INTERPRETING AUSTRALIA'S FERTILITY INCREASE

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After decades of decline, Australia's fertility rate has been rising. How should this phenomenon be interpreted? This paper assesses the nature of the increase and reviews some of the explanations put forward for the reversal in the direction of fertility change.

Discussion of Australia's recent 'baby boom' often relates to birth numbers, which have risen steadily since 2001 and reached a record 296,600 in 2008.[1] While birth numbers are partly a function of the number of reproductive-aged women in the population, population growth cannot account for this increase. Rather, the number of babies per woman, as measured by the total fertility rate (TFR), has also increased.

The TFR was 1.97 in 2008, substantially higher than the low of 1.73 babies per woman recorded in 2001.[2] This increase follows consistent decline in the TFR since the peak of the post-war baby boom, and coincides with similar increases in other western countries.[3] The change in direction has attracted much interest, following as it does a period of heightened concern over low fertility as a primary cause of population ageing around the developed world.

Of particular interest is whether higher TFRs can be sustained or will prove to be but a temporary aberration in demographic history. While it is impossible to predict the future, the answer to this question surely lies in the reasons for the increase. This paper assesses some of the explanations put forward for the reversal in the Australian context.

TEMPO EFFECTS

The total fertility rate measures fertility over a finite period of time (often, and for the purposes of this article, a calendar year). The TFR is the sum of age-specific fertility rates (ASFRs), and as such represents the number of babies each woman would have if she were to experience all the ASFRs of that year. In essence, a single year's data is used to estimate childbearing per woman, which in reality takes place over many years.

Measures of period fertility such as the TFR are important to the debate over population ageing, because fertility in any given year affects the age structure of the population. However, such measures are known to be subject to considerable distortions caused by changes in the timing of childbearing among cohorts of women.[4]

The average age of mothers increased dramatically in most developed countries in the latter half of the twentieth century, engendering discussion about the phenomenon of delayed childbearing.[5] In Australia, the median age of mothers rose steadily from 25.4 years in 1971 (the lowest on record) to 30.8 years in 2006.[6] During a shift to older ages at childbearing, fertility declines among younger women before any increase in fertility becomes evident among older women. Therefore, delayed childbearing temporarily depresses the TFR, whether or not it has any impact on completed fertility (ultimate family size). The negative effect of this shift on period fertility rates around the developed world is widely acknowledged.[7]

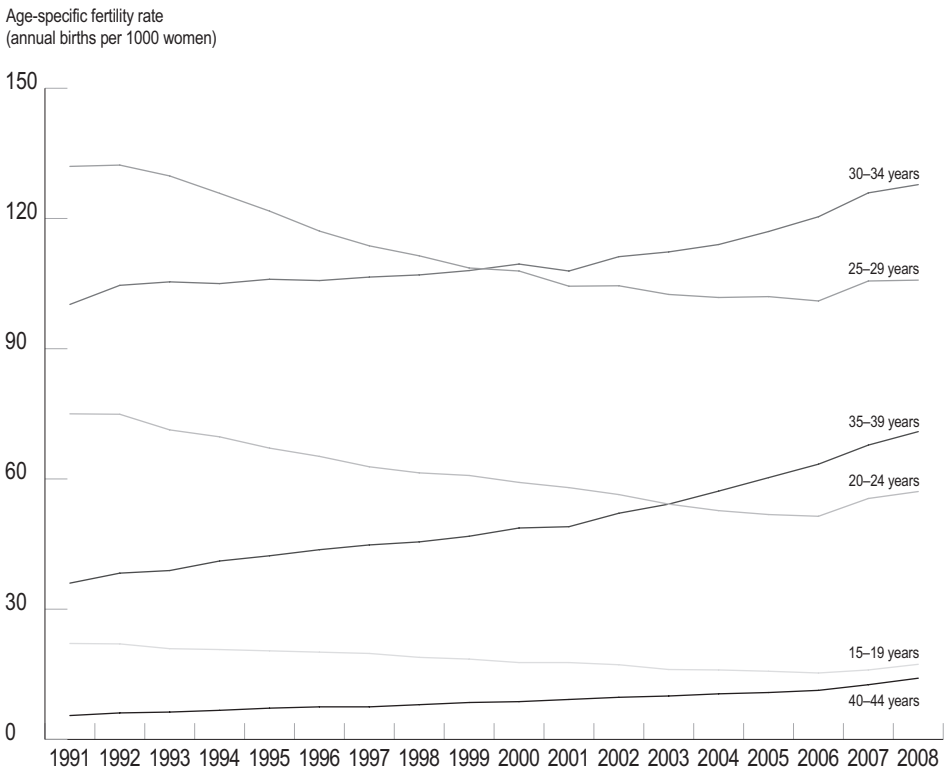
Conversely, if and when women who postponed childbearing do have children at higher ages, they will provide a boost to

the fertility rates of those age groups, and to the TFR. The increase in Australia's TFR since 2001 is largely attributable to births to women aged 30 to 39 years.[8] Though the trend towards births at higher ages has been evident for decades, the fertility rates of women aged in their thirties have accelerated since the turn of the century (Figure 1). This is consistent with the recuperation hypothesis; that is, women in their thirties are now making up for births delayed while they were in their twenties.

In addition to the continuing increase in the fertility rates of older women, the long-term decline in the fertility rates of younger women appears to have been halted (Figure 1), lending weight to declarations that the postponement of childbearing has come to an end.[9] Since there is a biological limit to how long women can delay childbearing, it was to be expected that the increase in the average ages of mothers would eventually slow or cease. In addition, there has been considerable publicity surrounding women 'leaving it too late' and being unable to have the number of children they desire—more so in Australia than elsewhere, according to McDonald.[10] However, it is difficult to verify McDonald's claim that increased awareness of age-related fecundity problems has affected the timing of births.

The developments described so far are consistent with projections of the Australian TFR published by Kippen in this journal in 2004.[11] Under one scenario, Kippen assumed that 'the postponement of fertility

Figure 1: Age-specific fertility rates, Australia, 1991 to 2008



Source 1: Australian Bureau of Statistics, *Australian Historical Population Statistics 2008* and *Births 2008*

halts; that is, fertility stops declining at younger ages but continues increasing at older ages...', resulting in a steady increase in the TFR. Although considered an 'unlikely option' at the time, this scenario has now come to pass. Indeed, Australia's TFR has increased much faster and to a level considerably higher (1.97 in 2008) than projected even under this scenario (1.85 by 2015).[12]

The difference is due to the fact that fertility among younger women has not only stabilised but increased (Figure 1). Following several decades of steep decline since 1980, the fertility rate of women aged 20 to 24 years increased from 51.4 to 57.1 babies per 1,000 women between 2006 and 2008. Similarly, the fertility rate of women aged 25 to 29 years increased from 101.0 to 105.8 babies per 1,000 women. Even teenage motherhood has increased, from 15.3 to 17.3 babies per 1,000 women over the same two-year period.[13]

In their analysis of *Recent Trends in Australian Fertility* for the Productivity Commission, Lattimore and Pobke contend that the increased age-specific fertility rates (ASFRs) of younger women signal a quantum rise in fertility, over and above tempo effects including the cessation of postponement. Data from the large-scale longitudinal Household Income and Labour Dynamics in Australia (HILDA) Survey is adduced in support of this argument. The period of increased fertility in Australia has coincided with an increase of around 0.15 babies in the expected lifetime fertility of younger women, with fewer anticipating childlessness, and with more positive responses to questions about the desirability and likelihood of future children.[14]

In reality, as Lattimore and Pobke concede, quantum effects are to some degree inseparable from tempo effects, because 'conditions that are conducive to earlier childbearing are also likely to prompt increased fertility'.[15] This brings us to discussion of the wider social and economic context in which Australia's fertility increase has occurred. The respective roles of partnering behaviour, economic conditions and policy interventions are considered below.

PARTNERING BEHAVIOUR

Partnering behaviour has been peripheral to recent discussion of fertility change in Australia.[16] Yet the proportion of women in sexual unions determines the population 'at risk' of childbearing.[17] Therefore, changes in this proportion and in the timing and nature of partnerships cannot fail to affect fertility rates.[18]

Recent Australian studies affirm the connection between partnering and fertility from the subjective point of view of their participants. Research by the Australian Institute of Family Studies documents the extent to which fertility aspirations, expectations, and achievements are related to relationship status: married men and women are more likely to believe they will achieve their desired family size than cohabiting respondents, while single men and women are least likely to expect to achieve their desired family size.[19] This is consistent with earlier research showing that among those who intend to have children, a failure to do so is often linked with relationship status—either remaining single, or relationship breakdown.[20] Data from the HILDA Survey confirm that partnered status is the most significant factor associated with expectations of having a first child. This remains a key factor in the progression from first to second child, and to a lesser extent in higher-order parity progressions.[2]

Married partnerships appear to remain particularly important for childbearing in Australia, with two-thirds of births being to married mothers.[22] Married women at the 2006 census were completing their childbearing years with an average of 2.27 children, whereas women in de facto

relationships had 1.83 children on average. In part this is because cohabiting couples are more likely than married couples to be childless.[23]

Australian fertility levels have moved in concert with marriage trends in recent years. The TFR reached its lowest (1.73) in 2001, the same year that the crude marriage rate reached an all-time low of 5.3 marriages per 1,000 people. Since then, according to 2008 figures, Australia's crude marriage rate has risen to 5.5 per 1,000, while the TFR has risen to 1.97. Further, data from the 2006 census shows that the partnered (both married and de facto) proportions of men and women in the prime age groups for childbearing have stabilised, after decades of decline.[24] The correlation between fertility and union formation partly reflects the fact that both are delayed or brought forward in response to common underlying factors, yet there is international evidence to suggest that the effect of union formation on the transition to parenthood is not entirely attributable to unobserved factors.[25]

Interestingly, when partnering trends are disaggregated by educational attainment and income, it becomes clear that these shifts are being driven by women with more education, and by men with more education and higher incomes. Trends in marriage are diverging for different socio-economic groups within the Australian population, according to census results from 1996, 2001 and 2006.[26] While married proportions of men and women without post-school qualifications continued to fall over this period, married proportions of degree-qualified men and women stabilised between 2001 and 2006. These trends may be related to the changing age profile of mothers, in that educated women have been most likely to delay both marriage and childbearing and are now, therefore, likely to be most prominent in any catch-up effect.

ECONOMIC CONDITIONS

There have been claims that Australia's economic prosperity over the past decade, notwithstanding the recent global financial crisis, is responsible for the coinciding increase in fertility. The Howard Government and its supporters asserted that families benefited from its sound economic management, through rising wages and low unemployment. Ex-Treasurer Costello specifically attributed the upturn in births to confidence in a prosperous future and claimed that policies introduced by the Coalition Government had improved the affordability of children (see discussion on policy below).[27]

International evidence supports the idea that fertility fluctuates in response to economic change, even within wealthy, developed world contexts. For example, economic trends are regarded as important in accounting for Sweden's 'roller-coaster' fertility in the latter decades of the 20th century.[28] In Australia, albeit in the context of sustained fertility decline over the period 1976 to 2000, Martin demonstrates that 'particularly steep declines in the TFR coincide with or closely follow periods of negative growth in GDP and high unemployment'. Conversely, fertility decline appears to have slowed over sustained periods of economic growth.[29]

The literature suggests that moderate economic change may affect the tempo rather than the quantum of fertility.[30] Similarly, declines in the Australian TFR recorded in times of economic downturn have not necessarily meant fewer children ultimately born: Martin notes that there have been catch-up effects (spikes in birth numbers) immediately following the first year of recessions, even when the economy continues to worsen.[31] It seems plausible that values and aspirations surrounding parenthood can remain unchanged, while economic conditions affect the way in which these are realised at any given time.[32]

These findings indicate that prosperity has probably contributed to the recent upturn in Australian fertility,[33] whether or not this is a tempo effect only. However, there are reasons to doubt that economic buoyancy provides the sole explanation for the increase. Firstly, the cost of living has increased alongside incomes, and house prices in particular have risen faster than have incomes. As a consequence, notwithstanding brief periods of respite when interest rates have been low, housing affordability has steadily deteriorated over the past decade.[34] This suggests either that housing costs are not important to fertility, contrary to some research,[35] or that they are outweighed by other factors.

Secondly, the economic setting in which childbearing occurs should arguably matter most to those whose incomes are most precarious. This logic suggests that the increased economic security, lower unemployment and improved wages of recent years should have prompted increased fertility among lower socio-economic groups. However, the opposite appears to be the case. While it continues to hold true that areas of most advantage are associated with lower TFRs, the most significant gains in fertility have occurred in the most advantaged areas of Australia: increased fertility in the most advantaged 40 per cent of Statistical Local Areas accounted for 59 per cent of the total increase in Australia's TFR between 2001 and 2005.[36] It has also been reported that the fastest growth in claims for the baby bonus has occurred in some of Australia's wealthiest suburbs.[37] Against the idea that improved economic conditions might be responsible for increased fertility, people living in these more advantaged areas are likely to have enjoyed high employment rates, good wages and secure conditions even prior to the recent period of fertility increase. Further, they are arguably less likely to have been swayed by the baby bonus incentive. On the other hand, if it is relative income that matters, any socio-economic group would seem as likely as any other to respond to changing economic conditions. Nevertheless, it remains difficult to explain why advantaged groups should respond most.

It may be that factors relating to socio-economic status are interacting with factors relating to age and education (see above). Women from higher socio-economic backgrounds are largely the same women as those with higher educational attainment and higher median ages at first birth. Again, it follows that such women should also be prominent in any catch-up effect. Increased fertility in more advantaged areas is largely attributable to the increased age-specific fertility of women aged 30 years and over.[38] Similarly, baby bonus claims in wealthier suburbs are largely made by women aged 30 years and over.[39]

POLICY INTERVENTIONS

There has been much speculation in Australia as to the role played by policy in stimulating recent fertility increase, particularly following the introduction of the maternity payment, or baby bonus. The upturn in the TFR began in 2002,[40] well before the payment (in its current form) started in July 2004. (It was on the basis of increasing birth numbers that the policy was declared a success by the government of the day[41]—even so, acceleration began in the September quarter of 2004, too soon to be attributable to the bonus).[42] Nevertheless, claims of success for the baby bonus receive some academic support. For women at parity zero or one there was a decline in the intended number of children from 2001 to 2003, which reversed in 2004 following the introduction of the maternity payment.[43] On the basis of increased birth numbers in NSW, Lain et al. find it 'unlikely that the short-term change of the magnitude seen from 2004 to 2005 is not related to the introduction of the Baby Bonus in mid-

2004'.[44] McDonald contends that the recent upturn in births reflects not only the baby bonus, but increased family tax benefits and child care payments, along with the 'psychological' effect of perceived social and government support for childbearing.[45]

A more indirect positive effect of the baby bonus on fertility is likely; namely that birth registrations have increased because registration is required in order to claim the payment. Along with improvements to the processing of births registrations in some states and territories, the ABS acknowledges that this requirement has improved the timeliness and coverage of its births data,[46] as anticipated in this journal and by the ABS itself.[47] This is not to say that the increase in fertility is artificial, but that births were previously undercounted, and the extent of the recent increase may be exaggerated by improved measurement.

Measurement issues aside, studies attempting to gauge the impact of policies such as the baby bonus on fertility are often inconclusive, as it is difficult to separate the effects of specific policy initiatives from the effects of other environmental factors.[48] There is some evidence that increased family benefits and direct cash incentives are more likely to alter the tempo than the quantum of births.[49] If so, changes to the Australian policy setting may have assisted the trend to earlier childbearing that is contributing to TFR increase.

In most other respects, however, the Australian policy setting has changed little in ways that might explain increased fertility. This is significant because McDonald (like other institutional theorists) previously argued that comprehensive change would be necessary to avert conflict between family and career goals for women and to bring about an increase in fertility:

> ...the full range of incentives and supports is required (financial, services, workplace arrangements) because they are all beneficial in differing degrees to women according to their potential wage and to their work preferences. They also need to be provided in as nearly universal a system as possible ...[50]

The aim described here is to change the environment of fertility decision-making in the direction of greater gender equity. Arguably, broad institutional change of this nature has been minimal in Australia over the past decade. There has been little progress in relation to key recommendations previously articulated by McDonald and others.[51] The tax system retains its bias towards single-income families and the improved parental leave entitlements recently announced by the Labor Government have not yet taken effect. Cross-national research suggests that the availability of formal child care and of flexible working hours are the most important institutional factors supporting fertility.[52] However, the shortage of child care places in Australia persists, according to the industry and to consumers[53] and, while it is fair to assume that workplaces are gradually becoming more family-friendly, gradual change is unlikely to explain a sudden reversal of fertility trends.

CONCLUSION

The impact of tempo effects on the TFR appears crucial to understanding Australia's recent fertility increase. These effects were generally underestimated by those concerned about the low fertility rates that prevailed at the turn of the century. Yet, just as the postponement of childbearing contributed to long-term TFR decline, the end to this postponement has boosted period fertility. Women in their thirties are recuperating their delayed births, with the greatest positive impact on the national TFR, while younger cohorts are having their babies slightly earlier.

The emphasis on age complements the finding that the fertility increase of recent years has been most pronounced in the more

advantaged areas of Australia.[54] Women from higher socio-economic backgrounds have long recorded higher median ages at first birth, since they have been most prone to delaying childbearing while they pursue education and career goals. It follows that such women should also be prominent in any catch-up effect, as they will be first to come up against the limits to postponement imposed by biology. Arguably, educated women are also most likely to have heard and absorbed the recent public discussion about 'leaving it too late'.

In turn, this emphasis on the behaviour of higher socio-economic status women complements recent findings about trends in Australian partnering, particularly marriage. The cessation of the long decline in fertility seems to have coincided with a similar reversal of trends towards declining union formation and increasing marital dissolution; a reversal attributable to the stabilisation of marriage among degree-qualified men and women. Since marriage remains such an important precursor to childbearing for many, these trends may be related to the fact that the most significant gains in fertility have occurred in the nation's more advantaged areas.

In light of the economic prosperity enjoyed by Australia in the first years of the 21st century, increased period fertility may well reflect parents' ability to afford to have children sooner, and perhaps also in greater numbers. Policy initiatives such as the baby bonus may have further reduced the economic barriers to childbearing. On the other hand, births have increased most (and consequently the take-up of the baby bonus is highest) in wealthy areas. Against economic arguments, men and women in these areas could be considered least likely to respond to altered economic conditions, relative to those in lower socio-economic strata.

Will higher TFRs be sustained into the future? An affirmative answer to this question requires strong qualification. Indeed, most of the arguments summarised above lead more realistically to the expectation of further fluctuations in period fertility. To the extent that the lesser postponement of childbearing represents a return to the norm, it is reasonable to expect that higher levels of fertility will be sustained—but only until or unless there are further shifts in the ages at which women have children. Similarly, any positive effect of the recent stabilisation in marriage rates may last only as long as current partnering behaviour continues. Meanwhile, economic circumstances are also ever-changing. Participation in a global economy seems to guarantee an unpredictable cycle of economic booms and busts, and of fluctuations in interest rates and house prices. Given this unpredictability, Australians may demonstrate continued flexibility in their decisions regarding the timing of childbearing.

Of the arguments discussed in this paper, only those relating to institutional change portend stable fertility rates, in that any such change is more likely to be unidirectional. That is, one might assume that future fertility decision-making will occur in the context of ever-increasing gender equity, expressed in ever more generous family-friendly policies. However, Australian policy initiatives in this area have to date been minor, and are in my opinion unlikely to account for recent fertility increase.

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