

A comparison of fertility in Canada and Australia, 1926–2011

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Abstract

This article compares the evolution of fertility in Canada and Australia since the early 20th century. Historically, in part because of the high fertility rates of Catholic French-Canadians, overall fertility was higher in Canada, but since the mid-sixties, fertility has been higher in Australia. This is especially noticeable among women aged 30+, but the observed difference is not a mere tempo effect, as completed fertility rates of the most recent cohorts are significantly higher in Australia. More generous family policies and a more robust economy could explain the maintenance of fertility close to replacement level in Australia, while Canadian indicators have been falling.

Keywords: fertility, Canada, Australia, Quebec, historical.

Résumé

Cet article compare l'évolution de la fécondité au Canada et en Australie depuis le début du XX^e siècle. Historiquement, en partie à cause de la forte fécondité des Canadiennes-Françaises catholiques la fécondité était plus élevée au Canada, mais depuis le milieu des années soixante, la fécondité est plus forte en Australie. Cette plus forte fécondité se remarque surtout chez les femmes de plus de 30 ans, mais on doit y voir plus qu'un effet de calendrier puisque la descendance finale des plus récentes cohortes est aussi nettement plus élevée en Australie. Des politiques familiales plus généreuses et une économie plus robuste pourraient expliquer le maintien d'une fécondité près du seuil de remplacement en Australie alors que les indicateurs canadiens faiblissent.

Mots-clés : fertilité, Canada, Australie, Quebec, historique.

Introduction

Throughout their histories, Canada and Australia have had many similarities, as described below. However, these countries have two obvious differences. First, Australia has no equivalent to the province of Quebec and is not bilingual. If Quebec's fertility trend was a mirror image of the trends in other provinces in Canada, this would not present a difficulty, but as we demonstrate in this article, the differences between fertility trends in Quebec and the other Canadian provinces go some way towards explaining the historical differences between the Canadian and Australian fertility trends—but only until 1960.

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The other obvious difference between the two countries is that Australia does not share a very long border with the United States; this proximity might promote similarities between Canada and the US, through border crossings or exchanges of population, or through the spread of cultural influences. For example, Canadians engage in sports that are similar to the range of sports that are popular in the United States—but not those that are popular in Australia. Nevertheless, patterns of fertility in Canada have differed very considerably from those in the United States (Belanger and Ouellet 2002; Sardon 2006, and McDonald and Moyle 2010). Around 2000, Canada's total fertility rate was about 25 per cent lower than that of the United States; in 2011 it was about 15 per cent lower. Furthermore, childbearing in the United States has occurred at much earlier ages than has been the case in Canada.

The main behavioural differences related to fertility have been summarized as follows:

Unwanted pregnancies and births are more frequent in the United States, as is the use of abortion, while Canadian females use more effective contraceptive methods than Americans, partly because medical methods and sterilization are more accessible and less costly. Marriage takes place earlier and is more widespread in the United States, and a higher level of religious practice is indicative of a more traditional and less secularized society than in Canada (Belanger and Ouellet 2002: 107).

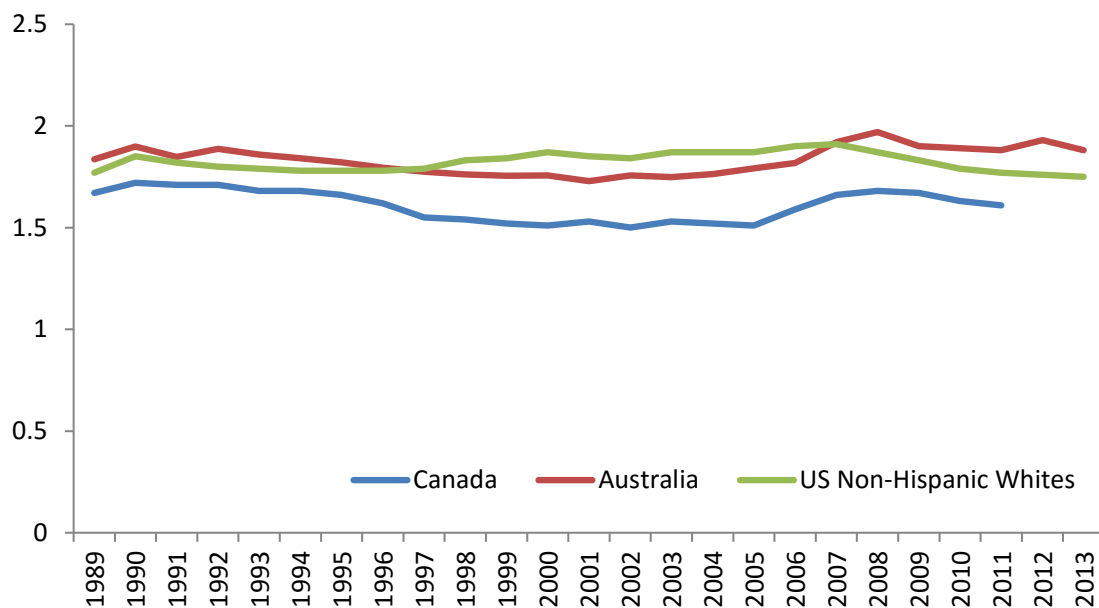


Figure 1. Total Fertility Rates, Canada, Australia and US Non-Hispanic Whites, 1989–2013.

On all of the behavioural dimensions cited in this statement, Australia is similar to Canada and unlike the US (McDonald and Moyle 2010); yet, in terms of the total fertility rate, over the past 25 years, Australia's fertility has been closer to that of Non-Hispanic Whites in the US than it has been to Canada's rate (Figure 1). Thus, while these behavioural dimensions may explain the recent difference in fertility between Canada and the United States, they do not explain the difference between Canada and Australia. Australia has all the same behavioural dimensions as Canada in relation to contraception, timing of the commencement of childbearing, and religious practice, but it achieves a higher fertility rate. This paper sets out to examine what other factors may be involved in the contemporary difference in fertility between Australia and Canada. Before doing this, however, the paper reviews the trends in fertility in the two countries over a longer time span.

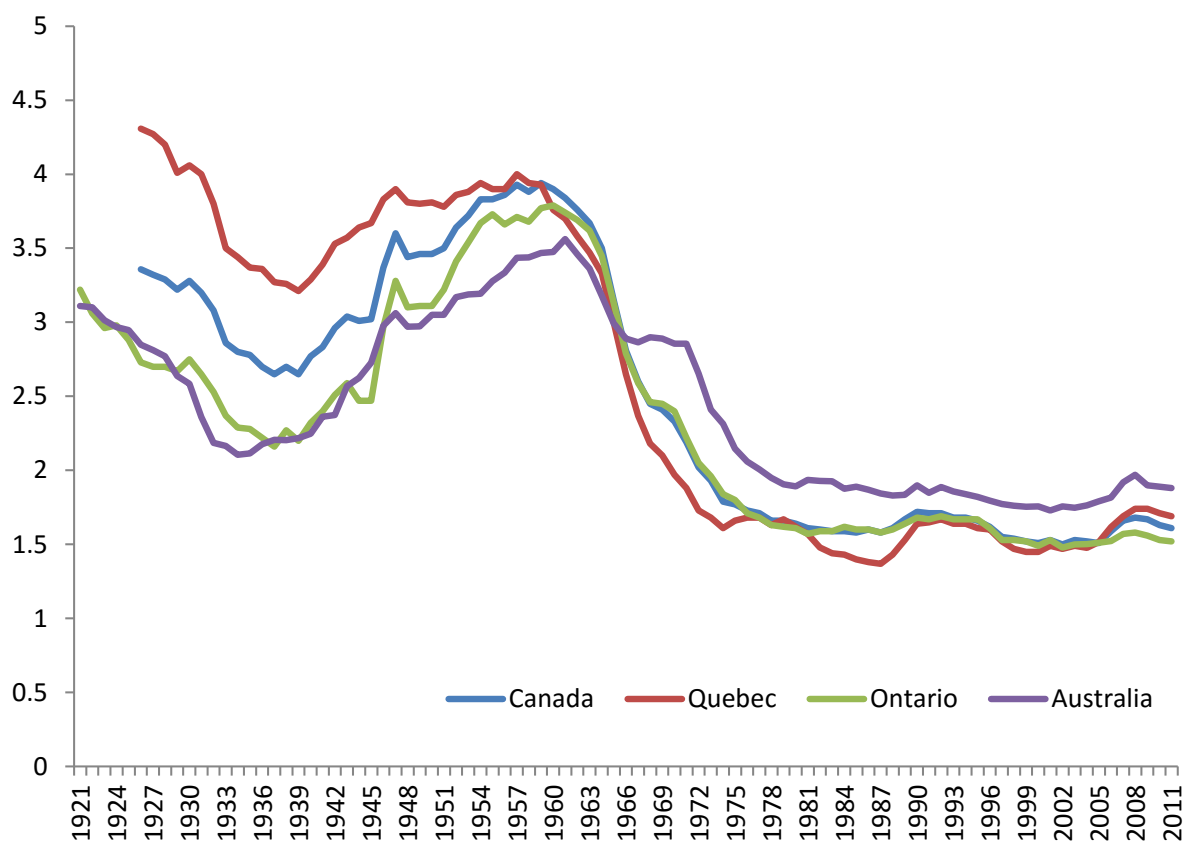


Figure 2. Total Fertility Rates, Australia, Canada, Quebec and Ontario, 1921–2011.

Fertility in Canada and Australia, 1926 to 1960

Figure 2 shows the total fertility rates in Canada and Australia from 1926 to 1960. The graph also shows fertility in the Canadian provinces of Quebec and Ontario. Data for Australian states are not shown because the variation in fertility rates across states has tended to be small, while the difference between these two Canadian provinces was around 1.5 births per woman in the latter half of the 1920s. The high fertility in Quebec in the first half of the 20th century explained most of the difference in fertility between Canada and Australia at that time, but it did not explain all of the difference. As the figure shows, fertility in Ontario until the baby-boom was the same as it was in Australia. Australia and Ontario were very similar in cultural terms; both populations were composed of a large proportion of first or second generations of European immigrants, mostly originating from the United Kingdom. Yet, some of the difference between the two countries was due to higher fertility in Canadian provinces other than Ontario. During the 1930s depression, fertility fell more in Australia than in Canada, and a wider difference opened up between the two countries. Also, Australian fertility during the depression reached its low point more rapidly than was the case in Canada. The fall in fertility in Ontario during the depression mirrored that of Canada as a whole, and so a gap opened up between Australia and Ontario. As commodity exporters, both Canada and Australia were hit badly and early and about equally by the depression, with unemployment rising in both countries to higher levels than was the case in the United States.

The more rapid fall in fertility in Australia during the depression could possibly reflect more effective use of contraception in Australia at that time. While comparative information for Canada is not readily available, Hera Cook has demonstrated that Australian women had much greater control over their own fertility and thus much greater sexual and reproductive autonomy within marriage from the 1890s to the 1960s than did women in England (Cook 2000). Helen Moyle has also demonstrated that between 1880 and 1920, Australian women were very likely to be using female methods of contraception, often homemade methods (Moyle 2015). She also argues that this was symptomatic of wider autonomy among Australian women that, for example, led to very early female suffrage. Australian women on the whole were able to vote from 1902, and women in the state of South Australia from 1895. Women overall were able to vote in Canada only from 1919, but not until 1940 in Quebec. Also, from 1892, in Canada it was illegal to sell or advertise for sale “any medicine, drug or article intended or represented as a means of preventing conception” (Section 192 of the 1892 Canadian Criminal Code). These provisions in the Canadian criminal code were only put aside in 1967, when Pierre Elliott Trudeau as Minister of Justice proclaimed that the state had no business in the bedrooms of the nation. This was not the case in Australia; indeed, around 1900, large city pharmacies had women’s sections, staffed by women, where contraceptives were sold, and discreet advertisements (subject to lewdness criteria) were published in newspapers (Moyle 2015). This explanation, however, has less force if applied to a comparison of fertility in Australia and Ontario, unless access and use of contraception in Ontario was better than it was in other Canadian provinces. Also, in the 1930s and 1940s, the Australian fertility rate was always close to that of the United States—which, as described above, was not renowned for its access to contraception.

Table 1. Percentage of the population living in agglomerations with 20,000 or more inhabitants, 1920–1960, Canada, Australia, and the United States

Country	1920	1930	1940	1950	1960
Canada	34	39	41	47	53
Australia	49	49	54	59	66
United States	42	47	47	51	59

Source: United Nations, Department of Social Affairs. 1969. *Growth of the World’s Urban and Rural Population, 1920–2000*. Population Studies No. 44. New York: United Nations, Table 45.

Prior to 1950, Canada was less urbanized than either Australia or the United States (Table 1), and it is well known that during the fertility transition in Western countries, the fertility rates of farmers remained higher longer. This compositional explanation of the differences in Figure 2 before 1950 is in accordance with the fact that Ontario was much more urbanized than provinces such as Alberta, Saskatchewan, and Manitoba. However, the levels and trends of urbanization are very similar for Ontario and Quebec from 1921 to 1961, not in accordance with the large differences in fertility (Statistics Canada nd). However, Krull and Trovato (2003) argue that outside of Montreal and Quebec City, Quebec remained very rural until the Second World War. About the high fertility in Quebec prior to 1950, they say:

Delayed modernization, therefore, can be attributed to the provincial Government’s dedication to the Church’s ideology and its vision of Quebec as a rural religious society. The influence of the Roman Catholic Church cannot be over-emphasized (Krull and Trovato 2003: 197).

They say that through its control over education and the social policies of the Quebec Government, the Church promoted a pro-natalist agenda, encouraged early marriage and large families, discouraged liberal ideologies, and interpreted feminism as a threat to national survival.

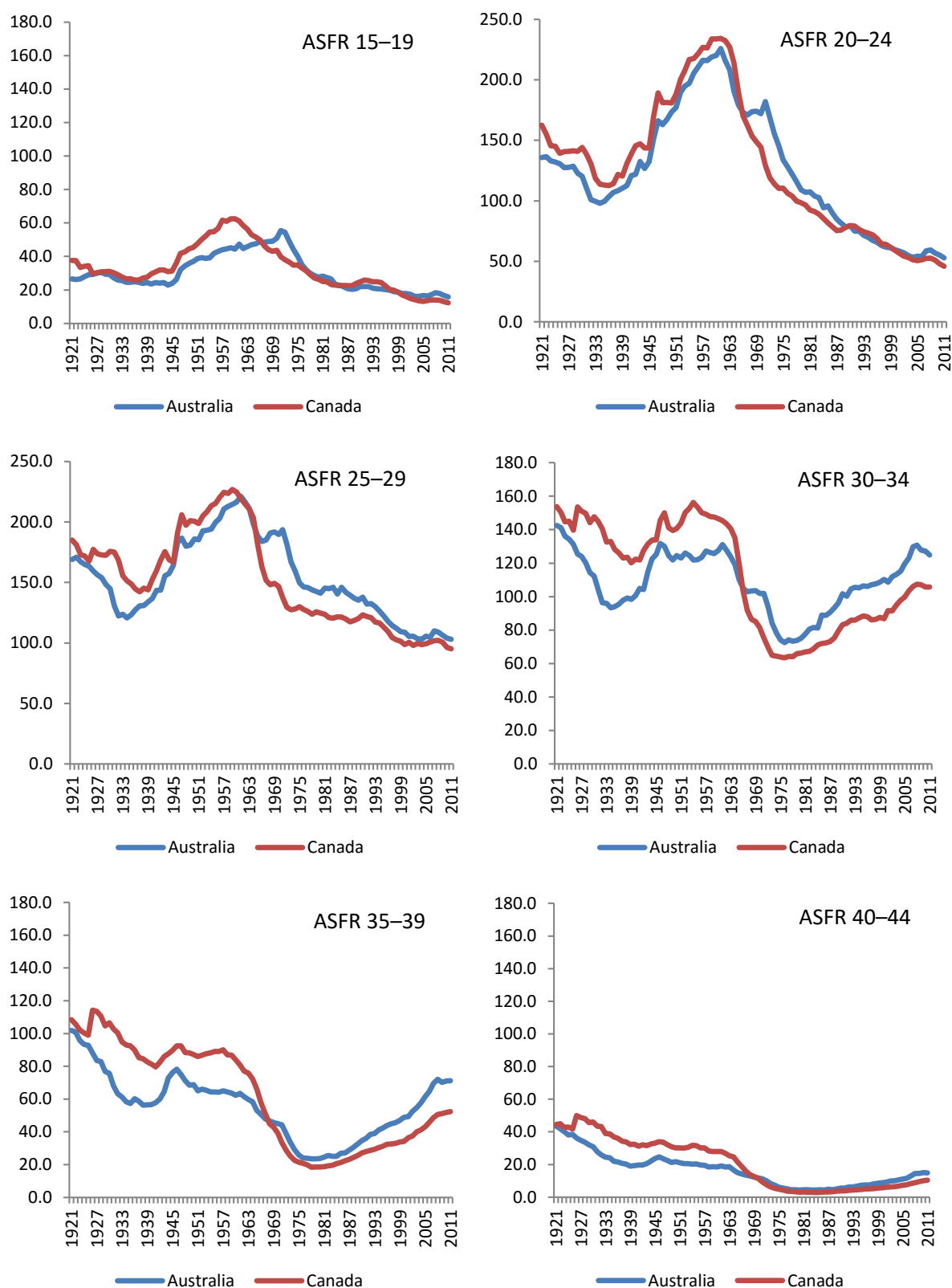


Figure 3. Age Specific Fertility Rates, Canada and Australia, 1921–2011.

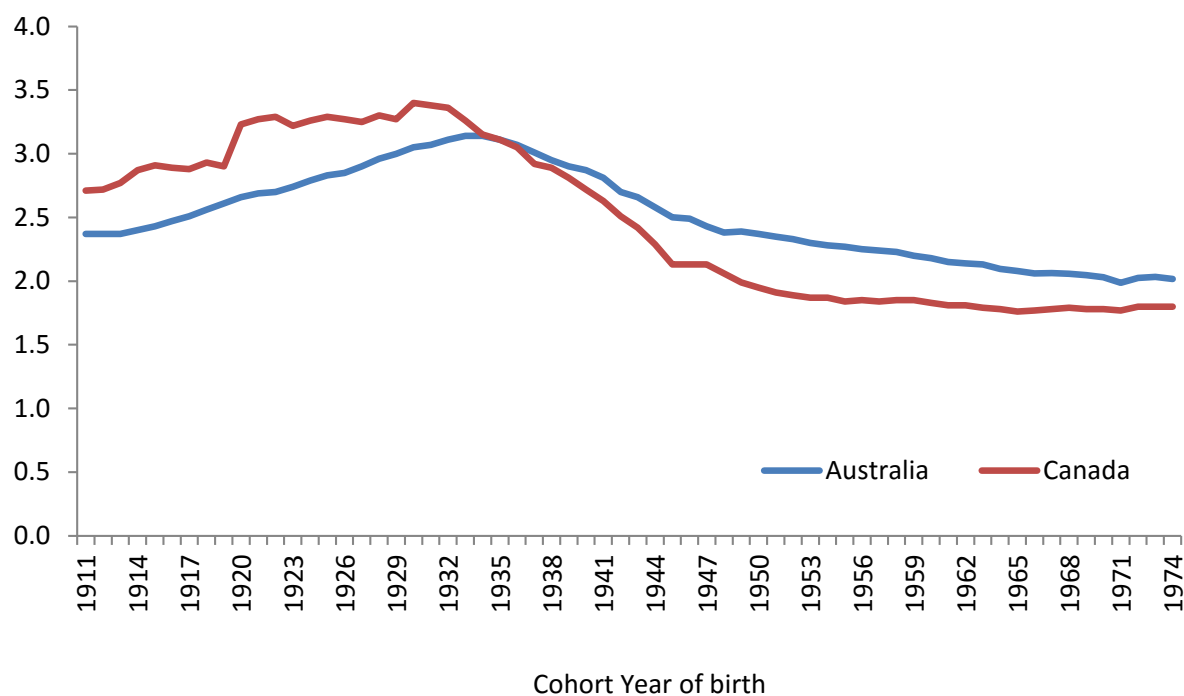


Figure 4. Completed-cohort fertility, Canada and Australia, years of birth of cohorts of women, 1911–74.

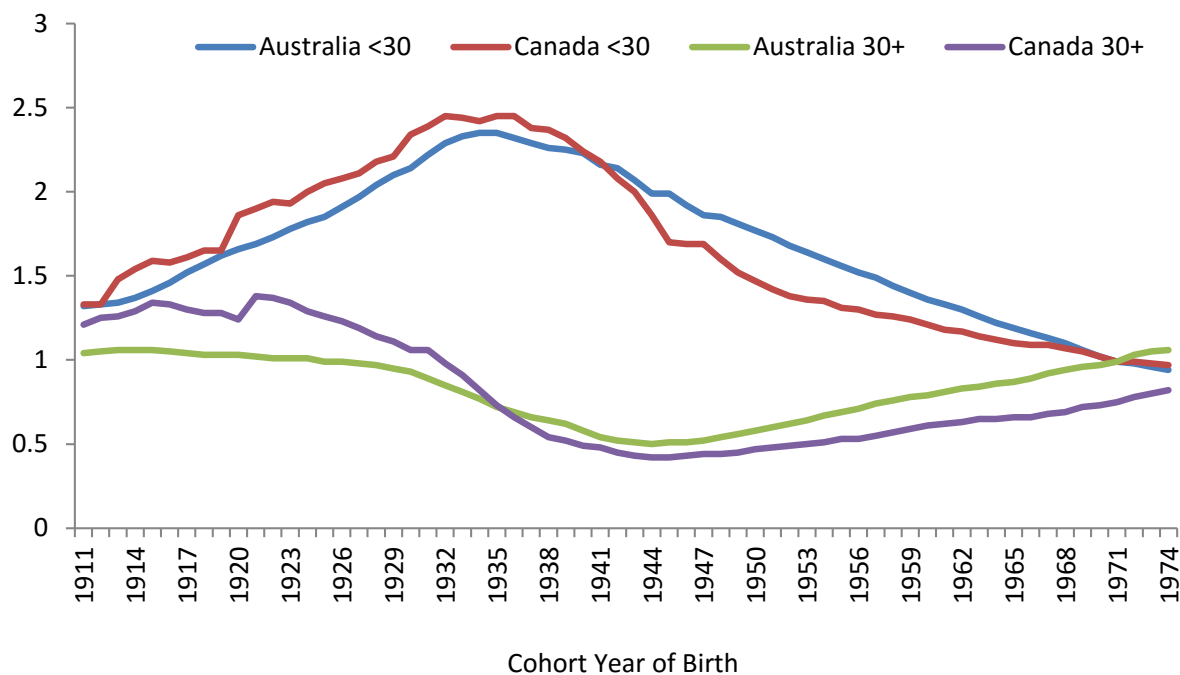


Figure 5. Cohort fertility ages 15–29 and 30–49, Canada and Australia, years of birth of cohorts of women, 1911–74.

Table 2. Parity distributions of completed-cohort fertility, Canada and Australia, 1929 and 1959/1961 birth cohorts

Birth parity	Cohort-completed fertility: Parity distributions			
	1929 birth cohort		1959 birth cohort	1961 birth cohort
	Canada	Australia	Canada	Australia
0	6.6	9.5	17.3	14.9
1	7.2	9.3	17.8	12.4
2	11.9	24.8	39.0	38.2
3	8.6	23.4	18.4	22.6
4+	65.7	33.0	3.8	8.8
Total	100.0	100.0	100.0	100.0
Average number of births	3.27	3.00	1.85	2.15

Sources: Canada, derived from data published in the Human Fertility Database; Australia, derived from an unpublished database of Australian fertility compiled by Peter McDonald and Rebecca Kippen (2011). 1929 is the first year for which Canadian data are available and 1959 is the last year. Data for Australia were not available for 1959, and so 1961 is used for comparison.

In the 1950s, during the baby-boom period, fertility rose by more in Ontario than in Australia, such that by the end of the 1950s, the fertility rates for Ontario, Quebec, and Canada as a whole were very similar, all being above the Australian level by about 0.5 births per woman. The baby-boom peak fertility was higher and occurred slightly earlier in Canada (3.91 in 1959) than in Australia (3.56 in 1961). Comparing the age-specific fertility rates of the two countries from 1921 to 1960 (Figure 3), fertility was higher in Canada than in Australia at all ages, but the difference was especially marked at the older ages (age 30+). The broad differences were not due to tempo effects; Figure 4 shows that completed-cohort fertility in Canada was higher than in Australia up to the cohort of women born in 1934, and the differences for the early cohorts were similar to those for period total fertility before 1960. Figure 5, using cohort data, confirms that the differences between Australia and Canada were more pronounced at age 30+ for the early cohorts. Finally, data on the completed-cohort fertility parity distributions for the 1929 birth cohort of women in the two countries (Table 2) indicate that Australian women were much more likely to stop at two or three children than was the case for Canadian women.

In summary, it is not possible to be definitive about why Canada's fertility was higher than that of Australia in the period prior to 1960. In the pre-baby boom years, in proximate terms, it may have been that Australian women had more control over their own fertility, as described above, or it may have been that Canadian couples wanted to have more children, or that the Canadian population was more rural than that of Australia—or, in the case of Quebec, that high fertility resulted from the control that the Catholic Church had over the people and the government. Explanations in this regard need to deal with the wide differences in fertility across the Canadian provinces, and why fertility in Ontario was much closer to that of Australia than it was to other Canadian provinces. In line with the argument made above about contraception in Australia, McInnis (1991) observed that control of fertility within marriage was adopted at a comparatively early point by women in Ontario. However, fertility was higher in other provinces of Canada, both because they were more rural and because of the influence of the Catholic Church in Quebec. For the baby-boom period, the interesting question is why fertility in Ontario lost its association with the fertility trend in Australia during the 1950s and moved to the fertility levels prevailing in other provinces of Canada (see Figure 2).

Fertility in Canada and Australia since 1960

From 1960 to 1980, fertility fell sharply in both countries: in Canada, from 3.9 births per female in 1960 to 1.64 in 1980 and, in Australia, from 3.47 to 1.89. In this period, Canadian fertility fell farther and faster than it did in Australia. The resultant positive gap in Australia's favour of about 0.25 births per woman in 1980 was maintained in broad terms in subsequent years, the gap being 0.27 in 2011. Two specific trends in this period stand out. The first is the almost meteoric fall of fertility in Quebec, from 3.93 in 1959 to 1.66 in 1975. The second is the flattening out, mid-decline, of Australian fertility between 1966 and 1971 (Figure 2).

Krull and Trovato (2003) attribute the meteoric fall in fertility in Quebec to a process of modernization and secularization that, at least initially, was associated with the Liberal Government elected in 1960 and with the rapid secularization of the society and development of a welfare state that characterized the province of Quebec under the Quiet Revolution. This corresponded with the rise of second-wave feminism, which resulted in dramatically increased levels of women's education and participation of married women in the labour force. Of course, these changes were occurring at the same time in other places, including other provinces of Canada and in Australia, but the changes were more rapid in Quebec—which was, before the Quiet Revolution, trailing far behind on most socio-economic indicators. The more rapid fall in Quebec may have been due to a more intensive move away from marriage and early childbearing (Langlois et al. 1992; Krull and Trovato 2003), although fertility fell sharply at all ages from 1960 onwards. By 1980, Quebec had the lowest fertility under age 25 of all of the Canadian provinces (99.8 per 1,000, compared with 118.4 for Canada as a whole). Abortion and sterilization rates were high for Quebec at this time (Krull and Trovato 2003).

In Australia between 1966 and 1971, age at first birth remained at a low level longer than was the case in other countries. This has been attributed to an increase in sexual activity among young single people that was not accompanied by ease of access to contraception or abortion. Teenage fertility hit its peak in Australia in 1970, ten years after the peak in Canada (Figure 3). First marriage rates for those at young ages (18, 19, and 20) hit their peak around 1970 for both those pregnant at marriage and those not pregnant (Carmichael 1988; Carmichael and McDonald 2003). At this time, being married before age 20 was a way for men to avoid conscription, and this has been proposed as a reason for the observed trend (Withers 1979). However, Figure 3 shows that fertility rates at ages 20–24, 25–29, and 30–34 also rose or levelled off in this short period in Australia, before plunging from 1971 onwards. Another speculative reason for the levelling off of fertility is that Australian Catholics, under the aegis of Irish Catholicism, may have been (temporarily) conservative in adopting the contraceptive pill and abortion, an attitude given impetus in 1968 by the publication of the papal encyclical *Humanae Vitae*.

Counter to the period before 1960, from 1980 onwards (and for birth cohorts from 1936 onwards), Australian fertility has remained higher than that of Canada (Figures 1–4). Initially, this was due to a slower decline of fertility at younger ages in Australia than in Canada, but from the 1990s onwards, the difference has been due almost entirely to higher fertility in Australia above age 30 (Figures 3 and 5). This is in sharp contrast to the explanation for the growing fertility gap between Canada and the USA occurring at the same time, where most of that gap is explained by higher fertility of American women before age 30 (Belanger and Ouellette 2006).

Looking at cohort fertility, we note that completed fertility is below 2 children per woman for all cohorts of Canadian women born after 1949, while it has never fallen below that level in Australia. The figures for the most recent cohort having completed its fertility are 1.8 children per woman in

Canada, which is about 10 per cent lower than the Australian completed fertility rate of 2.0 children per woman for the cohort born in 1974. The gap between Canadian and Australian fertility can therefore not be attributed to a tempo effect. For birth cohorts of women born around 1960, the proportion of women with completed family sizes of three or more in Australia was about ten percentage points higher than in Canada (Table 2). This difference is probably larger for more recent cohorts. It is to the differences in this contemporary period that we now turn.

Explaining the contemporary difference in fertility in Canada and Australia

According to social demographic theory (Leridon 2014; Keyfitz 1987; Lesthaeghe 2010; Lesthaeghe and Surkyn 1988; Preston 1987), fertility can be influenced by many factors, including: urbanisation, industrialisation, the state of the economy and employment; economic expectations; culture, religion, and cultural background; education; the social-economic role of women, gender equity, and women's agency; the potential for social mobility; the cost of housing; the direct and indirect costs of children; the relative income of young men (Easterlin 1973; Makunovich 1996); knowledge of and access to means of fertility control; the diffusion of values; and psychological perceptions of the value of children. In comparing the fertility trends of two countries, therefore, we may expect to find that differences in these factors will explain the differences between the two countries—although, given the wide range of potential theoretical explanations and their complexity, it is very unlikely that definitive explanations of the differences are possible.

Above, attention was drawn to the conundrum that in the past 25 years, Australia's fertility rate has been much closer to that of the United States than to that of Canada, despite the fact that behaviours related to marriage, contraception, and religion are similar in Australia and Canada and *unlike* behaviours (on average) in the United States. Between Canada and Australia, there are many other striking similarities besides these behavioural similarities. Both countries are federations of former British colonies, and both are parliamentary democracies along the lines of the Westminster model. Canada's federation was created in 1867 and Australia's in 1901. As in the United States, both have a states' house, the senate, but the Canadian senate is appointed while the Australian senate is elected. Both countries have a small but important indigenous population, and both countries are well-known as nations of immigrants and their descendants (see Edmonston, and Smith et al. in this volume). Their migration histories are similar over the past 100 years, and during their history they have applied similar policy approaches to migration, with an emphasis in the past 20 years on skilled migration.

In broad terms, levels of immigration to the two countries have been similar across time, and the peaks and troughs in immigration have occurred at about the same times. Prior to the Second World War, a high proportion of immigrants to both countries were British, but migration from the rest of Europe expanded after the war. The almost exclusive preference for migrants of European origin ended in both countries in the late 1960s, and since that time, both have experienced considerable migration from Asia, especially from China and India. Thus, it could be said that both countries experienced similar cultural influences from immigrants at much the same times; both were very British in orientation until the Second World War, taking on Southern, Eastern, and Western European influences from 1950 to 1970 and Asian influences from 1970 onwards. While at present, the two largest sources of immigrants to Australia are India and China, in recent years the proportion of all immigrants that has Asian origins has been higher in Canada than in Australia because of the continued large inflows to Australia from the United Kingdom and New Zealand. Canada also experiences moderate migration from Latin America and the Caribbean, sources that are small in the

case of Australia. Both countries experience moderate levels of migration from North Africa and the Middle East. Migration between Canada and Australia is small. At least nominally, the largest religious group in each country is Catholic, with the Catholic proportion being higher in Canada than in Australia, but today, both are very secular societies. According to the Canadian household survey, the proportion of the population declaring no religion was 23.9 per cent in 2011. This is very similar to the proportion of 24.4 per cent declaring no religion among those who answered the religion question in the 2011 Census of Australia.

In 2014, the Australian Total Fertility Rate (TFR) was 1.84 births per woman, 1.86 for Australian-born women and 1.77 for non-Australian-born women. Thus, immigrant fertility had little impact on the national fertility rate. The TFR for the major immigrant groups did not differ significantly from the national rate: 1.76 for United Kingdom-born, 1.94 for New Zealand-born, 2.00 for India-born, and 1.63 for China-born women. The lower rate for the China-born women was explained entirely by their lower fertility in the age range 15–24, at which ages many Chinese women included in the population are students living in Australia temporarily, and thus very unlikely to give birth. At ages 25 years and over, the fertility of the China-born in Australia is exactly the same as that of native-born women (ABS 2015).

Table 3. Total fertility rates in Montreal, Toronto, and Vancouver 2006–11 by visible minority group, immigrants and Canadian-born

Group	Canada	Montreal	Toronto	Vancouver
Visible minority				
White	1.61	1.53	1.42	1.33
Chinese	1.28	1.45	1.27	1.09
South Asian	1.82	2.16	1.82	1.63
Arab	2.73	3.02	1.94	2.24
Black	1.85	1.86	1.74	1.79
Others	1.59	1.70	1.48	1.38
Immigrants	1.86	2.15	1.73	1.48
Canadian-born	1.59	1.46	1.36	1.28
Total	1.66	1.64	1.51	1.35

Source: Authors' calculations using the 2011 Canadian National Household Survey.

In terms of total fertility rates, we observe larger differences between Canadian ethno-cultural groups. Using the own-children method and the Canadian National Household Survey of 2011, we estimate the Canadian TFR at 1.66 children per woman, comprising 1.59 for Canadian-born women and 1.86 for immigrant women (see Table 3). Earlier Canadian studies suggest that when other individual characteristics are taken into account, the average fertility of all women not born in Canada is not higher than that of Canada-born women, except for the most recent immigrants (Belanger and Gilbert 2007; Gebremariam and Beaujot 2010). Thus, part of the difference between immigrant and Canadian-born women can be explained by a tempo effect resulting from the disrupting effect of the immigration process on immigrant fertility. Yet, in terms of total fertility rates, differences in fertility between immigrants and natives appear more important in Canada than in Australia.

This can be due to differences in the composition of the immigrants of each country. Using the same data set and method, we estimate the TFR of Canadian women by visible minority groups. While the fertility of Chinese women is very low at 1.28 children per woman, the TFR of South-Asian (1.82), Black (1.85), and especially Arab women (2.73) is much higher than for White women (1.61). Also, according to Caron-Malenfant and Belanger (2006), the larger differences between visible minority and religious groups remain even when a control is made for other individual characteristics.

The conclusion can be drawn that the impact of immigrant fertility on the overall level of fertility in Canada can perhaps be larger in Canada than in Australia, but it would explain a higher overall fertility level in Canada, not the opposite. Thus, we can conclude that the recent difference in fertility between Canada and Australia is not due to immigrant fertility—or, stated differently, the fertility of Australia-born women is much higher than that of Canada-born women. Because the indigenous populations in both countries are small in number, the fertility difference between the two countries cannot be explained by the effects of indigenous fertility.

Table 4. Total fertility rates (TFR) in Ontario, British Columbia, New South Wales, and Victoria in 2011, and in Sydney and Melbourne in 2013

Province/State	TFR in 2011
Ontario	1.52
British Columbia	1.42
New South Wales	1.95
Victoria	1.85
City	TFR in 2013
Sydney (2013)	1.85
Melbourne (2013)	1.74

In geographic terms, both countries have enormous land areas, most of which is largely uninhabited. Their populations are highly clustered into a relatively small number of cities. Canada's population is concentrated in the south, and most of its population lives within 200 kilometres of the US border. In Australia, most of the population lives within 100 kilometres of the coastline. In the list of the world's most liveable cities published by The Economist Intelligence Unit (2015), the top ten most liveable cities include four Australian cities and three Canadian cities. These cities, particularly Sydney and Melbourne in Australia and Toronto and Vancouver in Canada, are highly cosmopolitan, with residents from almost all countries of the world. Thus, there may be an expectation of similar levels of fertility in these cities. Tables 3 and 4, counter to the expectation, show that fertility is much higher in the two Australian states than it is in the two Canadian provinces, and that it is much higher in the largest Australian cities than in the largest Canadian metropolitan areas.

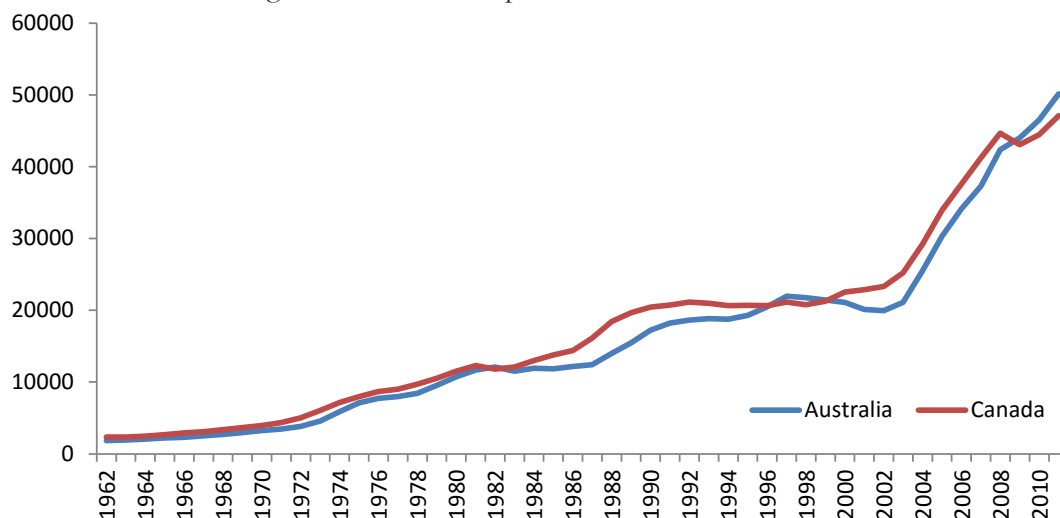


Figure 6. Gross National Income per capita (atlas method, current USD), Canada and Australia, 1962–2011.

Source: World Bank data, World Development Indicators.

Both countries enjoy very high standards of living, but their economic fortunes remain dependent, as they have always been, upon the export of primary production (food and minerals), and the state of their economies fluctuates with the prices of the commodities that they produce. In their histories, the major trading partner for both countries was the United Kingdom, but today, the UK is only Canada's fourth-largest trading partner and Australia's sixth-largest. On the other hand, the USA is by far the largest of Canada's trading partners, accounting for more than 70 per cent of its trade. Canada and the United States signed a free-trade agreement in 1988. This is where proximity counts. Australia's trading partners are more diverse, but its leading partner is China, with the level of bilateral trade being more than twice that of the second country, Japan. Australia and China signed a free-trade agreement in 2015.

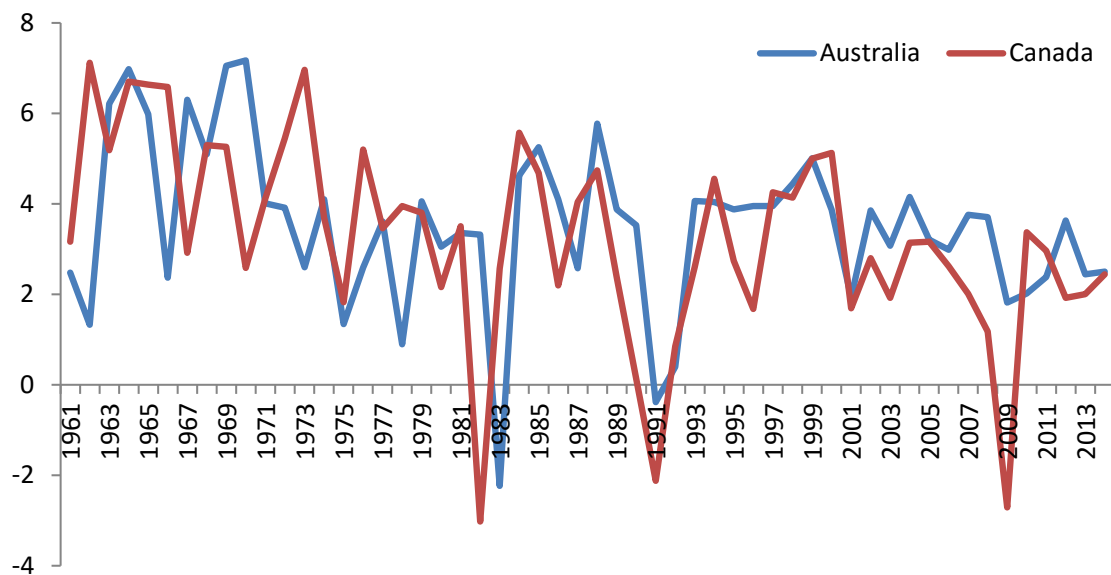


Figure 7. Rate of growth of Gross Domestic Product (%), Canada and Australia, 1961–2014.

Source: World Bank data, World Development Indicators.

Time series for three economic indicators in Canada and Australia are shown in Figures 6–8. The trend in gross national income per capita from 1962 onwards has been nearly the same in the two countries (Figure 6). The GDP growth rate has also followed a very similar course in the two countries, except for economic downturns in Canada in 1996 and 2009 that were not experienced in Australia. Also, the recessions circa 1981 and 1991 were more intense in Canada compared to Australia (Figure 7). Finally, the unemployment rate has been higher in Canada than in Australia for every year from 1991 to 2014, but the rates were very close until 2001. Following 2001, a gap opened up between the countries of about two percentage points, which widened during the global financial crisis but by 2014 had narrowed to less than one percentage point (Figure 8). The upward trend in Canada's fertility rate from 2005 to 2008 was reversed from 2009, the same year in which the unemployment rate surged upwards. Thus, there is some possibility that the more severe impact of the global financial crisis upon Canada may have led to a more pessimistic economic outlook among young people in Canada than was the case in Australia, and this could be considered as a potential explanation of very recent differences in fertility between the two countries. However, economic trends do not seem to explain the longer-term difference from 1980 onwards.

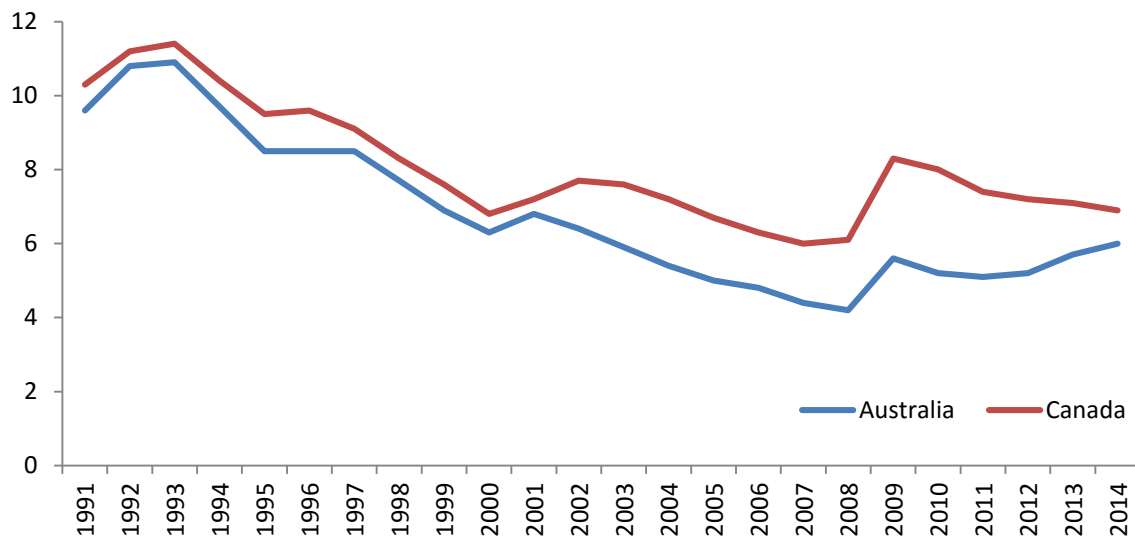


Figure 8. Unemployment rate (%), Canada and Australia, 1991–2014.

Source: World Bank data, World Development Indicators.

In relation to economic influences, Beaujot and Wang (2010) make an argument that fertility in Alberta rose from 2005 to 2008 because of strong job prospects for young people in the province. In the downturn in fertility in Canada after 2008, fertility fell more in Alberta than in any other province (Figure 9). In like manner, the Australian equivalents of Alberta—the ‘resources states’ of Western Australia and Queensland—followed much the same trend, with strong rises prior to the global financial crisis and strong falls from 2009 onwards. However, the benefits of the economic boom in Australia were more widespread; for example, they facilitated the Australia-wide economic stimulus package in 2008–09 that left Australia as the only advanced economy which did not experience negative economic growth at the time.

The most interesting trend in Figure 9, however, is the way in which fertility in Quebec was the same as that in Ontario up to 2005, but then increased substantially to 2008, while fertility in Ontario remained relatively flat. British Columbia followed the same trend as Ontario, but at an even lower level. Beaujot and Wang (2010) suggest that the rise in Quebec from 2005 was related to the introduction of a new range of family support policies specific to Quebec. The range of policies introduced in Quebec is detailed in Roy and Bernier (2007), and the effects of these policies upon fertility are described in Beaujot et al. (2013) and Beaujot (2013), the latter of which concludes:

Quebec family policies have helped to increase fertility rates, promote more favourable attitudes toward child care, led to more people using child care in Quebec than the rest of Canada, improved people’s satisfaction with child care, and allowed more women with young children to participate in paid work than the rest of Canada (Beaujot 2013: 1).

In Australia, a new family support package was introduced at the 2004 federal election that provided benefits Australia-wide (Heard 2006). In fact, it could be said that from 2005 onwards, Australia as a whole had the economic benefits of Alberta and the family policy benefits of Quebec. The increase in fertility in Australia after 2005 was driven by higher fertility among women in their thirties, effectively by better-educated women who had delayed their first births in an earlier time. Studies in Australia of the impacts of the new family policies upon fertility are essentially agnostic in their conclusions (Drago et al. 2010; Parr and Guest 2011), but they are plagued by the fact that it is

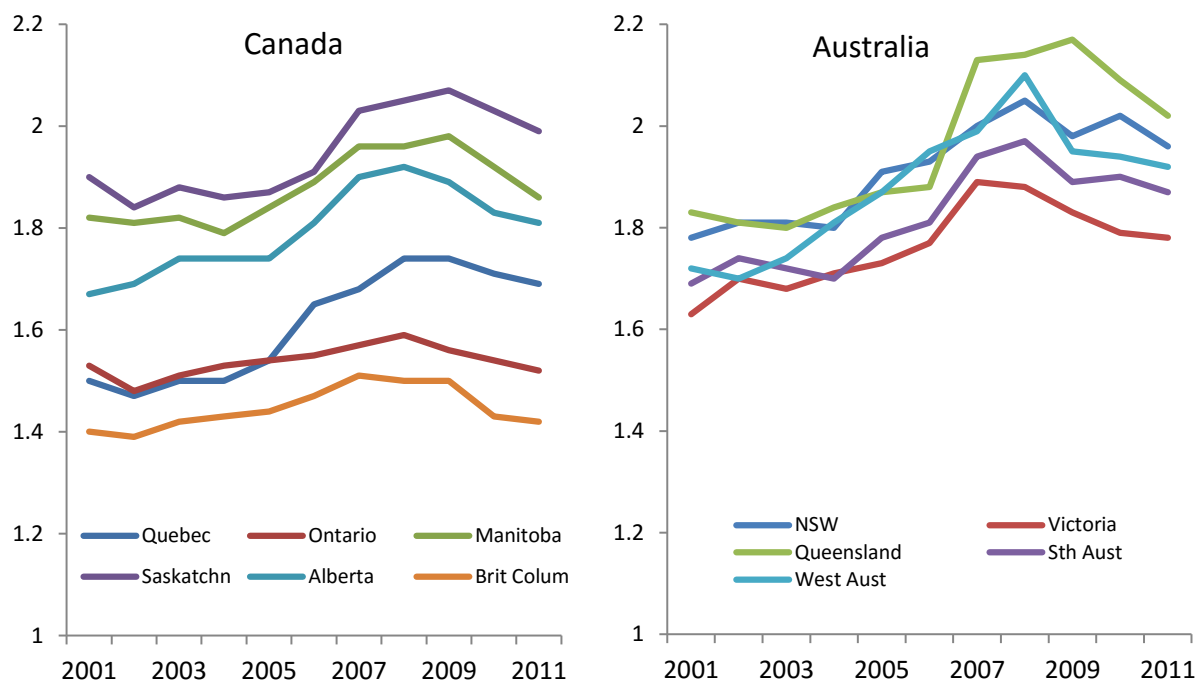


Figure 9. Total Fertility Rates in the larger provinces and states, Canada and Australia, 2001–11.

not possible to investigate the counterfactual of whether these women would have had the same level of fertility in the absence of these policies. Also, it is not easy to remove the effect of the improved economic circumstances for young people in the years in which the fertility rate rose. A detailed demographic analysis by McDonald and Kippen (2011) concluded that the increase in fertility was not due to higher fertility rates but to shifts in the composition of women by age, parity, and interval since previous birth. However, they also allude to the problem of the counterfactual: would fertility rates by age, parity, and interval since last birth have remained constant without the new family policies and the strong economy? In association with cutbacks in family policy in Australia (reduction of the ‘baby bonus’) and a downturn in the economy, fertility in the most recent years is falling again.

In the context of the discussion in the previous paragraph, it needs to be remembered that cross-sectional fertility rates can move up and down from year to year because of small shifts in the timing of births. We need to be careful not to over-interpret short-term movements; they serve as reminders to watch the longer-term trend and, in relation to fertility, the trend in cohort fertility.

Two other interesting observations can be drawn from Figure 9. The first is that the variation across provinces in Canada is much wider than the variation across states in Australia. In 2011, the ranges were 1.4 to 2.0 in Canada and 1.8 to 2.0 in Australia. A relative lack of variation in Australia is also confirmed by the relatively high fertility rate in the Australian Capital Territory (1.79 in 2012), a region in which women are highly educated on average and where labour force participation of women is very high by Australian standards but where standards of work-family provisions are led by the favourable benefits received by Australia civil servants. Furthermore, completed family size and desired number of children are relatively high for Australian women with university degrees (Arunachalam and Heard 2015; Heard and Arunachalam 2015). In Canada, the higher fertility in Manitoba and Saskatchewan can be explained by the higher proportion of Aboriginal population, with much higher fertility rates than non-Aboriginal, while in Alberta and Saskatchewan the positive economic horizon was provided as an explanation of higher fertility while the oil price remained high.

The other associated observation is that, at present, Canada's relatively low fertility compared with Australia is very largely the result of low fertility in Ontario and British Columbia. More than half (52.1 per cent) of Canadian women aged 25–44 years lived in these two provinces in 2011, so clearly, by weight of numbers, the low fertility of these two provinces leads to low fertility in Canada as a whole. Thus, the question raised at the beginning of the paper as to why fertility in Australia in recent times has been more like the fertility of Non-Hispanic whites in the United States than fertility in Canada seems to reduce to the question: why is fertility so low in British Columbia and Ontario?

The explanation of low fertility in these two provinces probably involves one or more of the following:

1. The capacity to combine work and family is lower for women in Ontario and British Columbia than it is in other provinces. This is effectively the argument made by Beaujot et al (2013), although they do not address Ontario and British Columbia specifically. Labour force participation rates are somewhat lower for women aged 30–44 years in these two provinces compared with Canada as a whole (based on the September 2015 Labour Force Survey results).
2. It may be that employment prospects for young people are more precarious in Ontario and British Columbia than in other provinces, but in fact, unemployment rates for young people aged 20–29 years are not very different in these two provinces than for Canada as a whole, and this is also the case in relation to the percentage of men (aged 25–54 years) working in temporary jobs (based on the September 2015 Labour Force Survey results).

Table 5. Distribution (in %) of the female population aged 15–49 by largest visible minority groups; Canada, Montreal, Toronto, and Vancouver, 2011

Female population	Canada	Montreal	Toronto	Vancouver
White	77.2	77.2	48.9	49.6
Visible minority				
Chinese	4.8	2.4	10.3	19.9
South-Asian	5.6	2.2	15.9	11.9
Arab	1.3	4.3	1.4	0.5
Black	3.4	6.3	8.0	1.0
Others	7.7	7.6	15.4	17.1
Total	100.0	100.0	100.0	100.0

Source: Authors' calculations using the Canadian National Household Survey of 2011.

3. The ethnic composition of Ontario and British Columbia may be associated with low fertility. Ontario and British Columbia, especially the cities of Toronto and Vancouver, are major Canadian concentrations of visible minorities, especially the Chinese, who have particularly low fertility. In 2011, visible minorities constituted half of Toronto's and Vancouver's female population aged 15–49 (Table 5). Moreover, 10.3 per cent and 19.9 per cent of Toronto's and Vancouver's female population, respectively, belong to the Chinese minority group. However, Toronto and Vancouver also count large South Asian populations, which have a somewhat higher fertility. Montreal has the same percentage of its population that belongs to a visible minority group as Canada as a whole, but its composition is very different. In particular, more fertile Arab and Black visible minority groups represent a larger share of its population, but still are less preponderant in Montreal than Chinese are in Toronto and Vancouver. The reasons for the persistently low fertility rates in Ontario and British Columbia require further investigation.

Conclusion

This paper compares fertility trends in Canada and Australia. The secular trends in fertility rates are similar in the two countries, in the sense that peaks and hollows appear at about the same time, but the amplitude of the changes is more important in Canada. The baby-boom was stronger in Canada, but the baby-bust, too. Historically, Canadian fertility was higher than Australian fertility, in part because of the strong influence of the Catholic Church on French Canadians. For the last half century, however, fertility is clearly higher in Australia than in Canada, and most of the difference can be explained by the higher fertility of Australian women beyond age 30. The recuperation due to postponement in childbearing appears larger in Australia than in Canada. Cohort-completed fertility rates for the most recent cohorts show a fairly large difference of 0.2 births per woman.

It is difficult to find explanations for the observed differences. Both Canadian-born and Canadian immigrants have lower fertility rates compared to their Australian counterparts, and fertility differentials by ethno-cultural groups cannot be the reason. It can rather be argued that the stronger Australian economy and labour market, as well as better family policy benefits in Australia, may be the source of its higher fertility compared to Canada.

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