

## THE FERTILITY OF MIGRANTS TO AND WITHIN NORTH AMERICA

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Several recent studies have attempted to investigate the relation between migration and fertility with data from the 1960 United States census. One of these studies was a chapter in the book by Kiser, Grabill and Campbell.<sup>1</sup> The primary concern of that chapter was with two related topics: (1) the level of fertility of persons living outside the region of their birth vis-à-vis that of persons living in their region of birth (i.e., non-migrants), and (2) the relative influence of region of origin (birth) and region of destination on the fertility of migrants. This paper seeks to extend some of these findings for the United States with data on fertility of interregional migrants in Canada and migrants between Canada and the United States, and will also investigate the influence of destination factors by comparing the fertility of the foreign-born populations of the United States and Canada, controlling for age of migrants, country of origin and urban residence in country of destination.

Generalizing statements of the relation between migration and fertility have not been very firm, for the relation seems to vary according to the contexts in which migration takes place. Consider, for instance, the case of rural-to-urban migrants, who as a group have had exposure to fertility norms that have

traditionally been quite different. One might hypothesize that such migrants would have higher fertility norms than persons of similar age and current socioeconomic status, but who were exposed only to urban levels of fertility. Or conversely, such migrants may have lower fertility than urban natives either because the migrants are positively selected and are highly achievement oriented or are negatively selected and have problems of adjusting to urban life and forming stable family relations. Whether rural-to-urban migrants have higher or lower fertility than urban natives—and both situations have been found to exist—probably depends in large part on the basic reasons for moving and conditions existing in the areas of destination.<sup>2</sup> This example can be extended to movers between high- and low-fertility areas generally and not just rural and urban areas.

On the other hand, migration need not represent exposure to different fertility norms, as is probably the case with a good deal of internal migration in economically developed countries where intermetropolitan migration is great. When this is the case, one may still be interested in the act of migration (particularly its frequency) and the relation to fertility level. In developed countries one can visualize how the presence or arrival of children might in some instances be a stimulus toward short-distance movement.<sup>3</sup> But for long-distance movement—which is the concern in this paper—children are most easily viewed by the researcher as an impediment to migration. Yet the strength of the relation between fertility and long-distance movement is difficult to anticipate, for it is not clear that moving costs increase proportionately with number of children. That is, the marginal costs (both monetary and non-monetary) associated with additional children may be small or even zero. Little information or theoretical attention has been directed toward such issues.

Among the usual problems in empirical research is the fact that not only can migration be defined in a variety of ways using different geographic units and periods of time, but one almost never has a measure of the level of migration to relate

to the level of fertility. Although the latter can be obtained simply by asking women, "How many babies have you had?", it is obviously not feasible to obtain the level of migration analogously by asking, "How many times have you migrated?" Even if the definition of migration was generally agreed upon, one would probably want to know more than simply level of migration. More specifically, one might want to know the pattern of moves between areas of different type. Nor do the usual kinds of data give precise indication of the timing of events (like migration, marriage and the birth of children), and because one cannot isolate temporal priority, he is limited in deducing causality. Another limiting factor is the frequent lack of effective controls for socioeconomic status and other characteristics. These shortcomings have been carefully pointed out by Macisco and others.<sup>4</sup>

This paper stresses comparative aspects and focuses on long-distance movement, defined in terms of place of birth and place of current residence, with fertility defined cumulatively (children born per 1,000 women ever married). Four sections will follow. First, the United States data will be reviewed on fertility of women in various interregional migration streams vis-à-vis fertility of noninterregional migrants in the region of birth (origin) and region of destination. Another section will employ the same kinds of data for Canada. A third section will examine the fertility of migrants between Canada and the United States, and will compare the fertility of selected groups of foreign-born women according to whether they were living in Canada or the United States. A final section will be a summary and conclusion.

#### FERTILITY OF UNITED STATES INTERREGIONAL MIGRANTS

The basic data with which Kiser worked are presented in Table 1, although data are shown only for whites and only the age group "50 and over" is included. For the four broad census-defined regions in the United States, this table shows the number of children born per 1,000 ever-married native white

women according to age and region of residence in 1960 and their region of birth.

With these data Kiser attempted to investigate first the relative influence of region of origin and region of destination:<sup>5</sup>

The present data do suggest . . . that the relative influence of origin and destination may vary according to circumstances. Thus the data . . . indicate that the average number of children of white or non-white ever-married women migrating from the South to the Northeast (born in the South—residing in the Northeast) tended to be more similar to the rates for those born and residing in the Northeast than to those born and residing in the South. This may seem to suggest a stronger influence of the region of destination than the region of origin. However, there is a maxim that “it is a poor rule that doesn’t work both ways.” Thus . . . white and nonwhite women migrating from the Northeast to the South tended to have families more nearly the size of those in the region of origin (born and living in the Northeast) than of those in the region of destination (born and living in the South).

Perhaps the only “rule” here is that migrants tend to have families closer in size to the low-fertility region, regardless of whether the low-fertility region is the origin or destination.

Actually, United States interregional migrants (as defined here) more often than not have fertility lower than either region of origin or region of destination. In Kiser’s words:<sup>6</sup>

Although comparisons of the type considered above yield only negative results on the question of relative influence of region of origin and region of destination, they do serve to point up the relatively low fertility of the migrants. Thus, in the 83 comparisons for white women, in only six cases were the rates for the migrants higher than those for both the region of origin and region of destination. In 26 cases the rates for migrants were in intermediate position, and in 51 cases they were lower than those for both region of origin and region of destination.

These remarks refer to white women at age groups between 15 and 49, and similar conclusions hold for nonwhites. Kiser could have strengthened this argument somewhat if he had ex-

cluded women under 25 because their fertility may not have a very high correlation with completed fertility. If only women 25 and over and the category "50 and over" shown in Table 1 are considered, it is seen that, for 72 possible comparisons, in

TABLE I. CHILDREN BORN PER 1,000 NATIVE U.S. WHITE WOMEN EVER MARRIED, BY REGION OF BIRTH AND AGE AND REGION OF RESIDENCE IN 1960

<i>Age and Region of Residence in 1960</i>	<i>Region of Birth</i>			
	<i>Northeast</i>	<i>North Central</i>	<i>South</i>	<i>West</i>
<b>Northeast</b>				
15-19	736	697	754	*
20-24	1,227	1,177	1,282	1,662
25-29	2,006	1,912	2,070	2,012
30-34	2,412	2,460	2,507	2,530
35-39	2,477	2,593	2,417	2,576
40-44	2,359	2,358	2,298	2,353
45-49	2,181	2,081	2,148	2,161
50+	2,334	2,004	2,292	1,745
<b>North Central</b>				
15-19	674	708	760	696
20-24	1,212	1,404	1,516	1,432
25-29	2,070	2,305	2,285	2,190
30-34	2,565	2,740	2,681	2,764
35-39	2,614	2,776	2,729	2,814
40-44	2,374	2,629	2,760	2,561
45-49	2,141	2,437	2,577	2,346
50+	2,335	2,647	3,140	2,417
<b>South</b>				
15-19	625	611	717	717
20-24	1,134	1,298	1,403	1,299
25-29	1,940	2,069	2,195	2,194
30-34	2,383	2,481	2,576	2,677
35-39	2,479	2,554	2,702	2,628
40-44	2,215	2,300	2,695	2,404
45-49	1,857	2,056	2,646	2,204
50+	1,869	2,310	3,354	2,284
<b>West</b>				
15-19	625	703	798	754
20-24	1,196	1,406	1,588	1,490
25-29	1,897	2,209	2,356	2,408
30-34	2,334	2,544	2,603	2,778
35-39	2,301	2,501	2,612	2,824
40-44	2,167	2,290	2,461	2,619
45-49	1,838	2,073	2,323	2,374
50+	1,915	2,297	2,852	2,466

\* Rate not shown for base less than 1,000.

Source: U.S. Bureau of the Census, 1960 Census of Population, *Women by Number of Children Ever Born*, Table 12.

only one instance do migrant white women have higher fertility than nonmigrant white women in both the region of origin and region of destination; in 23 cases fertility was in an intermediate position; and in 48 cases migrants' fertility was lower than that of nonmigrants in both region of origin and region of destination.

For the United States, then, the fertility of migrants is generally lower than that of nonmigrants in both region of origin and region of destination. In fact, for ever-married white women age 25 and over the chances were two to one that interregional migrants had lower fertility than nonmigrant women of the same age in both region of origin and region of destination. The question may now be asked: Is the same, equally clear pattern to be found in Canada, using the same kinds of data and measures? Finding essentially the same pattern in Canada would strengthen the above conclusions first reached by Kiser and give credence to their generality. Furthermore, data may also be examined for migrants between the two countries and their fertility patterns compared with those of internal migrants.

#### THE FERTILITY OF CANADIAN INTERREGIONAL MIGRANTS

For five "regions" the 1961 census of Canada tabulated province of birth for ever-married native-born women according to age and number of children ever born. The five "regions" are (1) the province of Ontario, (2) the province of Quebec, (3) the province of British Columbia, (4) the Atlantic Provinces (consisting of Newfoundland, Prince Edward Island, Nova Scotia and New Brunswick), and (5) the Prairie Provinces (consisting of Manitoba, Saskatchewan and Alberta). The basic data that are available are shown in Table 2, which cross-classifies these five "regions" of residence in 1961 with the ten provinces of birth to show age and number of children born to ever-married women. Numbers whose base (women ever married) is less than 250 are indicated; because this base is not given in the census tables, it is not possible to compress the data

in Table 2 to show five regions of birth and five regions of residence in 1961.

Obviously quite a few numbers in Table 2 are not reliably estimated, including many that are not specifically designated as being unreliable. But the fertility of migrants to and from selected areas can still be compared with the fertility of non-migrants in those areas. Twenty-four origin-destination combinations lend themselves to analysis. These are streams in which no more than four of the nine age groups had a base of less than 250.<sup>7</sup> Of these 216 individual cases, 18 did, however, have a base of less than 250 and were excluded, leaving 198 comparisons. The results, along with those for the United States, are as follows:

<i>Fertility of migrants</i>	<i>Canada</i>		<i>United States (whites only)</i>	
	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>
Lower than either region of origin or region of destination	112	57	48	67
Intermediate	81	41	23	32
Higher than either region of origin or region of destination	5	2	1	1
Total	198	100	72	100

Patterns are similar in the two countries in that the fertility of long-distance migrants is more often than not lower than that of nonmigrants in both region of origin and region of destination. The two countries differ in that this characteristic appears more pronounced in the United States than in Canada. In the United States, in 67 per cent of the comparisons migrants had fertility lower than nonmigrants in both region of origin and region of destination, compared to only 57 per cent in Canada.

Finding in Canada a slightly higher percentage of internal migrants with fertility intermediate between area of origin and area of destination seems not unreasonable in light of Canada's greater regional differences in fertility. In Table 2, note that

TABLE 2. CHILDREN BORN PER 1,000 CANADIAN NATIVE-BORN WOMEN EVER MARRIED, BY PROVINCE OF BIRTH AND AGE AND PROVINCE OR REGION OF RESIDENCE IN 1961

Age and Residence in 1961	Province of Birth									
	Ontario	Quebec	B.C.	Nfld.	P.E.I.	N.S.	N.B.	Man.	Sask.	Alta.
<b>Ontario Province</b>										
25-29	2,216	2,250	1,770	2,167	1,961	2,214	2,196	2,058	2,008	1,917
30-34	2,714	2,872	2,213	2,353	2,452	2,625	2,648	2,571	2,585	2,496
35-39	2,896	3,108	2,457	2,637	2,547	2,964	2,858	2,623	2,741	2,676
40-44	2,868	3,228	2,537	2,918	3,211	2,759	2,821	2,573	2,547	2,416
45-49	2,677	3,174	2,390	2,475	2,519	2,548	2,490	2,364	2,518	2,134
50-54	2,599	3,119	2,208	2,973	3,023*	2,806	2,842	2,327	2,584	2,086
55-59	2,704	3,750	1,960*	3,306	2,715*	3,265	2,917	2,924	2,930	2,058*
60-64	2,870	3,949	2,125*	3,964	3,815*	2,786	3,494	2,879	3,100*	2,461*
65+	3,121	4,870	2,545*	4,025	3,743	3,547	3,583	2,995	2,710*	2,056*
<b>Quebec Province</b>										
25-29	2,098	2,242	1,286*	1,637*	1,880*	2,035	2,151	2,075	1,912	1,788*
30-34	2,904	3,068	2,414*	3,522	2,926*	2,635	2,818	2,536	2,642	2,652
35-39	2,995	3,796	2,553*	3,132	2,818*	2,454	3,367	2,443	2,974	2,600
40-44	3,028	4,197	2,575*	3,080*	2,781*	2,660	3,492	2,361	2,716	2,209
45-49	2,875	4,125	2,500*	2,867*	2,545*	2,151	3,149	2,309	2,543	2,372*
50-54	2,786	4,402	1,900*	2,563*	2,461*	2,348	3,429	1,723*	3,037*	1,750*
55-59	3,121	4,886	3,000*	3,088*	1,667*	2,655	4,008	3,200*	2,917*	5,000*
60-64	3,406	5,362	4,750*	3,769*	2,929*	2,827	4,607	3,125*	1,800*	500*
65+	4,030	6,114	2,000*	3,881	4,938*	3,254	4,977	3,972*	3,333*	2,000*
<b>British Columbia</b>										
25-29	2,168	2,142	2,285	2,571*	1,428*	2,166	1,926*	2,239	2,273	2,323
30-34	2,567	2,381	2,740	2,667*	2,556*	2,744	2,357*	2,494	2,683	2,643
35-39	2,721	2,716	2,818	2,663*	3,231*	2,762	2,561*	2,607	2,675	2,808
40-44	2,464	2,191	2,734	1,500*	2,200*	2,467	2,407*	2,399	2,753	2,596
45-49	2,093	2,509	2,335	1,786*	2,769*	2,892	2,362*	2,103	2,565	2,374
50-54	2,244	2,738	2,298	2,182*	2,615*	1,905	1,675*	2,133	2,661	2,375
55-59	2,309	2,129	2,345	1,540*	2,000*	2,000	2,488*	2,459	2,803	2,527
60-64	2,494	2,878	2,542	3,778*	2,706*	2,493	2,634*	2,640	3,000	3,378
65+	2,856	3,288	2,786	2,850*	2,003*	2,772	2,783*	3,102	2,883	3,626



TABLE 2 (CONTINUED)

Atlantic Provinces										
25-29	2,478	2,413	2,350*	2,992	2,534	2,516	2,745	2,077*	2,586*	2,296*
30-34	3,097	3,220	2,550*	3,883	3,529	3,172	3,521	2,711*	3,250*	2,762*
35-39	3,131	4,095	2,750*	4,518	3,792	3,521	3,941	3,081*	2,849*	2,896*
40-44	2,694	3,490	2,364*	4,929	3,868	3,632	4,097	3,913*	3,531*	3,210*
45-49	2,814	4,406	3,182*	4,914	4,148	3,508	4,063	1,706*	2,591*	3,143*
50-54	1,975*	3,795	3,500*	4,645	3,952	3,466	4,273	4,000*	2,000*	3,143*
55-59	2,323*	5,061	1,000*	4,862	4,061	3,704	4,246	1,500*	3,500*	**
60-64	2,266*	5,836	4,000*	5,107	4,844	3,923	4,401	1,667*	**	**
65+	2,870*	6,191	2,833*	5,559	4,156	4,423	4,790	3,286*	3,000*	1,000*
Prairie Provinces										
25-29	2,113	2,057	1,944	2,223*	2,294*	2,303	2,037	2,246	2,350	2,375
30-34	2,669	3,009	2,743	2,589*	2,316*	2,763	2,550	2,802	2,938	2,943
35-39	2,982	3,203	2,862	3,000*	3,154*	3,147	2,780	3,138	3,170	3,214
40-44	2,692	3,565	2,986	3,666*	3,000*	2,476	2,979*	3,138	3,333	3,213
45-49	2,594	3,963	2,528	2,154*	2,000*	2,597	2,145*	2,918	3,272	3,093
50-54	2,751	4,605	2,374	2,800*	2,214*	2,896	3,111*	3,031	3,459	3,178
55-59	2,991	3,753	2,421*	2,800*	3,417*	2,196	3,426*	3,455	3,926	3,843
60-64	2,975	4,515	2,389*	3,000*	5,091*	2,881	2,765*	3,504	4,464	4,722
65+	3,647	5,106	3,097*	2,870*	2,977*	3,207	3,839	4,583	4,683	4,750

\* Base is less than 250.

\*\* No women of this category were brought into the sample.

Source: Dominion Bureau of Statistics, 1961 Census of Canada, *Number of Children Born per 1,000 Women Ever Married*, Table H5.

for the youngest group of women of presumably completed fertility—those aged 40–44 in 1961—the variation in family size was from 2.73 children per ever-married woman born in and living in British Columbia in 1961, to 4.93 children per ever-married woman born in Newfoundland and still living in the Atlantic Provinces in 1961. Among older cohorts even larger differences exist, so that nonmigrant ever-married women in high-fertility provinces (such as Quebec and Newfoundland) had families on the order of twice as large as nonmigrant ever-married women in the low-fertility provinces (such as British Columbia and Ontario). Differences of this magnitude are not evident in the United States data; for the four regions used to define migration in Table 1, the variation in family size for nonmigrant ever-married white women age 40–44 in 1960, was only from 2.36 children per woman born in the Northeast to 2.70 children per woman born in the South. Unfortunately, these kinds of statistics do not exist for areas of the United States smaller than the four regions. From these considerations it is hypothesized that in countries having wide regional differences in family size the fertility of long-distance migrants will more often fall in an intermediate position vis-à-vis area of origin and destination than in countries with small regional differences in fertility.

A good example of this last point is migrants between Ontario and Quebec, which are the most populous provinces and represent considerable differences in average family size. Note in Table 2 that at every age group beyond the age of 30, migrants between these two provinces had intermediate levels of fertility. That is, migrants from Ontario to Quebec had higher fertility than Ontario nonmigrants, but not quite so high as Quebec nonmigrants. Similarly, migrants from Quebec to Ontario had lower fertility than Quebec nonmigrants, but not so low as Ontario nonmigrants. Also, both groups of migrants at each age under 50 had fertility closer to that of Ontario, which had the lower fertility. Although the data are not presented, exactly the same pattern applies when only cities of over 100,000

population are considered (that is, persons who had migrated between the two provinces and were living in cities of over 100,000 population had at each age group past 30 a level of fertility intermediate between that of noninterregional migrants in cities of over 100,000 population in the two provinces, but closer to that of large cities in Ontario). This was, incidentally, one of the few migration streams that permitted such controls for per cent urban.

In light of the preceding considerations, it might seem that a decrease in regional differences in fertility would be accompanied by a decrease in the number of cases in which fertility of migrants was intermediate or higher than in either region of origin or destination. This cannot be directly tested, but regional differences in fertility in Canada have been decreasing and older lifetime migrants account for a disproportionately high percentage of cases where fertility was intermediate between region of origin and region of destination. Whether this cross-sectional pattern will be maintained in the future cannot be predicted. If it does, then future interregional migrants in Canada will less often have intermediate levels of fertility and will more often have fertility lower than either region of origin or region of destination.

Having found that in both countries interregional migrants more often than not had fertility lower than noninterregional migrants, one can ask if migration has the effect of diminishing or reinforcing regional differences in fertility. It is quite possible for migrants to have fertility lower than either region of origin or region of destination yet still reflect the full differential existing in the various regions of the country.

This question is particularly relevant for Canada, where wide regional differentials in fertility have existed. The conclusion from Table 2 is that interregional migrants do not reflect the full range of fertility differentials existing among nonmigrant populations. Consider Ontario and Quebec provinces, where family size differences between nonmigrant women amounted to three children per ever-married woman at ages over 65, de-

creasing to 1.3 children per ever-married woman at ages 40–44. Differences of this magnitude are not reflected by migrants to or from these two provinces. Differences are in fact often not even in the expected direction—that is, higher for migrants to or from Quebec than among comparable migrants in the stream involving Ontario. But because interregional migrants are most likely to be moving between cities, they probably would not be expected to reflect the fertility differentials that exist among all noninterregional migrants. Although one cannot control for urban origins of migrants, one can consider only migrants living in cities in the areas of destination. (These data are not available for the United States but are available for Canada, although they are not presented here.) When this is done, interregional migrants still do not reflect the fertility differences that exist among urban populations that are not interregionally migrant. Overall, migration has the effect of reducing regional differences in fertility.

Another body of data allowing further tests of the preceding sorts of questions is statistics on country of birth of the foreign-born populations of Canada and the United States. With these data the fertility of migrants between the two countries can be compared with that of interregional migrants and noninterregional migrants in the two countries. Inasmuch as interregional migrants in both countries more often than not had fertility lower than in either area of origin or area of destination, one might test the hypothesis that the same pattern applies to migrants between the two countries, indicating that such migrants would have lower fertility than the native-born populations of either country. Also, the fertility of various foreign-born groups in both countries can be compared with other migrant and nonmigrant groups. Specifically, the question can be asked if migrants to Canada and the United States reflect the fertility differential that exists between the native-born populations of the two countries. Because Canada has traditionally had a higher birth rate than the United States, the hypothesis might be that migrants to Canada would have higher fertility

than migrants to the United States; but experience with internal migrants would indicate that the differential would be less than that between the native-born populations.

#### FERTILITY OF THE FOREIGN-BORN POPULATIONS OF THE UNITED STATES AND CANADA

Table 3 shows the number of children born per 1,000 ever-married women by age, country of birth and whether living in the United States or Canada. The countries of birth are the United Kingdom, Italy, Germany, Poland, the USSR and the Scandinavian countries. Table 3 also shows data on women living in the United States but born in Canada and women living in Canada but born in the United States. These are the countries of birth for which data on children per ever-married

TABLE 3. CHILDREN BORN PER 1,000 WOMEN EVER MARRIED, BY AGE, COUNTRY OF BIRTH AND WHETHER RESIDENT IN CANADA OR THE UNITED STATES

Age	<i>Born in U.K.*</i>		<i>Born in Italy</i>		<i>Born in Germany</i>	
	<i>Living in Canada</i>	<i>Living in U.S.</i>	<i>Living in Canada</i>	<i>Living in U.S.</i>	<i>Living in Canada</i>	<i>Living in U.S.</i>
25-34	1,862	2,023	1,790	1,893	1,611	1,613
35-44	2,573	2,249	2,632	2,317	1,953	1,815
45-54	2,217	1,850	3,478	2,554	2,357	1,565
	<i>Born in Poland</i>		<i>Born in USSR</i>		<i>Born in Scandinavia**</i>	
	<i>Living in Canada</i>	<i>Living in U.S.</i>	<i>Living in Canada</i>	<i>Living in U.S.</i>	<i>Living in Canada</i>	<i>Living in U.S.</i>
25-34	2,144	1,946	2,006	2,144	1,932	1,555
35-44	2,335	2,015	2,277	2,011	2,531	2,134
45-54	2,460	1,972	2,535	1,850	2,559	1,743
	<i>Born in Canada</i>		<i>Born in the U.S.</i>		<i>Total Foreign-Born</i>	
	<i>Living in Canada</i>	<i>Living in U.S.</i>	<i>Living in Canada</i>	<i>Living in U.S.†</i>	<i>Living in Canada</i>	<i>Living in U.S.</i>
25-34	2,616	2,159	2,588	2,400	1,924	1,949
35-44	3,340	2,415	3,065	2,586	2,530	2,296
45-54	3,312	2,127	3,037	2,347	2,594	2,226

\* Canadian data exclude Northern Ireland.

\*\* Canadian data include Norway, Sweden, Denmark and Iceland; U.S. data include only Norway and Sweden.

† Whites only.

Source: Dominion Bureau of Statistics, 1961 Census of Canada, *Number of Children Born per 1,000 Women Ever Married*, Tables H5 and H6; United States Bureau of the Census, 1960 Census of Population, *Women by Number of Children Ever Born*, Tables 8 and 9.

woman were presented in both the United States and Canadian censuses. Data are also presented for the total native- and foreign-born populations of the two countries. The data in Table 3 are for the whole countries; Table 4 attempts to control for per cent urban by considering only big cities in the two countries; in Canada "big cities" means cities of over 100,000 population, and for the United States "big cities" refers to urbanized areas, all of which have a central city of at least 50,000 population plus any densely settled urban fringe.

The first hypothesis was that migrants between Canada and the United States would have lower fertility than the native-born population of either. Ever-married women at all three age groups born in Canada but living in the United States did, as predicted, have lower fertility than the native-born population of either country. But the population born in the United States and living in Canada had, at all three age groups, fertility intermediate between the native-born populations of the two countries, and actually closer to the Canadian than the United States level. Thus, the hypothesis applies to migrants from Canada to the United States, but migrants from the United States to Canada had unexpectedly high fertility. These findings apply to the countries as wholes (Table 3) as well as to their large cities (Table 4).

The actual number of children per ever-married woman born in Canada and living in the United States was 2.16 at ages 25-34, 2.42 at ages 35-44, and 2.13 at ages 45-54. The figures for ever-married women born in the United States but living in Canada were 2.59, 3.07, and 3.04.<sup>s</sup> The fertility of Canada-United States migrants is not a great deal different from that of most groups of interregional migrants in the United States; and it is, therefore, lower than for most groups of interregional migrants in Canada. The United States-Canada migrants, however, had fertility higher than was to be found among interregional migrants in the United States and higher even than for many groups of interregional migrants in Canada; only migrants in streams involving Quebec and some of the

TABLE 4. CHILDREN BORN PER 1,000 WOMEN EVER MARRIED, BY AGE, COUNTRY OF BIRTH AND WHETHER RESIDENT IN LARGE CITIES\* IN CANADA OR THE UNITED STATES

Age	<i>Born in U.K.**</i>		<i>Born in Italy</i>		<i>Born in Germany</i>	
	<i>Large Cities in Canada</i>	<i>Large Cities in U.S.</i>	<i>Large Cities in Canada</i>	<i>Large Cities in U.S.</i>	<i>Large Cities in Canada</i>	<i>Large Cities in U.S.</i>
25-34	1,689	1,902	1,748	1,863	1,456	1,543
35-44	2,330	2,170	2,619	2,316	1,736	1,744
45-54	2,029	1,805	3,527	2,529	2,016	1,461
Age	<i>Born in Poland</i>		<i>Born in USSR</i>		<i>Born in Scandinavia**</i>	
	<i>Large Cities in Canada</i>	<i>Large Cities in U.S.</i>	<i>Large Cities in Canada</i>	<i>Large Cities in U.S.</i>	<i>Large Cities in Canada</i>	<i>Large Cities in U.S.</i>
25-34	2,017	1,893	1,852	2,116	1,752	1,379
35-44	2,039	1,999	1,877	1,945	2,261	1,985
45-54	2,111	1,934	1,921	1,768	2,223	1,534
Age	<i>Born in Canada</i>		<i>Born in the U.S.</i>		<i>Total Foreign-Born</i>	
	<i>Large Cities in Canada</i>	<i>Large Cities in U.S.</i>	<i>Large Cities in Canada</i>	<i>Large Cities in U.S.**</i>	<i>Large Cities in Canada</i>	<i>Large Cities in U.S.</i>
25-34	2,236	2,038	2,244	2,255	1,738	1,864
35-44	2,720	2,275	2,610	2,364	2,238	2,180
45-54	2,532	1,987	2,439	2,016	2,256	2,103

\* Refers to Canadian cities of over 100,000 population in 1961, and United States urbanized areas in 1960.

\*\* See notes to Table 3.

Source: See Table 3.

high-fertility Atlantic and Prairie provinces consistently had higher fertility than the United States-Canada migrants. Given this rather unexpected finding, it would be interesting to know more about the United States-born population of Canada.

The other hypothesis was that ever-married women of a given age and country of origin would have higher fertility if living in Canada. Note first the data in Table 3. In every case ever-married women at ages 35-44 and 45-54 had higher fertility if they were living in Canada, as was predicted. However, in all but two cases ever-married women at ages 25-34 had higher fertility if they were living in the United States. The higher fertility of the United States foreign-born population at the youngest age group probably represents simply the earlier age at which those women marry and have children<sup>9</sup> and may or may not result in higher completed fertility. At any rate, for

women over 35 years of age the hypothesis fits the data perfectly for the countries as wholes (Table 3) and fits the data with two exceptions (women 35-44 born in Germany and the USSR) for large cities (Table 4).

In several ways urban background and socioeconomic status could be influencing these findings. First, the study obviously did not control for urban background in country of origin, although it at least partially controlled for urban exposure in country of destination by considering only large cities in Canada and the United States. It is, of course, possible that migrants to the United States had greater urban exposure in their country of origin (and for this reason had lower fertility) than migrants to Canada. Second, it is possible that ever-married women of a given age and country of origin and resident in the United States represent higher socioeconomic status (and therefore lower fertility) than ever-married women of the same age and country of origin, but resident in Canada. This latter possibility could, for example, be the result of the United States resident women having been of higher socioeconomic status upon their arrival in North America or their having experienced greater social mobility after their arrival. These are at least possible factors affecting the above findings and for which it is difficult to control.

Sometimes socioeconomic status is measured in terms of the woman's educational level—which is often preferable when the measure of fertility is in terms of the woman.<sup>10</sup> But it would not be a satisfactory measure in this case because foreign-born women in the United States have lower levels of both education and fertility than do the native-born women.<sup>11</sup> On the basis of education alone the foreign-born would be expected to have higher fertility than the native-born (assuming an inverse relation between education and fertility). An alternative approach for controlling for socioeconomic status would be to limit the fertility measure to women married only once and with husband present, or simply married women with husband present, and to measure socioeconomic status in terms of the



husband's characteristics (occupation or income). This would seem to be the preferable approach in this case, but the information is not available.

What should be particularly emphasized is the fact that in the United States and Canada, the foreign-born have lower fertility than the native-born. In the United States the excess fertility of the native white ever-married women over foreign-born ever-married women amounted to 0.45 child per woman at ages 25-34, 0.29 child at ages 35-44 and 0.12 child at ages 45-54. The differences were greater in Canada, being 0.69, 0.81 and 0.72 child. In both countries fertility differences between the native-born and foreign-born populations were less in big cities than in the entire countries.

Notice that fertility differences between the foreign-born populations of the two countries are less than fertility differences between the native-born populations. This means that migration to the United States and Canada has a slight effect of reducing the fertility differential between the two countries. As was previously noted, interregional migrants in the two countries did not reflect fully the existing regional differences in fertility; therefore, in general, it may be said that long-distance migration is associated with a kind of leveling influence on fertility, so that the fertility of such migrants does not reflect the full range of variation represented by the origins and destinations of migrants.

#### SUMMARY AND CONCLUSION

In this paper "migrant" has been used to refer to a person whose place of birth (region or country) was different from his place of residence at the time of the census (1960 in the United States and 1961 in Canada). Long-distance migrants in the United States and Canada more often than not had fertility lower than nonmigrants in either region of origin or region of destination. However, this characteristic appeared more pronounced in the United States than in Canada, a pattern pre-

sumably associated with the greater regional differences in fertility in Canada.

Migrants from Canada to the United States fitted the general pattern for internal migrants by having fertility lower than the native-born (and in this sense nonmigrant) populations of either country. But migrants from the United States to Canada had intermediate levels of fertility—actually closer to the Canadian than the United States level. The fertility of the United States-Canada migrants was in fact higher than for a great many groups of strictly internal migrants, thus constituting an unexpected finding that was difficult to account for without further information.

When controlled for age, country of origin and residence in large cities, migrants to Canada generally have higher fertility than migrants to the United States. Although the study cannot control for other possible influences, this pattern seems to reflect primarily the fact that Canada has traditionally had a higher birth rate. The foreign-born populations of both countries have lower fertility than the native-born population.

Another interesting finding was that long-distance migrants—whether between regions within a country or between countries—do not reflect the full range of variation in fertility represented by nonmigrant populations. This means that more agreement is found among long-distance migrants as to family size than among nonmigrants. This may be because migrants are of more uniform socioeconomic status than are nonmigrants.

These findings apply only to somewhat special cases. No single relation exists between migration and fertility because of the many kinds of migration, and clearly more work needs to be done on the diffusion of norms (including those involving fertility) resulting from various types of migration under various circumstances.

## REFERENCES

<sup>1</sup> Kiser, C. V., Grabill, W. H. and Campbell, A. A., *TRENDS AND VARIATIONS IN FERTILITY IN THE UNITED STATES*, Cambridge, Harvard University Press, 1968, Chapter 6. For comment on similar data for 1940, see Grabill, W. H., Kiser, C. V. and Whelpton, P. K., *THE FERTILITY OF AMERICAN WOMEN*, New York, John Wiley & Sons, Inc., 1958, pp. 76-79.

<sup>2</sup> A brief discussion and reference to conflicting findings may be found in Myers, G. C. and Morris, E. W., *Migration and Fertility in Puerto Rico*, *Population Studies*, 20, 85-96, July, 1966, especially p. 86.

<sup>3</sup> Kiser refers to "the stimulus that the arrival or impending arrival of a baby gives a young couple to move out of their parents' home into a home of their own, to move out of an apartment into a house, to move from the central city to the suburbs, or simply to find a larger house." The statement is from Kiser, *et al.*, *op. cit.*, p. 104, where he refers to supporting evidence from the Princeton Fertility Study.

The other argument in favor of the notion that large families might promote migration is the theory that a man with many children is forced to work harder than a man with few children and is, therefore, more sensitive to economic possibilities that might be realized through migration. In an intergenerational perspective, it is sometimes argued that children of large families cannot all make a living out of the family farm or business and hence some of the children must migrate—a situation that promotes migration and that might not be faced with smaller family size. But this latter possibility is long-run and cannot be measured by statistics on migration status and present family size.

<sup>4</sup> Macisco, J. J., Jr., Fertility of White Migrant Women, U. S. 1960: A Stream Analysis, *Rural Sociology*, 33, 474-479, December, 1968; Macisco, J. J., Jr., Bouvier, L. F. and Renzi, M. J., Migration Status, Education and Fertility in Puerto Rico, *Milbank Memorial Fund Quarterly*, 47, 167-185, April, 1969; Macisco, J. J., Jr., Bouvier, L. F. and Weller, R. H., The Effect of Labor Force Participation on the Relation Between Migration Status and Fertility in San Juan, Puerto Rico, *Milbank Memorial Fund Quarterly*, 48, 51-70, January, 1970.

<sup>5</sup> Kiser, *et al.*, *op. cit.*, p. 111.

<sup>6</sup> *Ibid.*

<sup>7</sup> These streams are as follows: migrants to Ontario from Quebec, British Columbia, Newfoundland, Prince Edward Island, Nova Scotia, New Brunswick, Manitoba, Saskatchewan and Alberta; migrants from Ontario to Quebec, British Columbia, the Atlantic Provinces and the Prairie Provinces; migrants to Quebec from Nova Scotia and New Brunswick; migrants from Quebec to the Atlantic Provinces, the Prairie Provinces and British Columbia; migrants to British Columbia from Nova Scotia, Manitoba, Saskatchewan and Alberta; migrants from British Columbia to the Prairie Provinces; and migrants to the Prairie Provinces from Nova Scotia.

<sup>8</sup> Kiser, *et al.*, find the fertility of Canada-U. S. migrants to be relatively high. They say (p. 70): "Among ever-married women of foreign stock of given age and country of origin, the average number of children ever born was conspicuously high for those of Mexican origin. . . . For women under 45 years of age, those of Canadian origin stood in second place. This probably reflects the influence of the French Catholics among the migrants from Canada to the United States." Actually, as emphasized in the text, the Canada-U. S. migrants

have noticeably lower fertility than the United States-Canada migrants, the differences being 0.43, 0.65 and 0.91 child per ever-married woman at ages 25-34, 35-44 and 45-54, respectively. The differences are about half as great in large cities, but still the higher fertility of the United States-Canada migrants stands out.

<sup>9</sup> See Krotki, K. J. and Lapierre, E., *La fecondite au Canada selon la religion, l'origine ethnique et l'etat matrimonial*, *Population*, 23, 824-26, September-October, 1968.

<sup>10</sup> Macisco used education of wife when he attempted to control for socio-economic status among migrants to San Juan, Puerto Rico, between 1955 and 1960. See Macisco, *et al.*, *Migration Status, Education and Fertility in Puerto Rico*, 1960.

<sup>11</sup> Foreign-born women in the United States have a lower average level of education and a narrower range of years of schooling than the native-born women. United States Bureau of the Census, U. S. CENSUS OF POPULATION: 1960, Subject Reports: *Educational Attainment*, Final Report PC(2)-5B. Washington, United States Government Printing Office, 1963, Table 1.