw a big change in the educational attainment of the emigrants. Around a third of the emigrants had a third level education in the late 1980s compared to under 20 per cent in the 1960s and in the late 1980s there was very little emigration by people with only a primary education, whereas they accounted for the bulk of emigrants in the 1960s.

Figure 18
Stock of Emigrants
 by age and year of departure

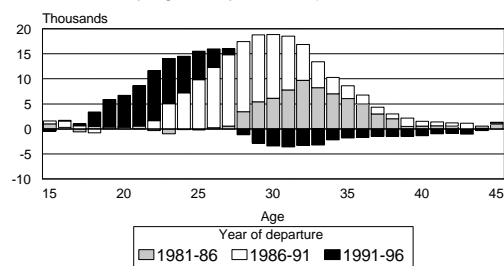


Figure 19
Education of Emigrants
 Males and Females, aged 15-29



Figure 20 shows that the proportion of those getting third level qualifications who emigrated was already high in the late 1960s. However, by the late 1980s the proportion of the cohort of 15 to 29 year olds with third level qualifications emigrating was at a high of over 20 per cent. Barrett and Trace, 1998 use data from a survey of school leavers to show that the proportion emigrating peaked at 25 per cent or more of graduates in the years 1987-89. Only a tiny proportion of those with only primary education emigrated permanently in the late 1980s⁷. This reversed the position which had pertained since the last century. This change partly reflects the fact that the Irish welfare system was more generous than that of the UK by the late 1980s. Hannan, Sexton and Walsh, 1991, show that such emigrants faced major difficulties within the 1980s UK labour market, difficulties they would not have

faced in earlier periods. This contrasts with the earlier generation in the 1950s who faced very difficult circumstances at home and who could generally improve their living standard by leaving. Changes in the UK welfare system, especially changes in the housing benefit system, also had an important impact in the 1980s on the relative advantage of emigrating (for people of differing levels of educational attainment).

Figure 20

Proportion of Cohort Emigrating

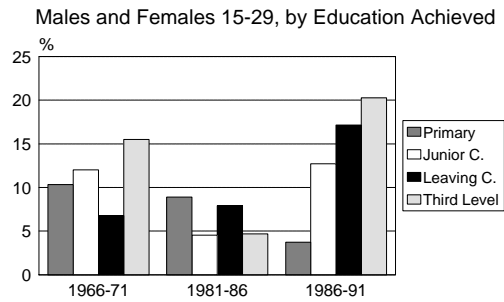
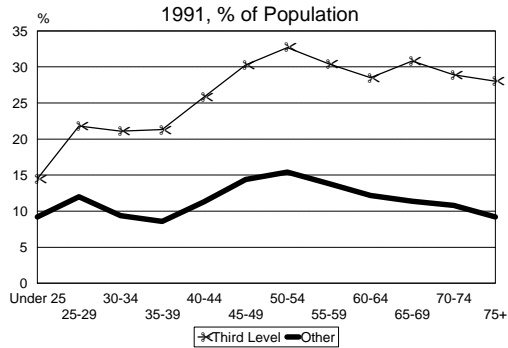


Figure 21

Males who have resided abroad

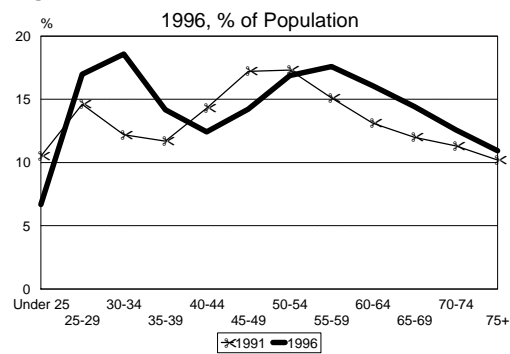


Source: CSO Census of Population

While those with a good education are now more likely to emigrate than those with only a primary education, they are also more likely to come back. As shown in Figure 21, in 1991 over a quarter of all males in the country (the figures are similar for females) aged 40 and over with a third level education had lived abroad for at least a year. For all other educational categories the proportion was 10 or 15 per cent and, as shown in Figure 22, the proportion of the population aged 30 to 34 who are returned emigrants has increased in recent years. While the latter figure is exceptionally high by the standards of other EU countries, it still suggests a much lower return rate than for those with third level education. It means that even in the

face of continuing substantial gross outflows, the fact that individuals return with additional experience from working abroad may actually enhance the return from education. Barrett and Trace, 1998 show that for those who returned to Ireland in the year ended April 1996, aged 25 to 29, 57 per cent of them had third level education and for the 30 to 39 cohort almost 50 per cent had a third level education. Thus a much higher proportion of those who returned to Ireland in that year had a third level education than was the case for those who emigrated in the late 1980s⁸.

Figure 22
Population who have resided abroad



Source: CSO Census of Population

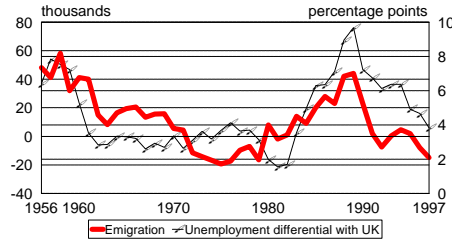
For a society which is exceptionally homogeneous in terms of race, religion and culture the returning emigrants have played an important role in introducing new experience, new ways of doing business, new expectations and a new vitality. Part of the transformation in society that has occurred must be attributed to the return of former emigrants.

Over the period 1991-97 there was a return to small net immigration, reflecting the boom in the domestic labour market, so that by 1996 nearly 20 per cent of the 30-34 age group were returned emigrants. For the future it seems likely that there will not be a return to net emigration. There is even the possibility that there could be significant net immigration, including immigration of non-Irish citizens.

A number of studies of the factors driving emigration in Ireland in the post-war period have found that it is significantly affected by the differential in unemployment rates between Ireland and the UK (Walsh, 1968, Honohan, 1992). Honohan found that the equilibrium gap in unemployment rates between Ireland and the UK was around 4 or 5 percentage points; at that difference in unemployment rates there would be no net flow of migrants out of (or into) the country. Figure 23 shows both emigration (left scale) and the actual gap in unemployment rates between Ireland and the UK (right scale), which reached a peak in the late 1980s, around the time that the latest bout of emigration was at its maximum.

Figure 23

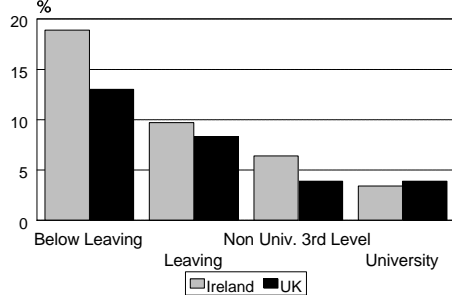
Emigration and Unemployment



Looking to the future there must be some doubt about the stability of the relationship which held in the past where the Irish unemployment rate was about 4 or 5 percentage points above the UK rate in equilibrium. Figure 24 compares Irish and UK unemployment rates for 1994 by educational attainment. It shows that for those with at least a leaving cert., the gap in unemployment rates in 1994 was less than 4 percentage points and unemployment rates were lower in Ireland for graduates. With the proportion of the population who have reached at least leaving cert. standard of education continuing to rise, the result may be a reduction in the potential gap between unemployment rates in Ireland and the UK.

Figure 24

Comparative Unemployment Rates
by Educational Attainment - Ireland v UK, 1994



Source: OECD Education at a Glance, 1996

In addition, as shown in Figure 18, when allowance is made for immigration, the stock of Irish emigrants abroad aged 15 to 40 in early 1996 stood at between 200,000 and 250,000. Since then there has been very significant immigration so that the stock to-day may be closer to 150,000 to 200,000. If the current buoyant labour market conditions in Ireland were to continue much longer the stock of emigrants who might potentially return could be further reduced, especially as many of those who departed in the 1980s move into their 40s. This leaves the possibility of immigration by non-Irish citizens, which is already occurring in small numbers. However, the factors driving such immigration are likely to be very different in scale from those driving migration behaviour by those born in Ireland. The population

from which they would be drawn is much larger than for returning Irish emigrants and the non-financial attractions of living in Ireland (proximity to family) are obviously much weaker. This makes forecasting future migration patterns exceptionally difficult.

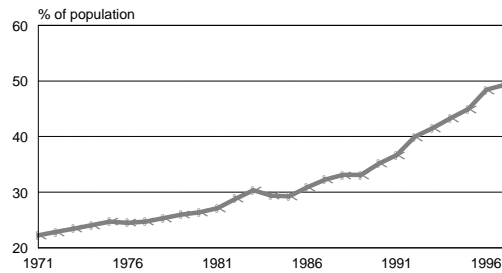
5. LABOUR FORCE PARTICIPATION

In the past a major factor in the high dependency ratio in Ireland was the small proportion of the adult population in paid employment. While the rest of Northern Europe saw a major increase in female participation in the paid labour force in the post-war years⁹, Ireland saw very little change in behaviour. In 1971 only just over 20 per cent of women aged 25 to 64 were in the labour force (Figure 25). While the participation rate for this age group rose to around 30 per cent by the early 1980s this was still exceptionally low by European standards. However, since the mid-1980s Ireland has seen an exceptionally rapid rise in female participation rates so that to-day almost 50 per cent of the female population between 25 and 64 are in the labour force.

Figure 25

Female Labour Force Participation

Women aged 25 to 64



Source: Labour Force Survey

As shown in Figure 26, for the 25 to 34 cohort the Irish participation rate of almost 70 per cent is approaching the EU average, higher than for Italy, Spain and lower than in Scandinavia, France and Germany. However, for the cohort of women aged 35 to 44 (Figure 27), the Irish participation rate of 50 per cent is among the lowest in Europe. To some extent this difference reflects the rapidity with which change has occurred, affecting the younger cohorts first and, as they age, gradually affecting the older age groups. Those women in their late 30s and early 40s to-day are to some extent affected by decisions on participation that they made when they were younger. Evidence from Callan and Wren, 1994 indicates that periods spent out of the labour market significantly affect potential earnings. As a result, it may be more difficult or less attractive for women who have left the labour market to break back in, whereas for the later generation, who have remained in the labour market, a higher participation rate in later years may be expected.

Figure 26
Female Labour Force Participation

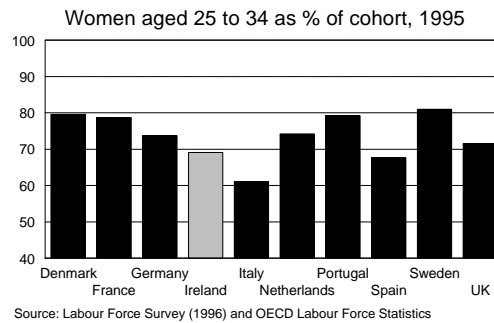
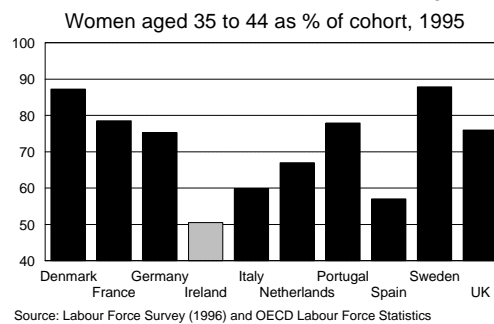


Figure 27
Female Labour Force Participation

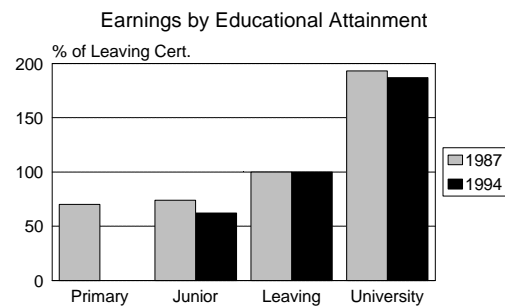


The changing role of women in the economy reflects both a wider cultural change and also the direct impact of rising levels of educational attainment. As shown in Figure 28, on average women with a university education earn twice as much as those with a leaving cert. (Barrett, Callan and Nolan, 1997). In turn, women with a leaving certificate, on average, earn substantially more than those with a junior (inter) cert. As shown in Figure 28, even with the major increase in the supply of skilled labour over the period 1987 to 1994, the returns to education did not fall¹⁰.

The effect of improved educational attainment means that women are able to earn substantially more in real terms in the labour market than they could in the past. As potential earnings rise in real terms this will tend to offset the costs of working where a couple (or a lone parent) has children. The potential earnings of a woman with only primary education in the labour market are low, while the cost of child minding probably does not vary greatly in absolute terms whatever a woman's earnings. Thus, in the absence of subsidised childcare, especially for lone mothers, the potential gain from employment may not offset the substantial fixed costs of

childcare. As discussed earlier, their potential earnings in the labour market may also affect the age at which women have children and the number of children which they have; the two decisions – on labour market participation and on having children – are closely interrelated. As Callan and Wren, indicate “there are substantial inherent difficulties in disentangling the effects of the costs and of preferences for children”¹¹.

Figure 28
Returns to Education - Female



The decision on labour force participation is not only affected by potential earnings on the labour market, proxied by level of education. The framework provided by the social welfare system also directly affects decisions on whether women consider themselves to be unemployed or outside the labour force (Walsh, 1993). More important still are the wider cultural factors which are changing womens’ career expectations. Fahey and FitzGerald, 1997, suggest that only a third of the rise in female participation since 1981 can be directly attributed to the changing educational composition of the population.

Figure 29

Female Labour Force
Participation by Age, % of cohort

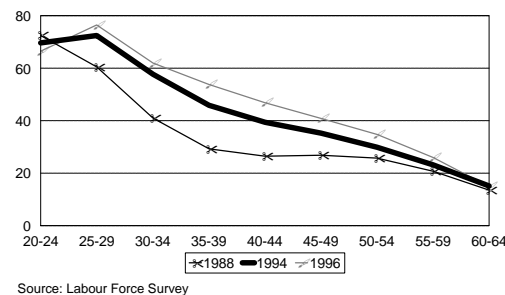
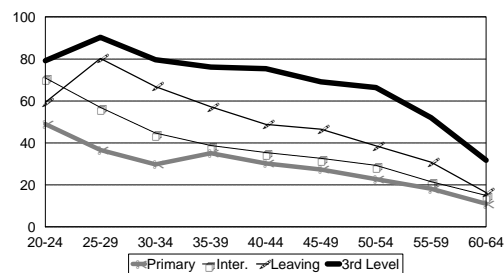


Figure 29 shows how the rise in participation since the late 1980s has seen a steady increase in participation throughout the age groups 25 to 50. The biggest increase has occurred among women in their 30s. The participation rate for women who were aged between 35 to 39 in 1988 and who were aged between 43 and 47 in 1996 has clearly increased, indicating a substantial return to the labour force by these women as families are reared.

The participation rate for women with third level education is extremely high, remaining between 75 and 80 per cent for women up to the age of 40 (Figure 30). For women with a leaving cert. level of education, the participation rate shows a steady decline among older women, from a high of around 80 per cent among those aged 25 to 29. The participation rate for women with a junior cert. or no qualifications is much lower at all ages than for those with higher qualifications. While women with a junior cert. education show a higher participation rate in their 20s than women with no qualifications, the difference between them in the older age groups is small.

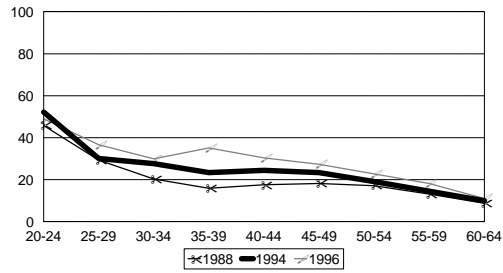
Figure 30
Female Labour Force Participation
 by education, 1996, % of cohort



Source: Labour Force Survey

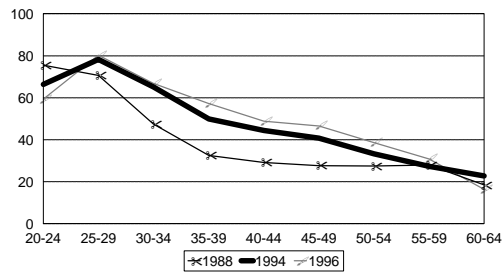
Figures 31 and 32 show the movement over time in the participation rates for women with no qualifications (primary) and women with leaving cert. level education. This shows that between 1988 and 1996 there was relatively little change in the rate for the least qualified category of women. While their absolute numbers fell with the improvement of the educational system, it was only among such women in their late 30s and early 40s that participation rates showed a significant increase. By contrast, the biggest increase in participation occurred among women with leaving cert. education (Figure 32). The increase was particularly marked among such women in their 30s and 40s.

Figure 31
Female Labour Force Participation
 by completed education - Primary, %



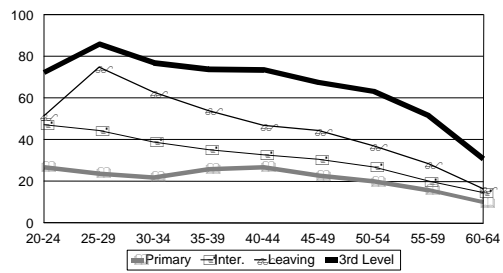
Source: Labour Force Survey

Figure 32
Female Labour Force Participation
 by completed education - Leaving Cert., %



Source: Labour Force Survey

Figure 33
Female Employment Rate
 by education, 1996, % of population



Source: Labour Force Survey

While the participation rate is an important measure of the involvement of women in the labour market it is also interesting to look at numbers in employment as a share of the population. When the figures for the employment rate by level of educational attainment (Figure 33) are compared with those for the participation rate in Figure 30, it can be seen that there is a big difference for those with the least education. For women under 40 with no educational qualifications, under 30 per cent of them are in employment, and these figures are much lower than for women with inter cert. education. For women with leaving cert. or better there is little difference between the two rates, reflecting the low level of unemployment.

In Figure 34 we examine the participation rate and the unemployment rate for women aged 25 to 29 who have no children. For women with even minimal qualifications in that age group, at least 85 per cent are in the labour force. However, the unemployment rate for those with an inter cert. is quite high. These results contrast with those for women with no qualifications where the participation rate is as low as 60 per cent with only 40 per cent actually in employment. While the numbers in this category are very small the poor labour market performance of this group is disturbing.

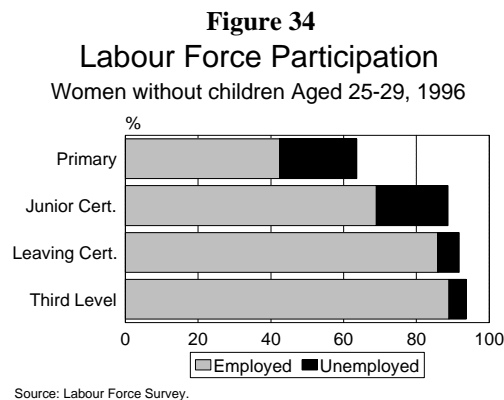
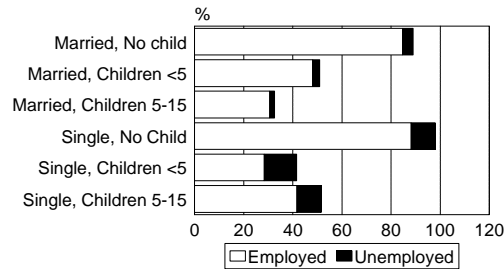


Figure 35 shows the labour market participation for women in the 25 to 34 age group, with and without children. The results indicate that it is the presence of children rather than marriage itself which exerts the major impact on participation¹². However, there is a significant difference in unemployment rates between married and single women. Generally single women, whether or not they have a child, have an unemployment rate of at least 10 per cent (of the population). This difference may owe something to the social welfare regulations which mean that wives record themselves as being out of the labour force rather than unemployed.

Figure 35
Women's Labour Force Participation
 Women Aged 25-34, by age of youngest child, 1996

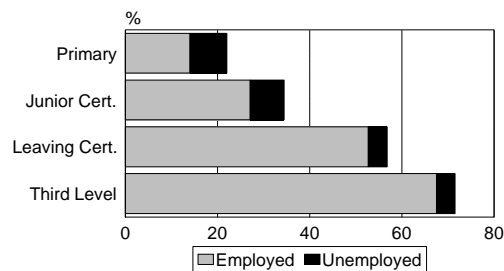


Source: Labour Force Survey.

There is an interesting difference between the labour market behaviour of married women with children and of lone parents. In the case of married women¹³ with children a substantially higher proportion of mothers with children under 5 are in the labour force (and in employment) than is the case for lone parents with a young child (or children). This confirms the results found in Murphy and Walsh, 1997. However, for mothers of older children the position is reversed with lone parents showing a higher participation rate. Even allowing for the higher unemployment rate among such women, a higher proportion of lone parents with older children are in employment than is the case for their married contemporaries.

Once again educational attainment exerts a big influence on the labour market behaviour of mothers. Figure 36 shows the participation rates for mothers aged 25 to 29. For mothers with third level education in this age group 70 per cent of them are in the labour force, whereas the figure falls as low as 20 per cent for those with no qualifications.

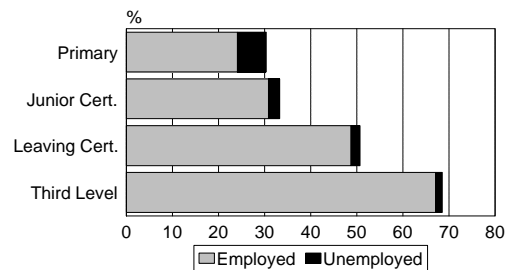
Figure 36
Labour Force Participation of Mothers
 Women Aged 25-29, 1996



Source: Labour Force Survey.

For the cohort of mothers aged 35 to 39 (Figure 37) the participation rates of women with a leaving cert. or higher level of education are very similar to those for women aged 25 to 29. For women with much lower levels of educational attainment the participation rate is higher for the older age group. This probably reflects the fact that, as discussed earlier, such women start their families at an earlier age so that in their late 30s their children are, on average, older. If the costs of child minding are lower for older children this could make it possible for such women to participate to a greater extent in the paid labour force.

Figure 37
Labour Force Participation of Mothers
 Women Aged 35-39, 1996



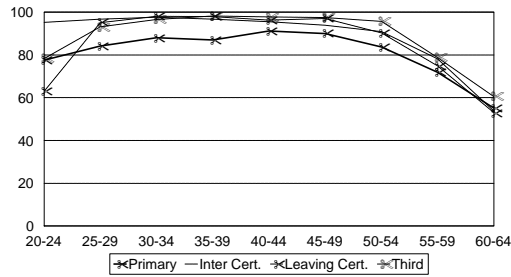
Source: Labour Force Survey.

While there has been a very rapid increase in female labour force participation, this has been concentrated among those women who are best educated and who have the greatest earning power. For women with very limited education, not only do they have much lower participation rates, but they also have much higher rates of unemployment. It seems highly probable that it is not so much the differences in educational attainment *per se* which give rise to the differences in labour market behaviour. Instead, as shown in Figure 28, education is a very good indicator of the potential earnings of women in the labour market. The potential gains for women with a good education from labour market participation are much higher than for those who are poorly qualified while the costs of child minding are likely to be relatively unrelated to parents' earnings.

There are a number of possible explanations why the labour market behaviour of lone mothers is different from that of married (including cohabiting) partners. The costs of child minding may well be lower or more evenly distributed between the parents where a couple are married, making participation in the labour market easier where children are very young. The high unemployment rate among lone parents is also interesting as, presumably, many of these women would qualify for lone parent's allowance and are not registered as unemployed. However, in the labour force survey they declare themselves to be unemployed whereas the vast bulk of married women who are not in employment declare themselves to be outside the labour market altogether.

For males the level of education attained affects not only whether or not they are likely to find employment but also whether or not they are likely to be in the labour force. For those with a primary education they show a much lower participation rate in the 20 to 45 age group than for men with even minimal qualifications (Figure 38). This suggests a significant discouraged worker effect among this group (Walsh and Murphy, 1996). Figure 39 shows that, as well as having a lower participation rate, less qualified men also have a very much higher unemployment rate.

Figure 38
Male Labour Force Participation
 by completed education, 1996



For both men and women (Figures 39 and 40) the unemployment rates for those with at least a leaving cert. are quite low and very few men or women with third level qualifications record themselves as unemployed. This probably reflects the mobility of such workers, especially in the younger age groups. If they do not get satisfactory employment in Ireland they will find it in the UK or elsewhere in the world¹⁴. It makes the supply of skilled labour in Ireland unusually flexible compared to other EU countries.

Figure 39
Male Unemployment, 1996
 By Educational Attainment

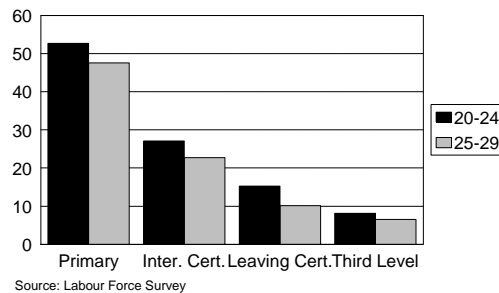
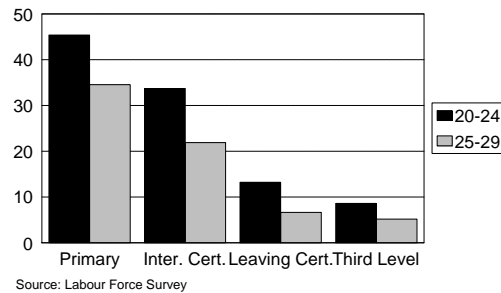


Figure 40
Female Unemployment, 1996
 By Educational Attainment



For the future the steady rise in the educational attainment of men and women, which is in prospect as those leaving the educational system to-day replace older cohorts, will continue to impact on labour force participation out to 2010. In addition, there is likely to be some further increase in participation rates for women independent of the effect of changes in educational attainment. However, as Murphy and Walsh, 1997, suggest, the rise over the next decade will be smaller than over the past decade.

The *Medium-Term Review* (Duffy, FitzGerald, Kearney and Shortall, 1997) included forecasts for female labour force participation out to the end of the next decade. These forecasts suggested that over that period female labour force participation could rise by around 10 percentage points above the 1996 level. Around half of the forecast rise would be due to the changing educational composition of the population and the other half to a forecast rise in education specific participation rates.

6. ECONOMIC AND SOCIAL IMPLICATIONS

In this paper we have revisited some of the issues which were of particular interest to the Society in its first 150 years of existence and we have looked at them in the light of the changing structure of Irish society. While many of the papers of the past on demographic and social issues adopted a rather apocalyptic tone, we are looking forward from the vantage point of a decade of exceptional economic progress. This progress, albeit unevenly distributed, raises new possibilities and new concerns that were not considered by the Society in the past.

In an extremely innovative and influential paper on Irish demography, published 30 years ago, Walsh, 1968, said that “the evidence presented (in the paper) suggests that there is no tendency for the supply of labour in Ireland to generate its own demand for labour”. Walsh also quoted from a letter from Malthus to Ricardo, written in 1817, where Malthus spoke of “the predominant evil of Ireland, namely a population greatly in excess above the demand for labour...”. This was a refrain

which had echoed within this Society and outside it for over 150 years. It is a mark of how much has changed in Irish society and economy that such sentiments may seem obsolete to-day.

The big changes in Irish demography in a relatively short space of time necessitate a rethinking of many of our assumptions about the future. While Walsh in 1968 was concerned about a possible explosion in the birth rate, with the prospect of continuing high emigration, we now have the prospect of below replacement fertility combined with zero net emigration and possibly sustained inward migration. The latter would yield a stronger population profile than the former and, paradoxically, would result in more effective population replacement than Ireland experienced while it had above-replacement fertility in earlier decades.

Underlying many of the demographic changes that have occurred has been the effects of the last 30 years of investment in education. This investment has changed behaviour in a range of different fields. It has been a contributory factor in the decline in fertility and it has influenced the pattern of family formation. The nature of emigration has been changed with young skilled labour proving more mobile than unskilled labour. Female labour force participation is also affected by the increased educational attainment of the population through a number of different mechanisms. Changes in the educational composition of the population have also influenced tastes and patterns of behaviour in the economic sphere. It has certainly had a direct impact on productivity and output in the economy.

The changing structure of the population has implications for a range of public policies. Firstly, the decline in the economic dependency ratio provides a window of opportunity that may last 15 or 20 years. In the long term the country is likely to face the problems of ageing which are common to many of our EU neighbours to-day, though there is little prospect at present that even in the longer term these will be as severe as those of some developed countries. Secondly, the changing nature of labour supply will require a reassessment of labour market and industrial policies. Thirdly, the changing structure of the population will put pressures on areas such as physical infrastructure, including housing. Fourthly, while the broad economic implications of the changes that are taking place are favourable, there remains a significant minority of the population that is significantly disadvantaged in the new environment. In particular there is a need to focus on current developments as they affect families and children.

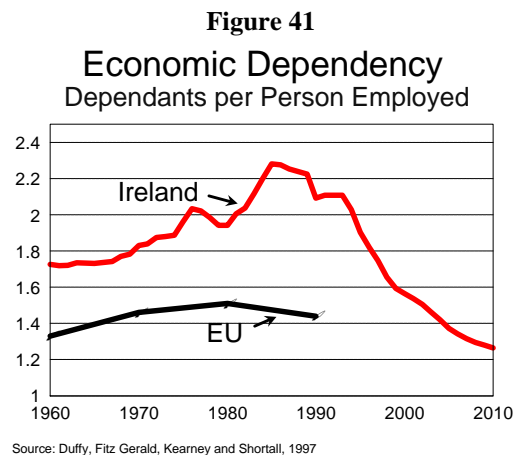
Dependency and Pensions

The fall in the birth rate that took place in the 1980s means that over the next 10 years the number of young people in the dependent age groups (still in the educational system) will fall. As their numbers fall there will be a corresponding rise in the potential numbers of young adults in the working age groups. While in the past such a rise might have disappeared in emigration, or served to raise the numbers unemployed, the situation to-day is different. The high level of education attained by

most of the young labour market entrants means that they either get a satisfactory job in Ireland or they leave. This has served to increase the supply of skilled labour (and also to increase the elasticity of labour supply). Under current circumstances the bulk of these labour market entrants are, in fact, finding attractive employment in Ireland, swelling the numbers in employment.

At the same time as the numbers in the active age groups in employment in Ireland are rising rapidly, there will be only a moderate increase in the numbers of retired persons. Many of those who would be retiring to-day emigrated in the 1950s and never returned. While rising life expectancy will see an increase over the next 15 years in the population over 65, and especially those over 80, this will still be moderate by the standards of many other developed countries.

These positive developments leave a window of opportunity over the next 20 years when the economy will face an exceptionally low rate of economic dependency (Figure 41). Ireland will see less than average pressure on the public finances, certainly compared to many of its EU neighbours. In the very long term the foreseeable rise in the dependency ratio out to 2025 or 2030 will still probably leave Ireland in a better position than it was in the 1960 to 1990 period, so that extreme pessimism about the inevitable ageing of the population is unwarranted. Ireland has experienced in the recent past the problems which Germany and other EU countries face in the immediate future. It was not very comfortable but the economy and society survived the experience without undue trauma. As a result, apocalyptic forecasts of a pensions time-bomb seem unwarranted.



We have time to prepare for future changes in the demographic structure and a range of different instruments is available which could alter the future balance:

- Investment – private individuals may increasingly provide for their retirement by saving. The public sector, which will inevitably carry some of the burden of long-term support, can ease future problems by part funding these liabilities; initially this could involve paying off debt.
- Changes in the retirement age – Instead of reducing the legal retirement age, some countries are actually announcing an increase to come into effect in the distant future.
- “Family friendly” policies to ensure that fertility does not fall too low. Changing work practices to facilitate parents in looking after children could reduce the cost of having children. Such policies have played a contributory role in Scandinavia’s current relatively high fertility.
- Immigration - This mechanism may provide an automatic stabiliser ensuring an acceptable and efficient population structure.

Industrial policy and the Labour Market

The changing structure of the labour force, with a rapid increase in the proportion of those in the active age groups with at least a leaving cert. standard of education, has big implications for the labour market. For those who have a reasonable level of education they can look forward to a life of employment. Even if there were some unforeseen downturn in the Irish economy, it is probable that they would seek and find employment elsewhere in Europe. The more probable scenario is that they will find relatively well paid employment at home in Ireland. Either way the proportion of the population that is unemployed is likely to continue falling over the next decade.

The current very rapid rise in the supply of labour can not be sustained beyond the early years of the next decade. The effects of the high birth rate up to 1980, on the numbers of new labour market entrants to-day, will be spent by 2005. The rise in female participation towards European levels of activity will also be attained around the same time. Finally, the stock of Irish emigrants abroad, able and wanting to return and work in Ireland is diminishing and those still abroad are ageing. For the last one hundred and fifty years Ireland has had the “problem” of too many people but not enough jobs; over the next decade we face the prospect instead of a labour supply constraint.

For some time industrial policy has been taking account of the changing circumstances where the bulk of labour market entrants are skilled. There has been a gradual shift in orientation over the last 15 years with more and more attention being given to attracting skilled jobs. However, the changing nature of the labour market raises further questions about the future objective of industrial policy.

Industrial policy for 40 years has aimed to attract jobs to Ireland to employ the unemployed or to reduce the outflow of emigration. In promoting such an inflow quite high incentives were paid in the early years of that policy. The justification for

such a policy lay in the well founded belief that the shadow price of labour was less than one – some, if not all, of the new employees would not have found employment in Ireland without the new industry. Honohan, 1996, in analysing the costs and benefits of such a policy, suggested that, in current circumstances, the shadow price of labour should be close to one when evaluating new projects. However, if the new jobs are to be filled by skilled employees coming from abroad the shadow price should possibly be greater than one reflecting the additional burdens which this would place on the available infrastructure. Thus a reevaluation of industrial strategy for the next decade may be required by the changing nature of labour supply. Once the current rapid increase in labour supply falls off by the middle of the next decade, the nature and volume of new jobs that may be needed, could be greatly altered.

The implications of the demographic changes for labour market policies are three-fold.

Firstly, in the future the disadvantaged group who have been failed by the educational system, though much smaller than in the past, may become even more isolated within the domestic labour market. While relatively rapid economic growth does involve an increased demand for unskilled labour, some of these jobs may well be filled by immigrants from other EU countries who have basic skills which the current unemployed do not. Thus a solution to the current high level of long-term unemployment is not going to be automatic without appropriate training and educational programmes.

Secondly, with a tightening labour market for skilled labour, where both labour and capital are internationally mobile, there may be a case for companies taking over more of a role in providing the specific skills they need. In addition, a modern economy requires a range of different skills and the education and training system must take account of the impending reduction in labour market inflows. Undue concentration on a particular market segment could exacerbate skilled labour shortages in the future.

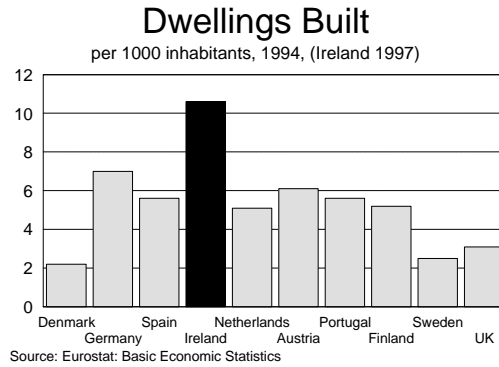
Thirdly, the increase in labour force participation by women in the past decade has been an important factor in the growth of the economy. However, there is less scope for increasing participation over the next decade. It may well be desirable to look at measures that would facilitate couples combining child-rearing with active labour market participation. This could help increase the supply of skilled labour. Such measures could include increased provision of child-care facilities for lone parents and a move to greater flexibility in working arrangements for parents.

Infrastructure and Housing

The rapid rise in the population in the young adult age groups, with a disproportionately small share of the population in older age groups, must inevitably lead to a rapid increase in the demand for dwellings. In many other EU countries much of the demand from young adults for independent dwellings is met as the older

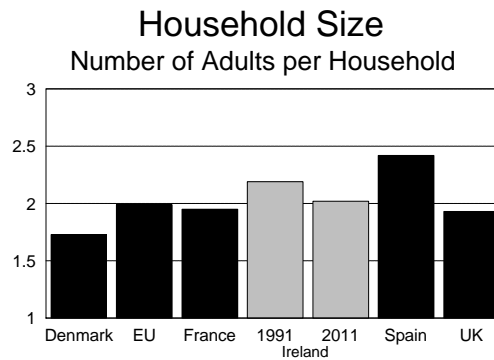
generation dies, releasing existing accommodation; in Ireland this is not possible. As a result, we need to invest a disproportionate share of our income in new dwellings. Last year the number of dwellings built in Ireland was almost 10 per cent of the number built in Germany, in spite of a population a fraction of its size (Figure 42).

Figure 42



In forecasting the future it is not sufficient to consider demographic factors alone. Changing tastes and rising living standards will also have an impact. In looking to the next decade it seems likely that headship rates will rise so as to reduce the average number of adults per household to around 2. This would bring household size in Ireland almost into line with the current EU average, though well below the current situation in the country with the largest households, Spain (Figure 43).

Figure 43



Currently, the demand for housing is running at an exceptionally high level, reflecting the very big increase in numbers at work. As people find well paid employment, they can afford to set up an independent household at an earlier age than in the past. In addition the significant net immigration of people in their late 20s and early 30s is further adding to demand. These factors are increasing the underlying demographic pressures, which will persist until the end of the next decade.

The very rapid rise in the cost of housing, reflecting the pressures in the market, will mean that those who are least skilled, who either have a poorly paid job or none, will be locked out of the housing market. One of the success stories of the 1980s was the extent to which physically satisfactory accommodation was readily available to even the poorest in the community; this is no longer the case. For the albeit diminishing share of the population who are unemployed the current environment will make them more than ever dependent on social housing provisions.

The housing market is only one aspect of the pressures which demographic change is putting on physical infrastructure. The rapid movement to two-earner households and the change in the nature of those jobs is greatly increasing the number of traffic movements in urban areas. With employment rising much more rapidly than population, the number of commuter journeys is also rising very rapidly. In addition, the more skilled nature of many of the new jobs and the changed working arrangements sees many more work-related journeys, spreading pressure on infrastructure well beyond the traditional peak hours.

The Family

It is as yet unclear what long-term social or economic effects will arise from the transformation of reproductive patterns represented by falling fertility, an increase in the share of fertility arising outside of marriage and an increase in marital breakdown. The growth of lone parent families often causes particular concern in this regard though its real effects are hard to assess. Concerns about family life seem to recur in every generation, even though the targets of the concern may vary. Brendan Walsh, in his 1968 paper, mentioned earlier, expressed worries about the high number of very large families in Ireland (those with seven births or more), especially since these were concentrated among the less well off. He felt that these large families had to be 'a serious barrier to mobility and educational attainment, especially among the poorest segments of the population' (Walsh 1968, p. 8). Today, we hear little about the *large* family (and it has become much rarer even among the poor). Instead concern has shifted to the lone parent family. While lone parent families frequently suffer social and economic disadvantages, it is not clear if their problems are greater or lesser than the problems faced by the large two-parent family in the past and it is therefore difficult to draw conclusions about the underlying trend in the quality of family circumstances as far as children are concerned.

Footnotes

1. In calculating the period fertility rates the number of children aged under 5 is used as a proxy for the number of births to the relevant cohort of women over the previous 5 years. The resulting estimate of the period fertility rate is then the average for the rates for the previous 5 years. The figures for the numbers of children will differ from the actual number of births to those mothers in the previous 5 years by the number of deaths of children in the intervening period (which is very small), and perhaps also, in the present context, because of sampling error in the survey data used. The estimated period fertility rate for the population using this method is, in fact, very close to the average of the rates for the years 1991-95.
2. For example, Geary, 1935 and Freeman, 1939.
3. This change was reflected in the proceedings of this Society in the 1960s as its “chronic preoccupation with demography had receded temporarily” (Daly, 1997, p.171).
4. This is not a true stock figure. The fact that it fell to less than zero in the 1970s reflects the fact that by the end of the 1970s many emigrants from an earlier period had returned in the previous 25 years and they more than counterbalanced the numbers who left in the younger age groups. The stock of emigrants abroad over all age groups was still very substantial in the late 1970s.
5. Barrett and Trace, 1998, suggest that 40 per cent of the gross inflow in recent years were not born in Ireland amounting to a figure of 40,000 or 50,000 individuals.
6. This analysis is carried out by examining what proportion of each cohort at one census is still in the country at the time of the next census (but 5 years older). Some estimation is necessary to arrive at the likely educational attainment of those still in the educational system at each census. This analysis is likely to underestimate the final educational level attained. As a result, the Figure, if anything slightly underestimates the proportion of emigrants who had a leaving certificate or third level education.
7. Garvey and McGuire, 1989, and Hannan, Sexton and Walsh, 1992, discuss how some of the least qualified emigrants did badly on emigration and were forced to return relatively quickly.
8. These data differ from those in Figure 21 in that they include people who have moved frequently in and out of Ireland who may have a different level of educational attainment than the stock of all returned emigrants. In any one year these frequent movers will constitute a much higher share of the recent returned emigrants than they do of all returned emigrants.
9. Participation rates were very high in some countries during the war but fell when the war ended.
10. In fact, the evidence presented in Barrett, Callan and Nolan, 1997 suggests that, if anything, the returns to education actually increased over the period.
11. Callan and Wren, 1994, p. 64.
12. These results are slightly different from the results in Murphy and Walsh, 1997. This difference is probably attributable to differences in definitions. Here we

treat cohabiting couples as married, though they are small in number. In the single category we include widows and separated wives, as well as those who were never married. The results in Murphy and Walsh suggest differences in the labour market behaviour of these latter two groups, single and separated or widowed.

13. The very small numbers who report themselves as cohabiting in the Labour Force Survey are included here in the married category.
14. Alternatively, they may be better able to pick up less skilled jobs at home in competition with those with a lower level of educational attainment.

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