

Trends in Irish Fertility Rates in Comparative Perspective

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Abstract. This paper examines trends in Irish fertility rates over the past four decades in the context of fertility trends in developed countries generally. Irish fertility rates have stabilised at the upper edge of the European range in the 1990s. This seems surprising, since the level of direct and opportunity costs of children would seem to be no more favourable to childbearing in Ireland than elsewhere in Europe. However, while Irish fertility rates are still reasonably high by European standards they are not particularly high by the standards of the “new world” countries – fertility rates in the US and New Zealand have been higher than in Ireland for much of the 1990s. The present paper explores the historical background and significance of these similarities and differences. It interprets trends in fertility rates in Ireland by reference to changes in supply and demand constraints and in the shifting balance between the two since the 1960s.

I INTRODUCTION

The total fertility rate (TFR) in Ireland dropped sharply during the 1980s but in the 1990s stabilised at levels that are close to the upper edge of the range for developed countries.¹ This stabilisation at upper bound TFRs is somewhat surprising as Ireland in the 1990s was marked by rapidly rising demand for female labour, rising costs for childcare, low state support for families with children and a housing shortage. These factors together might be expected to have caused Irish fertility rates to continue converging downwards towards the European average. Yet the strong convergence trend of the 1970s and 1980s more-or-less halted in the 1990s and it is not clear if or when it will resume. Furthermore, when the comparative range is extended

¹ See Appendix for definition and comment on TFRS.

beyond Europe to other developed countries, notions of “convergence” in TFRs do not adequately capture how Ireland fits into the international picture, since Irish TFRs in the 1960s were already more similar to those of some non-European developed countries than is often appreciated.

With these issues in mind, the present paper analyses trends in Irish fertility rates over recent decades in an attempt to identify their main components, locate them in an international perspective and consider their future course. Given the limited range of data sources on fertility in Ireland,² it focuses on aggregate trends based on birth registration data and on period rather than cohort measures (Ní Bhrolcháin (1996) analyses the merits and demerits of period versus cohort measures and, contrary to usual practice, argues for the superiority of period measures). The main focus of the paper is on fertility rates as measured by TFRs, though it is also concerned with matters such as union formation and family size which feed directly into TFRs.

The paper suggests that any attempt to understand trends in Irish fertility rates must come to terms with the supply side of the fertility system as well as the demand side. Since the 1960s, fertility in Ireland has evolved from an exceptional supply-constrained system (dominated by a low incidence of marriage) to a more standard mix of demand and supply constraints. Today, the costs of children – the principal demand constraint – are rising while the cultural valuation of large families has declined, thus leading to downward pressure on fertility. However, certain supply constraints have also eased, reflected mainly in an upsurge in new family formations and a countervailing upward pressure on fertility. These upsurges may be the consequences of positive income effects arising from the recent economic boom in Ireland – though why increased income should be funnelled into children rather than into substitute goods is difficult to explain. While the resulting supply-demand balance could easily be altered by shifts in any of a wide range of influences, it could persist at something close to its present form and thereby sustain Irish fertility rates in their current position close to the upper bound of fertility in developed countries.

² Data on fertility in Ireland are poor. Ireland has never had a comprehensive fertility survey and so lacks detailed data on individual fertility behaviour (though see the pioneering study by Mahon *et al.*, on crisis pregnancy). Up to 1981, the Census of Population periodically included questions on numbers of children born to married women (single women and widows were not included). These have not been included in the Census since 1981 and no more adequate measure of cohort fertility has taken their place.

II INTERNATIONAL CONTEXT: UPPER AND LOWER FERTILITY LIMITS

By the early 1990s, replacement level fertility (that is, a TFR of 2.1 or less) had become the upper limit of fertility virtually throughout the developed world. No country which dropped below replacement fertility over the past four decades (the first to do being Japan in the late 1950s) has risen above that threshold again. Replacement-level fertility is now steadily emerging in the developing world also, having already arrived in many parts of Asia (China, Thailand, North and South Korea, Singapore and Hong Kong). In consequence, an upper fertility limit of 2.1 or thereabouts is on the way to becoming a global norm in the foreseeable future (United Nations, 2000b). The United Nations estimates that in 1998, 45 per cent of the world's population lived in countries with TFRs at or below replacement level and its central projection is that that proportion will have risen to 75 per cent by 2018 (United Nations, 2000b, p. 27).

As an upper TFR limit of around 2.1 becomes a near-universal norm, attention has shifted to the question of what the lower limit of fertility might be. In much of Europe, fertility had already fallen below replacement by the mid-1970s (as it had in Japan two decades earlier) but it has shifted further downwards since then. By the latter half of the 1990s, the TFR in Japan and much of Europe was below 1.45. The lowest levels were recorded in southern and eastern Europe. Italy, Spain, Bulgaria, the Czech Republic, the Ukraine and Latvia all dipped below 1.2 between 1995 and 1999 (Council of Europe, 2000, p.74). Some sub-national regions were even lower still (for example, the province of Ferrara in Italy had a TFR of 0.7 in 1992), and for some commentators this raised the question as to whether one could speak of an absolute minimum in the TFR at somewhere around these levels (Golini, 1999). TFRs of 1.2 or below may reflect transitory fluctuations often found in period measures. Nevertheless, even on a cohort basis, it now seems likely that fertility rates per woman at or even below 1.5 may become widespread in Europe, Japan and perhaps some other parts of Asia, and are likely to be sustained for long enough to bring about significant population decline in those regions (United Nations, 2000b).

Some other regions of the developed world, of which the United States is the most important, have had a stronger fertility record. The TFR in the US dropped from close to 4 in the late 1950s to 1.79 in 1978 (its lowest ever), but since then has shifted slightly but steadily upwards, reaching 2.05 in 1998. A fertility rate at this level, coupled with modest inward migration, is sufficient to ensure that total US population will continue to grow for the foreseeable future, in contrast to incipient population decline in Europe (United Nations,

2000b). US fertility has been sustained in part by ethnic minorities – the TFR among US Hispanics in 1998 was 2.95 and among blacks was 2.24. But even among non-Hispanic white women in the US, the TFR was 1.85 in 1998 (National Center for Health Statistics, 2000, pp. 35-36).³ This is higher than the national TFRs of nearly all of Europe (in Europe, only Albania, Cyprus, Ireland, Macedonia and Turkey had TFRs above 1.85 in 1998).

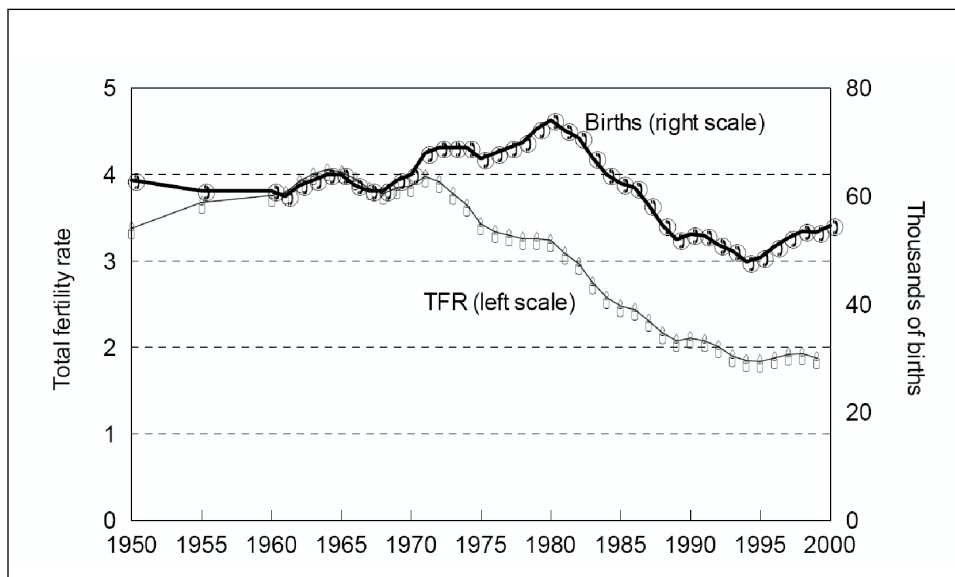
New Zealand is another country which has sustained its fertility at the upper edge of the range for the developed world. As with the US, its TFR fell by more than half between the early 1960s and the early 1980s (from around 4 to just under 2) but then levelled off and in 1999 was still 2.0 (data supplied by Statistics New Zealand).

These patterns mean that the effective range for TFRs at the national level in the developed world today is between an upper limit of approximately 2.1 and a lower limit somewhere in the region of 1.1. Variation in cohort fertility is likely to be somewhat narrower, in that its lower limit is likely to even out at somewhere above 1.4 or thereabouts. So far, the US is the most important major region of the developed world to remain consistently at the upper edge of that range, while most of Europe and Japan lie closer to the opposite end.

III FERTILITY RATES IN IRELAND

Figure 1 presents trends in Ireland in two indicators of fertility – the number of births and the TFR – for the period 1950-2000. During the 1950s, the number of births in Ireland fell slightly but because of decline in the population of women in childbearing years, the TFR rose. From the late 1960s to 1980, the opposite happened – births increased, but because the female population increased faster, the TFR turned downwards and fell from 3.87 in 1970 to 2.08 in 1989. Thenceforth, the decline in TFR slowed down almost to a halt. Despite a further dip in 1993-95, its overall trend in the 1990s has been reasonably flat. The number of births increased by 14 per cent between 1994 and 2000 but that was largely due to increases in the population of women of childbearing age rather than to an increase in the fertility rate per woman.

³ State-level variation in the TFR in the US was such that, in 1998, 14 states had TFRs above 2.1, with four states (Alaska, Arizona, Nevada and Utah) above 2.4. At the other extreme, three states (Maine, New Hampshire and West Virginia) had TFRs below 1.7 (National Center for Health Statistics 2000).

Figure 1: *Number of Births and Total Fertility Rate in Ireland, 1960-1999*

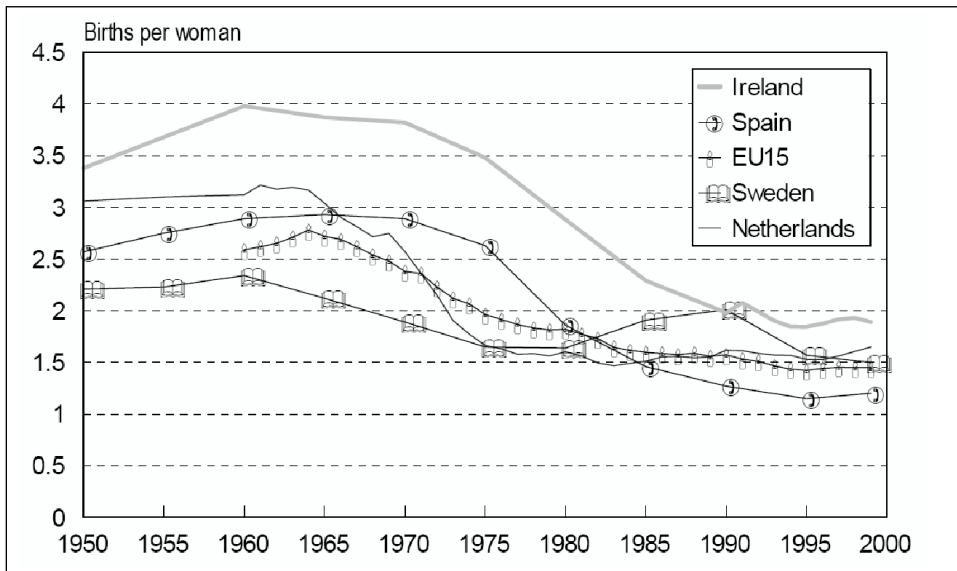
Sources: CSO Annual and Quarterly Vital Statistics Reports, Council of Europe (2000).

Since the 1950s, the level of fertility in Ireland has consistently been high by European standards, in keeping with the image of the Irish demographic regime as an outlier in Europe (Coleman, 1992). However, if the comparative range is extended to include other regions of the developed world, Irish exceptionalism becomes less clearcut, at least as far as fertility rates are concerned (as we shall see further below cross-national parallels in fertility rates do not necessarily imply parallels in other aspects of fertility). At certain points – particularly the start and end of the period between 1950 and 2000 – fertility rates in the United States, New Zealand and (at the start of the period only) in Canada and Australia have also been high by European standards and have fallen more or less in the same range as those in Ireland.

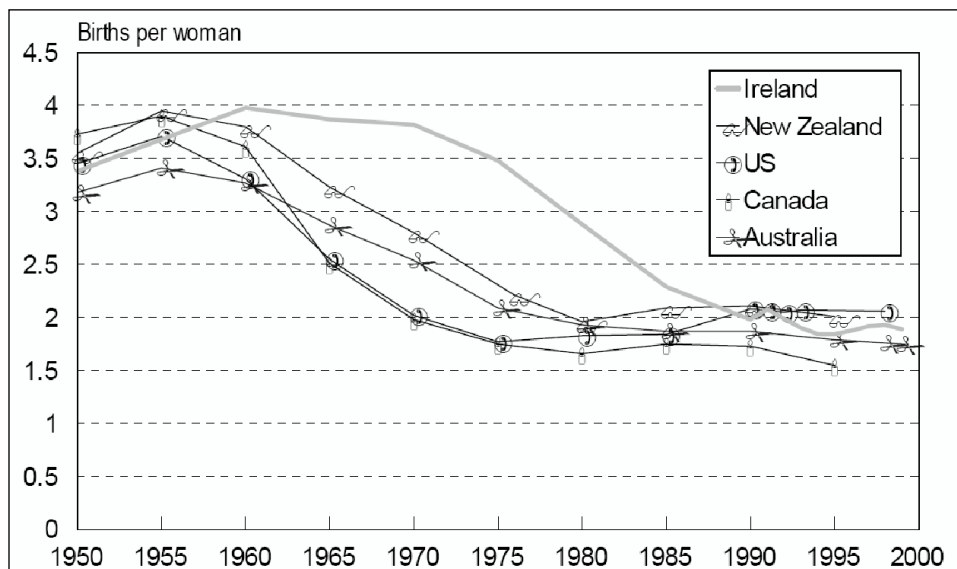
Figures 2a and 2b illustrate these comparisons. In 1960, when the Irish TFR was just below 4, few countries in Europe (the Netherlands and Portugal being the main instances) had TFRs even barely above 3.0 and the average for what later became the EU region was 2.69 (United Nations, 2000b; New Cronos, 2001). The Irish TFR was thus over 40 per cent higher than the average for the later EU and 66 per cent higher than that of Sweden, which then represented the lower limit TFR in western Europe. After 1960, fertility decline proceeded sooner and faster in the rest of Europe than in Ireland, so that Ireland's outlier position first became more pronounced. Then the decline

in the Irish TFR during the 1970s and 1980s set it on a convergence course toward the European average. However, convergence halted with the bottoming out of the decline in the Irish TFR in the 1990s, so that at its lowest point (1.84 in 1995), the Irish TFR was still 30 per cent higher than the EU average and 60 per cent higher than the TFR in Spain, which by then represented the lower limit in Europe (and indeed in the world).

Figure 2: *Ireland's TFR in Comparative Perspective, 1950-2000*
 2a. *Ireland and Europe*



2b. *Ireland and the "New World" Countries*



Sources: UN (2000a), New Cronos (2001).

Figure 2b shows that in the late 1950s, the “new world” countries – the US, Canada, New Zealand and (to a slightly lesser extent) Australia – were clustered around the TFR levels found in Ireland. Fertility in those countries declined sharply in the 1960s but by the 1980s that decline had levelled off and, in the US and New Zealand particularly, had turned into modest recovery. By the 1990s, the TFRs in the US and New Zealand had stabilised at levels slightly above those in Ireland, where they remain today. The TFR in Australia had fallen somewhat lower (to 1.75 in 1998), while Canada (1.6 in 1998) had dropped to well within the range common in Europe.

IV CHILDBEARING PATTERNS

Although Irish fertility levels in the 1960s were similar to those of the new world countries, the same cannot be said of childbearing patterns underlying them. It is in connection with the structure of childbearing in this period, rather than overall fertility rates, that Irish exceptionalism can again be unambiguously asserted. In Ireland, the uniqueness of the structure of childbearing lay in the degree to which marriages were few but families were large, a combination which had been a feature of Irish reproductive patterns since the late nineteenth century (Guinnane, 1997; United Nations, 1990; Walsh 1985). Although the United States and New Zealand were the developed countries with TFRs closest to Ireland in 1960, they were the furthest removed from Ireland as far as marriage patterns were concerned. In those two countries, marriages were many and took place at a young age by western standards, though family sizes were not the smallest in the developed world. Apart from decline in fertility levels, the shift away from the distinctive Irish fertility system of a low incidence of marriage and high marital fertility towards a more standard pattern for developed countries is a major part of the story of Irish fertility trends over the past half century. That new standard pattern is not easy to track, since one of its features is a growth in the number of non-marital unions and thus in types of couple-formation which are not fully captured in typical demographic data. Nevertheless, it is possible to trace the general outlines of what has happened and to gain some indirect indications of the more clouded developments.

Marriage

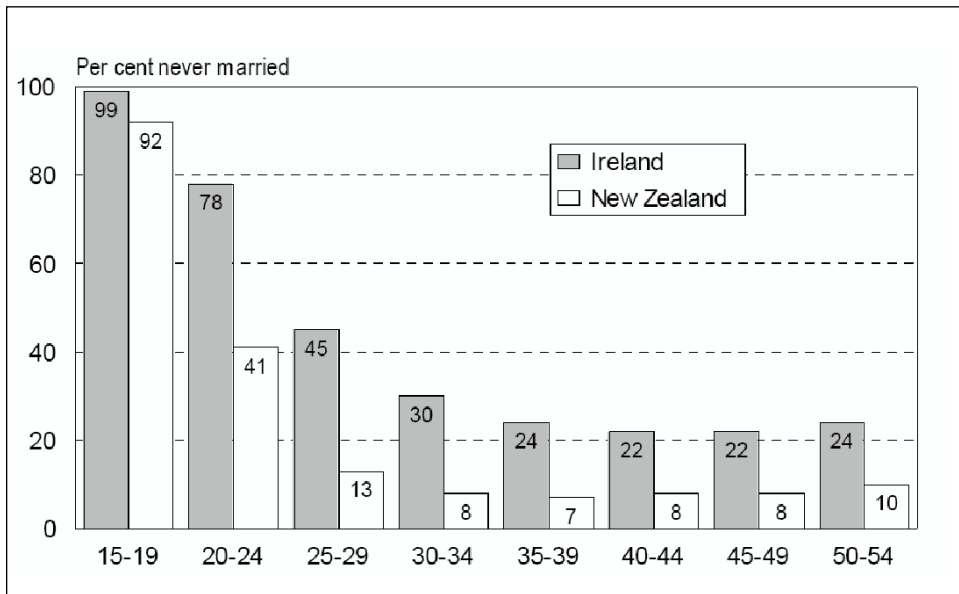
The shift in Irish marriage patterns since the 1960s can be illustrated by comparing it with the shift from the opposite extreme which occurred in New Zealand. In 1961, the proportion of women who were never-married was much lower in New Zealand than in Ireland (Figure 3a). At age 30-34, for example,

only 8.1 per cent of women in New Zealand in 1961 were still single, compared to 29.6 per cent in Ireland. Over the following two decades, Ireland had something of a marriage boom, in contrast to the rest of the developed world where the post-war marriage boom was by then played out and a decline in marriage was setting in (United Nations, 1990). By 1981, the proportions of women remaining single had fallen in Ireland while, in New Zealand, singlehood had risen among women aged between 20 and 30. In general, though the proportions remaining single were still larger in Ireland (Figure 3b).

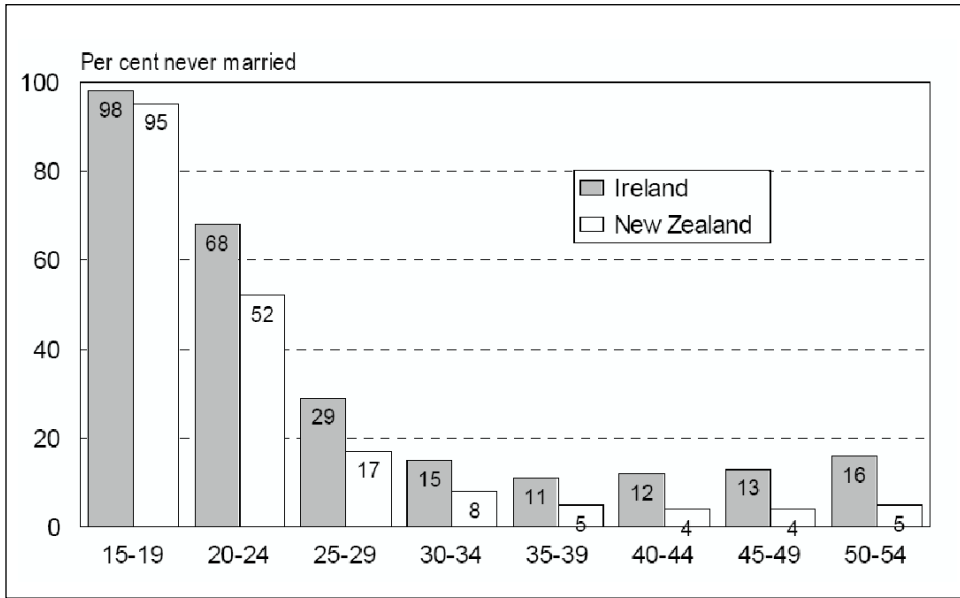
By 1996, the marriage boom in Ireland was well past and the incidence of non-marriage had risen sharply again (Figure 3c). Up to age 30-34, the proportions never married were higher in 1996 than they had been in 1961. A similar trend had continued in New Zealand, with the result that the former divergence in proportions remaining single between New Zealand and Ireland had all but disappeared by 1996.

Figure 3: *Proportions Never Married, Ireland and New Zealand, 1961, 1981, 1996*

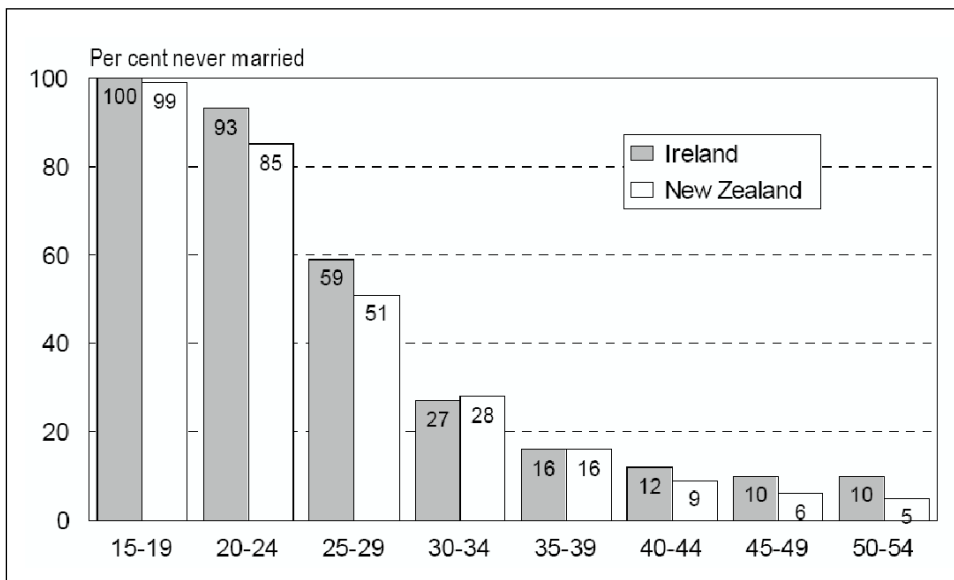
3a. 1961



3b. 1981

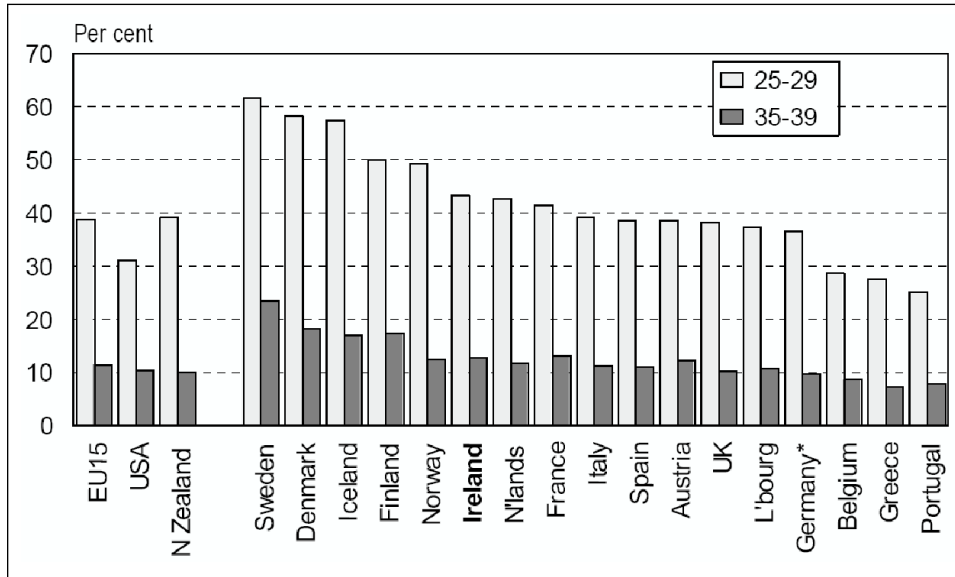


3c. 1996



Sources: Census 1996 (Ireland), Statistics New Zealand.

Figure 4: *Proportions Never Married Among Women Aged 25-29 and 35-39, Western Europe, 1990/1991*



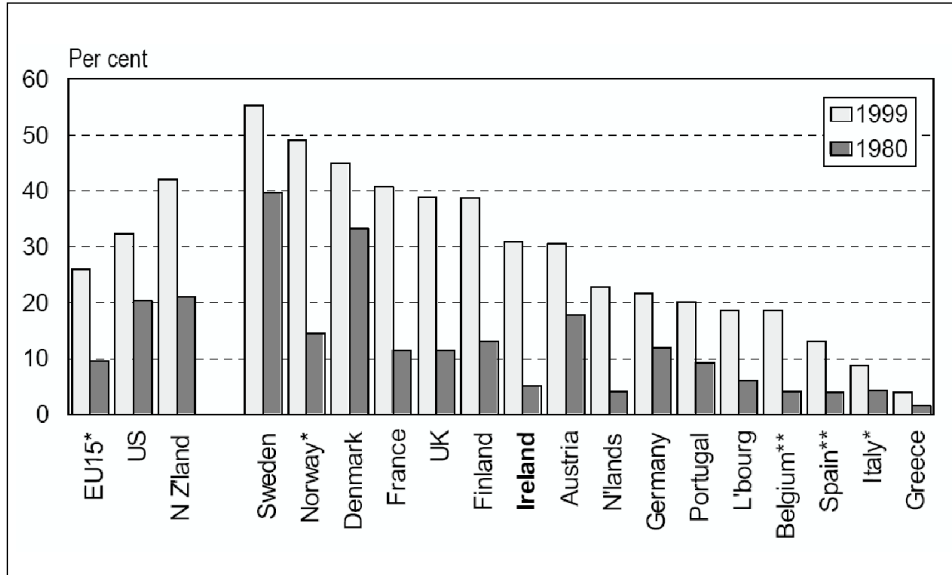
* excl. former GDR. *Source:* New Cronos (2001).

A broader international picture is summarised in Figure 4 for 1990/91, referring to women in the age-groups 25-29 and 35-39. This shows that, by the 1990s, the only real outliers as far as non-marriage was concerned were the Scandinavians – Denmark, Sweden, Finland, Norway and Iceland. Ireland's level of non-marriage by that time was unexceptional. Non-marriage in the US was somewhat less common than in Europe, though more recent data suggest that the gap may be closing (*Statistical Abstract of the United States, 1998*).

As the Scandinavian cases suggest, the significance of the declining incidence of marriage since the 1980s is complicated by the growing delinkage of both couple formation and childbearing from marriage in that period. As Figure 5 shows, the share of births taking place outside of marriage has risen sharply in many countries in recent decades and is particularly high in Scandinavian countries. In much of Europe, there are indications that large proportions of non-marital births take place within quasi-marital unions (Kiernan, 1999), so that the increase in non-marital fertility can be taken as a rough indicator of a rising trend in non-marital cohabitation. Similarly, in the US “almost all of the increase from the early 1980s to the early 1990s in births to unmarried women was in births to unmarried cohabiting women” (Ventura *et al.*, 2000, p. 2), though there are some indications that the balance

in the US may have started to shift back to non-cohabiting unmarried mothers in the 1990s (Raley, 2001, see also Smock, 2000).

Figure 5: *Proportions of Births Outside of Marriage, 1980 and 1999*



*1998, **1997

Sources: New Cronos (2001), Stat. Abstract of the U.S. (1998), Stat. NZ

Viewed in those terms, the patterns presented in Figure 5 could be taken as a complement to the data on cross-national patterns in the incidence of marriage referred to earlier. The Scandinavian countries, in general, tend to compensate for a low incidence of marriage by having high levels of non-marital fertility (much of it within informal unions). The Mediterranean countries, by contrast, which do not have particularly high incidence of marriage, do not have a high level of non-marital fertility either. In those countries, declines in the incidence of marriage indicate a decline in couple formation to a degree not found in other developed countries. Ireland would appear to occupy a middle position in this regard: non-marital fertility now accounts for 32 per cent of all births in Ireland, which is just slightly above the EU average and slightly below the level of the United States. While we have little information on the underlying mechanisms, it is possible that this level of non-marital fertility reflects a growth in non-marital couple formation which compensates in part at least for the decline in marriages over the past two decades. It is known that non-marital fertility in Ireland is concentrated

among younger mothers and those with lower educational levels and poorer employment prospects (Hannan and Ó Riain, 1993; Fahey and Russell, 2001). However, the steady rise in educational attainment and virtual elimination of unemployment which has occurred in Ireland during the 1990s has not caused the upward trend in non-marital fertility to reverse or even moderate. On a trend basis, therefore, any posited relationship between non-marital childbearing on the one hand and either poor education or unemployment on the other would need to be carefully explored.

Family Size

As a counter-balance to the low incidence of marriage in Ireland in the 1960s, family sizes were extremely large by the standards of virtually all other western countries (Walsh, 1968). This aspect of Irish fertility receded from that point on, but it did so quite slowly and it was only in the 1990s that family sizes in Ireland ceased to be significantly larger than the international norm. Though comprehensive direct data on family size are lacking in Ireland, Figure 6 illustrates this evolution by comparing the distribution of births by birth order in Ireland with two other indicative countries – Italy, which represents a low fertility European country, and the United States, a high fertility “new world” country where family sizes were at the outer limit of what was found in developed countries outside of Ireland (in New Zealand, another high fertility new world country, available data on birth orders relate only to legitimate births to current unions and so cannot be compared directly with Ireland).

In Ireland in 1960, one-third of births were fifth births or higher – an extra-ordinarily large proportion by western standards (Figure 6a). The typical pattern elsewhere at the time was that first births outnumbered fifth-plus births, but in Ireland there were almost one-and-half times as many fifth-plus births as first births. Even in the US, where the overall TFR in 1960 was close to that of Ireland, fifth-plus births were little over half as significant in relative terms as in Ireland.

By the 1980s, fifth-plus births had fallen to 15 per cent of the total in Ireland, but this was still significantly ahead of the corresponding proportions in Italy and the US, where births of this order had dwindled to insignificance (Figure 6b). It was not until the late 1990s that higher order births in Ireland dropped to something approximating normal levels for developed countries (Figure 6c). Even then, however, Ireland was at the upper limit for fourth order births or higher (by the mid-1990s, Ireland, Poland and Cyprus were the only European countries where fourth-plus births exceeded 10 per cent of total births – United Nations, 1997). Italy represents the opposite extreme. There 86 per cent of births were first or second order and even third births had dwindled to low levels.

Figure 6: *The Distribution of Births by Birth Order, Ireland, Italy and the United States, 1960, 1980 and 1995-99.*

Figure 6a. 1960

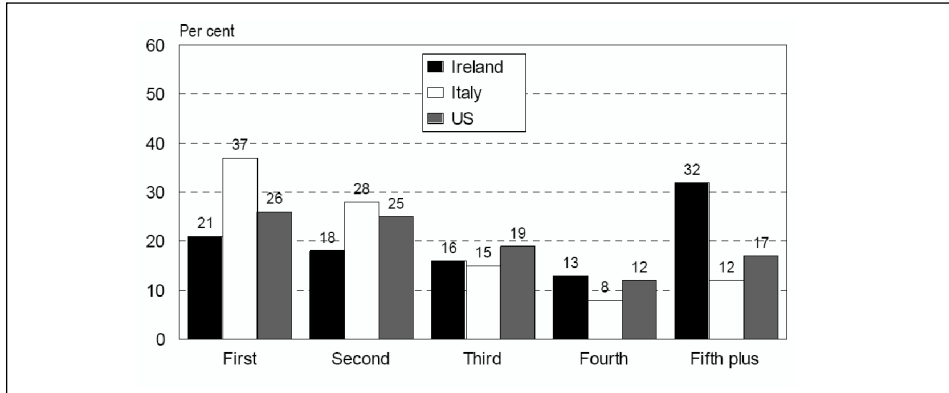


Figure 6b. 1980

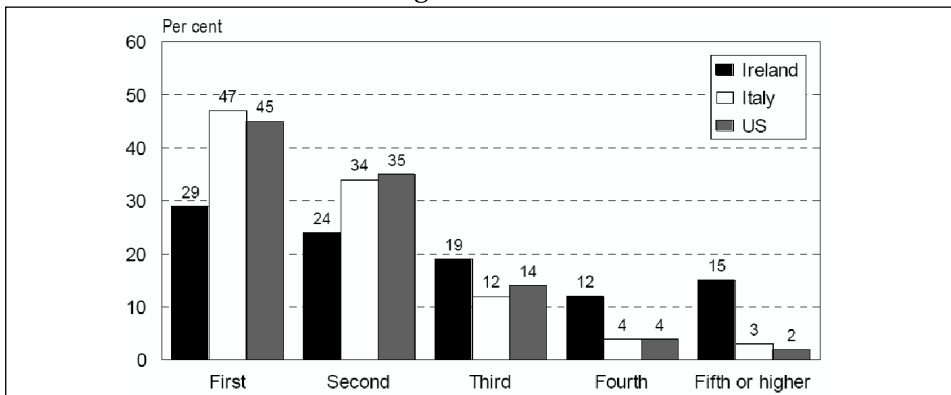
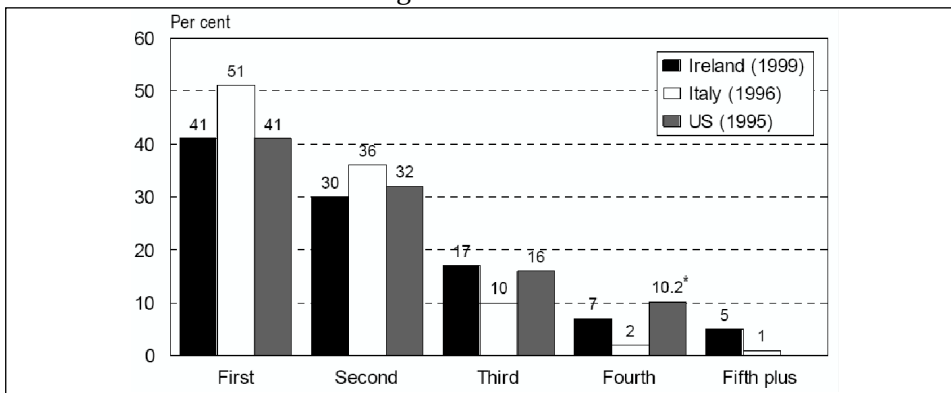


Figure 6c. 1995-99

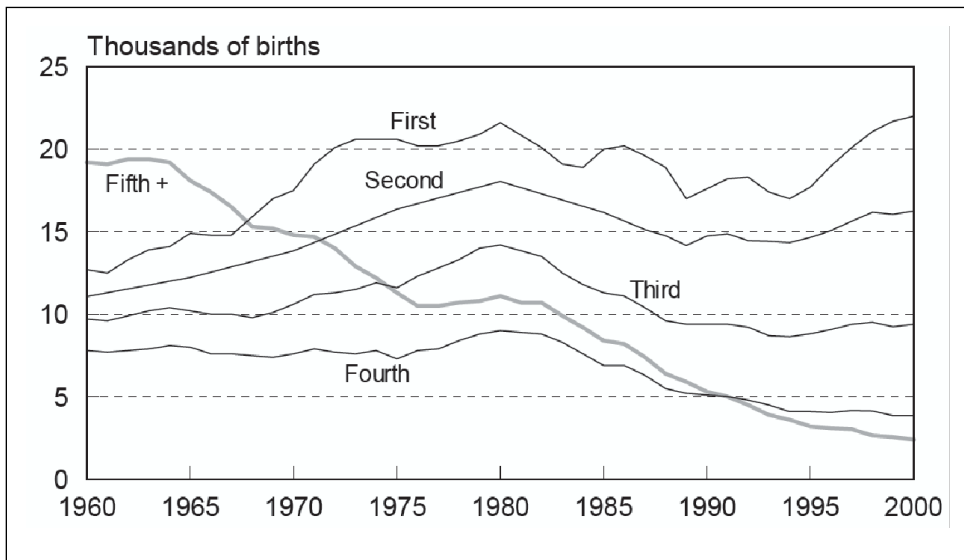


* Fourth plus (US 1995)

Sources: UN Demographic Yearbook 1965, Table 16; Council of Europe (2000); UN (1997).

Figure 7 provides more detail on the evolution of births by birth order since 1960 in Ireland. It shows that, apart from a brief hiatus in the second half of the 1970s (the peak of the Irish baby boom), fifth-plus births have been in continuous decline over the period. It also shows the dominant role of lower-order births, particularly first births, in driving overall birth numbers in the 1990s, especially since 1995. By 2000, the number of first order births had risen to its highest level ever in 20th century Ireland, barely exceeding the previous peak achieved in 1980. This is a significant feature of recent trends in Ireland and we will return to it below.

Figure 7: *Number of Births by Birth Order in Ireland, 1960-2000*



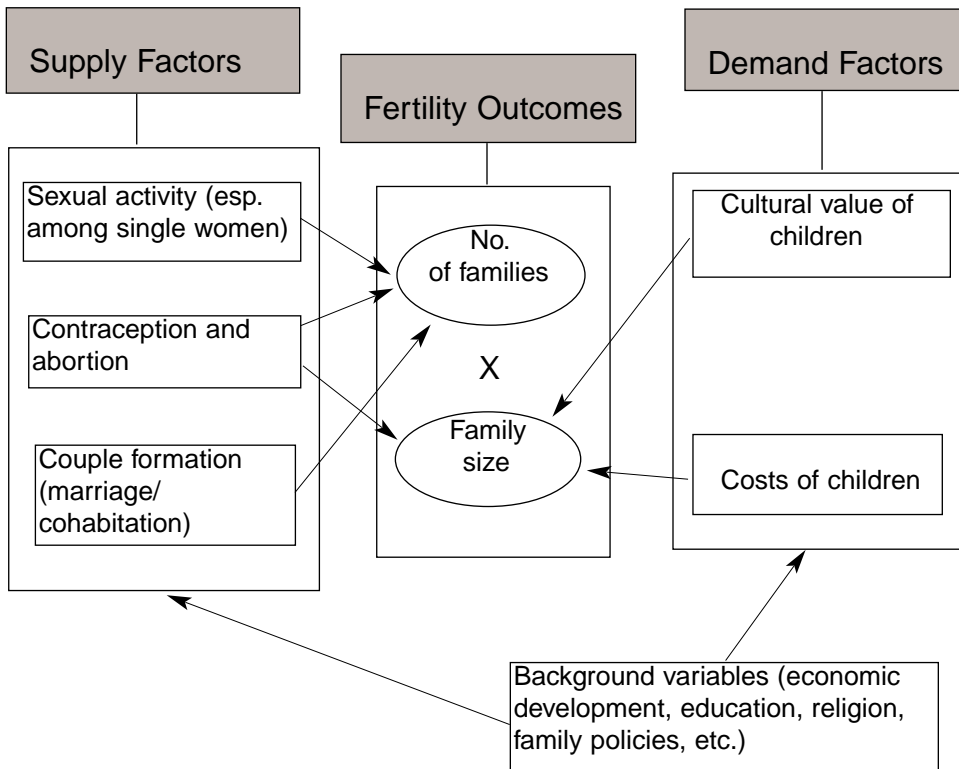
Sources: CSO Vital Statistics.

V INTERPRETING THE TRENDS

As the United Nations Population Division recently commented, “[t]here re-exists no compelling and quantifiable theory of reproductive behaviour in low fertility societies” (United Nations Population Division, 1999, p. 140). In consequence, there has been little success to date in providing a systematic, coherent account of fertility variations across countries, or even of detailed fertility patterns within countries (for overviews see Mason, 1997; Alter, 1992; Chesnais, 1999). However, various theoretical approaches do provide means for ordering analyses of fertility patterns, even if the resulting models typically have quite an *ad hoc* character.

Figure 8 presents a simplified version of such a model which can help guide interpretation in the Irish case, based on the conventional supply-demand approach to the analysis of fertility (Robinson, 1997). The purpose of this model is simply to identify the major supply and demand factors which have given Irish fertility its particular character and to provide some broad indications of their possible importance. No attempt is made at quantification, since much of the data one would need to do so is lacking.

Figure 8: *Model for the Interpretation of Aggregate Fertility Outcomes in Ireland*



Demand side influences can be thought of as those factors which influence the number of children couples want to have (further complications arise if attention is focused on each partner rather than on the couple as a unit, but that goes beyond our concern here). These consist most obviously in all the factors which affect the cost of children. These include the demand for female

labour (as reflected in women's wage rates and labour force participation rates), the cost and availability of childcare, the generosity of the tax-benefit system towards families with children, the cost of housing, and so on. Over recent decades in developed countries, factors such as these have generally tended to raise the cost of children and thus depress fertility. However, income growth can have positive effects on the demand for children (people have more children because they can afford to). It is, therefore, possible that rapid income growth (such as has occurred in Ireland in the 1990s) could counter-balance the negative effects of cost increases on the demand for children and thus either stabilise or reverse fertility decline. The theoretical problem here is the extra income is often spent on added investment per child rather than on added children, or even on other goods which can be thought of as substitutes for children. Alongside these hard economic factors, it is also possible that the cultural valuation attached to children and childbearing (as influence, for example, by religious belief) has a bearing on the demand for children.

Supply side influences can be thought of as those which cause couples (or individuals) to have either more or fewer children than they want to have, i.e. the factors which cause supply either to undershoot or overshoot demand. The most generic supply-side process which tends to raise fertility above the underlying level of demand is the unplanned pregnancy where the mother decides not to have an abortion and carries the child to term. That process may take many different forms as it involves the interplay of factors which themselves may vary greatly in character from case to case – the level of sexual activity, the use and effectiveness of contraceptive practice, and the use or non-use of abortion.

The most common supply-side process which tends to *reduce* fertility below the level of demand is that associated with couple-formation, as in the case of women who would wish to have one or more children but who are constrained from doing so by an inability or unwillingness to form a marriage or stable cohabitation. In such instances, the formation of a union is likely to be at least partially independent of the demand for children but nevertheless is a threshold which most women would wish to cross before choosing to have children.

VI THE COST OF CHILDREN

Of the factors just mentioned, those on the demand side, and especially those associated with the cost of children, usually take centre stage in the analysis of fertility trends (Robinson, 1997). However, those factors fall far short of providing an adequate explanation for cross-country or cross-time

variations in fertility patterns in developed countries, or for Ireland's position within those patterns.

Thus, for example, when Becker (1981) formulated his influential theory on the economics of family patterns, the relationship he posited between high female labour force participation and low fertility could be found in developed countries, but by the mid-1990s that relationship had reversed. In 1970, the TFR and the female labour force participation rate across 21 OECD countries were negatively related ($r = -.517$), as Becker's theory would predict. But by 1996, the relationship had turned strongly positive ($r = .714$) (Brewster and Rindfuss, 2000). In other words, by the 1990s, the OECD countries with the lowest fertility rates (principally the Mediterranean countries in Europe) also had the lowest rates of female labour force participation (for an attempt to grapple with this paradox in the case of Italy, see Bettio and Villa (1998)). In that context, Ireland in the early 1990s was something of an anomaly, in that it had relatively high fertility and low female labour force participation (Fahey *et al.*, 2000), a combination which made it different from other developed countries even though it conformed better to economic theory.

The generosity of state benefits for families with children likewise appears to have at most a minor effect on fertility rates. In a comparative study of twenty-two western countries in the period 1970-1990, Gauthier and Hatzius (1997) found that a 25 per cent increase in family allowances would raise fertility rates by only 0.6 per cent in the short term and about 4 per cent in the long term, that is, an effect of the order of 0.07 children per woman on average. This trivial effect is in keeping with the broader paradox that ungenerous welfare provisions in the US co-exist with higher fertility than is found in what has been called the highly pro-natalist Scandinavian welfare states (Demeny (1999), p. 190; for a somewhat contrary view, see Castles (1998), pp. 271-278). Likewise, the dismantling of the welfare state in New Zealand in the period 1985-1995 (Evans *et al.*, 1996) appeared to have little or no negative effect on fertility. Ireland too has relatively poor state provision for families with children but nevertheless has higher fertility than countries with more generous regimes (see, e.g., Randall (2000) on levels of state provision of childcare in Europe). While the precise implications of these patterns are uncertain, they are enough to caution against any expectation that pro-natalist government policies can readily succeed in propping up flagging birth rates.

VII CULTURAL VALUE OF CHILDREN

The difficulty in finding robust empirical support for economic theories of fertility determinants has lent credence to perspectives which emphasise

cultural influences (see, e.g. Cleland and Wilson, 1987; Lesthaeghe and Surkyn, 1988). While the general importance of cultural influences on the demand for children is difficult to establish, it seems inescapable in particular cases. Thus, for example, in the United States, the exceptionally high fertility of the state of Utah (TFR of 2.7 in 1998) is hard to attribute to anything other than the influence of the Mormon religion. Likewise, the high fertility of Hispanics in the United States (particularly compared to blacks, with whom they would overlap in socio-economic terms) seems to arise in large part simply because Hispanics want more children. According to survey data presented by Ventura *et al.* (2000, p. 16), US Hispanics who had children in 1995 wanted on average 2.7 children, while US blacks wanted 1.8 and US whites wanted 1.7.

Ireland is another instance where the case for recognising cultural influences on the demand for children can plausibly be made, particularly as regards a Catholic preference for large families. The Catholic influence on fertility was strong in the 1960s and although it subsequently weakened it continued to be detectable in the early 1990s (Ó Gráda and Walsh, 1995). Economic or quasi-economic explanations for this feature of Irish fertility patterns have also been offered. It has been suggested, for example, that emigration provided a safety valve which allowed Irish families to avoid the long-term negative feedback effects of high marital fertility, thus reducing the incentive to decrease family size (Coleman, 1992). However, the case is inconclusive: negative feedback effects were present in spite of emigration – see, for example, the evidence on the stunting effects of large family size on children in Dublin in the early 1970s (Kent and Sexton (1971-72); see also Walsh (1968) on the implications of large family size for family poverty). Furthermore, Irish family size continued to be large by western standards long after the peaks of emigration had passed in the 1950s.

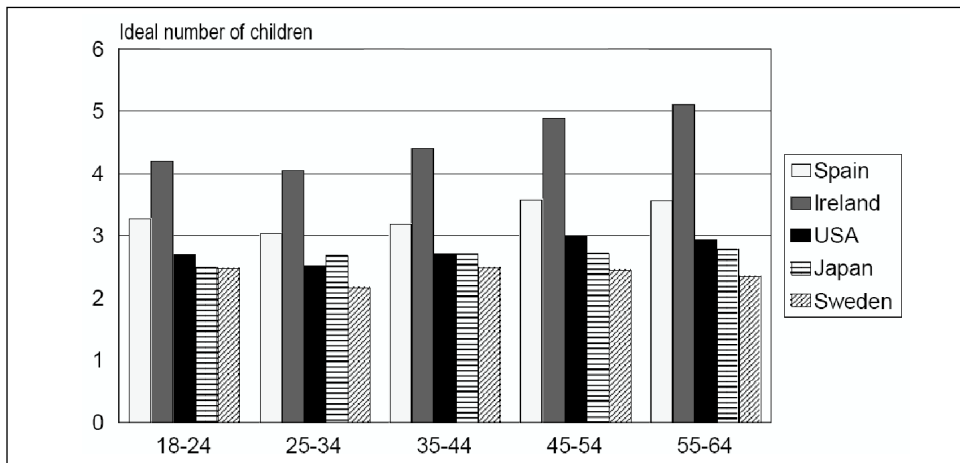
As a means to throw light on the cultural context for fertility patterns in Ireland, some empirical evidence on the cultural valuation of family size is available for Ireland and a number of other countries from the European Values Study (EVS) and World Values Study (WVS) in 1981 and 1990. These international survey projects included a question on what respondents would consider as the ideal number of children in a family. This question refers to what respondents would regard as a general ideal rather than to their preferences or intentions for themselves and as such the meaning of the responses may be somewhat uncertain. Nevertheless, the responses do offer a perspective on cross-national differences in the cultural context of fertility.

Figure 9 presents women's responses to this question for a range of countries, including Ireland. In 1981, Irish women, and especially older Irish

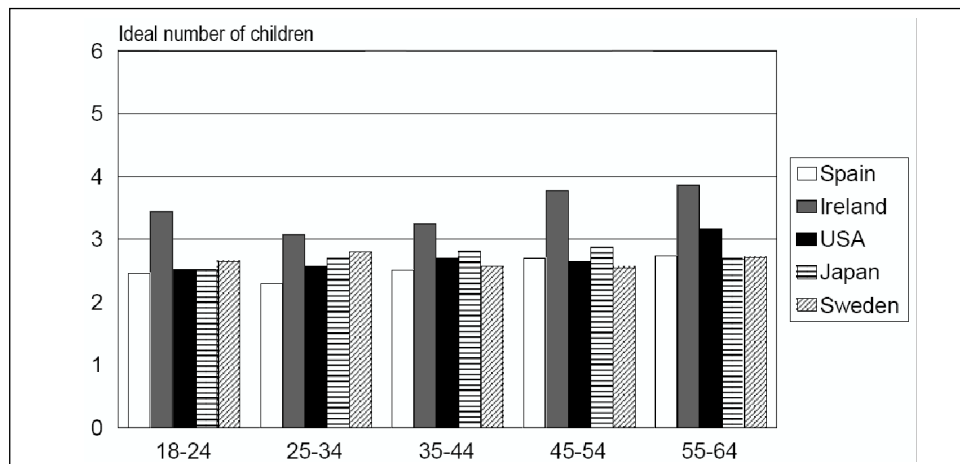
women, espoused a substantially larger ideal family size than women in any other developed country in the data set (Figure 9a). This was consistent with the somewhat higher incidence of large families in Ireland around 1980 which has been referred to earlier. By 1990, Irish women's ideal family size had fallen sharply while it had changed little in the other countries in Figure 9 (with the partial exception of Spain, where some decline had occurred). Among 25-34 year-olds, the key childbearing age-group, the difference between Ireland and the other countries had all but disappeared by 1990.

Figure 9: Cultural Value of Children: Ideal Family Size Among Women by Age-group in Selected Countries, 1981 and 1990

9a. 1981



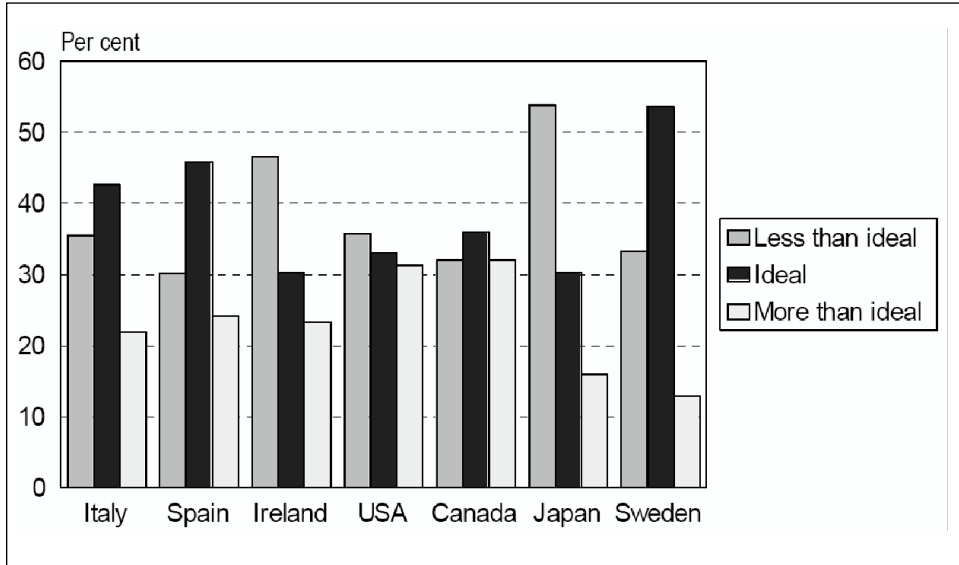
9b. 1990



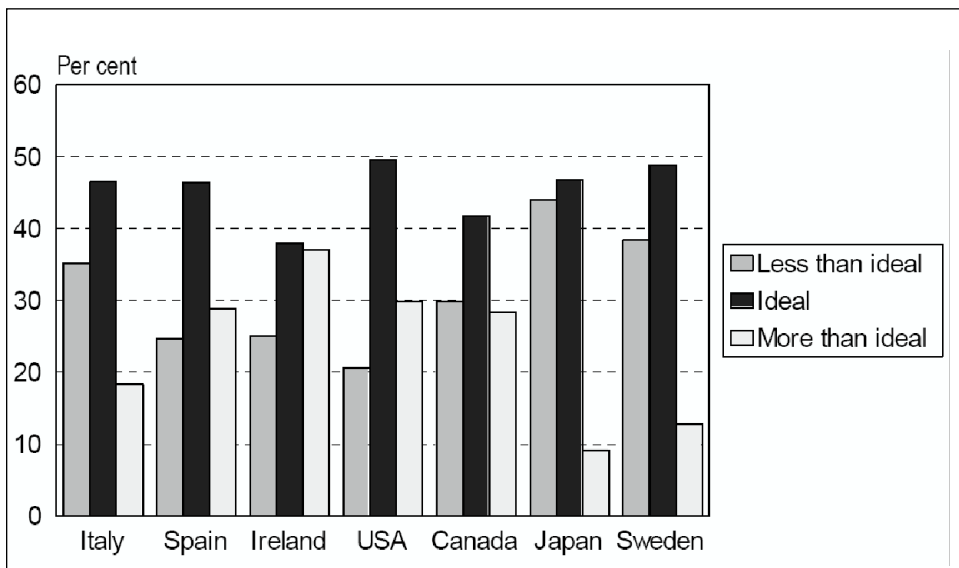
Sources: 1981 and 1990 European Values Study.

Figure 10: *Proportion of Mothers with Completed Fertility (Ages 45-64) Whose Actual Number of Children Was Less Than, Equal to and Greater Than Their Stated Ideal Family Size, Selected Countries, 1981 and 1990*

10a. 1981



10b. 1990



Sources: European Values Study 1981, 1990.

It is notable also, however, that even in 1990, ideal family size in all age-groups in all of the countries was substantially greater than the actual TFRs in those countries at the time. Mean ideal family sizes were generally of the order of 2.5 while actual TFRs were by then everywhere below 2.1. Some of the differential arises because the survey data included responses from women who had no children themselves (and perhaps did not want any) but who nevertheless gave a view on ideal family size (the number of respondents who said that “no children” was the ideal number of children was negligible in all countries). The EVS and WVS data allows us to throw some further light on this issue by comparing ideal family size with the actual number of children born to women with completed fertility. Figure 10 makes this comparison by identifying the proportions of *women with children* in the age-group 45-64 in each country whose actual number of children was less than, equal to and more than what they stated as an ideal. (We should recall here that respondents in these surveys were asked simply what they would regard as an ideal family size, not what they would regard as ideal for themselves. The actual-ideal comparison presented here links fertility outcomes to what might be regarded as general norms about ideal family size rather than personal preferences.)

The comparisons show that, while mean ideal family sizes varied only to a limited extent across countries (as revealed in Figure 9), there was considerable variation in the way in which actual fertility outcomes deviated from those ideals both across countries and between 1981 and 1999. Ireland in 1981 emerges as having a particularly pro-natalist value system. Despite the largeness of both actual and ideal family size in Ireland in that year noted earlier, the proportion of women whose actual family size fell short of their ideal was greater than in any country bar Japan, while the proportion whose actual family size was too big (in the sense of being more than their ideal) was quite low. By 1990, however, that pattern had reversed: both actual and ideal family size had fallen a good deal (as we saw earlier) but the net effect was that the proportion whose actual families were “too small” (i.e. below the ideal) had halved since 1981, while the proportion whose families were “too big” had grown by over a half.

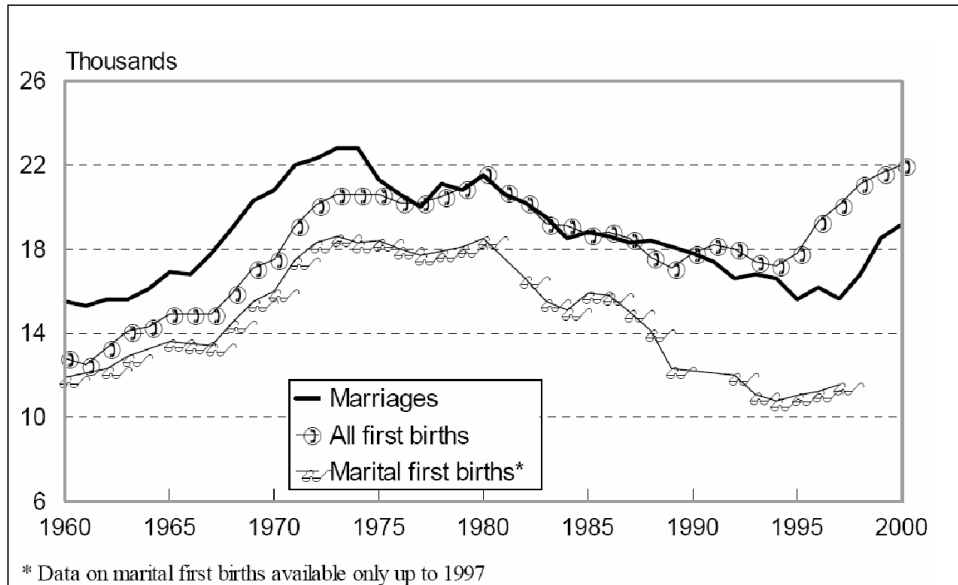
One would not want to read too much into these data, and one must recall that they relate to women aged 45-64 whose peak childbearing years would be some two decades prior to the survey date. Nevertheless they suggest, first, that the cultural context of fertility varied a good deal across developed countries over recent decades and second, that in Ireland the cultural valuation of large family size changed sharply in an anti-natalist direction in the 1980s.

VIII ACCIDENTAL AND DELIBERATE FAMILY FORMATION

One of the most difficult aspects of recent Irish fertility trends to disentangle is the supply side of the system as represented by new family formation. Certain general features of that picture are clear, as we have already seen: the fertility constraint which arose from the low incidence of marriage in the 1960s eased in subsequent decades, first through a rise in the incidence of marriage (up to the 1970s) and subsequently because marriage ceased to be as important a gateway to family formation as it traditionally had been.

However, the growth of family formation outside of marriage which has occurred in Ireland since 1980 gives rise to uncertainty about the underlying dynamics. The central question is how much of new family formation outside of marriage in this period is an accidental by-product of poor contraceptive practice (coupled, perhaps, with rising levels of sexual activity outside of marriage) and how much of it is a functional parallel of marital family formation which is actively chosen by those involved.

Figure 11: *New Family Formation in Ireland – Marriages, First Births and Marital First Births, 1960-2000*



Sources: CSO Vital Statistics, Council of Europe (2000).

While the lack of appropriate data make it impossible to answer this question, we can get some insight by tracking the level of marriages, first births and first births within marriage over time (Figure 11). These are alternative indicators of new family formation which relate to each other in a complex way. Their evolution since 1960 can be divided into three periods. First, in the period up to the early 1970s, marriage was the dominant but not exclusive gateway to family formation. The number of marriages exceeded the number of first births, and marital first births accounted for over 90 per cent of all first births. In the second period, which lasted until the mid to late 1980s, the number of first births rose to match the number of marriages and the share of first births occurring within marriage declined, falling to around 80 per cent by the mid-1980s. However, the ratio of marital first births to marriages stayed quite stable, suggesting that the degree to which marriages were followed by a first birth had changed little since 1960.

In the third period, from 1988 onwards, the picture becomes quite complex and it is difficult to decipher what it reflects. The share of first births occurring within marriage fell sharply, and had dropped to 57 per cent by 1997 (the last year for which data on marital first births are available). Also, the number of first births within marriage became increasingly detached from the number of marriages, so that the degree to which marriages were followed by a first birth declined. At the same time, the total number of first births began to rise, and following a lapse in 1993-1994, increased rapidly from 1995 onwards. By 2000, as mentioned earlier, the number of first births was the highest in the history of the state, having barely exceeded the previous record set in 1980. The coincidence of this surge in first births with the arrival of economic boom conditions from the mid-1990s onwards is striking and it is plausible to posit a causal connection between the two.

It is also notable that in the second half of the 1990s, the number of marriages followed at a lag behind the number of first births. The most plausible explanation for this is that by then, marriage came *after* rather than before the birth of the first child for many couples, which in turn suggests that a significant proportion of non-marital births took place within what were quasi-marital unions in the first place. It is also likely that the introduction of divorce from February 1997 contributed to the increase in the number of marriages by enabling people in second relationships following the breakdown of their first marriage to formalise their unions.

IX CONCLUSION

The puzzle which provided the starting point of the present paper was the stabilisation of Irish fertility rates in the 1990s at relatively high levels by European standards. Global patterns suggest that the effective range of total fertility rates (TFRs) in the developed (and much of the developing) world today is between an upper limit of 2.1 and a lower limit of 1.1. Much of Europe is located towards the middle or lower half of that range, while Ireland is located reasonably close to the upper edge. Given the accumulation in the 1990s of factors which one would expect to have a depressing effect on fertility (such as rising women's employment, costly childcare and a social welfare system that is ungenerous to families with children), it would not have been surprising if Ireland had continued on a downward convergence toward average European levels of fertility throughout the 1990s. Why did that not occur?

Part of the answer is that European average patterns are only one version of what can happen to fertility in developed countries. The United States (along with New Zealand and to a lesser extent Australia) offers another version, one where over the past two decades fertility rates have stabilised at levels slightly above those found in Ireland today. This indicates that, as far as fertility rates are concerned, Ireland today is closer to America (and New Zealand) than to Europe – and when we look back, we find that the same was true at the height of the post-war baby boom in the western world forty years ago.

The similarity between fertility in Ireland and the new world countries (the US, Canada, New Zealand and Australia) in the 1950s and early 1960s applied only to one aspect of fertility – the overall fertility level, as measured by TFRs. Underlying childbearing patterns in Ireland were characterised by an odd combination of low marriage rates and exceptionally large family sizes, features which were not present to the same degree anywhere else either in Europe or the new world. By the 1990s, when fertility rates in Ireland once again came close to those of the United States and New Zealand, the underlying similarities between Irish family formation patterns and those of other developed countries had become greater: family sizes had declined to the same general order, and the vitality of fertility patterns rested very much on the raised level of new family formations, many of which occurred outside of marriage.

This in turn would suggest that, while the mechanisms determining fertility in Ireland in the 1960s were more or less unique at the time (operating as they did through extreme marriage constraints coupled with high demand for children), they had come to be reasonably similar to those of

other countries by the late 1990s. By then, the depressing effect of the rising cost of children on fertility operated mainly to limit family size, in particular by reducing the number of fourth or higher order births to very low levels by Irish historical standards. It had less of an effect on the incidence of first or second births, perhaps partly because of the persisting cultural attachment to family sizes of that level or slightly above and partly because positive income effects seem to have encouraged the formation of new families and increased the number of women who make the transition into childbearing.

In looking to the future, the level of Irish fertility will depend on the balance that will emerge between the demand-depressing effect of the rising cost of children and the supply-enhancing effect of new family formation. It is difficult enough to predict the future course of any single element involved in that balance, and therefore impossible to foresee how it will work out overall. It is now generally taken for granted in demographic circles that neither in Ireland nor in any other country will events evolve in such a way as to raise fertility above the replacement-level threshold that is now rapidly becoming an upper bound for fertility around the globe. However, it is much more feasible, as the American experience of the past two decades suggests, for the supply-demand balance to operate so as to sustain fertility at levels close to that upper bound. If one were to take the historical record as a guide, then one might conclude that as far as fertility rates are concerned, Ireland is more likely to continue to hover closer to American levels than to fall to the more sluggish levels found in most of Europe.

APPENDIX

The TFR is the average number of births a woman would have during her reproductive life if she were exposed to the fertility rates characteristic of various childbearing age groups in a particular year. It is usually calculated as the sum of births per 1,000 women for five-year age groups multiplied by five and divided by 1,000. Two different methods can be used to classify mothers by age at birth of their child, one based on mother's age at last birthday, the other on age reached during the year. These methods yield slightly different age-profiles of mothers. Depending on whether and by how much the base population varies in size by age group, this can affect estimates of age-specific fertility rates (ASFRs) and can therefore yield different estimates of TFRs. In consequence, different sources may quote different TFRs for particular countries in particular years. Usually the difference is trivial but sometimes it is significant. For example, the Irish Central Statistics Office quotes a TFR of 3.23 for Ireland for 1980, where UN data

quote a rate of 2.88 for the same year (UN 2000a, p.236). Likewise, the UN (2000b, p.24) reports that the post-1950 TFR in New Zealand peaked at 3.95 in 1958, whereas Statistics New Zealand reports that it peaked in 1962 at 4.16. The approach adopted in the present paper is to quote comparative ASFRs and TFRs as found in whatever source is most suitable to the context, even though that may mean that slightly different estimates for the same statistic are provided in different parts of the paper (e.g. the trend lines for the Irish TFR presented in Figures 1 and 2).

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