

Sub-replacement Fertility: is this an issue for New Zealand?¹

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Introduction

In all industrialised countries, including New Zealand, the population is 'ageing'. The reasons for this vary somewhat between nations but, in most, a key driver has been a shift to below-replacement fertility rates. This ageing of the population has raised policy concerns in individual countries and international agencies as to how to economically support the growing proportion of the population that is projected to be no longer active in the labour market (e.g. Blöndal and Scarpetta, 1998; Weller, 2001). While reforming public retirement schemes is part of the policy agenda, other options to reduce the problems associated with an ageing population are also being investigated. These include increasing both fertility and the rates of female employment. This seems a difficult challenge because, as noted in a review article by the OECD (2001), fertility and women's employment have generally been viewed as alternative choices.

The key question in this paper is whether sub-replacement fertility is a problem, either now or in the immediate future, facing New Zealand. However, we also address a wider question as to whether there is an 'optimal' level of fertility. Given that female employment and fertility have the potential to move in different directions, we begin with a short overview of changing employment patterns. We then briefly examine trends in fertility in New Zealand. Taking employment and fertility patterns into account, the paper then considers possible public policy responses in relation to fertility.

Employment

In early 2000 the government stated that, while New Zealand's overall labour force participation rates were high, the rate for some groups of New Zealand women, particularly those aged 25–34, was below the OECD average (Clark, 2005). This created much debate about

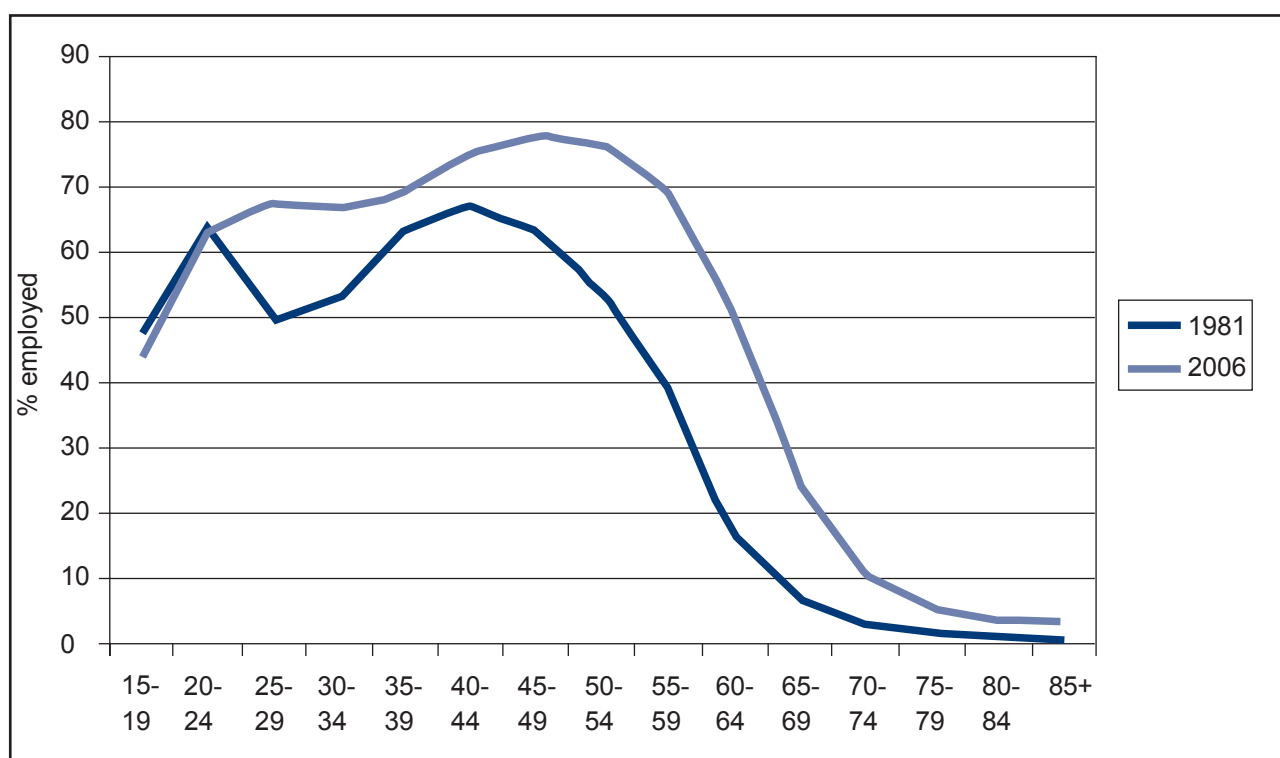
the costs and benefits of increasing female employment. However, since 2005 female employment has continued to increase. Long-term employment data show that, overall, in mid-2007 employment rates for women were at an historic high. These data show that in 1956 around 29% of women were employed, but by the June quarter of 2007 this had risen to just under 60%. In contrast, there has been a decline in male employment rates. In 1956, 90% of men aged 15 and older were in paid work. This reduced to a low of around 65% in the early 1990s, before climbing back to 73% in mid-2007.

However, more important than the overall growth in employment is in which age groups changes have occurred. While there has also been strong growth in the proportion of women working among older age groups, Figure 1 shows significant growth in the broad 20 to 39 age group in the period 1981 to 2006. These are the main childbearing ages for women. But the census data also show that while employment for older men has increased, the rates for men aged 20 to 39 remain well below those of the 1980s. Both trends can potentially have an impact on fertility.

Fertility

Following the 2005 debate about increasing women's participation in the workforce, in 2006 the prime minister, Helen Clark, announced the Choices for Living, Caring and Working ten-year plan of action to improve the caring and employment options available to parents and carers (Clark, 2006). The plan has six key areas of activity, which are designed to enable people to better balance their work and caring responsibilities. These are: supporting parents who wish to care for their

¹ This paper draws heavily on presentations given at a workshop on fertility held in October 2006 at the Institute of Policy Studies, <http://ips.ac.nz/events/completed-activities/Fertility.html>. It also draws on recent work by Statistics New Zealand.

Figure 1: Employment rates for women in each age group, 1981 and 2006

Source: Census of Population and Dwellings, Statistics New Zealand

children themselves in their first year of life; ensuring that families with children under five can access and participate in high-quality, affordable early childhood education; ensuring families have better access to quality, affordable and age-appropriate out-of-school services for their school-age children; improving the choices for New Zealanders who are caring for adults of all ages; encouraging flexible work practices; and an ongoing commitment to evaluation and research to ensure that the plan is effective over the next ten years. However, missing from the Choices programme of research and policy development was the consideration of policies that may support or, alternatively, create barriers to families making wise choices about whether to have children, when to have them, and family size. Health policies that could affect fertility, such as funding for IVF, also do not explicitly consider New Zealand's overall fertility levels.

Overseas, a major concern arising from the encouragement of women into paid work has been the potential impact on fertility. As part of a debate about employment and fertility in Australia, McDonald (2000, p.1) noted:

if women are provided with opportunities nearly equivalent to those of men in education and market employment, but these opportunities are severely curtailed by having children, then, on average, women will restrict the number of children that they have to an extent which leaves fertility at a precariously low, long-term level.

By OECD standards, New Zealand currently has above average fertility for the level of female employment (OECD, 2004) and for the generosity of child assistance (Bradshaw and Finch, 2002). In fact, New Zealand's relatively high fertility has been seen as one reason for lower than OECD average workforce participation rates for women aged 25–34 (Johnston, 2005). The latest data show that the number of births in the June 2007 year was 61,610, the highest since 1972. As a consequence there has been some media attention misinterpreting this as a mini baby boom, but it is primarily related to population size and the composition of the childbearing cohorts. The fertility rates remain around replacement level and while there is some evidence that there is a slight increase in the TFR (total fertility rate), this is well within the volatility of this measure (Table 1).

Table 1: Total fertility rates, selected countries 1993–2005

	Australia	Canada	England and Wales	France	Japan	Netherlands	NEW ZEALAND	Norway	Sweden	Switzerland
1993	1.86	1.69	1.76	1.65	1.46	1.57	2.04	1.86	2.00	1.51
1994	1.84	1.69	1.75	1.65	1.50	1.57	1.98	1.87	1.89	1.49
1995	1.82	1.67	1.72	1.71	1.42	1.53	1.98	1.87	1.74	1.48
1996	1.80	1.62	1.74	1.73	1.43	1.53	1.96	1.89	1.61	1.50
1997	1.78	1.55	1.73	1.73	1.39	1.56	1.96	1.86	1.53	1.48
1998	1.76	–	1.72	1.76	1.38	1.63	1.89	1.81	1.51	1.47
1999	1.76	–	1.70	1.79	1.34	1.65	1.97	1.85	1.50	1.48
2000	1.76	1.49	1.65	1.88	1.36	1.72	1.98	1.85	1.55	1.50
2001	1.73	1.51	1.63	1.88	1.33	1.71	1.97	1.78	1.56	1.41
2002	1.76	1.50	1.65	1.87	1.32	1.73	1.90	1.75	1.64	1.39
2003	1.75	1.53	1.73	1.88	1.29	1.75	1.95	1.80	1.71	1.39
2004	1.77	1.53	1.78	1.90	1.29	1.73	2.01	1.83	1.75	1.42
2005	1.81	–	1.80	1.94	1.25	1.71	2.00	1.84	1.77	1.42

Source: Demographic Trends, 2006, Table 2.11, Statistics New Zealand

However, underlying the overall fertility rate there is considerable diversity of fertility patterns amongst individuals and families, a pattern Ian Pool (2007) refers to as ‘polarisation’. For example, when compared with the OECD comparisons New Zealand has relatively high rates of teenage pregnancy. Yet overall in New Zealand there has been a strong shift to later childbearing. In addition, while there are childless families, there are also pockets of larger families.

But, directly relevant to the question of sub-replacement fertility, there are signs that fertility could reduce in New Zealand in the future, particularly amongst the increasing numbers of well-educated women. For example, the 2006 Census shows that one in six of 40-year-old women had not started a family. But for those born just ten years later, in 1975, indications are that around one in four may remain childless throughout their reproductive lives (Boddington and Didham, 2007). If fertility levels are to be maintained in this situation, women who do choose to be mothers (i.e. non-childless women) would need to have on average 2.8 children each rather than the current 2.3. There are now pockets of low fertility in New Zealand and this relates to a number of factors, including the geographic areas where well-educated people tend to live (Didham,

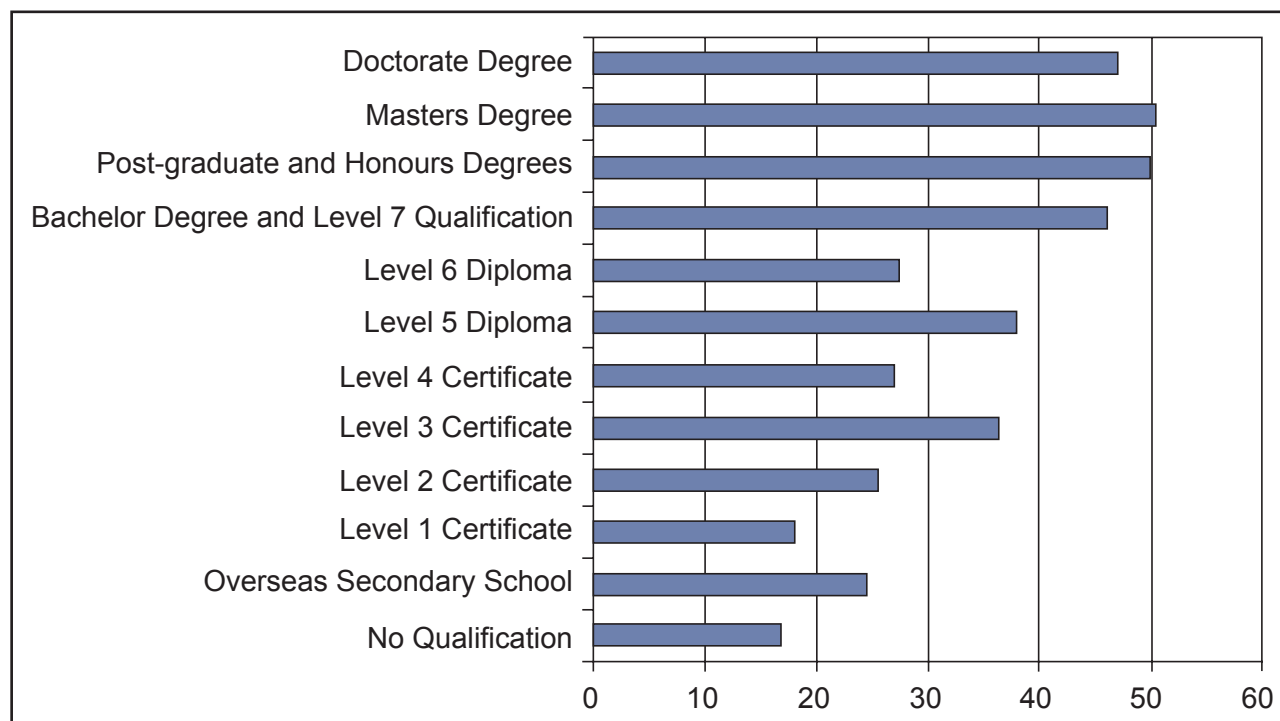
2006). Figure 2 shows that while there are some areas of qualification that do not fit the trend, overall, women with higher levels of educational qualifications are less likely to have had children.

Timing and spacing of children are important in determining and sustaining fertility levels. Both biomedical data and demographic data show that first childbirth is being delayed in New Zealand. This delay appears to be causing fertility problems for a significant number of New Zealand women (Sceats, 2006; Peek, 2006). Delayed fertility is often a result of women participating in tertiary education and then investing in their career in their late 20s and early 30s. Research undertaken in New Zealand suggests that beliefs that fertility can be delayed are at odds with the biomedical evidence. By the early 30s fertility levels for women (and probably men) are dropping substantially (Labett, 2006; Peek, 2006).² Similarly, the spacing between births has important economic and social consequences.

Attitudinal surveys in Australia and New Zealand suggest that the vast majority of young women have

2 In New Zealand we have lower rates of children born through the assistance of reproductive technology than many other industrialised countries (Peek, 2006).

Figure 2: Percentage of women who were childless in each level of qualification, 25-44 age group, 2006



‘traditional’ goals (Sceats, 2006; Labett, 2006).³ For women, one goal is finding an opposite sex partner before they have children, and, while many women are focused on developing their own careers, the majority are still looking for someone to share the financial burden of children with. This may help partly explain the keen interest of the media and the public in New Zealand in the misnamed ‘man drought’ in the 30–39 age group.

Fertility and public policy

Below-replacement levels of fertility are a concern for many policy makers. For example, in 2005, half of developed countries had in place policies to raise their birth rates, up from one third a decade ago (Jackson, Rottier and Casey, 2006). Countries which have total fertility rates of under 1.5 and which have policies in place include Italy, Spain and Japan. Even Australia, with a rate of around 1.7, has recently changed its policy stance from ‘no intervention’ to putting in place an explicit and indirect pro-natal fertility policy (ibid). In contrast, in the UN report on world population policies (United Nations, 2006) New Zealand, with its near-replacement fertility, is listed as having a ‘satisfactory’ level of fertility and is

classified as wanting to ‘maintain’ this level.

Yet, implicit in any discussion of the effect of low fertility is an assumption that there is an optimum fertility rate for a particular social environment. The basic assumption is that this optimum should lie somewhere close to the local replacement level, which for New Zealand is around 2.04 births per woman on average, though the internationally assumed level is around 2.1 births per woman, to account for regimes with higher infant and maternal mortality. However, it needs to be kept in mind that replacement level is assumed to be optimal only if a country has decided that the current population level is what they want, or if nations are able to balance migration so that they have net gain, or countries can perhaps manage population change via migration to maintain a particular age structure that they want at the time.

While most discussions about fertility in industrialised countries focus on ways to maintain or raise fertility levels, it is worth considering possible benefits, particularly to the individual, of *lower* fertility. First, in the longer term for most women lower fertility has had major benefits. For example, it has allowed many women to invest in education and careers. This has also

³ In both these studies only women were interviewed.

had an indirect benefit for men in that there is greater opportunity for direct involvement in child-rearing. Lower fertility could also be important in terms of reducing the human footprint on the planet. One possible trade-off for long-term sustainability would be a reducing world population as standard of living, and thus resource use, for individuals increases.

There is also a need to think about low fertility in industrialised countries in other wider contexts. Concerns about below-replacement fertility rates are certainly not a worldwide phenomenon, with the world total fertility rate calculated as being 2.7 (Population Reference Bureau, 2007). In terms of future labour shortages in industrialised countries, McDonald and Kippen (2001) point out that the number of prime working aged people is growing very rapidly in some developing countries. They note, for instance, that the number of people aged 20–64 in Pakistan is projected to grow from 50 million in 1995 to 150 million in 2035; in India from 470 million to 850 million; and in the Philippines from 32 million to 70 million. Closer to home, Melanesia has a rapidly growing population (Bedford, 2007). Consequently, McDonald and Kippen argue there will be no global shortage of labour. A continuation of globalisation of industries and investment will mean that some of these prime working aged individuals are likely to be providing the labour for ageing societies even if they remain in their own countries. Yet many young people in these countries will also wish to migrate to currently wealthier nations such as New Zealand.

The impact of migration on the ageing of the population, and on fertility, in countries such as New Zealand is complex. Both skilled and unskilled people from high-fertility, low-income countries will want to migrate to low-fertility, high-income countries. While those migrants who possess few skills may tend to have relatively high fertility levels, the well-educated migrants will tend to have fertility patterns more similar to educated people in industrialised countries. In countries such as New Zealand, due to current migration policies flows of low-skilled migration are very limited. Yet, based on models such as the United States or Singapore, in the future low-skilled migration could be considered as a way of providing domestic workers who could help support higher-income working families in New Zealand to raise children (Callister, 2005). Even if there

is some low-skilled migration, it is important to observe that fertility rates of migrants tend to be lower than those of the general population in their source countries, and that after migration migrants quite rapidly adopt local fertility norms pertaining within their communities.

But migration affects New Zealand in other ways. The ageing of the population in Europe and other industrialised countries provides a strong pull factor for our young people. This removes, either on a temporary or permanent basis, a significant number of the people who are making decisions about fertility. With our very large diaspora, decisions about fertility and the location of childrearing families are being made both within New Zealand and overseas. Not only are issues such as employment opportunities being considered by New Zealand's diaspora, but also the level of support for families provided by various countries.

Just focusing on New Zealand, surveys would suggest that there is some conflict between employment and fertility for some women in their childbearing ages, particularly among middle-class women with either established careers or strong career prospects (Sceats, 2006). Yet it is difficult, both methodologically and in fact, to find evidence linking policies to increase fertility and actual increases in fertility in industrialised countries (Robertson, 2006; Callister, 2002). It is easier to identify policies that result in very low fertility. For example, the inability of Italian women to combine career and family life has been linked to their very low fertility rates. While it seems that no one policy will have a major impact on fertility, it is more likely that the impact lies in how a wide range of policies work together.⁴

Certainly, providing additional support to women and their partners in areas such as childcare, parental leave and flexible work arrangements may help them to find better ways of combining work and family responsibilities. Based on the evidence, this might, in turn, marginally lift the fertility rates of those already deciding to have children. It is more difficult to see how to reverse the increase in the number of women who are not having children. However, providing additional family–work support measures might encourage some women who have decided to have children not to delay their childbearing so long, thereby

⁴ This is excluding draconian policies such as banning contraception.

reducing the infertility problems associated with delayed childbearing. However, for many women, and men as well, this may also require earlier partnering if their preference is to bring a child into the world within a two-parent family. It is possible that men do not want to partner earlier and do not feel the same urgency to have children as women. Research suggests that women have traditionally partnered with a male with a higher level of education than themselves. This may be through their own choice, or because in the past there were simply significantly more men with higher levels of education than women. However, changes in education outcomes for men relative to women has made finding a suitable partner based on this criterion more difficult for women. It may also be that men generally do not want to partner with women with better qualifications than themselves. Moreover, not insignificant for this process is the way in which educational qualifications are implicated in social status and wealth outcomes, which in turn influence decisions on family size.

There also appears to be some scope in terms of encouraging the greater sharing of unpaid work in couple families, which could assist women to better balance work and family commitments. This would generally require a reduction in the paid work hours of fathers.

Related to this, it is clear that the focus of historical discussions about fertility has been on the choices that women are making. Internationally, it is starting to be understood that attitudes and decisions being made by men are important (Goldscheider and Kaufman, 1996). Changing labour market and educational outcomes for men are likely to be having some influence on behaviour. For example, in an Australian context, Birrell, Rapson and Hourigan (2004) suggest that loss of jobs, as well as downward pressure on the wages of employed low-skilled men, may be having a negative impact on fertility levels. However, while overseas research is beginning to explore the role of men in partnering and fertility choices, research in New Zealand has yet to be carried out on male partnering and fertility attitudes and decisions.

While unlikely to have any significant influence on the overall fertility rate, public policy can have a major influence on individual outcomes. It has been suggested that New Zealand has provided inadequate support for public IVF programmes. Peek (2006) states that public funding of infertility treatment in New Zealand is

severely restricted, allowing a maximum of two cycles in a couple's lifetime, and then only if stringent eligibility criteria are met. Criteria include the woman being aged 39 or younger, not being overweight and not smoking. Having children aged 12 or younger reduces points for eligibility, as does a shorter duration of infertility. Couples with 'unexplained' infertility need to wait five years to become eligible. Peek notes that for those starting in their mid-30s there is insufficient time to try for up to four years without eroding their chance of success with treatment if they do not become pregnant by themselves.

Conclusion

Is low fertility a problem for New Zealand? In our view, the continued stability of the TFR around replacement level over the last 30 years is an important indicator that the severe sub-replacement fertility experience in parts of Europe, for example, will not be a part of New Zealand's fertility future at least in the short term. However, if child-bearing trends continue, the fertility rate is likely to drop unless the increases in childlessness are offset by increases in the average family size. The degree to which fertility changes in the medium term will depend on the relationship between these two factors.

There are strong impediments against any significant rise in fertility without some non-demographic shock that may trigger a 'prolific survivor' reaction (Desbarats, 1995). Among these constraints are labour market demands, increasing age at which women begin child bearing, increasing levels of childlessness and steady fertility among mothers. As discussed, while there is not strong evidence linking policies to increase fertility and actual increases in fertility in industrialised countries, some countries, such as Italy, can be found that show there are policies associated with very low fertility. What does seem to be clear is that no one 'family friendly' policy will have a major impact on fertility; the impact seems to lie in how a wide range of policies work together.

Discussions of migration cannot be separated from discussion about fertility. Migration may provide some temporary rise in fertility if there are gains of women from high-fertility source countries, but the size of migrant flows necessary to achieve this are unlikely given the competition for migrants among all low-

fertility destination countries and current policies which seek skilled migrants rather than future mothers or existing families.

In recent decades fertility policy has not been high on the policy agenda. If it is going to become more central in debates it cannot be considered in isolation. It needs to be thought about in the light of wider policy discussions, including those around migration, climate change and sustainability both nationally and internationally, health, and labour market policy.

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MAKING ENERGY WORK: A sustainable energy future for New Zealand

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