

## Low Fertility of The English-speaking Countries

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### 1. Setting the Issues

Most Western Developed Countries (WDCs)<sup>1</sup> have low levels of fertility, in fact generally below replacement, an issue already raising concerns in the 1980s (Bourgeois-Pichat 1987; Preston 1987). The occurrence of low fertility is not, however, an entirely new phenomenon as some countries (eg New Zealand, NZ) fell marginally below replacement for one or two years during the 1930s depression. But it is its magnitude, intensity and duration that sets apart the present episode: “Never before in recorded history...has fertility been so low for whole societies as it is now in the industrialised world” (Davis 1987: 48).

At the same time levels have converged across the WDCs: at the peak of the baby-boom (1955-60) over 17 WDCs, including the six English-speaking countries (ESCs)<sup>2</sup>, Total Fertility Rates (TFR)<sup>3</sup> varied across a range of 1.74 births per woman (4.07 – 2.23), if Japan is excluded, and 1.90 (4.07 – 2.08) if Japan is included. By 1990-95, this had dropped to only 0.79 (2.06 – 1.27). Thus any research looking at the causes and consequences of differences in fertility among low fertility countries starts with a major handicap – the relative lack of variance between groupings of low fertility countries.

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<sup>1</sup> Ireland and Iceland have until very recently been the exceptions, but around 2000 the United States again reached replacement. WDCs are defined for this paper as those OECD countries that are English-speaking, Nordic, German and Dutch speaking, and French, plus Greece, Italy, Portugal and Spain, and Japan.

<sup>2</sup> In this paper, wherever data allow, the ESCs include Australia, Canada, Ireland, New Zealand, United Kingdom, United States. There is some question whether Ireland exactly fits this grouping (see text below), while Quebec’s Francophone population is clearly a non-Anglophone Canadian minority. But there are also Black and Hispanic minorities in the US, the indigenous Maori in NZ (15% of the total), large immigrant communities in NZ (12% of the total were Asian or Pacific Island at the 2001 census), large Asian and other immigrant groups in Australia and Canada; Asian, Afro-Caribbean and other immigrants in the UK; a heterogeneous range of non-European, and non-British origin European immigrants in the US, and small but important indigenous minorities in the US, Canada and Australia. In sum, these countries are not homogeneously “British”. What is common, however, is the dominance in their national life of similar socio-political and cultural traditions that often have a British provenance from UK colonisation.

<sup>3</sup> Generally, two major sets of comparative data are used here: 1. Population data coming from the United Nations, *Estimates and Projections*, 2000 Revision are used for the following country groupings: Japan; *Nordic*: Denmark, Norway and Sweden; *Continental*: Austria, Belgium, France, Germany and The Netherlands; *Southern European*: Italy and Spain; and *ESCs*: Australia, Canada, Ireland, New Zealand, United Kingdom, United States of America. 2. Sample survey data for WDCs are drawn from the *Standard Country Reports* of the United Nations Economic Commission for Europe’s (ECE, which includes North America)/ Family and Fertility Study (ECE/FFS). New Zealand was accorded associate status for the ECE/FFS and thus data on it are included here; recent comparable Australian data are not available. Unfortunately, the United Kingdom chose not to join the study, while the United States’ *Standard Country Report* had not been published at the time of writing.

Nevertheless, among the WDCs, the fertility of the ESCs stands out as having “distinctive features”, to cite Chandola, Coleman and Hiorns. In their study “evidence seems to exist for [the] proposition” that ESCs have “elements of a common fertility pattern..., especially in respect of the age-profile of fertility” (2002: 196). In 1990-95, the average (TFR) for 17 WDCs, including the six ESCs, was 1.70 births per woman, whereas for the ESCs alone the average TFR was 1.91. Moreover, age-specific patterns are also different. Here Chandola *et al*'s summary is a very useful starting point for the present analysis. They argue that in the ESCs

“age-specific fertility patterns display a marked ‘bulge’ in women under age 25

... [this heterogeneity is] related to differences in the timing of births by marital

status, and its magnitude is related to the proportion of births outside marriage. Additionally there is some evidence that, in the US, and to a lesser degree N Z, this heterogeneity in fertility patterns may be explained by ethnic differences [between European-origin and ethnic minority] in the timing and number of births” (Chandola, Coleman and Hiorns, 2002:181).

This paper investigates what are the factors that may be linked to this “distinctive” fertility pattern. Its focus is on the equally “distinctive” policy context of these fertility patterns. A review of the literature shows that in their public policy environments the ESCs are indeed somewhat different from other WDCs. Yet in this very difference there is a paradox that this paper must address: the differences in policy relate exactly to those factors that, in theory, should lead to lower fertility, not to the relatively higher levels of ESCs noted earlier.

If the policy-fertility link seems counterfactual, as has just been suggested, then there may be other possible, perhaps more nuanced, factors that might explain what is merely the “relative” reproductive advantage of the ESCs. The last part of the paper is more a reflection, in the French meaning of this word, than a sustained empirical analysis about what might be the key variables fashioning this subtle difference. We start, however, by looking at public policy.

## **2. Public Policy Environments, Family Policy and Fertility**

The so-called “worlds” constituting policy environments had been classified by Esping-Andersen (1990) as “ ‘social-democratic’ (basically the Nordic countries), ‘conservative’ (Continental Europe), and ‘liberal’ (the Anglo-Saxon Nations)...” (cited in Esping-Andersen 1999:12). He argues that *liberal* policy is essentially “residual” in that “social guarantees are restricted to ‘bad risks’... it adheres to a narrow conception of what risks should be considered ‘social’ [and] its encouragement of the market... Besides universalism the *social democratic* welfare state is particularly committed to comprehensive risk coverage, generous benefit levels, and egalitarianism... The essence of a *conservative* regime lies in its blend of status segmentation and familism” (Esping-Andersen 1999: Chapt 5 *passim*). Myles (1996: 118) takes these points a bit further by comparing the residual “social assistance” model implemented “When Markets Fail”, to the “industrial achievement model” based around “labour market performance”, and

the “citizenship model” of “universal social benefits”. In his most recent book, moreover, Esping-Andersen has added in three different new models together constituting, as he puts it, what could be seen as a “fourth world”.

Firstly, there is the “Antipodean” model (Australia and NZ) in which what seem modest, typically needs-tested, benefits are coupled, however, with “functionally equivalent welfare guarantees that were implanted in the labour market via the wage arbitration system”. NZ was to become a pioneer welfare state through its *Industrial Conciliation and Arbitration Act, 1894*, and the underlying ideology of a “social wage” sufficient to sustain a working man and his family. These, and full employment in many years, were to underpin the maintenance of social equality until, it could be argued, the radical shift to an extreme liberal regime in the late 1980s-early 1990s (Shirley *et al.* 1997, esp. chapt 2).<sup>4</sup>

A second is the “Mediterranean” model, that perhaps differs from the “Continental European”. (Esping-Andersen debates this point, but it certainly seems to contrast with what is seen in the ESCs), by “the use of social benefits...for purposes of political clientelism” and its emphasis on “familialism”. For example, “In Italy, even in the industrialised north, the accepted meaning of family remains encompassing. It is a solidarity network consisting not only of a couple and their children, but also of grandparents, uncles, aunts, cousins and even more distant relatives” (Chesnais 1996; 735).

As the Mediterranean experience provides a counterpoint to that of the ESCs or Nordic countries, it is worth looking at it in a little more detail. Livi-Bacci and Salvini define the Italian model as “too much family and too few children”, citing as a key mechanism

“Prolonged co-residence of young adults with their parents is a central aspect of the Italian situation; [it is] directly associated with the postponing of marriage and childbearing, and relatively low rate of nuptiality, and without doubt it counts among the principal causes of the growing gap between expected and achieved family size” (Livi-Bacci & Salvini 2000: 231-32; translation by present authors).

But this has to be seen in its context, so they argue: that social transfers for young adults fall below those in much of Europe. Yet from 18 to 60 years tax burdens are relatively high, whereas comparatively low percents of GDP are spent on education. Moreover, deposits for purchasing dwellings are high. Thus in a sense “Italian familialism” is not a return to the traditional parent-child household and moral values. Instead, it is a familialism that maximises the utility of the family as a sort of policy/service delivery instrument. Italy is not unique in this; Livi-Bacci and Salvini also identify this factor in Spain and Japan (2000:252).

The third model is the “East Asian”, notably Japan, that in many senses is a hybrid. It depends on high levels of targeting, and is one in which the family still

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<sup>4</sup> See also Kamerman and Kahn 1997a, who give a very succinct analysis of the similarities and differences in family changes and family policies in four of the ESCs; besides Shirley *et al.* 1997 on NZ, see also essays on Gt Britain by Ringen (ed) 1997, Canada by Baker and Phipps 1997, and the US Kamerman and Kahn 1997b.

plays a major role in family welfare, particularly in caring for the elderly (Esping-Andersen 1999: 88-92)<sup>5</sup>

In their cross-comparative research on WDCs, Castles and Mitchell (1993: 117-119) take this further. They analyse a range of political and public policy variables, from which they derive a set of propositions allowing them to classify nations into “families”. The ESCs stand apart as countries in which since World War II “the political right has enjoyed long periods of political office”, but vary between them as to the political strength of their labour movements, the level of public policy expenditures and their use of “equalising instruments”. Those ESCs low on two or three of these factors are Canada<sup>6</sup> and Ireland, while the United States (US) is low on all. They conclude that “the impression is of an extraordinarily close fit between political structure and the character of welfare provision... Three of the six [ESCs – Australia, New Zealand (NZ) and the United Kingdom (UK) - have] an historical legacy of [Radical egalitarianism]. Two others have characteristics which cross-cut the Radical and Liberal worlds. The US alone is clearly an inhabitant of the Liberal world”(123-24). Elsewhere Castles (1998: 8-9) sets out what he calls “families of nations”, comprising the ESCs and others (Continental West European, composed of France and the German/Dutch speaking countries, with “a historical legacy of dynastic links, cultural (particularly religious) similarities and policy diffusion...”; Nordic; Southern European), while Switzerland and Japan<sup>7</sup> were difficult to classify.

Four other points about the ESCs are worth noting. Firstly, Ireland has a somewhat different history. Like Australasia and North America it was a colony, but unlike them its path was not dominated by the British and other Europeans, “transplanted overseas”, but was one of the “colonial inheritance” of a “subject people” colonised “to enhance military and political control and to exploit economic resources” (Castles 1993a: xxii). Ireland also did not join in the radical shifts in policy of the 1980s seen in other ESCs (Castles 1993b: 5).

Secondly, despite their profile as “liberal” recent low social spending states that rely on targeting (Kamerman and Kahn 1997a:10), “the case for an English-speaking family of nations united by a common ‘status’ of welfare state laggards sits very uneasily with the historical record... The New Zealand *Social Security Act* of 1938 was regarded by the ILO as having ‘more than any other law, determined the practical meaning of social security,...’ (Castles & Mitchell, 1993: 93-94). Within the ESCs, the US is different in this regard in that some components of welfare programmes vary from state to state (eg maternity leave, Rosenfeld 1996: 205), and thus historically some have been highly innovative in diverse regions, but this may not show up at the national level. Some uniformity is achieved, as in the New Deal, by federal interventions to pressure or support individual states (Kamerman and Kahn 1997b: passim). In Canada, as already

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<sup>5</sup> John Campbell notes as a special case that he terms the Japan Model, “a full-employment policy powered by the private sector...” (cited in “The Japanese Model: Past Present and Future” *Asahi Shimbun*, 12-13 Oct 2002, p.25)

<sup>6</sup> In Canada’s case Federal-Provincial trade-offs produce more equitable policy than would otherwise be the case (Castles and Mitchell 1993: passim).

<sup>7</sup> See also footnote 5..

noted, federal-provincial trade-offs affect family policy formulation and implementation.

Thirdly, Castles makes a point that is critical for this paper. The ESCs share “a link [that] can be traced to the timing of sequences of historical development that differentiate the experiences of the ESCs from other nations of advanced capitalism. The argument is simply that slow economic growth, policy ineffectiveness and high threshold electoral systems [in the 1970s and 1980s] are all, in some degree, consequences of the relative earliness of economic, social and political modernisation in Britain and in the countries largely settled by British migration” (Castles 1993b: 28).

Fourthly, the ESCs have in common a “1980s shift to anti-statism” (Castles 1993a: xviii). Under Reagan and Thatcher, liberal welfare policies were extended in the US and UK (Castles 1993b: 6-7), while in the Antipodes the supports of “social wage” and full employment virtually disappeared. These “guarantees” were eroded by the shift to “liberalism” in Australia in the 1980s. “[T]hey were effectively eliminated in NZ” (Esping-Andersen 1999: 89; see also Castles et al 1996). What is surprising about the Antipodean changes was that they were initiated by Labour (Left-incumbency) governments, although then carried further, especially in New Zealand, by Right- incumbency cabinets. In Canada the changes came not so much from the restructuring of public policy – conservative governments attempted but did not succeed in this - but from restructuring its trade links with the US (Castles 1993b: 10-11)

Much of the public policy literature deals with the family and with its interface with the labour market. Not surprisingly, a considerable degree of attention is paid to family formation and structures, and to levels of fertility *per se* (Castles 1999: Chapt 7; Esping-Andersen 1999: Chapt 4; Kamerman & Kahn eds 1997; Day 1992: Chapt 5 looks at policy alternatives in low fertility societies; the official positions for all ECE countries, including Canada and the US, is in UN(ECE)/Council of Europe 1994).

In the ESCs there is a focus in both policy research and in policy formulation in political circles on what might be seen as the non-traditional family forms: cohabitation, ex-nuptial childbearing and lone-parenting (Kamerman and Kahn 1997a). Frequently, moreover, the contemporary situation is seen in an unfavourable light by comparison with some vaguely defined past ‘golden era’ of families (in the Neo-Europes, typically the baby-boom). Often these distinctly different behaviours are confounded in the public discourse, and in analyses. This eventuates in ‘moral panics’<sup>8</sup> about the future of the family, resulting often in prescriptive policy formulations and programmes (eg statements by Social

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<sup>8</sup> Ironically, NZ’s ‘golden era’, the baby boom, was subject to a Gilbertian moral panic about “moral delinquency...among children” that was “undermining the fabric of society”, requiring a Commission headed by a Queen’s Counsel, Dr Mazengarb (Belich 2001: 504), the report of which was sent to every household in the country. This was not by any means the first such panic. There were others in the late 1890s/early 1900s about declining fertility, in the Australasian colonies, resulting in a Royal Commission in New South Wales; and a Commission on purported high levels of abortion in NZ in the late 1930s.

Security Secretary Lilley in the UK, reported *Daily Telegraph*, Mar 31 1995; for the US, Newt Gingrich's and Dick Armey's, and the "House Republicans", *Contract with America*; for NZ, memoirs of Finance Minister Ruth Richardson, 1995: 213-14; for Canada, see Baker and Phipps 1997:184). These anxieties and responses seem more extreme in Anglo-Saxon than in continental European countries, and detract attention from more normative family problems and more universalistic family policies relating, say, to poverty and the supports for child-rearing by families. "The fiscal malaise of [ESCs], and thus calls to demolish the welfare state, is often attributed to family dysfunction, and particularly to the sole-parent [also variously called lone/solo parent – the NZ term is used in this quote], which is usually female-headed" (Pool 1996: 12).

The recent trend towards ageing and low fertility has, however, revived interest in factors that might lead to higher fertility. A macro-economic, cross-comparative (Netherlands-NZ), time-series analysis by Poot and Siegers (2001: 96) argues that fertility levels are influenced by economic factors. In the case of factors that might affect real costs of childbearing these causal links were, however, "fragile" and "suggested that the causality runs from fertility to real interest rates rather than vice-versa". In contrast there were stronger effects coming from policy interventions, notably the "impact of social security payments on fertility... the introduction of a substantial subsidy to families just after World War II boosted fertility greatly..."

A comprehensive review of a wide variety of family policies is found in Gauthier's study (1996). For this present paper the interest in her work is on cash benefits to families and other sorts of interventions that might be seen to have pronatalist impacts, such as maternity leave. She summarises the effects of these in a figure (Gauthier 1996:189) that trichotomises support into high, medium and low categories. The ESCs, except for the UK, and the Southern European countries are in the low grouping.

In her most recent paper Gauthier fits family policies into the Esping-Andersen country clusters. She shows that state support for parents has not converged in response to the fact that countries face some common problems, but had actually diverged. In this regard the liberal cluster, including all the ESCs except Ireland, plus Japan and Switzerland "has been increasingly marginalized" (Gauthier 2002:467)

In another paper Gauthier and Hatzius (1997) restrict their analysis to the linkages between benefits and fertility, for a period (1970-90) that post-dates the post-war decades when social security may have acted as a positive incentive (see above Poot and Siegers 2001). Gauthier and Hatzius' results show that cash benefits did not affect fertility in the Anglo-Saxon countries, had a marked impact in the Scandinavian, and that the Continental and Southern European countries fell between, varying for the parity order of the child for whom the benefit was received. Where the value of the benefit also increases by birth-order this effect is maximised. They conclude, however, that "The potential effects of benefits should also be investigated. These include means-tested benefits and benefits in the fields of day-care, housing, health care and education" (Gauthier and Hatzius 1997: 302).

This introduction has served to highlight questions to be analysed in the rest of the paper. The ESCs have different fertility and policy regimes. Their focus on residual and targeted assistance means that today the ESCs fall not only behind some other groupings of WDCs, but that cash-incentives for fertility have minimal impact in these countries. Against this the ESCs have higher fertility than most other WDCs, and this is marked at youngest ages at which it could be assumed the need for supports and family-friendly policies would be greatest. This summary thus leaves a number of unresolved questions:

1. Are there other demographic factors that might explain this paradox?
2. Or are there “cultural” factors in the ESCs relating to values around child-bearing, family formation and household structures?
3. Are there more muted aspects of the policy environment, or rather how the populace responds to it, that affect fertility trends and patterns? Indeed, as Gauthier and Hatzius remind us (see above), family friendly and potentially pro-natalist policies may relate to many aspects of well-being and not just comprise family benefits (see also Letablier 2002 reporting on France)

### **3. Mapping the Fertility Transitions of ESCs**

Many aspects of the transitions followed by Western Developed Countries (WDCs) have been well documented in country or cross-comparative analyses (eg Henripin 1968; Festy 1979; Romaniuc 1984; Khawaja 1985; Sceats & Pool 1985; Bourgeois-Pichat 1987; Preston 1987; Rallu and Blum (eds) 1991, for European countries only; Nimwegen et al (eds) 1993, especially chapt by Beets, by Blayo et al, and by Beets et al; Morgan 1996; Pool et al 1999; Livi-Bacci & Salvini 2000; ECE/FFS, various dates and authors; see also below **References**, Unpublished Data Sources). Thus conventional time-series analyses will not be presented here. Nevertheless, the Appendix provides Total Fertility Rates (TFRs) for selected WDCs.

The groupings of countries used here in tables and figures vary between those that are based on the Economic Commission for Europe’s, Fertility and Family Surveys (ECE/FFS) and those used by Gauthier and Hatzius (1997). Available data from the ECE/FFS are classed following the groupings used by the National Institute of Population and Social Security, Tokyo. Those tables/figures that employ vital statistics use the classification followed by Gauthier and Hatzius 1997. Within groups there are, of course, often also major differences, as ,for example, between France and Netherlands in the “Continental” group (van Nimwegen *et al.* 1993: 4-5).

The low, sub-replacement, TFRs that characterise almost all the WDCs today come from two different factors. But before discussing these it is worth reiterating that the span of rates is not great today, although within that range the ESCs tend to be at the upper end, a long-standing distinction (See below).

The first factor affecting the general pattern is that completed family sizes are now small, with decreasing proportions of women having two or more children, as is seen in Table 1. Conversely, this table also suggests that childless and one-child families are increasing in prevalence, although some caution should be applied when making this comment. There are significant differences in timing and levels

between European populations: within some nations there is a great deal of variance in the profiles of family sizes, yet in other countries this is far less true (de Rose & Racioppi 2001: 28-29). Table 2, column (1) uses life-table estimates of the probability of having one or more child(ren) by age 30 years, for women of all educational statuses (differences by educational attainment will be discussed later). In every country there is a decrease in this likelihood, and thus conversely increases in childlessness at least until age 30, although this change is as yet very slight in the case of Portugal. The ESCs, if anything, are a little less advanced in this direction than some European countries.

[Table 1 about here]

A second factor, also demonstrated by Table 2, is that of a major shift in timing. Again some caution must be expressed, because, for countries with longer traditions of low fertility, a shift to delayed first childbearing may not imply further decreases in levels of childless and one-child families, although it will affect parities 2+ (Toulemon and Mazuy 2001: 624-25). This is a very important point raising major issues not only about timing *per se*, but also about what we will call the “force” of reproduction across the reproductive span. That is, whether child-bearing occurs disproportionately at younger ages (15-24 yrs), in the middle part of the span (25-34), or at the end (35+), as measured by the proportion of the TFR found at these ages, or by a ‘TFR-type’ rate computed across these narrow bands of ages.

[Table 2 about here]

Data on the Force of Early Reproduction are presented in Table 3. There is a very wide spread in this pattern, 15 percentage points from 16% (Japan) to 31% (ESCs). What is very clear in this table is the higher level of the ESCs, the “bulge” identified by Chandola et al (2002), compared to other groupings, although Austria within the Continental block is also very high, whereas Australia in the ESC category is relatively low. Australia and New Zealand’s majority Pakeha (European-origin) populations had a very long tradition of Antipodean solidarity demographically, lasting from the 19<sup>th</sup> century, but the two different migration flows in the post-War period have produced a divergence, with Australia affected, in particular, by inflows from Southern Europe (Pool 2002). Also of interest are the very low levels seen in the Netherlands, Japan, Denmark and the Mediterranean countries. The Netherlands with its recent history of higher fertility is a very interesting case -- today its TFR has dropped to 1.5 (van Nimwegen et al 1993: 4-6), perhaps setting a precedent for the ESCs.

[Table 3 about here]

Chandola *et al.* (2002) have pointed to the effects of the fertility levels of ethnic minorities on overall patterns of reproduction. Certainly, the Force of Early Reproduction is very high for both the Maori (48%) and African-American (54%)



minorities, by comparison with the majority populations in these countries, Pakeha in NZ (26%) and 'White' Americans (39%). Yet the overall impact of these minorities' reproductive regimes is limited. The rate for the Total populations are only 13% above that for Pakeha in NZ, and 5% above the 'White' rate in the US: In the demography of the ESCs, 'White' Americans tower above all European-origin populations, but their numbers do include Hispanics, who have higher fertility. That said, the 'Pakeha' grouping also includes the Pacific Island Polynesian population, which has significantly higher fertility than that of other New Zealanders.

In terms of the force of reproduction at the older ages (35+) the ESCs on average have lower rates than the other WDC groupings, but the differences and spread, only four percentage points between groupings, are far less marked than for early reproduction. The percentages are:

ESCs	14%	Continental	16%
Japan	13%	Nordic	16%
Southern European	17%		

What again sets the ESCs apart, however, is the relatively weak force of reproduction at the middle age-group, 25-34 years. Australia is the sole example that resembles other groupings, being closest to Germany. As noted already, the patterns of reproductive intensity in the former may have been modified by Southern European immigration. In the case of the latter, the lowest force at middle reproductive ages outside the ESCs<sup>9</sup>, may have been affected, as will be implied from data to be presented below, by the incorporation of East Germany into the Federal Republic<sup>10</sup>.

The net result of these different patterns of force is shown in Figure 1, which graphs the percentage point deviations from the WDC level for each reproductive stage. In Figure 2 this is shown schematically. The ESCs stand out as having a very marked U-shaped distribution, while the other groupings have either inverse U-shaped distributions, shallow for the Nordic and Continental countries, whose patterns are very similar, but more marked, for Japan, or closer to a modified S-shape for the Southern European countries. The ESCs, relative to the other WDCs, thus have two polar *loci* of reproduction, with the central part rather weaker. In policy terms this is of enormous significance: it is not just that, relative to the other WDCs, the ESCs have concentrated their reproduction at young ages, but that they also have a degree of concentration at the older ages. It is around this bifurcation that much of the 'moral panic' and political concerns revolve, a point that will be returned to below.

[Figures 1 and 2 about here]

There is yet another aspect to this: as is true across the WDCs, fertility at older ages is going up. By approximately 2000, the ESCs had on average an age-

<sup>9</sup> Austria may well have resembled the ESCs, but there were no data available to assess this.

<sup>10</sup> See also Konietzka & Kreyenfeld (2002:344). They show, for 1997, marked differences in force with a peak in the present day eastern regions of Germany at 20-28 for women with a child aged 3-6 years, as against 29-36 in the western part.

specific fertility rate (ASFR) of 102 per 1000 at 30-34 years, up from 88 in 1985<sup>11</sup>. The remaining WDCs for which there are data were only marginally higher at 103, up from 79 in 1985. At 35-39 years the ASFR in 1985 for the ESCs had been 33; by 2000 it was 47. For the remaining WDCs the change was from 26 to 44. The highest ASFRs in the WDCs at 30-34 yrs in 2000 were in Australia, Ireland, New Zealand, the Netherlands, Denmark and Norway; at 35-39 they were in the same countries, with Sweden replacing Denmark.

Finally, one other factor of force should be noted: the shift-share in the middle age-range between 25-29 and 30-34 years. Countries that have recently gone through this shift, and which now see their highest rate in the latter age-group, are Australia, Ireland, Netherlands and Spain, with New Zealand and Japan right at the changeover point. This obviously has longer-term implications for policy. Shifts of this sort may be as much a factor of differences in rates of increases as of decreases at one age-group and an increase at the next.<sup>12</sup>

The higher fertility and patterns of force that distinguish the ESCs are not something new. They fit demographic regimes that have certainly existed since the baby-boom, and might be seen as going back far further than this. In the 1870s the highest birthrates in Festy's WDC data set (1979: 52), all above 37 per 1000, were recorded for Canada, American 'Whites' and for Australia, and for Germany and Finland outside the ESCs. England and Wales, at 35, was above a number of continental European countries, while Pakeha NZ rates (not included in Festy's comparison) were even above the Australian, reaching 42 per 1000 in 1876 (Khawaja 1985: 153). For the Neo-European ESCs, these rates came from nuptiality patterns of early and almost universal marriage (Sceats and Pool 1985: 183)<sup>13</sup>, that were markedly different from those occurring in the British Isles, often referred to popularly as "home".

It is the baby-boom, aspects of which are documented in Table 4, that sets aside the ESCs in the post-War period. We define a baby-boom in terms of two characteristics: higher TFRs, and a situation where the force of fertility is high at early ages. In New Zealand, the baby-boom saw these two characteristics determined by earlier timing and closer spacing than was the case for Canada (Sceats 1981). Short intervals are still a New Zealand norm that is, for example, more marked than even for the United States (Morgan et al 2001), and certainly by comparison with European countries (Sceats 1999). Finally, the higher average family sizes of the baby-boom were also driven in part by a shift away from childless or one-child marriages. Indeed, "[t]he proportion of women having three or four children climbed from 31 per cent (for the 1912-16 birth cohorts) to 43 per cent (for the 1930-31 birth cohorts)" (Khawaja 1985: 158).

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<sup>11</sup> Ireland was the sole country analysed here to show declines in ASFRs at 30-34 yrs (from 136 to 126) and 35-39 (75 to 64). Sweden showed a decline in part of the period, but by 2000 was going up again.

<sup>12</sup> By 2002 this had occurred for New Zealand. While fertility at both 25-29 and 30-34 yrs declined, but the former trend was more marked, thus producing a shift-share.

<sup>13</sup> Pickens 1980, showed that these metropolitan-colonial differences occurred within families as well as between populations

In these senses, a baby-boom, properly speaking, is really a neo-European phenomenon, because the UK looks more like its continental European counterparts, and Ireland was following a totally different path from most of the other WDCs, a long term decline. On the continent, Austria meets the criterion of higher levels of force at younger ages, but not that of level. For the TFR, in contrast, the Netherlands certainly meets the criterion of level but does not experience elevated early force. On both these criteria it is perhaps Norway that comes closest to the neo-European ESCs, yet its TFR is still well below theirs. The decline after the boom was also more marked in the ESCs than in the remaining WDCs with the exception of the Netherlands, while among ESCs the UK has a lower decrease.

[Table 4 about here]

The post-boom “baby-bust” was followed around 1990 by what Pool has called a “baby-blip”, so as to distinguish it from the boom *per se*, but that in the American literature is referred to as the “echo to the baby-boom”. The American terminology describes its provenance – the intersection of two trends. These are (i) the ASFRs at 30+ years of cohorts that had delayed their births but who were having these at older ages, with (ii) the arrival of distended cohorts, the last of the baby boom generation births, at these older reproductive ages. In NZ, in terms of numbers, the baby-boom had bi-modal peaks, in 1960 and again in 1970, thereby prolonging the blip through much of the 1990s.

To a limited extent the higher fertility of the ESCs has also been affected, as has been noted, by the presence of “minorities” with higher fertility and patterns of early childbearing. Table 5, using two of the same variables as in Table 4, examines this factor in the late baby-boom and more recently for three neo-European ESCs analysed by Chandola et al (2002) to look at the impacts of ethnic differences, plus for Germany, where there are marked divergences in patterns of fertility between the former divisions of East and West. These last differentials are due, of course, not to ethnicity but to a political schism and variations in the balance between Catholic and Protestant.

[Table 5 about here]

Despite the fact that, by comparison with their European-origin counterparts, African-Americans and Maori have markedly different levels of fertility and patterns of early childbearing, especially around 1970, the overall impact on Total population trends is negligible, just a point or so (for the Maori transition see Pool 1991). At the end of the baby-boom these minority patterns were merely an exaggerated form of the majority’s force of reproduction, extremely so in the case of Maori in 1970. But by 1990, by the baby-blip, the early childbearing of the minority differed sharply from the pattern shown by the majority group, especially in New Zealand’s case. For Canada, the Quebec pattern depresses the Total, but it differs only marginally from that shown by the largest Anglophone Province (Ontario). Germany produces a somewhat different situation: TFRs are virtually

the same, yet the rhythm of reproduction is totally different. One other Continental country, Belgium, included in tables in this paper also has major cultural differences, in their case linguistic. Again these seem to have little overall impact on fertility levels: in 1990 the TFR for Flanders, the “majority” population comprising 58% of the Total, was 1.55 births per woman; that for the entire country 1.62 (ECE/FFS, Lodewijckx 1999: 54).

Thus, today in low fertility countries ethnic and other divisions have limited impact on national trends. More importantly for this paper, there is strong empirical evidence of trends, implying the maintenance of cultural norms, even in majority populations, favouring high fertility and early childbearing in the ESCs, or at least in the Neo-Europes. To take the case of NZ (until recently it was reasonably representative of Anglo-America and Australia), the pioneer period was characterised by this pattern, which then shifted rapidly between 1876 and 1901 to one closer to that of the UK – later marriage and higher levels of celibacy. In the baby-boom there was then a reprise of the pioneer model, at least of its age-specific dimensions (the peak baby-boom TFR in 1961, 4.2, was still below that estimated for the 1870s, 6.7). This was followed in the baby-bust by a switch back to later marriage and childbearing, and lower fertility, almost exactly a century after the first shift between neo-European and European patterns had occurred (Jackson and Pool 1994: 17). Clearly, then, by comparison with other WDCs, the ESCs, at least the US and NZ, are capable of sudden and significant shifts in reproductive regimes. These changes produce the rather severely disordered cohort flows seen in these populations (Pool et al 1999; Pool 2000).

#### **4. Determinants of Differences between ESCs and other WDCs**

A review of the proximate determinants conventionally referred to in fertility analyses throws little light on the questions that emerge from the results presented here. The prevalence of contraception is high across all WDCs. Typically it is used by the youngest cohorts even at first intercourse, although there is some variance between ethnic groups<sup>14</sup>. In many WDCs, especially the ESCs, very high levels of pill use occur at the central reproductive ages for timing and spacing. Sterilisation is the norm in numerous WDCs for limitation among women and couples at older reproductive ages (ECE/FFS various dates and authors: Tables 19 & 21; detailed for NZ in Pool et al 1999). With the exception of the U.S., in WDCs total abortion rates are low (<0.6/woman), and in the other ESCs are <0.5; in the 1980s New Zealand had one of the lowest rates but these have increased recently. Across the ESCs, abortion had been legalized in various ways in the 1970s, usually after rancorous debate (eg NZ see Sceats, 1988; Sceats and Parr, 1995).

With the exception of Southern Europe, there are also not particularly significant differences between countries and cohorts in levels of union formation, although the form this might take varies considerably. Across the WDCs, and for all countries, high proportions of women have been in one or more unions by age 25 years, as is shown in Table 6. But today this is not likely to be formal marriage,

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<sup>14</sup> In NZ age, cohort and period are the prime determinants of differentials, ethnicity is of some importance, while education and other co-variables have limited effect (Dharmalingam et al 1997)

except in Southern Europe. The switch to cohabitation as the preferred form of first union seems to have occurred simultaneously in WDCs in the 1970s. Levels vary, with France, the Nordic countries, New Zealand (Maori and Pakeha) and Quebec among the populations at the higher end of the spectrum, and English-speaking Canada rather lower (Klizjing & Macura 1997; Lapierre-Adamcyk et al 1997; Pool et al 2000), but all the WDCs outside Southern Europe (and probably Japan) seem to have gone through the same general revolution in family forms.

[Table 6 about here]

As noted earlier there are differences in the force of reproduction by age, yet across the WDCs, and especially the ESCs the early force has fallen, and with it teenage childbearing. This has co-varied in time with the shift to cohabitation and increases in levels of ex-nuptial childbearing. There is, however, a tendency on the part of some commentators to confound teenage childbearing with ex-nuptial childbearing, and both of these with sole-parenting<sup>15</sup>. As this affects the policy debate it must be discussed further here.

In the ESCs, especially the neo-Europes, the baby-boom was driven to a degree by teenage pregnancy, resulting from nuptial or ex-nuptial conception, with the latter typically followed first by a wedding, usually “white” and blessed by the families concerned, and then by a nuptial confinement with the birth often referred to as “premature”. This is illustrated by reference to NZ data in Table 7. If the accent is placed on ex-nuptial conception, as against ex-nuptial birth, it has been a significant factor at least since the late baby-boom. In fact, the seminal studies by the late E.G. Jacoby (1958 & 1961) show that this pattern was a long-standing tradition in 20<sup>th</sup> century Pakeha NZ, peaking just after World War I, again in the 1930s and reaching its apotheosis in the baby-boom (Pool & Crawford 1980). If marriage did not occur quickly, thereby resolving any moral dilemmas as the opprobrium of ex-nuptial birth had been avoided, the child would often be adopted out. The peak years for this coincided with the second peak of the baby-boom in NZ, and the peaks for ex-nuptial conception/marital birth (*NZ Official Yearbook* 1990: 218).

Once the stigma attached to ex-nuptial childbearing disappeared<sup>16</sup>, then cohabiting couples no longer felt the pressure to marry quickly. The extremely rapid adoption of the pill in most ESCs in the 1960s and 1970s (eg. For NZ see Pool *et al.* 1999 and 2000) provided a mechanism by which couples could cohabit with a degree of protection against unwanted pregnancy- abortion played a minor role in this transition. Ironically, the precipitate marriages at young ages of the late baby-boom were at high risk of divorce (Dharmalingam et al 1998), thus driving the very trends deplored by moralists worried about the future of the family. We are citing NZ here, but this scenario probably applies as much to the US as to NZ (Morgan et al 2001: 73, citing major American studies).

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<sup>15</sup> The Republican “*Contract with America*” 1994, went right back to this as it prescribed “tax incentives for adoption”).

<sup>16</sup> A not completely untypical notice from the Engagements Column, *NZ Herald*, in Oct 1995 read: “Jocelyn and Shane announce with glee, we’re engaged and about to become three.”

[Table 7 about here]

Turning to causally more remote determinants, Table 2 presented earlier takes the cumulative proportions of women having a first birth by age 30 years, comparing all women with the least well-qualified and the most highly-educated women. Two trends are evident in this comparison. Firstly, the gap in cumulative fertility between all women and the least well-educated is low for all countries and all cohorts. Secondly, and in contrast, the gap between all women and those who are more highly qualified increases for recent cohorts. Generally, it is least in the Nordic countries (the Austrian data seem aberrant), and greatest in France and the ESCs, but with Italy being an extreme case.

A far more precise analysis using live-births at any age shows, however, that the situation is far more complex than these comments might suggest. Above all, the differences between France and the United Kingdom stand out. French women are more likely to have births earlier, and the gap between educational statuses is lower for Britain (Eckert-Jaffe *et al* 2002; for NZ see Dharmalingam *et al* 2003)

A comparison with the Nordic countries is interesting in another regard. Recalling that the social welfare supports are generally most advanced and developed in these countries, it is easy to see why rates of labour force participation among women with young children are also high, as is shown in Table 8. But in the ESCs, where support systems are far less developed, rates are higher than in most Continental and Southern European countries, albeit that they are not as elevated as for Scandinavia and Finland.

France where support systems are very comprehensive, including for childcare (Eckert-Jaffe *et al* 2002; Letablier 2002) has notably high levels of participation.

[Table 8 about here]

The question then arises: who cares for the young children of working mothers. For example, east German women “find it easier to combine childrearing and employment [than do their west German counterparts], thanks to the greater availability of children’s day care”. The “high work orientation” of east German women and the “unfavourable male employment situation” are also cited (Konietzka & Kreyenfeld 2002: 350). These points are of relevance when ESCs are analysed (see below). To take another case, by comparison with other WDCs there are lower rates of labour force participation in Southern Europe, where social welfare support for child care is limited. This suggests that a choice is made either for mothers to stay at home, or for family members, notably grandmothers, to provide this support, or, as Livi-Bacci and Salvini (2000: 247-48) show, for employed women to avoid childbearing.

In lieu of more precise data to test this effect, a ratio based on the number of pre-school age children to women of “active/healthy” grandmother ages has been computed, and presented in Table 9. Subject to the caveats one must make about crude indices and about the instability of ratios as measures, the index does suggest that the potential for this form of familial support is greater in Japan and

Southern Europe than elsewhere in the WDCs. It is least in the Nordic countries, but in principle families there have access to publicly financed support systems, and the level is low for the Netherlands, where in any case rates of participation are lower. But the lowest potential for resort to grandmothers is found in the ESCs where non-familial support for childcare is also limited. A qualitative study carried out in Australia, England and New Zealand, the last by a co-author of this paper (Johnstone 2002; Cairns *et al.* 2002; Sceats 2002)<sup>17</sup> indicates that in the ESCs there would be little reluctance on the part of parents to have carers who are non-family members, who are appropriately qualified and if couples can afford this. There are precedents for this attitude. As in other WDCs, “wet-nursing” occurred historically in the ESCs, especially the UK, while for the middle and upper classes, nannies and boarding schools (especially for boys and even for young children) are British traditions exported to their colonies.

[Table 9 about here]

## **5. Higher Fertility in the ESCs: Alternative Explanations**

### *Factors of Demographic Composition and Dynamics*

This brief review of trends and of their determinants leaves open more questions than it answers. The data presented earlier have shown that, overall, levels of fertility and early childbearing are higher in the ESCs than elsewhere in the WDCs, and that the latter attribute is more marked among ethnic minorities and also the less well-educated. All this seems counterfactual to a policy environment that is targeted and parsimonious, and often designed to provide almost punitive responses to sub-populations whose reproductive patterns seem to provoke moral panics. Beyond this there is another puzzle: the ESC young parents have labour force participation rates just below the Nordic, but without the benefits either of a comprehensive Scandinavian-style social security system and childcare (Gauthier 1996:189), or the potential support of the “Southern European grandmother” sort.

Demographic composition seems to play a minor role in determining this pattern. For example, “It is sometimes suggested that the relatively high fertility, and other distinctive features of birth rates in the Neo-Europes, are not due to any distinctive behaviour among their European-origin or English-speaking population...”, but of their ethnic minorities. Yet, as was shown above, the impacts of minorities appear very limited, a result that confirms the conclusion of Chandola *et al.*(2002:185)..

In contrast, as Chandola *et al* (2002) argue, early childbearing is clearly a more important factor. This can be demonstrated by adjusting the American TFR for the year 2000 by applying Swedish ASFRs at age-groups <20 years and 20-24, and

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<sup>17</sup> Although these studies were carried out independently in different countries and environments (especially in terms of transport and other difficulties, and transaction costs), an international metropolis (London), a large second-order city (Melbourne, Australia), and a small city and its rural-urban fringes (Hamilton, New Zealand), many of the the overall results were remarkably similar.

then using the US ASFRs from then on. Instead of their TFR being almost at replacement, the level would then be only 1.6, marginally higher than that of Sweden. Clearly, then, early childbearing has a significant effect on their reproduction. But what is really interesting is that if the same procedure is applied to 'Whites' only the results do not differ to any significant degree from those of the Total US population. Similarly, for NZ the adjusted rate is 1.7 as against a recorded one of 2.0. For Pakeha the same procedure also yields virtually the same figures.

In sum, in both the US and NZ what is operating seems to be some sort of regime that applies to the national, minority and also majority European-origin populations. Thus there is a need to turn to other explanations of which two might be suggested. The first often cited as a possibility is labour market flexibility. The second possibility, we would hypothesise, lies in a complex of ideational factors, none of which provides on its own a sufficient or predominant explanation, but which together seem critical.

#### *Labour Market Flexibility*

"Labour market flexibility" is often offered as an explanation of the higher fertility of the ESCs, especially by advocates of neo-liberal economic policies; in the academic literature a more neutral phrase is likely to be used, such as "labour market arrangements /institutions" or simply "employment" (see Adsera 2002; McDowell 2001). The case for flexibility seems to rest on a set of assumptions, built on other assumptions:

"Research on the type of jobs women hold sometimes assumes that 'female' jobs have characteristics that make them more compatible with motherhood and that 'flexible' jobs are predominantly held by women, so that they can shape their employment around their work for the family and home.... Others have argued that predominantly female occupations require less effort ([citing Gary] Becker 1985 [*J. Labor Econ.*]) and are more flexible than other occupations, making it easier for employed women to combine jobs with home responsibilities" (Rosenfeld 1996: 199, 212).

Empirical analyses, especially those that might be the bases for modeling fertility-employment interlinkages, encounter major problems with these assumptions, that must by their very nature focus essentially on the role of women in the labour market. Not the least is the fact that the term "labour market flexibility" is inexact (Deakin and Reed, 2000:4). At a micro-level it is often seen as the availability of part-time work and casualisation, plus strategies by firms allowing labour inputs to vary according to the level of external demand for the firms' output (Atkinson, 1985). "An important related trend has been from employment relationships to contract relationships" (Quiggin 2001:186). Moreover, at this level three basic assumptions seem unsustainable: "[I]t does not seem that flextime is a response to women's needs to combine domestic work with labour market work; [in 1991 in the US] a greater proportion of men than women had flexible work schedules... To the extent that flexible jobs are also jobs with long and irregular hours, increases in this kind of work would be



expected to be associated with lower fertility... [and] women's jobs are not easier or more accommodating,..." (Rosenfeld 1996: 210, 211, 212).

When the effects of "flexibility" on families are studied qualitatively in more detail at a micro-level, some aspects become clearer. A cross-national analysis in Australia, Britain and New Zealand has raised some major questions. Micro-level flexibility definitely has some advantages for less well-off families where both parents need to work, and also are prepared to share child-minding and household duties, and to work different shifts. Casual and part-time jobs may also be the only feasible sources of jobs both for the working poor, especially sole-parent families, and even for the better-off well-educated (Johnstone, 2002; Harris *et al* 2002; Sceats, 2002).

At a macro-level, flexibility is a strategy aiming to remove some effects of labour supply on demand by firms and the economy in general, in ways that seem to privilege employers rather than workers.

"The argument is that with expansion of the service sector, global competition, and rapidly changing technology, employers need the freedom to bring workers in, to arrange their work schedules – with possibly irregular days and hours – and to dismiss them as needed. Temporary contracts, subcontracting, part-time work, and work outside the regular workday schedule are some of the ways employers enact this flexibility" (Rosenfeld 1996: 208).

In policy discourses "flexibility" has also been taken a step further. It has become associated with the reorientation of social welfare as this affects the relationship between capital and labour, and the costs of benefit systems. In short, it has become coupled with neo-liberal macro-level economic policy perspectives.

A recent cross-comparative empirical study by Adsera gives no clear support for arguments favouring or against "flexibility". In the United States where markets are deemed to be flexible, the opportunity costs of childbearing seem less because women appear to be able to re-enter jobs after the birth of their child. But equally well in Northern Europe, levels of fertility are higher yet seem to be related to state support for families, and also because the public sector is large. In southern Europe fertility trends are low both where flexibility is greater (Spain) and less (Italy).

This leaves unanswered other questions (the macro-level implications of these are elaborated for Britain in McDowell 2001). Firstly, there is a fundamental question: why both partners must work when they have a young child, even when conditions are less than ideal. Indeed, "talk of a family-friendly workplace has remained talk, while conditions of employment have become steadily less family-friendly" (Quiggin 2001:187). For example, there may be difficulties with childcare arrangements that typically in the ESCs will be *ad hoc* and not necessarily of high quality in terms of the "safety" and the social-emotional development of the child; or there may be the impacts of shift work on family life. Obviously, however, this is the only way some families are able to survive economically.

Secondly, there is the further fundamental question whether or not there are jobs. In many parts of Britain, for example, there is a "job deficit" (McDowell

2001: 453). Arguments based on low rates of unemployment as gauged through labour force surveys are likely to be spurious as the definitions used in these instruments are extremely restrictive: they define out of the labour force anyone who was not working or “actively” seeking a job in the reference period (normally last week/month). Where “job deficits” occur a large pool of potential workers will often not even try their hand at seeking work only to risk rejection, even where they have the resources to do so, such as transport and access to job agencies and pro-active programmes may not really address this issue.. British ‘Workfare’ “schemes [called “New Deal”] concentrate on improving the quality of the labour supply through training in the main with little attention given to job creation” (Mc Dowell 2001: 452).

Thirdly, for many couples, and especially women, the need is to secure and maintain status and advancement in careers to prepare for which they have invested heavily, and typically have postponed childbearing. “The combination of later childbearing and early retirement (also a feature of the ‘new’ economy) also implies that the early childhood period, at which the demands of childcare on parents’ time are most intensive, tends to coincide with the point at which standard career paths demand maximum commitment to the workforce” (Quiggin 2001:185). This then reinforces other labour market patterns, notably gender trends in participation in the “high tech” as against “high touch” service occupations “that increasingly dominate advanced industrial economies”. But associated with these shifts are the growing income inequalities and status gaps between full- and part-time work. In Britain, “Full-time work for women is astonishingly strongly class differentiated... women who work continuously in full-time jobs not only tend themselves to hold higher status jobs than other women [and thus, if parents, to have an income allowing them to purchase quality childcare] but also to be partnered by men in high status employment” McDowell 2001: 450, 451, 455). Thus part-time and casual workers seldom maintain the job status of their full time peers. Essentially, then, a product of this form of “flexibility” is a further segmentation of the labour force into full-time workers who have higher status, and part-time ones who have lower status and fewer prospects. It also effectively segments is into full-time women workers, especially higher professional and managerial, that is disproportionately childless or with very low fertility, as against part-time workers who have children and higher fertility. (Dharmalingam *et al* 2003).

The need to work after childbearing often reinforces this segmentation, and thus risks increasing distinctions and inequalities. The cross-national quantitative study noted above states that in all three countries there is “little indication that women have the full range of choice in terms of employment options when they have children... Women in all countries commented on the frustration of being employed part time and a sense of not being taken seriously” (Sceats *et al* 2003).

Fourthly, some larger employers, especially the public sector where female participation rates are high, can provide better flexibility in work conditions, as in the Nordic countries. This also occurs in those ESCs (notably the United Kingdom) where this backed up by state intervention in the form of prescribed

durations of maternity leave (Sceats *et al* 2003). But as Gauthier (2002) shows, the ESCs are at the bottom end of the WDCs for these measures.

Ultimately, however, even under the most favourable conditions, and for all except the small minority of women with high-paying jobs and superior back-up arrangements, the satisfactory functioning of flexible conditions is ultimately dependent on individual situations "... a supportive boss, supportive husband, or a handy grandmother nearby. If these are present then the lack of policy support is mitigated, and conversely if they are absent it can be difficult, even in an organization that is "family friendly". An unsympathetic boss or supervisor, for instance can make or break the situation for a working mother" (Sceats *et al* 2003).

### *Ideational Factors*

As has been noted already, it is clear that policy instruments extant in the ESCs do not have a pro-natalist effect. In principle, they should have -- or rather the lack of a universal and comprehensive system should have -- exactly the inverse effect. Nor does labour market flexibility, whatever this might mean, appear to be the magic formula. For want of a more exact explanation of the higher fertility of the ESCs, it seems, therefore, that one must turn to some set of underlying values and norms that predispose ESCs to higher fertility, achieved among other ways through a greater force of reproduction at earlier ages not only among minorities, but also by European-origin majority populations.

The values system in the ESCs, especially for the majority populations, comes from a shared experience of being "British", mainly as colonies but also as independent countries that maintain close links with the UK, as most public policy analysts argue. But, is there something more fundamental than this common origin and language? The data presented earlier have indicated some differences between the Neo-Europes and their former metropole, the UK, even though socio-political interactions are often close: as recently as the late 1960s NZ was still linked closely economically and many other ways (Belich 2001 *passim*). That said, the processes of migration and colonisation have meant that, for example, "Australia and NZ, unlike Britain, have relatively shallow kinship structures..." (Thorns 1992: 254). This is a factor of importance in the area of family policy.

The net result of the migrations from Europe is that the ESCs are rather different from all other groupings of countries in this volume except Japan. This is because most ESCs are outside Europe, and 84% of the ESCs population live in Neo-Europes. Of course, the US alone accounts for 71% of the total.

The ESCs do have a common history that extends, however, beyond the simple links of colonisation and migration. They share a distinct set of "cultural" traditions, but the similarities go far beyond what are normally seen as cultural factors, say ethnicity, language, religion, family ties of "kith and kin", norms and mores. Rather, the factors that comprise this shared culture, in a broader sense of the word, are also some macro-economic, macro-social and macro-cultural attributes, and some micro-social norms and expectations.

Along with these common experiences the Neo-European ESCs also seem to share a "cultural" tradition around their trends in reproduction, and this may well affect contemporary patterns. We noted earlier that, at early settlement, crude

birth rates (CBR) were often higher for European-origin Neo-European than for European populations, even England and Wales and Scotland, and were driven by early and almost universal childbearing. In the 1870s for Pakeha New Zealanders the TFR was almost 7.0. The CBR was lower than the TFR might suggest, at 42 per 1000, because of the very high masculinity ratio in the immigrant population. The Neo-European ESC rates then declined significantly to around those in Europe. An exception was Canada whose levels declined in most provinces, even pioneer Manitoba, but nationally were maintained at relatively higher levels (1921 4.0 births per woman, vs 2.9 for Pakeha NZ) because of higher levels of fertility in Quebec. Neo-European rates then decreased further, so that by the Depression -- again with the exception of Canada because of the higher rates in Quebec at all ages 20+years, and especially 25+ -- levels were barely at replacement, resembling Northwestern Europe. Most importantly they fell well below those of Catholic Southern Europe ((Henripin 1968: 25, 30; see also Romaniuc 1984:14-16; Sceats and Pool 1985: Fig 25; Festy 1979:241-97). For Pakeha New Zealand, for example, they dropped below replacement in every year 1932-37 (Khawaja 1985: Figure 21, Table 73, 154).

Of more than passing interest is the rapid decline in fertility in the Neo-Europes in the late 19<sup>th</sup> century, and their lower levels relative to much of Northwestern Europe and the Mediterranean over the first few decades of the twentieth century, even in pioneer zones like Manitoba (see above), or, by 1901, in the newly settled interior North Island of New Zealand (Pool and Tiong 1991). This point should be put alongside the fact that in several Neo-Europes sub-replacement fertility was reached in the depression (see also British Columbia in 1937, Henripin 1968: 30). This means that arguments about inherent higher fertility arising from a frontier spirit and the optimistic expectations this might engender, are not particularly persuasive.

Below we will argue that there is recent memory of high fertility by WDC standards in the ESCs, but this brief history of the “culture” of reproduction also implies that two other factors may be of significance. There may also be a longer-term residual memory of sub-replacement fertility. Moreover, there is a long history not only of exceptionally high fertility by any standards in the pioneer period, but since then also of a series of rapid ebbs, then waves (Baby-boom), then more ebbs etc., that by WDC standards have been radical, even in recent memory.

This could be compared with the more or less continuous decreases in fertility over several decades seen in, say, Japan or Southern Europe. This could mean that the ESCs have somehow developed strategies for fitting fertility trends to macro-social and economic circumstances, something that other WDCs are still coming to terms with. It is instructive that the countries that had lower fertility during the depression (TFR at replacement or below) typically had higher fertility in the 1990s (1.7+ births/woman) ( eg ESCs, except Canada; France), and vice-versa (eg Italy, Spain, Netherlands; cf Festy 1979:241-97 and Rindfuss and Brewster 1996: Table 1; Appendix to our paper).

Critical to this is a point raised earlier. The ESCs were the first WDCs to go through economic modernisation, to “become richest earliest subsequently grow

more slowly and [to be] gradually overtaken...” (Castles 1993b: 28), and this was to shape their social morphology as much as their economic structures. For example, some Neo-Europes had exceptionally high levels of life-expectation in the latter years of the 19<sup>th</sup> century, with New Zealand arguably the highest (Pool & Cheung 2002). This early modernisation also affected expectations about wealth and the notion that the path to development followed by these societies was the ideal model for others to follow<sup>18</sup>.

Recently the ESCs, especially the US, have played a major role in developing and branding the so-called “New Economy”. According to the reviewer of a recent book by Robert Reich, its growth

“encourages a division between the talented few and the routine many: it also results in greater insecurity for everyone, leading them to work harder, [and] promote themselves more relentlessly... the traditional job for life provided not just security but structure... [although] over the course of history, structure has been of negligible importance in the world of work... work has been about survival, and structure has come, if at all, from other sources, for the most part feudal or religious” (Seabright 2002; see also Quiggin 2001).

The higher levels of skill, and the costs involved in achieving these, as demanded by the “flexible economy”, create further insecurities between aspirations for structure and progression, and the realities of the job market (see also McDowell 2001; Quiggin 2001). For the less skilled, a lack of qualifications produces further tensions (Seabright 2002). Symptomatic of this is the decimation of traditional manufacturing in regions across the WDCs, and the resultant job losses there, as against the growth of financial and information industries increasingly concentrated in favoured areas.

It is this aspect of structure that is critical for the present paper. In the 1980s and 1990s, the ESCs entered enthusiastically into restructuring, as has been documented earlier in this paper, emphasising, *inter alia*, flexible labour markets, contracting, out-sourcing and similar management strategies. Accompanying this have been major shifts in ESC family policy environments taking away many of the mechanisms for reconciling family life and the workplace. As yet, however, the ESCs have not created viable, alternative structures. In contrast, familialism in Southern Europe or the policy frameworks of the Nordic countries achieve this harmonisation. As in the former East Germany, moreover, in the ESCs it is typically men in manufacturing and some clerical industries who have most keenly felt the impacts of restructuring.

These changes may have affected fertility in the ESCs in two ways. Firstly, skilled women will have been those who delayed pregnancy in order to train and to gain significant career experience. This shows up in the data on education and cumulative fertility presented earlier in this paper, and in the polarisation of reproductive force identified for the ESCs in particular. A recent paper comparing the United Kingdom and France pinpoints the effects of this and of the tensions

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<sup>18</sup> This is implicit in the vast literature on modernisation emanating primarily from the United States in the era of functionalist sociology ; more recently the Anglo-Saxon Reagan/Thatcher model of economic restructuring has become widely applied by Bretton Woods agencies.

noted earlier. In Britain “State intervention is minimal, while France practiced a generous family policy. The net result is that social polarization of fertility is significant in Britain but not in France. Becoming a mother or moving to higher parities is more difficult for better educated British women than for their French counterparts” (Eckert-Jaffe *et al* 2002: 491 and 507). These factors must be among those that explain why France has maintained a consistent and relatively high level of fertility by WDC standards (Letablier 2002)

Three qualitative studies carried out in England, New Zealand and Australia (Cairns *et al* 2002; Johnstone 2002; Sceats 2002) show that highly qualified, career-oriented women often have the financial means to purchase private sector childcare when they have only one child. But it becomes increasingly difficult to sustain full-time work once they have a second child. In this context, it hardly needs to be mentioned that the relationship between education and fertility is two-way: it is those women who avoided early childbearing who have the qualifications referred to here.

Job loss among men, especially in less skilled and manual occupations, has often meant, as in eastern Germany, that women enter the labour market as the principal breadwinner, on whom the family, in the absence of comprehensive benefits, becomes dependent. Similar pressures exist for sole parents whose households in ESCs have the lowest incomes (eg for NZ see Johnstone & Pool 1996). “Workfare” and related schemes implemented by public policy agencies in numerous ESC jurisdictions, aiming to pressure women, in particular and including sole parents, to go back into the labour force, have increased these tensions. For example, Britain “has bought into the workfare ideal... Mothers of dependent children are now expected to work,...” even sole parents (McDowell 2001: 452). There are calls for the cutting of welfare, and these are linked to fertility, but retrospectively for those who have children already<sup>19</sup>. One might add that it is the early starters and minority women who are disproportionately affected by these policies.

Early modernisation was accompanied, at least in Australia, NZ, the UK, and to a lesser degree Canada, by legislation laying down the bases of welfare states. As was noted earlier, these privileged the stereotypical family through emphasising the “social wage”, so that the family or widow of a working man who had fallen on hard times would be maintained at a level of well-being not far below that of the average working man’s family. But this model was eroded over time, and then in the dying decades of the 20<sup>th</sup> century was radically restructured into targeted forms of social assistance. In a curious way, however, this factor may be positively associated with fertility, rather than being anti-natalist. It is the less well off with higher cumulative probabilities of fertility by say 30 years who are most

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<sup>19</sup> Families not on welfare also face pressures coming from the economic costs of childrearing, increasing expectations and values surrounding “quality” of childcare, including regulations relating to equipment that is legally deemed “safe”. An example in automobile dependent ESCs lacking adequate public transport would be toddler car seats that meet safety standards, but that have the effect of limiting the number of children able to be carried in a typical family car, a contrast with the baby-boom when 3-4 would be transported unrestrained, The costs of education are also an issue, even where children attend public schools but are required to spend on “extras”. See Sceats (2002), Cairns *et al* (2002) and Johnstone (2002).

likely to seek such benefits; the better off have achieved this status frequently because they stay childless as long as possible as they lay down their careers and equity (Johnstone & Pool 1996).

Of course, the paths of causality are far from unidirectional: early childbearing by accident or by design, recalling that this a culture that still has a strong memory of such patterns, places many couples in a vulnerable situation so that they must seek targeted assistance. Typically, however, this is so parsimonious that, contrary to what neo-conservatives argue about “sending out the wrong messages” (Richardson 1995), the availability of targeted benefits is not itself a sufficient reason for early childbearing

Economic modernisation in the ESCs had come, in the main, first from the manufacturing and associated exploitative (eg coal mining) and trading sectors, and later from service industrial growth. This naturally led these countries into early urbanisation. What is less evident is why Neo-Europes dependent on the export of primary commodities – New Zealand is the extreme example – also urbanised at an early stage. By 1900, and this was still the case in 1950, the highest levels of urbanisation were found in Oceania (Australia and New Zealand: 22% of the population in 1900, 39% in 1950), followed by North America (19%, 29%), and Europe (15%, 21%). For the World as a whole the proportions were 6% (1900) and 13% (1950) (Lampard 1967: Table 3). By 1911, three-quarters of the British population was urban, as was half the New Zealand; and by 1920 more than 50 % of Americans were also urban (Coleman & Salt 1992: 86; Pool & Bedford 1996: 14; National Commission on Urban Problems, US, 1969: 40). Within Europe in the 1930s, the percent of the UK’s population urban (76%) was only exceeded by the proportions for Belgium and the Netherlands; the rate for England and Wales (excluding the other countries in the UK) equaled those in the Low Countries. Most European countries were still below 50%, the exceptions being Austria (61%), France (52) and Italy (52), with Germany alone (70%) resembling but not equaling the UK (Kirk 1946, reprinted 1968). Levels of urbanisation in the individual countries around which this paper’s interest revolves are presented in Table 10 for 1950 to 1990. With the exception of Ireland, the ESCs still figured as among the more urbanised WDCs through the entire post-War period.

[Table 10 about here]

It could also be argued that early urbanisation in the ESCs tended to take a different form from that found elsewhere in the ESCs. Low density housing, terraced/row houses, semi-detached or detached dwellings became the mode in the ESCs in the late 19<sup>th</sup> or early 20<sup>th</sup> centuries, whereas multi-storey apartments were more common in the big cities of the continent.<sup>20</sup> This was particularly true for the Neo-Europes, except say in the large eastern seaboard cities of North

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<sup>20</sup> These comments on housing are based on personal observation plus very useful discussions with Prof. David Thorns, NZ’s most eminent urban sociologist, Canterbury University; and with Assoc. Prof. David Swain, a Waikato University family sociologist whose current research on genealogical data sources in the UK, NZ and other EDCS has confirmed many of these points.

America that were the normal ports of entry for immigrants, but it even held true in the UK. Early developments in commuter transport systems were led by the ESCs, most notably the automobile that spawned the suburbia of the Neo-Europes. The ESCs also led the way in the shift to owner-occupied housing, in its commodification as it were, and this led to differences in provision for the less well off : the rental housing estate that is publicly funded, versus the institution of rent-controls on private sector rental housing (Barlow & Duncan 1994: Figs 2.1 & 2.2; Harloe 1995: Chapt 1). From the 1920s in the UK and in other ESCs Building Societies<sup>21</sup> and other mutual benefit associations were helping couples to finance dwellings. The overall result was that by the time directly comparable home ownership data become available the ESCs stand out. In 1971 only Iceland in the western countries had higher levels than Australia (69%), NZ (68), US (63), Canada (56), Belgium (56) and, lowest among ESCs, Britain (50). Other WDCs for which data are available came further down below 50%. In Australia and NZ the level was already at 50-60% in 1945 (Kilmartin & Thorns 1978: 22, 104).

The argument here is that the early modernization and its accompaniment urbanisation, plus the early introduction of welfare state measures, and the forms these took, together created a distinctive values system. At an early stage, ESC populations developed the modalities that allowed them to accommodate family formation to urban living, and even as we suggested earlier, to how patterns of reproduction were adapted early on to meet economic changes.

Then after World War II the baby-boom reproductive regimes associated with suburban family life in a detached house (as described in William Whyte's "The Organization Man", 1960: chaps 23 & 24) set the values for later generations, at least in the Neo-Europes, cutting across all European-origin social groups, as evidenced by earlier data presented here on education and cumulative fertility. These baby boom regimes involved *inter alia* a return to marked levels of early reproductive force that had also characterized the pioneer period. It may have been easier for very young parents to raise a family in a detached suburban house than in an apartment, provided they had the means to buy a home.<sup>22</sup> Moreover, with changing values about the "quality" of childrearing there is increasing opposition to the notion of children, particularly of different ages and/or genders, sharing bedrooms, the norm earlier in the 20<sup>th</sup> century. This left, as it were, a recent residual memory of fertility levels that were high by WDC standards, even Mediterranean European, yet realized in a peculiar urbanized environment of owner occupied detached dwellings.

But today in the ESCs the trend is also for childbearing and childcare polarization, that also often parallels a dichotomisation into "work rich" and "work poor" households (McDowell 2001: 452). Typically, this is between the better off, frequently the late-starting parents, who have the means for this "suburban", or quasi-suburban inner city (say a large owner-occupied row house), child-rearing, as well as the capacity to buy "quality" child care. "In the United

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<sup>21</sup> The 1916 New Zealand census reported 53% of dwellings were owner-occupied (typically of course being bought with a mortgage or by time-payment).

<sup>22</sup> The means of purchasing varied across the Neo-Europes, but frequently involved some form of family support.



States, for example, women's childcare choices are circumscribed by their economic resources" (Rindfuss and Brewster 1996: 282). The obtaining of quality care in ESCs where there is limited state support for this (cf France), may be most easily achieved by women in full-time employment in high status jobs. But to be in this position, they will often have had to delay childbearing so as to pursue their education, and may end up childless, or with a completed family size below what they might have desired.

In contrast, there are the less well-off who start childbearing earlier, and thus often do not have the chance gain the better qualifications that would afford them a comparable family environment, or for that matter quality childcare for their children. They are faced with a struggle on benefits, or on low incomes gained by whosoever of the couple has a job. With targeting, couples ineligible for benefits may find it especially difficult to provide such an environment and there may be a need for both parents to work. This is further complicated when males face unemployment or low paid jobs. "At low levels of [male relative income], young people learn to look at the income-producing power of female earnings: the income effects on fertility of a woman's earnings increases at such times" (Macunovich 1996: 251). One can take this argument a step further and infer that, in order to maintain a minimal level of wellbeing, less well-off couples with children might equally well accept, albeit reluctantly, benefit income accruing to the mother and child.

The consequence of all this for the ESCs is both demographic (fertility) and benefit polarisation (see also Eckert-Jaffe *et al* 2002; Dharmalingam *et al* 2003), between those families that need welfare and those who do not seek it, even if sometimes the need is there. It is this dichotomisation that undoubtedly drives the moral panic prevalent in the ESCs, expressed often in terms with eugenics' overtones: the wrong people having children (Pool 1996). That the higher profile early childbearing groups are also often the more visible minorities adds to polarisation in public discourses. The policy response, moreover, has not been to formulate "family friendly" policies relating to work and childcare that might bolster reproduction, but to argue for rather punitive measures that aim at pressuring the unmarried poor not to have children (*Contract with America* 1994; Richardson 1995: 213-14).

## **6. Conclusion**

Analysis of differences in fertility patterns between WDCs is remarkably difficult today because levels of variance are relatively low. Thus it is almost impossible to draw robust and authoritative conclusions.

Nevertheless, this paper has shown that the fertility levels of the ESCs are higher than for most WDCS, and that this seems to occur in a policy environment that has fewer of the possible supports for childbearing and rearing that are seen in France or Nordic countries. Labour market flexibility also did not seem to explain relatively elevated rates.

We posited and showed that, instead, in the ESCs there is a long developed, shared culture and norms, albeit often latent, rather than manifest (to use the terminology of functionalist sociology), based on a relatively common origin but

reinforced by the diffusion across the group of social and economic ideologies and values. The resulting value system is something more than merely the effects of colonisation and migration. In the ESCs it seems to produce higher fertility driven to a significant degree by early childbearing. This appears to occur despite a policy environment that is parsimonious and targeted, is certainly not pro-natalist (Gauthier and Hatzius 1997), and provides benefits that are insufficient to offset increasing costs associated with bringing up children. Families are supported by a 'residual' welfare system mutated in most ESC countries from the early essays into welfare statism, that privileged married men and their families. This earlier policy emphasis on "married" couples may explain also the current concerns about ex-nuptial childbearing and cohabitation.

The remaining vestiges of these former systems may be residual in yet another sense. Resort is made to them because of a 'residual memory' of what existed not too long ago when young couples and their children, born very soon after marriage, could take up neo-local residence in a detached owner-occupied single-family dwelling, often financed with state support. Today owner-occupation is becoming far more difficult for the young at key reproductive ages. Between 1986 and 1996 the percentages in this category in New Zealand declined significantly from 62% to 53% at 25-34 years; from 78% to 72% at 35-44 years (*N.Z Census* of 1986 and 1996). A qualitative study reports that frequently NZ women will recite a widespread belief that "NZ is a great place in which to bring up children", but then will add a newly emerging caveat, "but it is becoming more and more difficult" (Sceats 2002). Indeed among sub-populations the effects of these emerging difficulties may already be becoming apparent, as TFRs in some NZ areas drop to levels reminiscent more of continental Europe than of ESCs (Pool 2002: 34-35).

This raises then the question: are barriers to fertility becoming such in the ESCs that they will outweigh longstanding cultural values? Are the ESCs, despite all their distinctiveness today, facing a future ultimately not too different from that diagnosed for the European Union: "...continued below-replacement fertility,..." (Lesthaeghe & Willems 1999: 227). Could the absence of policy props, and the advocacy<sup>23</sup> and promulgation of further neo-liberal policy measures revolving around work-family linkages have negative implications for fertility in the ESCs, for example? Rindfuss and Brewster have argued that "changes in work and childcare arrangements...may induce fertility decline" (1996: 282).

But one cannot ignore another dimension of this. What if the ESCs were to see their fertility return upwards towards replacement? Would they effect this transition as rapidly as they did in the past as they moved through transitions, in and out of the baby-boom?

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<sup>23</sup> There are strong voices advocating further workfare type measures among senior neo-conservatives close to the Cabinet in the US; in NZ a senior parliamentary conservative, a former Reserve Bank Governor has made a strident call of this sort. In Britain the Blair government is implementing a number of such measures (McDowell 2001).

**Table 1: Number of children ever born - alive by age of women (% with zero, one and two-plus children), selected WDCs, 1990s**

Age Group Number of children	35 – 39			40 – 44			45 – 49			50 – 54			55 – 59		
	0	1	2+	0	1	2+	0	1	2+	0	1	2+	0	1	2+
<b>Country(ies)</b>															
<b>ENGLISH SPEAKING</b>															
Canada	22	15	63	16	13	71	14	11	75	8	10	82	-	-	-
New Zealand	11	12	77	11	8	81	9	9	82	7	6	87	10	6	84
<b>FRANCE</b>															
	11	18	71	8	22	70	12	17	71	-	-	-	-	-	-
<b>GERMAN/DUTCH SPEAKING</b>															
Austria	14	25	61	8	24	68	9	21	70	8	19	73	-	-	-
Belgium*	12	21	67	-	-	-	-	-	-	-	-	-	-	-	-
Netherlands***	17	16	67	15	7	70	-	-	-	-	-	-	-	-	-
Switzerland	23	16	71	20	15	65	16	15	69	-	-	-	-	-	-
<b>NORDIC</b>															
Denmark	16	19	6	12	18	70	10	16	74	-	-	-	-	-	-
Finland	13	22	65	13	22	65	12	18	70	-	-	-	-	-	-
Norway***	9	14	77	7	14	79	-	-	-	-	-	-	-	-	-
Sweden***	12	17	61	12	14	64	-	-	-	-	-	-	-	-	-
<b>SOUTHERN EUROPEAN</b>															
Greece	8	18	74	8	15	77	7	10	83	-	-	-	-	-	-
Italy	17	26	57	11	23	66	9	20	71	-	-	-	-	-	-
Portugal	12	23	65	8	22	70	9	20	71	-	-	-	-	-	-
Spain	9	19	72	10	13	77	7	12	81	-	-	-	-	-	-

**Source:** Appendix Table 12, ECE/FFS *Standard Country Reports* for Selected Countries.

- = No data

\* Flemish regions only

\*\* 40-42 years rather than 40-44

\*\*\* Age groups 38 & 43

**Table 2: The timing of fertility: cumulative percentage (1) of all, (2) of least well educated (ISCED 0-2) and (3) of best educated (ISCED 5-6) female respondents, by cohort, who by 30 years, have had a first birth, selected WDCs**

Educational Level	Birth Cohort of																		
	1936-40			1941-45			1946-50			1951-55			1956-60			1961-65			
Country(ies)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	
ENGLISH SPEAKING																			
Canada*	77	84	62	77	83	60	75	85	51	67	82	49	67	88	43	-	-	-	-
New Zealand	85	89	62	85	88	78	82	83	69	77	81	62	77	81	64	(74)	(83)	(50)	
FRANCE**	-	-	-	-	-	-	80	92	57	85	89	73	81	88	59	(72)	(81)	47	
GERMAN/DUTCH SPEAKING																			
Austria	-	-	-	86	89	86	86	82	94	86	85	81	77	75	72	(78)	(79)	(85)	
Belgium	-	-	-	-	-	-	-	-	-	83	87	86	(79)	(85)	(64)	-	-	-	
Netherlands**	-	-	-	-	-	-	-	-	-	76	86	44	69	78	46	(58)	(69)	(31)	
Switzerland	-	-	-	-	-	-	74	85	54	65	84	33	63	78	24	(57)	(77)	(24)	
NORDIC																			
Denmark ***	-	-	-	-	-	-	85	89	71	81	86	67	75	82	62	(67)	(79)	(55)	
Finland	-	-	-	-	-	-	80	86	63	79	82	65	80	86	69	(69)	(77)	(55)	
Norway	-	-	-	-	-	-	86	90	84	85	94	74	78	96	60	-	-	-	
Sweden	-	-	-	-	-	-	80	84	72	75	83	68	75	81	66	-	-	-	
SOUTHERN EUROPEAN																			
Greece	-	-	-	-	-	-	-	-	-	85	90	82	82	90	70	81	92	48	
Italy	-	-	-	-	-	-	84	89	39	80	89	41	70	84	14	(64)	(80)	(9)	
Portugal	-	-	-	-	-	-	86	87	79	86	88	74	84	88	70	82	88	57	
Spain	-	-	-	-	-	-	85	87	68	82	85	53	82	85	63	(70)	(80)	(45)	

**Source:** Appendix Tables 14 & 17, ECE/FFS Standard Country Reports for Selected Countries. For further points see notes Table 1.

\* ISCED 4

\*\* ISCED 4-6

\*\*\* Gymnasium Level and above

**Table 3: 1990s selected WDCS: Early force of reproduction**

<b>Country(ies)</b>	<b>% of TFR at 15-24 years</b>
<b>ENGLISH SPEAKING</b>	
Australia	24
Canada	29
Ireland	31
New Zealand	29
United Kingdom	30
United States	41
Mean	31
<b>CONTINENTAL</b>	
Austria	33
Belgium	26
France	21
Germany	24
Netherlands	13
Mean	23
JAPAN	16
<b>NORDIC</b>	
Denmark	19
Norway	23
Sweden	22
Mean	22
<b>MEDITERRANEAN</b>	
Italy	18
Spain	15
Mean	17

Sources: United Nations (various years) *Demographic Yearbooks*  
 Unpublished data, see end of **References**

**Table 4: Setting the parameters of the baby boom**

	Average	Early Force of Childbearing					Post-boom Decline <sup>1</sup>
	TFR	1960	1965	1970	1975	1980	
	1955-65						
<b>Country(ies)</b>							
<b>ENGLISH SPEAKING</b>							
Australia	3.3	1.3	1.1	1.1	0.9	0.7	1.5
Canada	3.8	1.5	1.2	0.9	0.7	0.6	2.1
Ireland <sup>2</sup>	3.8	0.6	0.7	0.8	0.8	0.7	1.5
New Zealand <sup>3</sup>	4.1	1.6	1.4	1.4	1.1	0.9	2.0
United Kingdom	2.7	1.0	1.1	1.0	0.8	0.7	0.8
United States	3.5	1.7	1.3	1.2	0.8	0.8	1.6
<b>CONTINENTAL</b>							
Austria <sup>4</sup>	2.7	1.1	1.1	1.1	0.9	0.8	1.2
Belgium	2.6	0.9	1.0	0.9	0.7	0.7	1.0
France	2.8	0.9	1.0	0.9	0.8	0.7	1.0
(W) Germany <sup>5</sup>	2.3 (2.4)	0.7	0.9	0.8	0.5	0.5	1.0
Netherlands	3.1	0.6	0.7	0.7	0.5	0.4	1.6
JAPAN	2.1	0.6	0.6	0.5	0.6	0.4	0.4
<b>NORDIC</b>							
Denmark	2.6	1.1	1.1	0.8	0.8	0.6	1.0
Norway	2.9	1.0	1.1	1.1	0.9	0.7	1.1
Sweden	2.3	0.8	0.9	0.8	0.7	0.6	0.4
<b>MEDITERRANEAN</b>							
Italy <sup>6</sup>	2.4	0.6	0.8	0.8	0.8	0.6	1.1
Spain <sup>7</sup>	2.8	0.6	-	0.7	0.8	0.8 (0.4)	1.3

1 Absolute change in births per.woman, 1955-65 to 1985-90

2 1961, 1966...

3 1962

4 1961...

5 Figures in brackets are for all of Germany. The West German figure is for 1960

6 1971

7 1960, 1970, 1974, 1978, (1986)

Sources: TFRs, United Nations (2002) *Projection & Estimate*

ASFRs. (1) United Nations (various years) *Demographic Year Book*

(2) Country sources noted in **References**, "Unpublished" at end

**Table 5: Majority and minority fertility patterns**

Births per woman	English-speaking Countries			
	Canada <sup>1</sup>	New Zealand <sup>2</sup>	United States <sup>3</sup>	Germany <sup>4</sup>
TOTAL FERTILITY RATE				
1970				
Majority	2.4	3.0	2.4	2.3
Minority	2.0	5.2	3.1	2.2
Total	2.3	3.2	2.4	-
1990				
Majority	1.7	2.2	2.0	1.6
Minority	1.6	2.2	2.5	-
Total	1.8	2.2	2.1	-
EARLY-CHILDBEARING <sup>5</sup>				
1970				
Majority	-	1.3	1.1	0.8
Minority	1.7	2.3	1.7	1.8
Total	1.9	1.4	1.2	-
1990				
Majority	-	0.6	0.8	0.3
Minority	0.5	1.2	1.4	0.9
Total	0.6	0.7	0.9	-

Sources: see **References** “unpublished” at end

- = No data

1 “Minority”, of European-origin but mainly Francophone, Quebec; “Majority”: Ontario, an Anglophone province is used

2 “Minority”, the Polynesian-origin indigenous Maori; “Majority” European-origin “Pakeha”

3 “Minority”, African-Americans, “Majority” “white” Americans

4 West Germany is taken as the “Majority”; East Germany as the “Minority”

5 Births per woman, ages <25 years = 5 x (ASFR<sub><20</sub> + ASFR<sub>20-24</sub>)

**Table 6: Partnership Formation: Cumulative Percentage of Female Respondents, by Cohort, who by age 25 years (1) were in a first partnership (P) of any sort; or (2) were in a first marriage (M) without any prior partnership, selected WDCs**

Birth cohorts of: Partnership/Marriage Country(ies)	1936-40		1941-45		1946-50		1951-55		1956-60		1961-65		1966-70	
	P	M	P	M	P	M	P	M	P	M	P	M	P	M
ENGLISH SPEAKING														
Canada*	79	79	79	77	82	74	78	58	81	49	74	32	-	-
New Zealand	82	77	85	76	82	68	85	54	89	38	85	25	(85)	(20)
FRANCE**	-	-	-	-	85	68	86	63	84	48	82	33	(76)	(16)
GERMAN/DUTCH SPEAKING														
Austria	-	-	84	70	83	60	84	45	78	31	81	23	(74)	(14)
Belgium	-	-	-	-	-	-	89	80	88	73	(76)	(59)	-	-
Netherlands**	-	-	-	-	-	-	85	65	84	53	82	31	(71)	(21)
Switzerland	-	-	-	-	76	56	73	38	74	25	74	17	(67)	(16)
NORDIC														
Denmark ***	-	-	-	-	-	-	-	-	-	-	78	8	(730)	(7)
Finland	-	-	75	65	77	60	81	35	81	17	(78)	(9)	-	-
Norway	-	-	81	70	82	54	84	37	81	22	-	-	-	-
Sweden	-	-	-	-	88	17	85	8	84	6	84	6	-	-
SOUTHERN EUROPEAN														
Greece	-	-	-	-	-	-	79	68	78	58	81	58	75	46
Italy	-	-	-	-	79	76	76	72	67	62	62	55	(41)	(36)
Portugal	-	-	-	-	78	67	80	70	76	68	74	61	64	50
Spain	-	-	-	-	75	73	76	73	78	73	70	61	(53)	(43)

**Source:** Appendix Table 8, ECE/FFS Standard Country Reports, for selected countries. For further points see notes Table 1.

**Note:** (P) – (M) = Consensual Cohabitation

\* The actual birth years vary marginally around the reference groupings used here

- = No data

Parentheses ( ) are used where cohorts have not yet reached 25 years of age.

Also see notes for Table



**Table 7: New Zealand, total, nuptial, ex-nuptial and ex-nuptially conceived births, 1962, 1972, 1982 and 1992(% of Total)**

Year	Total Births	Total Nuptially Born		Nuptially-born within one-year of marriage*		Ex-nuptially born		Total ex-nuptially conceived	
	No.	No.	%	No.	%	No.	%	No.	%
1962	65,127	59,157	91	8,356	13	5,242	8	13,598	21
1972	63,215	57,725	83	7,689	12	9,345	15	17,34	27
1972	49,938	38,147	77	3,512	7	11,288	23	14,800	30
1992	59,268	38,080	64	-	-	21,188	36	-	-

**Sources:** Dept of Statistics (various years), *Vital Statistics*.  
 Dept of Statistics (1982), *Demographic Trends*

- = no data

\* Most of these would be within the first nine months, see Pool and Crawford (1980); Morgan *et al* 2001

**Table 8: Percentage of women currently employed, among those in the cohorts with the largest number who have a child of (1) nursery school age (ages 0-2); (2) kindergarten age (3-6) and (3) primary school age (7-12 years). Selected WDCs**

	Nursery school age	Kindergarten age	Primary school age
<b>Country(ies)</b>			
<b>ENGLISH-SPEAKING</b>			
Canada	40	53	64
New Zealand	40	57*	65
FRANCE	56	67	71
<b>GERMAN/DUTCH SPEAKING</b>			
Austria	21	48	65
Belgium	28	30	31
Netherlands	43	44	48
Switzerland	37	44	54
<b>NORDIC</b>			
Denmark	79	83	84
Finland	36	88	94
Norway	59	70	82
Sweden	51	78	90
<b>SOUTHERN EUROPEAN</b>			
Greece	44	40	44
Italy	46	39	43
Portugal	-	-	-
Spain	41	34	41

Source: Appendix Table 31, *ECE/FFS Standard Country Reports*, for selected countries. For further points see notes Table 1.

Note: Because of definitional, calibrational and time-reference (hours worked) problems *all* currently employed (full- and part-time) are included

\* Average of two cohorts with identical n's

**Table 9: Index of potential grandmother support: ratio  $P_{0-4}/P_{50-64}^f$**

<b>Country</b>	<b>1955</b>	<b>1995</b>
<b>ENGLISH SPEAKING</b>		
Australia	1.22	0.82
Canada	1.71	0.75
Ireland	1.15	0.85
New Zealand	1.42	0.96
United Kingdom	0.64	0.64
United States of America	1.22	0.87
<b>CONTINENTAL</b>		
Austria	0.53	0.53
Belgium	0.65	0.55
France	0.76	0.62
Germany	0.57	0.41
Netherlands	1.16	0.65
JAPAN	1.63	0.38
<b>NORDIC</b>		
Denmark	0.83	0.61
Norway	0.85	0.75
Sweden	0.67	0.64
<b>SOUTHERN EUROPE</b>		
Italy	0.87	0.39
Spain	1.05	0.45
Western Developed Countries	1.00	0.60

Source: United Nations (2000) *Estimates & Projections*

Ratio =  $\text{Population}_{0-4} / \text{Population}_{\text{female}, 50-64}$

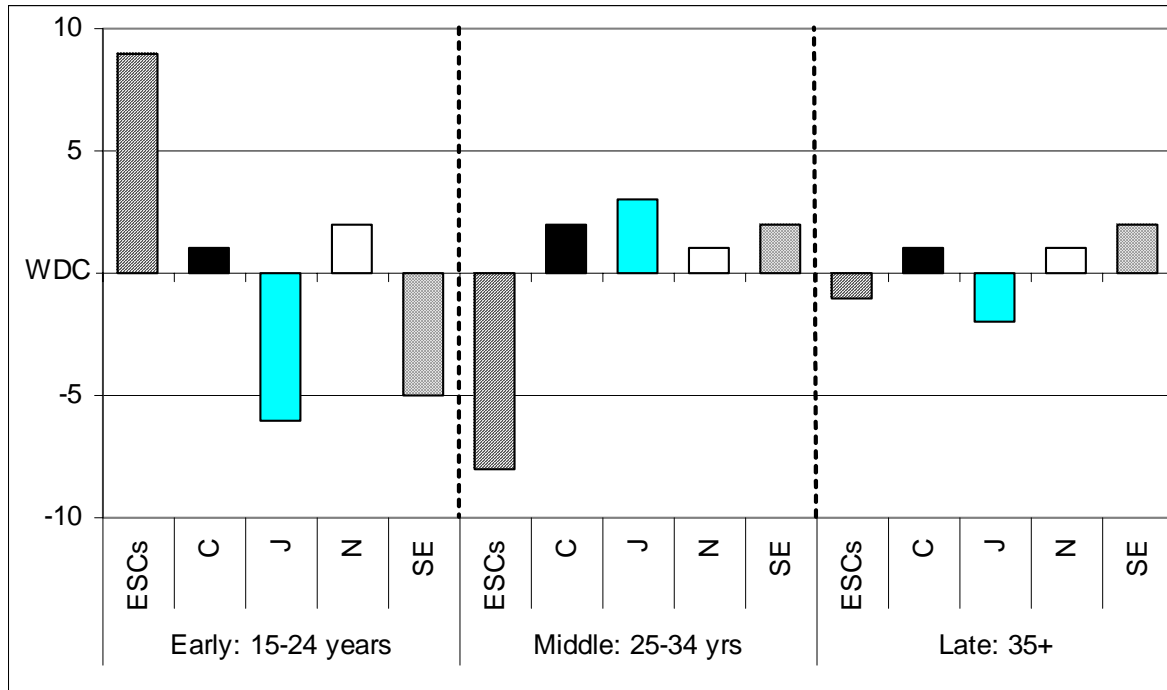
Note: A ratio of this sort is, of course, affected both by trends in the numerator and the denominator

**Table 10: Percent of population urban, selected countries, 1950, 1970, 1990**

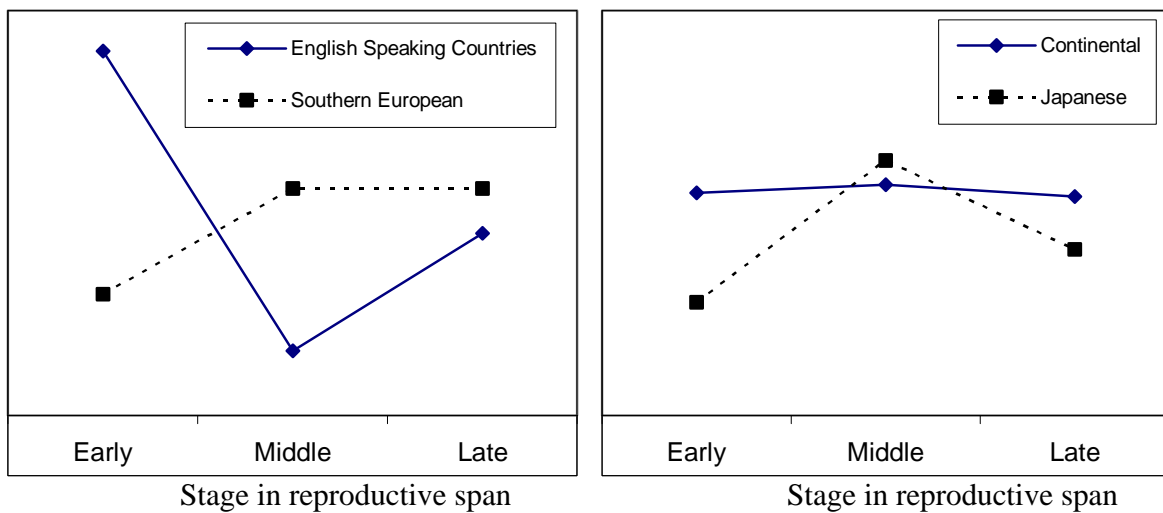
	1950	1970	1990
MDC	55	68	74
ENGLISH SPEAKING COUNTRIES			
Australia	75	85	85
Canada	61	76	77
Ireland	41	52	57
New Zealand	73	81	85
United Kingdom	84	89	89
United States	64	74	75
CONTINENTAL	68	77	81
Belgium	92	94	97
France	56	71	74
Germany	72	80	85
Netherlands	83	86	89
NORDIC	73	80	84
Denmark	68	80	85
Finland	32	50	61
Norway	50	65	72
Sweden	66	81	83
S.EUROPE	44	57	64
Greece	37	53	59
Italy	54	64	67
Spain	52	66	75
JAPAN	50	71	77

Source: United Nations (2001): Table A.2  
MDC = More developed countries

**Figure 1: Force of reproduction 1990s, early, middle and late parts of reproductive span: country groupings compared with WDC as a whole**



**Figure 2: Schematic diagrams of four different patterns of reproduction**



**Appendix: Total Fertility Rates**

	1955-60	1965-70	1975-80	1985-90	1995-00
<b>Country(ies)</b>					
<b>ENGLISH SPEAKING</b>					
Australia	3.41	2.87	2.09	1.87	1.77
Canada	3.90	2.51	1.74	1.62	1.60
Ireland	3.68	3.87	3.48	2.29	1.92
New Zealand	4.07	3.35	2.18	2.05	1.97
United Kingdom	2.49	2.52	1.72	1.81	1.70
United States of America	3.71	2.55	1.79	1.92	2.04
<b>CONTINENTAL</b>					
Austria	2.52	2.53	1.64	1.45	1.36
Belgium	2.50	2.34	1.70	1.56	1.55
France	2.71	2.61	1.86	1.81	1.73
Germany	2.30	2.32	1.52	1.43	1.33
Netherlands	3.10	2.80	1.60	1.56	1.54
JAPAN	2.08	2.00	1.81	1.66	1.41
<b>NORDIC</b>					
Denmark	2.54	2.25	1.68	1.54	1.74
Norway	2.84	2.72	1.81	1.80	1.83
Sweden	2.23	2.16	1.66	1.91	1.51
<b>SOUTHERN EUROPE</b>					
Italy	2.35	2.49	1.89	1.35	1.20
Spain	2.75	2.92	2.57	1.48	1.16

Source: United Nations, 2000 projections.

## References

- Adsera, A (2002) "Changing Fertility Rates in Developing Countries: The Impact of Labour Market Institutions" Unpublished paper drawing on presentation PAA 2002, Atlanta.
- Asahi Shimbun*, 12-13 Oct 2002.
- Baker, M. and Phipps, S. (1997) "Canada" in Kamerman, S. and Kahn, A. (eds) (1997) *Family Change and Family Policies in Gt Britain, Canada, NZ and the US*, Oxford, Clarendon: 103-205.
- Barlow, J. & Duncan, S. (1994) *Success and Failure in Housing Provision*, Oxford, Pergamon, Elsevier Science.
- Beaujot, R. (2000) "Les deux transitions démographiques du Québec, 1860-1996", *Cahiers Québécois de Démographie*, 29,2: 201-30.
- Beets, G. (1993) "Demographic Trends: The Case of the Netherlands", in van Nimwegen, N., Chesnais, J-C. & Dykstra, P. (eds) *Coping with Low Fertility in France and The Netherlands*, Amsterdam, Swets and Zeitlinger: 11-42.
- Beets, G., Blayo, C., Sardon, J-P., & Toulemon, L. (1993) "Demographic Trends: Comparison, in Nimwegen et al (eds) op cit: 99-126.
- Belich, J. (2001) *Paradise Reforged*, Auckland, Allen Lane – The Penguin Press.
- Bourgeois-Pichat, J. (1987) "The Unprecedented Shortage of Births in Europe", in Davis, K., Bernstein, M. and Ricardo-Campbell, R. (eds) *Below Replacement Fertility in Industrial Societies*, New York, Population Council: 3-25.
- Cairns, H., Harris, S. and Clarke, L. (2002) "Mothers, Work and Childcare [in England]", Unpublished Report prepared for Inst. of Pop. and Social Security, Tokyo.
- Castles, F. (1993a) "Introduction" in Castles (ed) *Families of Nations: Patterns of Public Policy in Western Democracies*, Aldershot, Hants, Dartmouth Publishing: xiii-xxiii.
- Castles, F. (1993b) "Changing Courses in Economic Policy: The ES Nations in the 1980s", in Castles (ed): 3-34.
- Castles, F (1998) *Comparative Public Policy: Patterns of Post-War Transformation*, Cheltenham (UK), Edward Elgar.
- Castles, F. and Mitchell, D. (1993) "Worlds of Welfare and Families of Nations" in Castles, F. (ed) (op cit): 93-128.
- Castles, F., Gerritsen, R. and Vowles, J. (1996) *The Great Experiment: Labour Parties and Public Policy Transformation in Australia and NZ*, St Leonards, NSW, Allen & Unwin.
- Chandola, T., Coleman, D. and Hiorns, R. (2002) "Distinctive Features of Age-Specific Fertility Profiles in the English Speaking World: Common Patterns in Australia, Canada, New Zealand and the United States, 1970-98", *Population Studies*, 56: 181-200.
- Coleman, D. & Salt, J. (1992) *The British Population*, Oxford, OUP.
- Daily Telegraph* (UK), Mar 31 1995.

- Davis, K. (1987) "Low Fertility in Evolutionary Perspective", in Davis et al (eds) op cit,: 48-65.
- Day, L. (1992) *The Future of Low Birthrate Populations*, London, Routledge.
- Deakin, S and Reed M (2000) *The Contextual Meaning of Labour Market Flexibility, Economic Theory and the Discourse of European Integration*, Cambridge, U.K ESRC Centre for Business Research.
- De Rose, A. & Racioppi, F. (2001) "Explaining Voluntary Fertility in Europe: A Multi-level Approach", *Genus*, LVII, 1: 13-32.
- Dharmalingam, A., Pool, I. and Hillcoat-Nalletamby, S. (1997) "First Sexual Intercourse and Teenage Fertility in NZ", Paper Population Assoc. of America, Washington, DC.
- Dharmalingam, A., Pool, I., Hillcoat-Nalletamby, S. & McLuskey, N. (1998) "Divorce in NZ", Paper Population Assoc. of America, Chicago.
- Dharmalingam, A., Pool, I., Sceats, J. & Baxendine, S. (2003) "Reproductive Polarisation in NZ", Paper Population Assoc. of America, Minneapolis.
- ECE/FFS (Economic Commission for Europe/Family and Fertility Study) (various authors, various dates, each country outlined) *Fertility and Family surveys in Countries in the ECE Region: Standard Country Report*, New York and Geneva, United Nations (ECE and UNFPA).
- ENGLISH SPEAKING COUNTRIES
- Canada:* Wu, Z. (1999).
- New Zealand:* Johnstone, K., Baxendine, S., Dharmalingam, A., Hillcoat-Nallétamby, S., Pool, I. and Paki Paki, N. (2001).
- FRENCH SPEAKING
- France:* Toulemon, L. and de Guibert-Lantoine, C. (1998).
- GERMAN/DUTCH SPEAKING
- Austria :* Prinz, C., Lutz, W. and Nowak, V. (1998).
- Belgium:* Lodewijkx, E. (1999).
- The Netherlands:* Latten, J. and de Graaf, A. (1997).
- Switzerland:* Gabadinho, A. and Wanner, P. (1999).
- NORDIC
- Denmark:* Carnerio, I. and Knudsen, L. (2001).
- Finland:* Nikander, T. (1998).
- Norway:* Noack, T. and Ostby, L. (1996).
- Sweden:* Granström, F. (1997).
- SOUTHERN EUROPEAN
- Greece:* Symeonidou, H. (2002).
- Italy:* de Sandre, P., Ongaro, F., Rettaroli, R. and Salvini, S. (2000).
- Portugal :* Carrilho, M. and Magalhaes (2000).
- Spain :* Delgado, M. and Martin, T. (1999).
- Eckert-Jaffe, O., Joshi, H., Lynch, K., Mougiz, R., Rendall, M., "Timing of Births and Socio-Economic Status in France and Britain: Social Policies and Occupational Polarisation" *Population (English Edition)*, 57,3: 475-508.



- Festy, P. (1979) *La fecondite des pays occidentaux, 1870 a 1970*, Paris, PUF.
- Gauthier, A. (1996) *The State and the Family: A Comparative Analysis of Family Policies in Industrialised Countries*, Oxford, Clarendon.
- Gauthier, A. (2002) "Family Policies in Industrialized Countries" *Population (English Edition)*, 3 May-June; 447-74.
- Gauthier, A. & Hatzius, J. (1997) "Family Benefits and Fertility: An Econometric Analysis" *Population Studies*, 51: 295-306.
- Harloe, M. (1995) *The People's Home? Social Rented Housing in Europe and America*, Oxford, Blackwell.
- Henripin, J. (1968) *Tendances et facteurs de la Fecondite au Canada* Ottawa, Canada, Govt. Printer.
- Jackson, N. & Pool, I. (1994) *Fertility and Family Formation in the 'Second Demographic Transition': New Zealand patterns and Trends*, Family and Societal Change Report # 2, Christchurch (NZ), Inst. For Social Res. and Development.
- Jacoby, E. (1958) "A Fertility Analysis of New Zealand Marriage Cohorts". *Population Studies* 12(1): 18-39.
- Jacoby, E. (1961) "Some Demographic Observations on First Order Births in the Light of the Cohort Approach". *Economic Record (Aust)*, 26(2): 308-19.
- Johnstone, K. "The Qualitative Study of Children, Childrearing, work and the Family in Australia", Unpublished Report prepared for Inst. of Pop. and Social Security, Tokyo.
- Johnstone, K. & Pool, I. (1996) "NZ Families: Size Income and Labour Force Participation", *NZ J of Social Policy*, 7: 143-73.
- Kamerman, S. and Kahn, A. (eds) (1997) *Family Change and Family Policies in Gt Britain, Canada, NZ and the US*, Oxford, Clarendon.
- Kamerman, S. and Kahn, A. (1997a) "Introduction" in Kamerman and Kahn (eds) (op cit): 1-28.
- Kamerman, S. and Kahn, A. (1997b) "United States", in Kamerman and Kahn (eds) (op cit): 305-418.
- Khawaja, M. (1985) "Trends and Differentials in Fertility", in UN(ESCAP) (eds) *The Population of New Zealand, Vol 1*, New York, United Nations: 152-77.
- Kilmartin, L. & Thorns, D. (1978) *Cities Unlimited*, Sydney, George Allen and Unwin Ltd.
- Kirk, D. (1968) *Europe's Population in the Inter-War Years*, NY, Gordon & Breach Science Publishers.
- Klizjing, E. & Macura, M. (1997) "Cohabitation and Extra-Marital Childbearing: Early FFS Evidence", *XXIIIrd International Population Conference, Beijing*, Liege, IUSSP: vol 2, 885-902.
- Konietzka, D. & Kreyenfeld, M. (2002) Women's Employment and Non-Marital Childbearing: A Comparison between East and West Germany in the 1990s", *Population (English)*, no 2 (Originally in *Population* 57,2): 331-58.

- Lampard, E. (1967) "Historical Aspects of Urbanisation", in Hauser, P. and Schnore, L. (eds) *The Study of Urbanisation*, NY, John Wiley: 514-54.
- Lapierre-Adamcyk, E., Pool, I. & Dharmalingam, A. (1997) "New Forms of Reproductive and Family Behaviour in the Neo-Europes" Paper Int. Union for the Scientific Study of Pop., XXIIIrd International Population Conference, Beijing, Oct.
- Letablier, M-T (2002) "fertility and Family Policies in France" Presentation International Workshop/Seminar on Low Fertility and Social Policies, National Institute of Population and Social Security, November, Tokyo.
- Lesthaeghe, R. & Willems, P. (1999) "Is Low Fertility a Temporary Phenomenon in the European Union?", *Population and Development Review*, 25,2: 211-28.
- Livi-Bacci, M. & Salvini, S. (2000) "Trop de famille et trop peu d'enfants: la fécondité en Italie depuis 1960", *Cahiers Québécois de Démographie*, 29,2:231-54.
- Macunovich, D (1996) "Fertility and Female Labor force Participation" in Casterline, J., Lee, R. & Foote, K. (eds) *Fertility in the United States*, N Y, Population Council: 223-57.
- McDowell, L (2001) "Father and Ford revisited: Gender, Class and Employment Change in the New Millennium", *Transactions Inst. of British Geographers*, NS 26: 448-64.
- Morgan, P. (1996) "Characteristic Features of Modern American Fertility", in Casterline, Lee and Foote (eds) op cit: 19-63.
- Morgan, P., Dharmalingam, A., Sceats, J. & Pool, I. (2001) "The Link of Early Childbearing to Marriage and to Subsequent Fertility in NZ", *NZ Population Review*, 27, 1 & 2: 49-76.
- Myles, J. (1996) "When Markets Fail: Social Welfare in Canada and the US", in Esping-Andersen, G. (ed) *Welfare States in Transition*, London, Sage: 116-40.
- National Commission on Urban Problems (1969) *Building the American City*, Wash DC, US Govt Printing Office.
- NZ Official Yearbook* (1990), Wellington, Statistics NZ.
- Pickens, K. (1980) "Marriage Patterns in a 19<sup>th</sup> Century British Colonial Population", *J of Family History*, Summer: 186-90.
- Pool, I. (1991) *Te Iwi Maori*, Auckland, Auck. Univ Press.
- Pool, I. (1996) "Family Demographic Changes" in Smith, A & Taylor, N (eds) *Supporting Families and parents Through Family Changes*, Dunedin (NZ), Univ of Otago Press: 11-33.
- Pool, I. (2000) "Vers un modele de la transition age-structurelle", Conference invitee, l'Assoc. canadienne-française pour l'avancement de science, Montreal, May.
- Pool, I. (2002) "New Zealand Population: Then, Now and Hereafter", in Carmichael, G & Dharmalingam, A (eds) *Joint Special Issue Journal of Population Research (Aust. Pop. Assoc.) and NZ Population Review (NZ Pop. Assoc.)*, September: 23-38.

- Pool, I. and Bedford, R. (1996) "Macro-Social Change in NZ: Historical and International Contexts", *Population Studies Centre Discussion Papers, # 18*, Sept, Hamilton, University of Waikato.
- Pool, I., & Cheung, J. (2002) "Why were New Zealand's Levels of Life Expectation so High at the Dawn of the 20<sup>th</sup> Century?", Paper presented, Max Planck Institute, Rostock, Sept
- Pool, I., Dharmalingam, A. & Sceats, J. (2000) "What happened in the 1970s Mummy?": Periodicity in NZ Family Formation", Paper, FFS Flagship Conference "Partnership and Fertility: A Revolution", Brussels, May.
- Pool, I., Dickson, J., Dharmalingam, A., Hillcoat-Nalletamby, S., Johnstone, K. & Roberts, H. (1999) *New Zealand's Contraceptive Revolutions*, Social Science Series, Population Studies, Hamilton, Univ of Waikato.
- Pool, I and Tiong, F (1991) "Sub-National Differentials in the Pakeha Fertility Decline: 1876-1901" *NZ Population Review*, 17: 46-64.
- Poot, J. & Siegers, J. (2001) "The Macro-economics of Fertility in Small Open Economies: A Test of the Becker-Barro Model for the Netherlands and NZ", *Population Economics*, 14: 73-100.
- Preston, S. (1987) "The Decline of Fertility in Non-European Industrialised Countries" in Davis et al (eds) op cit: 26-47.
- Quiggin, J (2001) "Demography and the New Economy", *Journal of Population Research*, 18, 2:177-93.
- Rallu, J-L. and Blum, A. (eds) (1991) *European Population, Vol 1: Country Analyses*, Published for the European Population Conference Paris, Oct., Paris/London/Rome, John Libbey.
- Richardson, R. (1995) *Making a Difference*, Christchurch (NZ), Shoal Bay Press.
- Rindfuss, R and Brewster, K (1996) "Childrearing and Fertility" in Casterline, Lee and Foote (eds) op cit : 258-89.
- Ringen, S. (ed)(1997) "Gt Britain" in Kamerman and Kahn (eds) (op cit):29-102.
- Romaniuc, A (1984) *Fertility in Canada: From Baby-boom to Baby-bust*, Ottawa, Min. of Supply and Services.
- Rosenfeld, R (1996) "Women's Work Histories" in Casterline, Lee and Foote (eds) op cit : 199-222.
- Sceats, J (1981) "Family Formation in NZ": An Analysis of the Timing and Spacing of Pregnancies", *NZ Population Review*, 7,3: 29-47.
- Sceats, J (1988) *Induced Abortion in a low fertility country: New Zealand, a case study*. PhD. University of London.
- Sceats, J (1999) "Cohort Patterns and Trends of Timing and Spacing of Births", in Pool I and Johnstone, K (eds) *The Life Courses of NZ Women: Fertility, Family Formation and Structure, Fertility Regulation, Education, Work and Economic Wellbeing*, Papers Presented Seminar, Min of Women's Affairs, Wellington, June 8<sup>th</sup>, Hamilton, Population Studies Centre, university of Waikato: 26-34.

- Sceats, J. (2002) "The Qualitative Study of Children, Childrearing, work and the Family in New Zealand", Unpublished Report prepared for Inst. of Pop. and Social Security, Tokyo.
- Sceats, J., Johnstone, K., Harris, S., Clarke, L., and Kamano, S. (2003) "Policy and Practice in Balancing Work and Family: Results of a Study of Mothers of Young Children in New Zealand, Australia and Britain" Paper presented at the Australian Institute for Family Studies Conference, Melbourne, Australia February.
- Sceats, J & Parr, A. (1995) *Induced Abortion: National Trends and a Regional Perspective*. Hamilton, Midland Regional Health Authority.
- Sceats, J. & Pool, I. (1985) "Fertility Regulation", in UN(ESCAP) (eds) op cit: 178-92.
- Seabright, P (2002) "Who is the villain? Review of 'The Future of Success' by Robert Reich", *London Review of Books*, 22 Aug: 24-25.
- Shirley, I., Koopman-Boyden, P., Pool, I. and St John, S. (1997) "NZ" in Kamerman, S and Kahn, A (eds) : 207-304.
- Statistics New Zealand (2001) *Demographic Trends*, Wellington, Statistics New Zealand.
- Thorns, D. (1992) *Fragmenting Societies*, London, Routledge.
- Toulemon, L. & Mazuy, M. (2001) "Les naissances sont retardees mais la fecondite est stable" *Population*, 56,4: 610-43.
- United Nations (Economic Commission for Europe) & Council of Europe (1994) *European Population Conference, Proceedings, Vol 2*, N Y and Geneva, UN.
- United Nations (various years) *Demographic Year Book*, New York, Economic and Social Affairs, Population Division.
- United Nations (various years) *Population Estimates and Projections*, New York, Economic and Social Affairs, Population Division.
- United Nations (2001) *World Urbanisation Prospects: 1999 Revision*, New York, Econ. and Social Affairs.
- Van Nimwegen, N., Chesnais, J-C. & Dykstra, P. (1993) "Introduction", in Nimwegen et al (eds) op cit: 3-9.
- Whyte, W (1960) "The Organization Man", Harmondsworth, Middlesex, Penguin (reprint of his 1956 book).

#### **Unpublished data**

- Canada: Health Statistics Division, Statistics Canada
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