

## FERTILITY LEVELS IN AUSTRALIA: WHAT CAN THE 1991 CENSUS TELL US?

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*The information which can be gathered from the 1991 Census on trends in fertility is limited. But an analysis of the one per cent users' sample tape indicates that women with advanced educational qualifications are now having families which are considerably smaller than those of women who have no post-school qualifications.*

By the early 1970s many social scientists had become convinced that differences in child-bearing behaviour among different groups of women in Australia were decreasing: urban or rural, Catholic or Protestant, upper income or lower income, Australian women were all tending toward the two-child norm.<sup>1</sup> A few immigrant groups persisted with larger families (the Dutch, Maltese, Turks and, more recently, the Lebanese and Vietnamese) but even so the absolute size of their families fell.<sup>2</sup> And, though Aboriginal women were still having larger families than others, their family size was also declining. Overall it seemed that, irrespective of their social location, most couples in Australia were having broadly similar experiences with family formation.

In the 1980s this trend seemed to be reversing slightly. Based on analysis of the 1981 and 1986 census, Hugo found that some ethnic differences remained and that a few other fertility differentials might be returning. Some groups of poorer women appeared to be having larger families than more well-off women and there was some indication that the downward trend in Aboriginal fertility had stalled.<sup>3</sup>

It has not been easy to use the 1991 census to update Hugo's work. This is because for the first time since 1901 (apart from 1933)<sup>4</sup> the census did not ask a question on 'issue' (the question that asks how many children a woman has ever had). This means that our attempt to carry the story forward is handicapped. We cannot update Hugo's work directly, but we can try to discover if the trends he identified are persisting. This has been done by using the one per cent users' sample file of the 1991 census, selecting from it women aged 20 to 39, and attempting to link them with children (and young adults) labelled as 'offspring'. The method we have used is outlined below and described in more detail in the appendix.

### METHOD

The mean number of offspring for different groups of women has been calculated and the results have been standardised for age. The technique used is direct age standardisation as described by Young.<sup>5</sup> The average number of children per woman in each five-year age group is multiplied by the number of women in each age-group in a standard population. The sum of all the products is then divided by the total number of women in the standard population. (The age distribution of all women aged 20 to 39 in the sub-sample drawn from the one per cent file is used as the standard.) This method is superior to a simple mean number of offspring for all women aged 20 to 39, and for those in particular ethnic, religious or other categories because it controls for any differences in age structure between the various sub-groups of women. For example, only eight per cent of the Greek-born women in the sub-sample were aged between 20 to 24 while 46 per cent were aged 35 to 39. In contrast, 21 per cent of the Vietnamese-born women were aged between 20 and 24 and 25 per cent between 35 to 39. If simple means were used to compare the average numbers of children for each group, the results could well be affected by the different age structures of the two groups rather than by any differences in their underlying experience of family-formation.

We do emphasise that the age-standardised mean numbers of offspring do not indicate completed family size. Even if most mothers and children have been correctly identified by the 'resident-offspring' method used in this paper, the women involved are all passing through their child-bearing years. Their family building is incomplete. The method takes an imperfect snapshot of their situation in 1991; it cannot tell us how many children they will eventually have had by the time they move out of their childbearing years.

This difficulty handicaps the attempt to compare different groups because it is not only age distribution which may vary between them. In one social milieu it may, for example, be customary to have children in one's early twenties. In another, women may not have their first child until their thirties. Yet it is possible that the average completed family size for both could be the same; they might only differ in the timing of their births not in the total number. (In practice, most women who begin childbearing in their thirties usually have fewer children than those who begin in their early twenties, but the possibility exists that they may not.)

Because of possible inter-group differences in the timing of births, the age-standardised mean number of offspring for groups of women aged 20 to 39 should be interpreted with caution. In order to provide an indicator of family size which, as far as possible, controls for possible differences in the timing of births (as well as for the age structure of specific groups) we have, in a number of instances, provided data on the mean number of children present just for women aged 30 to 34. This age group was selected because most women who are going to have children will have started their childbearing by 30 to 34, while very few children with 30 to 34 year-old mothers will be old enough to have left home.

#### ORIGIN AND ETHNICITY

Table 1 shows that age-standardised Aboriginal family size is more than 65 per cent above the average, a larger gap than that identified by Hugo, but the gap between migrant family size and the average is less

marked. Nonetheless, the age-standardised means suggest that women born in non-English-speaking-background (NESB) countries are still having rather more children than the norm, though those born in English-speaking-background (ESB) countries now have fewer children than the overall average. In the data for women aged 30 to 34 the NESB women no longer show a higher figure. It is possible that the larger age-standardised mean is due to a greater tendency of NESB children with older mothers (mothers aged 35 to 39) to live with their parents. Borrie's analysis of married women in the 1966 census showed that, in general, Australian-born wives had rather more children than immigrants, but that some groups of NESB wives (for example the Maltese and the Dutch) had considerably larger families.<sup>6</sup> However, many of the immigrant groups which are significant today were not well-established in 1966 and this weakens comparisons with the contemporary data on family size by birthplace.

Table 2 provides more detail by country, or region, of origin for 1991. As with Hugo's analysis of the 1986 census, women born in Lebanon stand out as having larger families than usual. But a number of Asian-birthplace groupings are shown as having average or below average numbers of children (China, the Philippines, Vietnam). In contrast, Hugo's fuller information has China and the Philippines well above average and Vietnam slightly above. This suggests that the resident-offspring technique is affected by missing children either still overseas (or, possibly, by the small sample sizes in some of the groups in the sub-sample).

Table 1: Mean age-standardised family size of women (1991), total fertility rates (1986/88), and mean family size of women aged 30-34 (1991), by origin and migrant background

	1991 (women in sub- sample aged 20-39)	% difference from 1991 mean	1991 (women in sub- sample aged 30-34)	1986 <sup>a</sup> (all women)	% difference from 1986 mean
Aboriginal	2.07	+65.6	2.44	2.6	+35.4
Torres Strait Islander	1.27	+1.6	* <sup>b</sup>		
Other (ie non-ATSI)	1.23		1.66		
Overseas-born: ESB	1.17	-6.4	1.56	1.94	+1.04
Overseas-born: NESB	1.29	+3.2	1.64	2.13	+10.9
Total (mean)	1.25			1.92	

<sup>a</sup> These data are taken from Hugo (1993). In this instance they are total fertility rates, drawn from the 1986 census, except for the Aboriginal data which are 1988 data, applying only to Aboriginal women in South Australia.

<sup>b</sup> \* Numbers too small for analysis

**Table 2: Mean age-standardised family size of women aged 20-39 by birthplace, sub-sample 1991 census<sup>a</sup>**

	Means	Number of women		Means	Number of women
Australia	1.26	18,323	USA	1.05	81
UK and Ireland	1.20	1,742	South Africa	1.15	81
New Zealand	1.16	617	Sri Lanka	1.05	73
Italy	1.43	189	Oceania & Antarctica <sup>a,b</sup>	1.41	166
'Yugoslavia'	1.37	242	Southern Europe*	1.17	83
Greece	1.52	101	Western Europe*	1.18	76
Vietnam	1.26	233	Northern Europe*	0.90	43
Germany (Federal Republic)	1.31	99	Eastern Europe*	1.13	51
Netherlands	1.32	87	USSR & Baltic States	1.25	23
China (excluding Taiwan)	0.70	127	Middle East & North Africa*	1.53	202
Philippines	1.14	219	South East Asia*	1.16	239
Malaysia	0.96	159	North East Asia*	0.87	118
Lebanon	2.54	143	Southern Asia *	1.09	26
Poland	1.02	86	Northern America*	0.63	44
India	1.07	110	South & Central America & the Caribbean*	1.26	141
Hong Kong	0.83	128	Africa (excluding North Africa)*	1.13	107
Malta	1.63	66			

<sup>a</sup> Inadequately described and not stated, 84

<sup>b</sup> \* Not elsewhere specified

### INCOME

Hugo's most striking finding did not concern origin or migrant background, but annual family income. He divided women into three income groups for the 1981 and 1986 censuses and discovered that, while family size had fallen in all income groups between 1981 and the 1986, it had fallen less steeply in low-income families (see Table 3). The result of this was that the difference in family size between the high- and low-income groups had increased. The income categories which he used for the two census were not exactly the same (less than \$12,000, \$12,000 to \$26,000, and over \$26,000 for 1981 and less than \$15,000, \$15,000 to \$40,000 and over \$40,000 for 1986). Because the census

only asks respondents to specify an income category, rather than to name a precise figure, and because of the effects of inflation, it is difficult to get exactly comparable income categories. Table 3 attempts to facilitate comparison by converting these income categories to 1991 dollars.

Our analysis is not directly comparable with Hugo's. There was little point in trying to replicate his income categories as there were in fact two sets, and we wanted to achieve a rather finer level of detail by examining four income categories rather than three. (The breaks were set partly by the census categories and partly by the need to have substantial numbers in each of the groups.)

With income divided into four groups, not three, the family size of the lowest-income group is identical with that of the highest-income group. However, compared with Hugo's analysis, the income of the lowest-income group is very low and it may have included many unmarried students and other young single

**Table 3: Mean number of children born to women aged 15 and over by annual family income, 1981 and 1986 (income categories in 1991 dollars)**

	1981	1986
Low income (< \$25,423 in 1981, < \$21,398 in 1986)	2.18	2.05
Middle income (\$24,425-\$55,085 in 1981, \$21,399-\$57,061 in 1986)	1.95	1.76
High income (\$55,087+ in 1981, \$57,063+ in 1986)	1.77	1.55

Source: Hugo (1993: 4)

**Table 4: Mean age-standardised family size of women aged 20-39 (and mean family size for women aged 30-34) by family or individual annual income, sub-sample 1991 census**

	Mean (for women in sub- sample aged 20-39)	Number of women (20-39)	Mean (for women in sub- sample aged 30-34)	Number of women (30-34)
Low income (less than \$16,000 per annum)	1.09	4,989	1.47	983
Low-middle income (between \$16,000 and \$30,000 per annum)	1.36	7,295	1.86	1,795
High-middle income (between \$30,001 and \$50,000 per annum)	1.32	6,640	1.75	2,047
High income (over \$50,000 per annum)	1.09	4,625	1.45	1,431

Family income is used for women who are person 1 or spouse and individual income for all others: there were no data for income for 760 women in the sub-sample.

people. The family size of women in the second-lowest group is still 17.4 per cent higher than that of the highest income group (see Table 4). When the analysis focuses on women aged 30 to 34 the general pattern shown by the age-standardised means remains, but the difference between the family size of the second-lowest income group and the high income group is even sharper. Average family size for the low-middle-income group is 28.3 per cent higher among women aged 30 to 34 than that of the high-income group.

Hugo also found a clear trend for a larger proportion of women in higher-income families to remain childless than women in lower-income groups. This trend is less clear in our data. Nonetheless, Table 5 does show that better-off women aged 25 to 29 are very much more likely to be childless than women in less affluent families, but the trend amongst women in their thirties is less marked. (Reasons for a weaker association between larger families and lower incomes than Hugo found may include differences in the methods used to analyse the data, as well as the fact that a high proportion of younger women in the low-income group in 1991 are childless.)

Borrie does not present data on family size by income for

1966 but, if the occupation of the husband can be taken as an indicator of socio-economic status, his data show that the wives of 'upper professionals' had relatively large families (2.93 children) compared to wives of clerks and shop assistants (2.66). The only groups with larger families were wives of farmers and wives of manual workers.<sup>7</sup> The 1981, 1986 and 1991 data suggest a sharp change as far as the better-off groups is concerned.

We were able to explore other socio-economic variables in the 1991 data: religion, education and labour-force status. With the exception of the high fertility of Islamic women and the relatively low fertility of Jewish women, the data on religion show little variation. Borrie found that, in 1966, married women aged 35 to 39 who were described as Catholic had an average of 3.18

**Table 5: Percentage of women with no children present, by age and income (either family or individual income), sub-sample 1991 census**

Age group	<\$16,000	\$16,000- \$30,000	\$30,001- \$50,000	>\$50,000	Total
20-24	85.5	78.6	74.6	84.1	81.0
25-29	47.3	46.4	44.8	65.5	49.7
30-34	29.1	21.8	21.2	28.3	24.2
35-39	23.0	16.4	14.7	13.1	15.8
total 20-39	55.6	42.6	32.7	36.3	41.3

children, compared to 2.22 for Jews and 2.91 for all religions.<sup>8</sup> Table 6 shows that, in the 1991 sub-sample, women described as Catholic are almost indistinguishable from other Christian women, a pattern which holds for the women aged 30 to 34 as well as in the age-standardised means for women aged 20 to 39.

**Table 6: Mean age-standardised family size of women aged 20-39 (and mean family size for women aged 30-34) by religion, sub-sample 1991 census**

	Means (ages 20-39)	Numbers of women (20-39)	Means (ages 30-34)	Numbers of women (30-34)
Anglican	1.25	5,589	1.67	1477
Other Protestant	1.29	4,779	1.75	1302
Catholic	1.27	6,937	1.73	1817
Orthodox	1.24	711	1.72	158
Jewish	1.09	70	1.21	23
Islamic	2.04	256	2.62	66
Buddhist	1.15	245	1.46	67
Other	1.10	166	1.46	48
None	1.14	5,556	1.50	1495

#### EDUCATION AND LABOUR-FORCE STATUS

With a few, numerically small, exceptions religion does not appear to be an important variable but the situation is different with education and labour-force status. Borrie found a 'U-shaped' association between wives' education and family size. (In 1966, highly-educated women had more children than women who had finished their education with Matric or Intermediate, but those who had not finish secondary school had the largest number of all.)<sup>9</sup> In contrast, in 1991, family size diminishes rapidly with increasing educational qualifications, and the most highly- educated women now have the smallest families; Table 7 shows that women with higher degrees have families less than

half the size of women with no post-school qualifications. Age obviously affects the level of higher education individuals may have attained, especially during their early twenties; for example, only two women in the sub-sample who were aged 20 to 24 had higher degrees. The data for women aged 30 to 34 are therefore especially important for this variable, and Table 7 shows that the association between higher education and small family size is just as strong for this group as it is for the sub-sample as a whole.

Table 8 shows that being a wage or salary earner, or being unemployed but looking for full-time work, are also associated with small families, both for the sub-sample as a whole and for women aged 30 to 34. In contrast, women who are not in the work force have

**Table 7: Mean age-standardised family size of women aged 20-39 (and mean family size for women aged 30-34) by highest post-school qualification attained, sub-sample 1991 census**

	Means (aged 20-39)	Number of women (aged 20-39)	Means (aged 30-34)	Number of women (aged 30-34)
higher degree	0.60	152	0.72	57
post-graduate diploma	0.94	473	1.33	160
bachelor degree	0.78	2,009	1.09	592
under-graduate diploma	1.06	1,692	1.49	527
associate diploma	0.93	290	1.33	72
skilled vocational	1.12	761	1.64	176
basic vocational	1.13	1,603	1.52	455
no post-school qualification	1.34	15,105	1.84	3,836
level inadequately described (id)	0.98	224	1.49	59
level not stated (ns)	1.23	2,000	1.61	519
all women with qualifications	0.97	6,980	1.35	2,039
all women without qualifications(or id or ns)	1.35	17,329	1.81	4,414

the largest families (apart from the group who did not respond to the question on the labour force). This trend was also observed by Borrie: he reports that wives aged 35 to 39 who were not in the work force had an average of 3.11 children while those in 'career' occupations had fewer than 2.5 (he includes clerical and sales workers in the 'career' group, along with professionals and administrators).<sup>10</sup> Analysis of the 1986 census data shows that there was little association between family size and labour-force status for women aged 45 and over, most of whom would have had older children, but a strong association for younger women.<sup>11</sup>

The U-shaped association between women's education and family size in the mid 1960s appears to have changed to a straight-line association in the early 1990s. A possible reason for this change might be that most women with higher education today are using their skills in the workforce. In the 1960s some highly-educated women could marry highly-educated men and retire from the workforce to raise a family. In contrast, more of their less well-educated contemporaries might have managed to achieve middle-class living standards for themselves and their families by remaining in the workforce. Poorly-educated women may not have aspired to reach the standard of living of the group with moderate education and they, like the highly-educated women, could have found that their husband's wage was adequate for the family's needs. Today, however, two incomes are necessary for a wider range of households.

Table 8 also shows a relatively high family size for women in 1991 who are employers or who are self-employed. This is curious. It may reflect women's involvement in family businesses or even a trend for women with larger families to organise their

own home-based employment. Working from home or in a family business may be easier to combine with child care than other forms of employment.

The data on qualifications, however, provide the strongest evidence for the hypothesis that a serious commitment to obtaining qualifications and using them in the work place is hard to combine with childrearing. Table 9 presents data on the percentage of women childless who do not have post-school qualifications compared with those who do by age and income. The tendency to avoid or postpone childbearing is particularly marked among women in the high-income group who have post-school qualifications.

An economic explanation can be produced for the low fertility of educated women. In 1988 Beggs and Chapman estimated that if a woman of average education left the workforce to bring up a child she would lose (in 1988 dollars) about \$336,000 in the salary she would otherwise have earned. Second and third children were associated with further losses of around \$50,000 and \$35,000 respectively. Losses for women with below-average education were rather less (\$282,000 for the first child and an extra \$30,000 and \$20,000 for the second and third) but higher for a woman with above-average education. A woman with 16 years of education (that is, a woman with at least three years of post-school education) would lose \$439,000 for the first child, an extra \$98,000 for the second, and an extra \$78,000 for the third. Beggs and Chapman report that, if we were to assume that the lost income were invested at seven per cent per annum, the highly-educated woman would lose two million dollars for the first child, \$400,000 for the second and \$250,000 for the third: \$2,650,000 for a three child family.<sup>12</sup>

**Table 8: Mean age-standardised family size of women aged 20-39 (and mean family size for women aged 30-34) by labour-force status, sub-sample 1991 census**

	Means (aged 20-39)	Number of women (aged 20-39)	Means (aged 30-34)	Number of women (aged 30-34)
employer	1.54	596	2.09	207
self-employed	1.48	962	1.99	341
wage or salary earner	0.91	13,314	1.24	3,139
unemployed, seeking full-time work	0.93	1,210	1.27	251
unemployed, seeking part-time work	1.48	594	1.83	163
unpaid helper	1.69	165	2.12	51
not in the labour force	1.78	6,959	2.18	2,129
not stated	1.86	509	2.15	172

**Table 9: Percentage of women with no children present by age and income (either family or individual income), high income groups and all income groups combined, sub-sample 1991 census<sup>a</sup>**

age group	women without post-school qualifications <sup>b</sup>		women with post-school qualifications	
	> \$50,000	all income groups	> \$50,000	all income groups
20-24	79.0	77.6	94.4	92.1
25-29	60.5	42.9	71.6	66.5
30-34	24.0	20.0	32.7	33.3
35-39	10.8	13.7	15.9	20.4
Total (20-39, no children) (%)	33.5	38.28	39.6	48.8
Total (20-39, no children) number of women	849	16,699	828	6,850

<sup>a</sup> There was no income data on 630 women without post-school qualifications and none on 130 women with qualifications

<sup>b</sup> Includes qualifications inadequately described and not stated.

This is intriguing statistical exercise. But most highly-educated women do not now leave the work-force permanently with the birth of their first child. Rather, they begin the long struggle of trying to reconcile home and work. This, of course, is a burden that less well-educated mothers in the paid work force also share. However, women who are committed not just to earning a wage, but to making a contribution in a career, may have less room to compromise. One avenue that is open to them is to severely limit child-bearing.

#### CONCLUSION

Analysis of fertility in the 1991 census based on the 'resident-offspring' technique shows few strong variations. Income does matter, as does labour-force status, and a handful of ethnic and religious groups do stand out but, in most cases, the method does not show marked differences. This may be because the differences do not exist or it may be because the method is not capable of uncovering them. A fuller answer to the question of whether these particular variables affect contemporary fertility must await better data in the future.

But two variables explored in this present analysis do stand out: labour-force status and education. In 1991 women who worked as wage or salary earners had families 51 per cent smaller than women who were not in the labour force and the family size of women with post-school qualifications was 28 per cent smaller than that of women with none (and 56 per cent smaller for women with

higher degrees). Labour-force status in many cases fluctuates and, for many women, it may also be relatively easy to change. But educational status does not fluctuate and it is not easy to change. On the basis of the 1986 census data on fertility and income Hugo warned of the danger of greater economic and social polarisation among the children who would become young adults in the late 1990s and early 2000s. While our data on income give only qualified support to his findings, the data on women's education show a clear trend; women who achieve in the education system have much smaller families than those who do not. This pattern did not exist in the mid 1960s. It is new and it casts an uncertain shadow into the future.

#### APPENDIX

We have included all of the women aged 20 to 39 from the sample file in this analysis where the person's 'motherhood status' can be inferred from the question on relationship to the reference person. Women identified as either female person 1 (the reference person) or female spouse of person 1 are assumed to be the mothers of people named as 'offspring' (including dependent offspring, other offspring, offspring present, or offspring temporarily absent). In most cases this assumption will be justified but, in some cases, the offspring will be step-children and consequently the number of children per women will be inflated.

Against this, however, the method misses children of non-custodial mothers, children

away at boarding school or college, or living with relatives for more than six months of the year (and therefore not coded as usually resident with their parents), as well as those who have left home for good. (The converse of this is that children usually resident with person 1 and his or her spouse but who are not their biological or social offspring, for example nephews, nieces, brothers, foster children and so on, will not be coded as offspring and therefore are excluded from the analysis. If there is a greater tendency for children from some groups, for example some immigrant groups, to live with relatives other than their parents this will introduce distortions, as will a differential tendency to attend boarding school.) A child will only be included in the numerator if he or she usually lives with his or her mother or step-mother. Others will be missed, including children who have died, as well as children of recent migrants who have not yet joined their mothers in Australia.

The analysis also misses older children living at home with their mothers but who have themselves acquired a partner and/or a child or children of their own. Young people who have started to form families of their own are no longer classified as 'offspring' by the census, even if they continue to live with their parents. They are coded as part of a second (or third) family living within the same household as the primary family provided by their parents (or parent). If they are women aged 20 to 39 they will appear in the denominator used in this analysis and, if they have children, these children will be in numerator. But any daughters aged 20 to 39 who have partners and/or children and who live with mothers who are themselves aged 20 to 39 will not appear as the offspring of these mothers.

Women aged 20 to 39 who live with their parents (or parent) and have no family attachments of their own are coded as offspring. Like the women in group households and lone households they, by definition, do not have children living with them.<sup>13</sup> Their motherhood status — zero offspring — therefore is known and this means that they can be included in the analysis. There is a slight chance that some of these older offspring could appear in both the numerator and the denominator, provided their mothers were aged also 20 to 39. Most, however, will simply be in the denominator.

The analysis is restricted to women aged 20 to 39 to minimise the chance of complications such as the possibility outlined above, and to minimise the chance of serious distortions being introduced by a differential tendency of children to leave home.<sup>14</sup> While some children will have left home before their mother's fortieth birthday, in principle their numbers should be few: an Australian Bureau of Statistics (ABS) survey reports that, in 1992, almost 80 per cent of children aged 24 and under and who lived with natural parents, step parents or guardians, lived with both their natural parents, and 96.3 per cent lived with their natural mother.<sup>15</sup>

Women aged 20 to 39 who are classified as the sister or other relative of person 1 are excluded from the denominator because their motherhood status is not known. The sample tape also produced five women aged 20 to 39 whose status was coded as 'mother' of person 1 or his or her spouse. They too have been excluded. This may seem odd, but these women are known only to be the mother of person 1 or his or her spouse; we have no information about their other children, if any. Similarly, women classified as visitors or as non-family members and those for whom the question on relationship in the household was not applicable are also excluded. Overall, 9.45 per cent of women aged 20 to 39 have been excluded and the remaining 90.55 per cent constitute the sub-sample of 24,309 women used in the analysis.

The 1992 family study conducted by the ABS can provide some indication of the adequacy of this method. Limiting the analysis to women aged 39 or younger should not mean that large numbers of mothers are missed; the survey found that over the last 20 years women aged 40 or more only accounted for around one per cent of annual births (1.4 per cent in 1991).<sup>16</sup>

But the technique employed here is obviously second-best and it is clear that many children have been missed. For example the overall mean number of offspring identified for all the women in the sub-sample is 1.245. This figure is low: Table 10 shows that, in every age-group category enumerated in the 1986 census, the mean number of children was substantially higher than our estimates. (The difference cannot be due to a sudden drop in fertility because the annual total fertility rates set out in Table 11 show that there was little decline in fertility between 1986 and 1991.)



The usefulness of the analysis therefore rests on the comparative picture it provides of differences in family size between groups, rather than any impression of absolute numbers.

**Table 10: Mean family size by age of woman, 1986 census<sup>a</sup> and 1991 sub-sample**

	1986 census	1991 sub-sample
20-24	0.38	0.28
25-29	1.10	0.93
30-34	1.85	1.67
35-39	2.24	1.98

<sup>a</sup> Source: *Fertility in Australia*, ABS, 1992, p. 15

**Table 11: Total fertility rates,<sup>a</sup> 1921 to 1993<sup>b</sup>**

1921	3.109
1933	2.159
1954	3.192
1961	3.539
1966	2.889
1971	2.945
1976	2.061
1981	1.938
1986	1.870
1991	1.855
1993	1.863

<sup>a</sup> The total fertility rate can be thought of as the number of children a woman would bear over the course of life if she were to experience childbearing at the rates shown by the different age groups in the year under observation.

<sup>b</sup> Figures from 1921 to 1961 are taken from Borrie, p. 46, and those for 1966 to 1993 from *Births, Australia, 1993*, ABS (Catalogue No. 3301.0), p. 6

#### Acknowledgments

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#### References

- <sup>1</sup> See L. Day, 'Family size and fertility', in A. F. Davies and S. Encel (eds), *Australian Society*, Cheshire, Melbourne, 1970, p. 22.
- <sup>2</sup> C. Young, 'Changes in the demographic behaviour of migrants in Australia and the transition between generations', *Population Studies*, vol. 45, no. 1991, pp. 69-76
- <sup>3</sup> G. Hugo, 'Recent trends in fertility differentials in Australia', *People and Place*, vol. 1, no. 2, 1993, pp. 1-5
- <sup>4</sup> W. D. Borrie, *First Report of the National Population Inquiry*, The Government Printer of Australia, Canberra, 1975, p. 83
- <sup>5</sup> The technique is described in detail in Christabel Young's analysis of age-related labour-force participation rates. See 'Do immigrants have higher or lower labour-force participation rates than the Australian-born', *People and Place*, vol. 3, no. 1, 1995, p. 38.
- <sup>6</sup> Borrie, op. cit., p. 53
- <sup>7</sup> *ibid.*, p. 57
- <sup>8</sup> *ibid.*, p. 55
- <sup>9</sup> *ibid.*, p. 57
- <sup>10</sup> *ibid.*, p. 58
- <sup>11</sup> *Fertility in Australia*, Australian Bureau of Statistics (ABS), Canberra, 1992 (Catalogue no. 2514.0), p. 7
- <sup>12</sup> J. Beggs and B. Chapman, *The Foregone Earnings from Child-Rearing in Australia*, Discussion Paper Number 190, Centre for Economic Policy Research, Australian National University, Canberra, 1988, pp. 40-1
- <sup>13</sup> See definitions given in the *1991 Census Dictionary*, ABS, Canberra, 1991 (Catalogue No. 2901.0).
- <sup>14</sup> Young found that children of mothers born in Southern Europe left home later than children of other mothers. See *Leaving Home in Australia: the Trend Towards Independence*, Department of Demography, Australian National University, Canberra, 1987, pp. 105-9.
- <sup>15</sup> *Focus on Families: Demographics and Family Formation*, ABS, Canberra, 1994 (Catalogue No. 4420.0), pp. 2, 16
- <sup>16</sup> *ibid.*, pp. 2, 13