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CENTER DISCUSSION PAPER NO. 355

MIGRANT AND NATIVE FERTILITY IN COLOMBIA IN 1973:

ARE MIGRANTS SELECTED ACCORDING TO THEIR REPRODUCTIVE PREFERENCES?

Helena Ribe and T. Paul Schultz

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Introduction

Since fertility is generally lower in urban than in rural populations, it is widely assumed that the fertility of migrants born in rural areas but now living in urban areas lies somewhere between that of rural and urban nonmigrants. Rapid internal migration may have contributed, according to this view, to nationwide declines in fertility in some low income countries. To evaluate how migration affects fertility, it is useful to know the levels of migrant and nonmigrant fertility at origin and destination and how migrant fertility converges, if it does, to the level of nonmigrant or native fertility at destination. This paper assembles evidence on migrant-native fertility comparisons at destination for Colombia from the 1973 census in an effort to discriminate among several working hypotheses put forward to explain migrant reproductive behavior. The comparisons of migrant and native fertility are performed within groups that have relatively similar (labor market) opportunities and skills, approximated here by women with the same education and age.

Empirical regularities in migrant and native fertility differ somewhat from study to study, and region to region.¹ There emerge from the demographic literature, therefore, few confirmed and replicated associations between fertility and migration. This may be due to the varied samples examined, the different definitions of fertility and control variables, the different causes for migration in different countries or regions, and the inability of a single cross section to discriminate adequately among competing, often dynamic hypotheses. Three classes of explanations for native-migrant fertility differentials appear in the literature. The first stresses

¹See literature surveys in Goldstein (1973), Macisco, *et al.*, (1970), and Zarate and Zarate (1975).

the inculcation of tastes or norms by parents at origin in their offspring, who may or may not subsequently migrate. The second emphasizes the process of adaptation by which the behavior of the migrant changes with time to conform to new opportunities and constraints associated with the destination environment. The third recognizes that migrants are self-selected, and assumes that their distinctive preference orderings compared with nonmigrants leads them to move to areas that reinforce their distinctive behavioral tendencies. This paper makes a start at formalizing and discriminating among these hypotheses.

A four percent sample from the 1973 Colombian Census is analyzed. Fertility differentials are measured in terms of children ever born, stratified by the woman's age and education, and in the case of married women with spouse present, by husband's monthly income. Migrant status has several dimensions, including the size of current residential area and of the origin area, and the duration of current residence at destination.

The first section of the paper presents alternative hypotheses for native-migrant fertility differences. The second develops a framework for decomposing group differences in fertility. The third presents cross tabulations of the census sample that illustrate the conclusions of the paper. Multiple regressions are then employed to distinguish between the migrant adaptation and migrant selectivity hypotheses. A final section restates our conclusions.

Why is There a Relationship between Migration and Fertility?

Urban populations generally have lower fertility than do rural populations. Though these differences have not been firmly attributed to a specific set of factors, regional differences in relative prices, male and female wage differences, the level of child mortality, and occupational structures are commonly cited as determinants of fertility.² Urban immigrants are sometimes observed to have higher fertility than do urban natives, but not all empirical studies agree even on this point. Table 1 summarizes evidence on the migration-fertility association that has been noted in various low income countries. One must be cautious, however, in generalizing from results such as these, because of numerous incomparabilities in data and methodology. At a minimum, it seems necessary to make migrant-native comparisons within maternal age and education classes. A variety of behavioral explanations have been offered for observed relationships between migration and fertility; here only three general hypotheses are discussed, for the sake of brevity:

(1) Fertility goals are formed as a child and they reflect one's family environment during childhood. Goldberg (1959, 1960) and Duncan (1965) explain in this way the tendency for U.S. urban migrants from rural backgrounds to have higher fertility than urban-born natives, of the

²Most studies confirm urban-rural residence is related to fertility levels. For example, Goldstein (1977) using the 1960 Thailand Census reports that the average number of children ever born, with age standardized, ranged between 3,375 per thousand ever married women in Bangkok, to a high of 4,461 for those in rural Thailand. Potter, Ordoñez and Mesham (1976) report total fertility rates of 7.4 in rural areas of Colombia and of 4.58 in urban areas of the country in 1968 (these rates have been calculated by Elkins using data from the Colombian National Fertility Survey conducted in 1967-68). Birdsall (1979) also reports lower fertility rates in urban areas of Colombia, for several years during the period of 1960-1978, with the differential between the rates increasing due to a faster decline in fertility rates in urban areas during the period. About one-fourth to one-fifth of the differences in fertility between rural and urban areas in Colombia can be explained by offsetting rural-urban differences in child mortality (Schultz, 1967).

TABLE 1.1

Findings of Empirical Studies of Migration and Fertility - Low Income Countries Only

Author (year) Country, Data Set	Children Ever Born Migrant/Non-Migrant at Destination	Relation with Fertility and Controlled by:				Migrant Definition	Others - Comments
		Education	Age	Origin	Other		
Berqueo (1968) Sao Paolo, 1965	Young migrants have lower fertility, reverses at old ages.	No	Yes	Yes. Rural young migrants have lowest fertility		Includes once married women	
Brito (1969) Mexico & Buenos Aires, 1963-64 Celade Survey	Higher migrant fertility.	Inverse Yes	No	Yes		All migrants	Exception: in Buenos Aires urban migrants in middle education levels have lowest fertility.
Edmonston (1976) Bogotá, Rio de Janeiro, Mexico. Celade, 1964 survey	Higher CEB for migrants from rural origin	Yes Negative	Yes Positive	Yes. Husband and wife's rural origin is positively related to fertility		Married women, in 20-50 age group.	Multiple regression. Finds that education's effect is stronger than origin's effect.
Elizaga (1966) Santiago, Chile	Lower migrant fertility, if under 40.	No	Yes	No		All migrants	
Goldstein (1973) and (1977), Thailand, 1960 Census and 1970 Longitudinal survey	Fertility of migrants does not exceed that of non-migrants. Recent migrants (5 yrs) have lower fertility than natives at destination and than stayers at origin.	No	Yes. Lower fertility for migr. under 40, higher for others.	Yes. Rural migrants have higher fertility. Inverse to size.		Lifelong migrants and five year migrants. Uses husband's migration.	Rural-urban differences more important in explaining fertility differentials than migration status differences. Migration is a disruptive process which may explain lower fertility of recent migrants, also younger migrants may be a more innovative, selected and educated group.

TABLE 1.2

Findings of Empirical Studies of Migration and Fertility - Low Income Countries Only

Author (year) Country, Data Set	Children Ever Born Migrant/Non-Migrant at Destination	Relation with Fertility and Controlled by:				Migrant Definition	Others - Comments
		Education	Age	Origin	Other		
Gonzalez de Vi- llacorta (1970) Peru, 1965 Census	Higher migrant fer- tility.	Yes General Pattern Remains	Yes	Yes		All migrants	Exceptions: migrants from medium sized urban areas who move between age 15-34; migrants from rural and towns who move between age 15-24
Hendershot (1976) Manila National Demo- graphic Survey, 1973.	Migrants to Manila have lower fertility than nonmigrants at origin (stayers). Difference is small	No	Yes	No	Labor force Women and dura- tion of marriage	Women between 18-39	Social mobility hy- potheses. In early stages of urbaniza- tion, migration is more difficult and more selective; this facilitates adapta- tion, which means later marriage and higher labor force participation and lower fertility among migrants. For later urbanization, selec- tion of migrants is not positive and adaptation is more difficult.
Hiday (1978) Philippines 1970 household survey conduct- ed by the Inst. of Behavioral Science, Univ. of Colorado.	Rural-urban migrants have lower fertility than stayers, espe- cially after age 29.	No	Yes	Yes Migrants from larger sized origins have lower fer- tility, i.e., inverse to size		Compares 3 groups of women in 15-49 age; rur-urb mig, rur-rur mig, rural stayer.	Social mobility hy- pothesis. Concludes that fertility is inversely related to "social" distance from rural home. Ur- banization exerts major effect after age 20-29 after which migrants con- trol family size.

TABLE 1.3

Findings of Empirical Studies of Migration and Fertility - Low Income Countries Only

Author (year) Country, Data Set	Children Ever Born Migrant/Non-Migrant at Destination	Relation with Fertility and Controlled by:				Migrant Definition	Others - Comments
		Education	Age	Origin	Other		
Lutchinson (1961). Eight Brazilian cities. 1960.	Migrants family size is inversely related to size of birthplace.	No	No	Yes		Males married more than 10 years	Results hold when control by manual and non-manual occupation.
Iutaka, Bock & Varnes (1971) Six cities. 1960 Brazil Census.	Higher migrant fertility.	Yes. General pattern remains	Yes	Yes. Those born in large cities have lower fertility.			Results hold for each category of age at marriage, occupation and education (one at a time and multi- ply). Age, age at marriage, color, size of city are related to fertility for natives and effects for migrants are stronger.
Macisco et al. (1969) San Juan, 1960 Pto. Rican Census	Lower migrant fer- tility, if arrived under 34. Reverses otherwise.	Negative Yes	Yes	Yes		Married women, husband moved within last 5 yrs. Non-metrop migrant.	Social mobility hypotheses.
Macisco et al. (1970) San Juan, 1960 Pto. Rican Census.	Lower migrant fer- tility, if arrived under 34. Reverses otherwise.	No	Yes	Yes	Labor Force Parti- cipation	Married women, husband moved within last 5 yrs. Non-metrop. migrant.	Fertility results hold when controlled by labor force participation.
Martine (1975) San José and Bogotá, Celade	All migrants have higher fertility, but if duration of marriage is controlled, only rural born migrants have higher fertility.	No	Age at arrival. Lower fer- tility if arrived be- tween 15-24.	Yes		All migrants	Age at arrival is at least as important in explaining lower mi- grant fertility as origin or duration of marriage.

TABLE 1.4

Findings of Empirical Studies of Migration and Fertility - Low Income Countries Only

Author (year) Country, Data Set	Children Ever Born Migrant/Non-Migrant at Destination	Relation with Fertility and Controlled by:				Migrant Definition	Others - Comments
		Education	Age	Origin	Other		
Myers (1966) San José, Mexico, Caracas, Buenos Aires. 1963-64, Celade Survey	Higher migrant fer- tility.	No	Yes General pattern remains	Yes Inverse to size		All migrants	Migrants who arrived before 15 have lower fertility.
Myers & Morris (1966) San Juan, 1960 Pto. Rican Census	Lower migrant fer- tility	No	No	No		All migrants	
Park & Park (1976), Korea 1970 Census, 10% sample.	Lower migrant fer- tility, except for rural migrants after age 30. Migrants also have lower fertility than stayers at origin.	Yes. Re- duces differ- ences among groups.	Yes	Yes. 3 types of location. Inverse to size.	Labor force.	Migrants who moved in last 5 years.	When labor force is considered, only those migrants in occupations in- compatible with childbearing have lower fertility.
Ro (1976) Korea, 1% sample, 1970 Census	Lower migrant fer- tility than non- migrants regard- less of age, resi- dence and education	Yes Negative	Yes General pattern remains	Yes. Inverse to size; differences are smaller for migrants		Women that moved in the past 5 years	Uses multiple re- gression. Exception: rural migrants in the 16-29 age group have more children than non migrants.
Salazar (1968) Lima 1965 Census	Higher migrant fer- tility, regardless of duration of migra- tion or age at arrival	Yes	Age at arrival	Yes. Those who depart from palces smaller than 5000 have lower fer- tility	Labor force. Results hold	Includes women between 20-49	Migrants have high- er fertility at elementary educa- tion or less. Result reverses for higher levels of education.

same age and education. Acceptance of smaller "urban" family size norms is hypothesized to occur only after a generation has elapsed: thus the title: "two generation urbanites." Replication of Duncan's analysis by McGirr and Hirshman (1979) for U.S. cohorts born after 1910 did not confirm that more recent rural-urban migrants had distinctly higher fertility than urban natives. Evidence from 1964 for Bogotá, Colombia was consistent with the Goldberg-Duncan (G-D) hypothesis in finding migrant fertility higher than native, if either the wife or husband came from a rural area, controlling for education and age of the wife (Edmonston, 1976).

The G-D hypothesis stresses the intergenerational persistence of tastes in the demand for children.³ The hypothesis is designed to explain higher migrant than native fertility in urban areas, but symmetry would imply lower migrant than native fertility in rural areas, if the migrants come from urban areas. The G-D hypothesis has no predictions for the fertility of migrants who move within the rural or urban sector. This hypothesis does not discuss relative prices of children in urban and rural areas or the effect of more extensive and better paying labor market opportunities for women in most urban as compared with rural areas.

³The Goldberg-Duncan (G-D) hypothesis is in one sense the converse of the hypothesis proposed by Easterlin (1968) to explain long swings in U.S. fertility. Fertility goals are firmly inculcated by the parental family at origin, according to G-D, with a lasting effect on the subsequent reproductive behavior of the next generation, even after migration places the second generation in surroundings that encourage lower levels of fertility. Easterlin argues that material consumption standards are formed in childhood, and that unanticipated changes in adult relative income levels are then translated into relative deviations in fertility levels. Easterlin's hypothesis would predict, therefore, that if rural-urban migrants experienced a substantial unanticipated increase in their income level, which is likely to be true in Colombia (Ribe, 1979), the migrants would tend to spend a major share of their gains as adults on the formation of larger families than would otherwise be expected of them in urban areas.

(2) The adaptation hypothesis assumes that fertility differences are in part due to different relative wages received by men, women and children, and to different price and income constraints confronting different families. These constraints vary systematically between rural and urban areas and partly explain fertility differences between them. With sufficient time to discern how these relative wages, prices and incomes differ among residential areas, migrant fertility should eventually converge toward that of native, controlling for their stage in the life cycle (i.e., wife's age), and the resources and price of time of the couple (i.e., education of the woman and income of the man). The "adaptation" hypothesis stresses the conditioning role of regional labor market and price variables, but does not explicitly indicate how rapidly behavioral adaptation will take place.⁴ Some have emphasized the greater efficiency of more educated people to deal with a setting where prices and technology are in flux.⁵

⁴ Evidence from several low income countries appears to be consistent with the adaptation hypothesis (see Table 1). For example, Martine (1975), Park and Park (1976) and Macisco *et al.*, (1969) report lower fertility levels for migrants than for natives when the migrants arrived at their current residence at a young age. Some studies also report lower fertility for migrants than for those who stay in the origin (Park and Park, 1976), although education is not always held constant when performing migrant-stayer comparisons (Hendershot, 1976 ; Hiday, 1978).

⁵ Another aspect of the adaptation hypothesis would seek to characterize the speed of adaptation to the newly established urban market incentives. It is observed in many areas of behavioral responses to disequilibrium signaled by market incentives that the efficiency of the individual in processing information and the magnitude of the gains accrued from the behavioral change affect directly the rate of behavioral adaptation and innovation (T.W. Schultz, 1975).

(3) Another approach to migrant behavior elaborated in this paper emphasizes the heterogeneity of populations and the distinctive preferences of migrants (Kuznets, 1964). Even when migrants are compared with "similar" nonmigrants, according to age, education and income, etc., migrants remain intrinsically different, if for no other reason than that they are self-selected and thus represent a non-random sample of the population at origin from which they are drawn. To derive predictions for distinctive migrant fertility behavior, we assumed that unobserved preferences of migrants are revealed by the area to which they move; namely, they have a tendency to migrate toward areas where local relative prices and opportunities favor their preferred pattern of behavior and consumption. It is widely believed that children are more costly to rear in urban than in rural areas. One might expect, therefore, that migrants from rural to urban areas would, on the average, assign less importance to having a large family than would nonmigrants who remain in rural areas, other things equal. Conversely, potential migrants from urban to rural areas might be less discouraged by the move, other things being equal, if they assign more importance to having a large family. When individuals born in rural areas decide to move, the decision on whether to migrate to an urban area or remain in the rural sector is assumed to be influenced by their preferences for family size, with those preferring a larger family being more inclined to relocate in another rural area, and those preferring a smaller family being more inclined to move to an urban area.

If there were no adaptation costs or lags in curtailing reproductive performance, our migrant selectivity hypothesis would predict that in otherwise similar groups, rural born migrants in the city would have lower fertility than city born natives. Consequently, the migrant selectivity hypothesis implies that rural-urban differences in fertility (across regions where relative prices of children vary) would be exaggerated among migrants compared with natives. The adaptation hypothesis, on the other hand, suggests the contrary tendency would be evident, with fertility of rural and urban natives being further apart than the fertility of migrants currently residing in rural and urban areas. More generally, we would expect other aspects of lifecycle behavior, such as the probability that women would work in the market labor force, to also be affected by migrant self-selection of their future location. For similar reasons the propensity of migrant parents to invest in the schooling and health of their children might be greater in urban residential locations, if health and schooling are more accessible and less costly in urban than in rural areas. Of course, as all potential migrants in a population decide to migrate from an area, as is the case for higher educated women born in rural areas of Colombia, migrants are no longer selectively sampled at origin according to their behavioral preferences. Rather, migrants are then representative of the entire population at origin with its full distribution of preferences for fertility and other types of behavior.

In reality, probably all three of these basic hypotheses have some validity: origin-conditioned demands for children persist for a time in a new environment; migrants gradually adapt their reproductive goals and behavior to fit the constraints imposed on them by their current environment; and migrants are self-selected to be favorably disposed toward consumption patterns that are relatively less expensive in their current residential area compared with natives in that area. Since in their extreme form, the adaptation and selectivity hypotheses have distinct implications, it should be possible to at least make a start in discriminating among them. Clearly the character of the migration process will have much to do with any observed differences in migrant-native fertility. Thus, the case of Colombia considered below may have limited generality to other regions of the world or even to other countries in Latin America. The next issue is what constitutes the appropriate controls for comparisons of the native-migrant fertility.

Comparisons across groups are generally framed with otherwise "homogeneous" populations in mind. The only distinctions that are "controlled" here are the woman's age and education. Within five year age brackets, a linear control for age should not introduce substantial bias due to the probably nonlinear nature of the age-cumulative-fertility schedule (Boulier and Rosenzweig, 1978). Since education and monthly income are closely associated for Colombian women reporting income (Fields and

Schultz, 1980), education of the woman is viewed as a proxy for the woman's market opportunity wage and hence her shadow price of time, if she enters the labor market. Of course, the more educated woman may also encounter lower search costs in obtaining effective birth control techniques, and this lower cost of controlling excess fertility as well as her higher price of own-time in childrearing may account for the frequently observed inverse relationship between women's education and fertility.

Years of schooling completed by women do not necessarily imply the same achievements and skills on the part of both migrant and native. Primary education in rural areas of Colombia is probably "inferior" to that provided in urban areas, both in terms of the cost of resources used per student-year and perhaps in terms of the "value added" by the schooling to the student's future earnings potential. On the other hand, the motivation and innate ability of the average rural student is likely to exceed that of the average urban student with the same schooling certificate. The rural student has surmounted the problems of gaining entrance to the limited number of rural schools and has survived the heavy attrition which occurs in the understaffed rural school system. Thus, holding constant for years of schooling completed ignores the offsetting biases of schooling input quality which penalizes rural women relative to urban women, and that of selectivity which screens more severely rural women relative to urban women, assuming that the school system eliminates less able and less motivated students.

A Framework for Studying Differential Fertility and Marital Status

First let us consider the number of children ever born to a group of women as our indicator of cumulative fertility.

$$F_{i,j} = C_{i,j}/W_{i,j} \quad \begin{array}{l} i = m,n \\ j = u,s \end{array}$$

where $F_{i,j}$ is the number of children born to women in the i^{th} class (either migrant native) and j^{th} marital status group (either in a current union or living separately). The number of children ever born to women of a specific class and group is $C_{i,j}$, and the number of such women is $W_{i,j}$. The proportion currently in a legal, religious or common law union or "married" is defined,

$$M_i = W_{i,u}/W_i,$$

where $W_i = W_{i,s} + W_{i,u}$ and analogously, the fertility of all women regardless of marital status is a weighted average of the group averages:

$$F_i = F_{i,u} M_i + F_{i,s} (1 - M_i).$$

The ratio of migrant, m , to native, n , fertility for all women is then a combination of migrant and native women's fertility within and outside of marital unions:

$$\frac{F_m}{F_n} = \frac{F_{m,u} M_m + F_{m,s} (1 - M_m)}{F_{n,u} M_n + F_{n,s} (1 - M_n)}.$$

The ratio of migrant to native fertility, F_m/F_n , is larger the larger is $F_{m,u}/F_{n,u}$ as long as $F_{i,u} > F_{i,s}$ for $i = m, n$, other things being equal. If $F_m/F_n < F_{m,u}/F_{n,u}$, then migrants "marry" less than natives, or migrants living separately have fewer children than do natives, or both may explain the above inequality in migrant-native fertility. Conversely, if $F_m/F_n > F_{m,u}/F_{n,u}$, it implies that migrants are more often reported

in current unions than are natives, or migrants outside such unions are more fertile than are nonmigrants, or both differentials hold.

A second component of the differential in overall migrant and native fertility is defined residually and is called, for simplicity, the effect of marital union status:

$$I_{m,n} = \left(\frac{F_m}{F_n} \right) / \left(\frac{F_{m,u}}{F_{n,u}} \right)$$

This residual ratio ($I_{m,n}$) represents both the relative distribution of migrants and natives who are currently in marital unions, and the relative reproductive performance of migrants and natives who are not currently "married." For example, we would not want to attribute a lower overall reproductive performance to migrants because they delay their entry into marriage, unless the "unmarried" migrants exhibit the same relative restraint on their reproductive performance as do natives. If instead, we knew that "unmarried" migrants had more marital separations, and higher illegitimacy rates than did the natives, then the marital status categories might have a different "meaning" for fertility among migrants and natives.

From the above accounting definitions, three multiplicatively related indexes of migrant-native fertility are obtained, each of which warrant study:

$$\frac{F_m}{F_n} = \frac{F_{m,u}}{F_{n,u}} \cdot I_{m,n}$$

Both the prevalence of marital unions and fertility within marriage might be expected to respond in parallel fashion to market economic incentives, and yet the two components should be studied separately, even where the distinction

between those living in unions and separate is blurred by social custom. Empirical analysis may show, therefore, that in some settings little is learned by decomposing the migrant-native fertility ratio into its marital fertility and marital status components. In other societies, marital status may respond to quite different conditioning factors than does marital fertility.⁶

Data Description and Definitions

This study uses a four percent sample from the Colombian Census of Population conducted in October, 1973. The sample consists of 860,000 individuals. Sub-samples are analyzed which include all women of child-bearing age or only women with husbands present. Census information is examined on sex, age, marital status, children ever born, educational attainment, income received during the last month, place of current residence, place of birth, and time elapsed since migration to current residence. Women not responding to the fertility or age question are excluded.

Migrants are defined as having been born in a municipality different from where they currently reside. Colombia is divided into some 900 municipalities in 1973, excluding the frontier regions and territories that were not included in the public use four percent sample. Four types of current residence are defined by population size at the time of the 1973

⁶ Schultz (1980) in a study of Taiwan used a different decomposition to get at a similar question. In that case he had census information on duration of marriage which is not available in Colombia, perhaps because of the less clearly recorded time of first marriage.

Census. The categories are: (1) Large: includes the four largest cities in the country: Bogotá, Cali, Medellín and Barranquilla; (2) Medium: includes cities with populations between 35,000 and 400,000; (3) Town: includes all other urban locations including most Cabeceras; and (4) Rural: areas outside of the Cabecera or otherwise denoted rural. The census does not distinguish birthplace within a municipality and, therefore, only three classifications of origin are possible, with "Town" and "Rural" combined.

Decomposition of Migrant and Native Fertility Differences at Destination

Before considering differences in fertility between migrants and natives, several aspects of fertility in both groups should be noted. The number of children ever born per woman is inversely related to the woman's educational attainment across age, current residence, and marital status groups (see Table A-). The few exceptions are where primary schooled women report slightly more births than do women with no education at all.⁷ Fertility of women is also inversely related to the population size of the woman's current residential area, whether the comparison is based within age, education or migrant status groupings. The most common exception to this pattern is fertility in Towns, which is little different and sometimes somewhat higher than that reported in rural areas.

Table 2 presents the three migrant-native ratio comparisons at destination with age, education and current residence categories. The first row, (a), reports the ratio of children ever born per migrant woman to that per native woman (F_m/F_n).

⁷ Women have improved their educational attainment substantially in recent years in Colombia, though they remain rather low in towns and rural areas as reported in Appendix Table A-3. The expansion of education for women is undoubtedly linked to the dramatic decline in total fertility rates of more than a third in the last decade. Natives in large cities report somewhat higher educational attainment than migrant women, but elsewhere migrant-native differences in schooling are relatively minor.

Migrant-Native Ratio of Children Ever Born per Woman for All Women
(CEB) and for Women Currently in a Union (CEB/Union),
and Ratio of the Two Indicating Marital Status Fertility Effects

Age and Education of Women Used for Migrant-Native Comparison	Current Residence			
	Large City	Medium City	Town	Rural
<u>Age 15-19</u>				
None a. CEB	.97	1.32	1.40	1.56
b. CEB/Union	1.04	1.29	1.29	1.03
c. a/b	.93	1.03	1.09	1.52
Primary a. CEB	.91	.93	1.52	1.96
b. CEB/Union	1.01	.79	.97	1.10
c. a/b	.90	1.18	1.57	1.78
Secondary a. CEB	1.57	1.50	3.00	3.13
b. CEB/Union	1.11	1.01	1.21	1.30
c. a/b	1.42	1.48	2.48	2.40
Higher a. CEB	.40	1.00*	-	-
b. CEB/Union	.30*	-	-	-
c. a/b	1.33*	-	-	-
<u>Age 20-24</u>				
None a. CEB	.90	1.10	1.09	1.15
b. CEB/Union	.91	1.09	1.01	1.02
c. a/b	.99	1.01	1.08	1.12
Primary a. CEB	.86	1.08	1.16	1.30
b. CEB/Union	.98	1.06	1.03	1.05
c. a/b	.88	1.02	1.13	1.24
Secondary a. CEB	1.21	1.20	1.37	1.61
b. CEB/Union	1.07	1.08	1.08	1.03
c. a/b	1.14	1.10	1.27	1.37
Higher a. CEB	1.06	1.76	1.89*	-
b. CEB/Union	1.06	.69*	-	-
c. a/b	1.00	2.55*	-	-
<u>Age 25-29</u>				
None a. CEB	.78	.96	1.13	1.08
b. CEB/Union	.82	.94	1.04	1.01
c. a/b	.94	1.02	1.09	1.07
Primary a. CEB	.94	.99	1.05	1.11
b. CEB/Union	.96	.97	.99	1.03
c. a/b	.98	1.03	1.06	1.08
Secondary a. CEB	1.05	1.13	1.30	1.08
b. CEB/Union	1.01	1.05	1.09	1.02
c. a/b	1.04	1.08	1.19	1.06
Higher a. CEB	1.10	1.35*	-	-
b. CEB/Union	1.02	1.01*	-	-
c. a/b	1.08	1.34*	-	-

Table 2.2

Age and Education of Women Used for Migrant-Native Comparison	Current Residence			
	Large City	Medium City	Town	Rural
<u>Age 30-34</u>				
None a. CEB	1.03	.98	.98	1.11
b. CEB/Union	.96	.92	.97	1.01
c. a/b	1.08	1.07	1.01	1.10
Primary a. CEB	.92	.99	1.02	1.25
b. CEB/Union	.93	.97	.95	.98
c. a/b	.99	1.02	1.07	1.27
Secondary a. CEB	1.08	1.07	1.15	1.06
b. CEB/Union	1.04	.99	1.02	.98
c. a/b	1.04	1.09	1.12	1.08
Higher a. CEB	1.06	1.42*	-	-
b. CEB/Union	.85	1.15*	-	-
c. a/b	1.25	1.24*	-	-
<u>Age 35-39</u>				
None a. CEB	1.01	1.07	.99	1.14
b. CEB/Union	1.08	1.06	.97	1.06
c. a/b	.94	1.01	1.03	1.08
Primary a. CEB	.95	.98	1.00	1.07
b. CEB/Union	1.00	1.01	.99	1.02
c. a/b	.95	.98	1.02	1.06
Secondary a. CEB	1.02	1.16	1.16	.73
b. CEB/Union	1.05	1.11	1.03	.70
c. a/b	.98	1.05	1.12	1.04
Higher a. CEB	.81	-	-	-
b. CEB/Union	.82	-	-	-
c. a/b	.99	-	-	-
<u>Age 40-44</u>				
None a. CEB	.88	.87	.97	1.12
b. CEB/Union	.86	.87	.98	1.07
c. a/b	1.02	1.00	.99	1.05
Primary a. CEB	1.00	1.05	1.02	1.08
b. CEB/Union	1.03	1.03	.94	1.02
c. a/b	.97	1.02	1.09	1.06
Secondary a. CEB	1.10	1.14	.93	.91
b. CEB/Union	1.11	1.02	.88	.92
c. a/b	.99	1.12	1.05	.98
Higher a. CEB	1.18	-	-	-
b. CEB/Union	1.23	-	-	-
c. a/b	.97	-	-	-

Table 2.3

Age and Education of Women Used for Migrant-Native Comparison	Current Residence			
	Large City	Medium City	Town	Rural
<u>Age 45-49</u>				
None a. CEB	.81	.98	.99	1.09
b. CEB/Union	.84	.95	.89	1.07
c. a/b	.97	1.03	1.11	1.02
Primary a. CEB	.99	1.10	1.00	1.08
b. CEB/Union	.94	1.11	.94	1.02
c. a/b	1.05	.99	1.07	1.06
Secondary a. CEB	1.02	1.37	1.21	1.23
b. CEB/Union	1.00	1.29	.97	1.25*
c. a/b	1.02	1.07	1.24	.99*
Higher a. CEB	1.36*	-	-	-
b. CEB/Union	1.31*	-	-	-
c. a/b	1.04*	-	-	-
<u>Age 50-59</u>				
None a. CEB	1.15	.99	1.00	1.08
b. CEB/Union	1.18	1.11	.94	1.03
c. a/b	.98	.89	1.06	1.05
Primary a. CEB	1.05	1.04	1.07	1.10
b. CEB/Union	1.04	1.01	.98	1.05
c. a/b	1.01	1.03	1.09	1.04
Secondary a. CEB	1.27	1.22	.87	1.21
b. CEB/Union	1.18	1.06	.81	1.24*
b. a/b	1.08	1.15	1.08	.98*
Higher a. CEB	-	-	-	-
b. CEB/Union	-	-	-	-
c. a/b	-	-	-	-

- Less than ten migrants or natives in sample categories for calculating ratio.

* Less than 25 migrants or natives in sample categories for calculating ratio. Ratio should be interpreted with caution, given sample variability.

Source: derived from Appendix Tables A-1 and A-2.

The second row (b) in Table 2 is the same ratio calculated only for women who are currently in a sexual union, $(F_{m,u}/F_{n,u})$, whether a formal marriage of a legal or religious type or an informal common-law union. The third row (c) is the ratio of (a) to (b), $(I_{m,n})$, and can be interpreted as an index of marital status effects on migrant to native fertility, including differential fertility of migrants and natives outside of current unions. For example, among women age 20-24 with some primary schooling living in towns, migrants have 16 percent more children than do natives. This is accounted for by 3 percent higher fertility of migrant women in current unions and 12 percent higher marital status effects. The absolute levels of fertility from which these ratios are derived are reported in Appendix Table A.1, and the number of women observed in each category in the census sample is shown in Appendix Table A.2. Distinguishing migrants to large cities who were from rural-town origins in Table A-1 and A-2 did not reveal any distinctly different patterns in fertility or marital status from those reported from all migrants to large cities. We shall consider only the rural to city migrants subsequently.

Two tendencies are seen in the migrant-native overall fertility ratio, (a) in Table 2. First, migrant fertility is relatively higher than native fertility in rural areas, including in many instances the smaller urban areas called towns and medium sized cities. Women migrating toward the smaller towns, and in particular toward the rural areas, have higher fertility than do the natives of these regions, even though the rural and town natives report relatively high levels of fertility.⁸ On the other hand, female migrants to the large cities have similar fertility levels to those of city natives--with somewhat lower fertility among those with less than a secondary education, and somewhat higher fertility for migrant women with secondary education or more.

⁸This flow of migration toward towns and rural areas constitutes only a quarter of all Colombian migrants, 80 percent of whom were born in other towns or rural municipalities (Table A-7 and A-8).

The inverted pattern of migrant-native fertility in cities and in rural areas is consistent with our migrant selectivity hypothesis, if adaptation of migrants is prompt and nearly complete. The selectivity of migration allocates persons with unusually strong preferences for small families to cities, and allocates persons with unusually strong preferences for large families to rural areas. Holding other things constant, the fertility of migrants in rural areas should exceed that of rural natives; the fertility of migrants to cities should be less than that of city natives. Finding this pattern among migrants in rural areas is even more surprising when it is recognized that rural natives are themselves a selectively distinguished population that was left behind during the last several decades of rapid outmigration from rural to urban areas of Colombia. Hence, we would expect that the remaining rural native population would be composed disproportionately of persons with preferences for large families. Despite this offsetting tendency for rural native fertility to be raised by outmigration, migrants to the rural sector exhibit still higher levels of fertility than rural nonmigrants. This phenomena is nearly obscured if the population is not first stratified by education (Compare Tables A-2 and A-4).

The margin for selectivity to affect migrant fertility is attenuated in the case of better educated women moving toward the cities. Very few women with any higher education are enumerated in their birthplace in towns and rural areas of Colombia; they all have moved to large and medium sized cities (Table A-3). Only a small proportion of rural born women with some secondary education remain in their birthplace.

Consequently, the leeway for migrant selectivity to affect the distribution of fertility preferences (and hence behavior) is greatly reduced for secondary educated migrants to urban areas and is negligible for higher educated migrants to cities.⁹ In these cases, the adaptation process and family origin effects should be evident. And indeed, these better educated migrants to the cities report higher fertility than do comparably educated urban natives. Regression analysis below explores whether these differentials diminish with duration of migrant residence in the city, as would be implied by the adaptation hypothesis.

⁹ The same pattern of sex and education specific migration is evident in Venezuela in 1961 (Schultz, 1977).

Table 3
Proportion of All Women Never Married
By Age, Education, Current Residence and Migrant Status: Colombia, 1973

Residence Age and Education	Large City		Medium City		Town		Rural	
	Native Born	All Migrant	Native Born	All Migrant	Native Born	All Migrant	Native Born	All Migrant
<u>Age 15-19</u>								
None	84.7	79.2	77.6	74.6	66.2	65.5	67.8	47.9
Primary	81.2	84.4	80.1	77.4	83.0	74.0	79.6	60.8
Secondary	91.3	86.9	90.7	87.1	94.4	86.2	91.0	79.1
Higher	96.2	95.5	-	-	-	-	-	-
<u>Age 20-24</u>								
None	48.1	52.0	35.0	34.7	35.6	35.4	31.3	30.2
Primary	37.1	47.7	42.8	39.9	41.2	32.3	38.1	20.0
Secondary	57.3	50.5	57.5	49.3	62.2	50.0	62.3	41.4
Higher	78.0	73.7	85.4	61.6	-	-	-	-
<u>Age 25-29</u>								
None	33.3	37.3	23.9	27.9	25.1	19.2	21.0	12.3
Primary	23.1	27.9	24.2	22.6	23.1	21.0	19.2	10.8
Secondary	32.3	28.4	31.5	23.9	33.3	20.1	25.6	17.2
Higher	45.6	40.7	41.7	29.2	-	-	-	-
<u>Age 30-34</u>								
None	30.0	24.6	24.6	24.5	19.1	21.4	18.5	8.6
Primary	17.6	19.4	17.5	16.6	16.2	12.6	14.6	7.4
Secondary	21.0	17.3	24.1	15.7	26.2	13.9	15.4	-
Higher	37.9	23.0	45.5	29.4	-	-	-	-
<u>Age 35-39</u>								
None	21.3	24.4	25.3	21.0	19.7	16.4	17.4	8.3
Primary	13.6	17.0	15.0	15.7	14.1	11.9	11.9	5.6
Secondary	14.7	15.6	18.5	12.5	17.4	8.8	-	-
Higher	19.1	19.5	-	-	-	-	-	-
<u>Age 40-44</u>								
None	17.8	21.0	21.4	22.4	16.8	15.5	15.1	10.1
Primary	14.2	16.5	11.7	12.0	15.1	8.8	11.5	5.0
Secondary	13.4	12.6	14.5	10.7	16.5	11.2	-	-
Higher	-	-	-	-	-	-	-	-
<u>Age 45-49</u>								
None	20.5	19.7	20.3	15.3	22.2	12.8	13.3	9.6
Primary	15.6	13.9	10.3	11.7	14.3	12.7	9.5	4.6
Secondary	11.8	12.4	15.1	8.5	26.6	6.9	-	-
Higher	-	-	-	-	-	-	-	-
<u>Age 50-59</u>								
None	18.8	17.6	19.6	17.0	19.6	16.6	13.4	9.2
Primary	17.3	16.2	15.3	13.3	17.5	10.2	11.3	6.1
	-	-	25.0	12.3	16.8	13.7	-	-

Comparisons of row (c) in Table 2 and Table 3 confirm that particularly for the better educated women, migrants are more likely to marry than natives. The difference is larger for migrants moving to rural and small town areas, even though the proportion of natives ever married increases in these less metropolitan areas in all age and education groups.¹⁰ For women, migration to more rural areas of Colombia involves a high probability that one is married, and this increased frequency of marriage among migrants explains much of the greater fertility of migrants compared with natives in these rural areas. This pattern fits the selectivity hypothesis.

Women with less than a secondary education who migrate to large cities delay their marriage, not only in comparison to the population they left at origin, but relative to the later marrying urban natives at destination.¹¹ But for better educated women migrating to the urban areas, perhaps in part to complete their schooling, the evidence from Table 3 suggests that they marry somewhat more often than do natives, at least up to the age of 35.

¹⁰Evidence from the 1976 Colombian National Fertility Survey indicates that the urban-rural differential in the proportion of single women decreases with increasing age of women, and that differences between urban and rural populations is small after age 35 (Hernandez, 1978).

¹¹Recall that 46 percent of all women migrants in 1973 lived in the large cities, and 68 percent of them had no secondary or higher education. In contrast, among women age 20-24, only 54 percent of the migrants to large cities had less than a secondary education.

The second regularity shown in Table 2 is the lower migrant to native fertility ratio for women with less education. In this case, fertility decreases among all groups with women's education, but among migrants, fertility decreases less rapidly with education than for natives. For example, migrant women in large cities with no more than a primary education generally have about the same or lower fertility than do native women; this pattern is often repeated from age 25 to 44 in smaller sized cities and towns, and is consistent with our formulation of the migrant selectivity hypothesis. But with the acquisition of some secondary or higher education, migrants in the large cities have more children than do the natives.

To better understand the origins of these differences in migrant-native fertility, Table 2 also reports the fertility ratio of women in current unions (b) and the ratio of marital status effects (c). On the whole, migrants currently in unions do not report many more children than do natives. Rather, migrant women with at least some secondary education are more frequently in such unions than are natives, or those migrants currently outside of such a union report higher fertility than do comparable natives. Table 3 shows the proportion of women never married, (i.e., single), by age, education, current residence and migrant status.

For this better educated half of the migrants (see Appendix Table A-3) in Colombia, migration is not associated with a marriage delay, but with a decrease in the age of marriage and at later ages a slight increase in the fertility of those currently in a union.¹²

Another way to display the importance of migrant selectivity is to calculate the ratio of rural fertility to large city fertility for residents in the two extreme current residence areas. First this ratio is reported in Table 4 for natives born in these areas in Column (1). The rural-large city fertility ratio is then reported for migrants to these residential areas in Column (2). The first ratio for natives represents a more nearly random distribution of population preferences for fertility, and is presumably due to the differences in behavioral constraints implicit in the two environments. The second ratio for migrants, assuming no economic or psychological costs of promptly adapting to their adopted environments, would capture both the differences in the constraints of the two environments and the selectively different preferences for fertility that would favor high fertility among the

¹² One possible explanation of the differential effect of urban migration on marriage and fertility of women of differing education is the sex imbalance in the urban population and the barrier to marriage and a search for a mate that occurs within the occupations held by a substantial number of the less educated female migrants: domestic service.

Ratio of Children Ever Born per Woman in Rural Areas to that in Large Cities,
of Natives and Migrants, by Woman's Age and Education⁺

	Native Born	All Migrants
	(1)	(2)
<u>Age 15-19</u>		
None	1.39	2.25
Primary	1.14	2.45
Secondary	1.14	2.27
<u>Age 20-24</u>		
None	1.33	1.70
Primary	1.22	1.86
Secondary	1.25	1.46
<u>Age 25-29</u>		
None	1.23	1.71
Primary	1.38	1.64
Secondary	1.40	1.44
<u>Age 30-34</u>		
None	1.30	1.40
Primary	1.34	1.82
Secondary	1.45	1.43*
<u>Age 35-39</u>		
None	1.25	1.41
Primary	1.33	1.57
Secondary	1.66	1.18*
<u>Age 40-44</u>		
None	1.10	1.40
Primary	1.39	1.49
Secondary	1.58	1.31*
<u>Age 45-49</u>		
None	1.06	1.42
Primary	1.38	1.51
Secondary	1.02	1.24
<u>Age 50-59</u>		
None	1.34	1.27*
Primary	1.39	1.45
Secondary	1.46	1.39*

Notes: ⁺ Higher educated women rarely found in rural areas; comparisons restricted, therefore, to first three levels of schooling.

* Native Ratio exceeds Migrant Ratio, suggesting adaptation process may outweigh migrant selectivity in this case.

Source: Table A-1.

rural migrants and favor low fertility among the city migrants. Thus, if the migrant selectivity process is quantitatively more important than the adaptation process, the rural-city fertility ratio for migrants should exceed that for natives. In 19 out of 24 cases in Table 4 it does, providing support for the view that the allocation of migrants is selective with respect to fertility preferences and four out of five of the exceptions are for women with secondary education, for whom the effect of selectivity on migrants to urban areas was predicted to be small. These distinctive preferences of migrants across destination regions may also help to account for other types of migrant behavior that are widely observed to covary with fertility, namely, female labor force participation, parental investments in child schooling, and child survival and health.

In sum, there are few large differences between the fertility of migrants and native women living in the same residential area, of the same age and educational attainment. Women moving to or within rural areas tend to have higher fertility than non-migrants living in these areas. Conversely, migrant women in the large cities with no more than a primary education have lower fertility than do natives, on the whole.¹³ These two patterns in migrant-native fertility confirm a role for migrant selectivity.

13

Evidence from National Fertility Surveys in 1969 and 1976 as well as the 1964 and 1973 censuses indicate that the proportion married at a given age is decreasing and that the median age at marriage is increasing in recent years in Colombia (Hernandez, 1978). As discussed in the text, our analysis of a single cross section (census sample of 1973) cannot illuminate clearly the character of these changes taking place over time and how they will affect future marriage and fertility rates. A single cross sectional data source, such as a census sample, cannot disentangle life-cycle fertility patterns from those due to different period-specific effects that occurred at different ages for different birth cohorts.

Migrant-Native Fertility Comparisons at Origin

The previous data on migrant-native fertility at destination support the hypothesis that migrant reproductive preferences influence the destination migrants select, but the evidence did not determine the importance of adaptation of migrant fertility to the social and economic constraints of current residential area. Moreover, to appraise the role of family origin on migrant fertility, as hypothesized in the writing of Goldberg and Duncan, it is helpful to consider briefly migrant fertility vis-a-vis native fertility at origin, within the same age and education groups. The predominant migration stream in Colombia is that from towns and rural areas of municipalities to the four largest cities, even though these largest cities contained in 1973 only a third of the Colombian population. Nonetheless, since three-fourths of the women in these cities migrated there, this migrant group constitutes a quarter of the entire female population and represents over a half of all migrant women in the country (see Tables A-7 and A-8). This stream of migrants from rural backgrounds to metropolitan areas is also most similar to the population originally studied by Goldberg and Duncan in the U.S.

Columns (2), (4) and (6) of Table 5 report the average number of children ever born per woman, by age and education, for natives resident in large cities, migrants from towns and rural areas to large cities,

Table 5
Children Ever Born of Migrants from Rural and Town Areas
to Large Cities and Natives at Destination and Origin, by Age and Education[†]

Age and Education *	Residents in Large Cities				Residents in Town or Rural		Migrant-Native Fertility Ratio at	
	Natives Born at Destination		Migrants Born in Towns and Rural		Native Born		Origin	Destination
	Number of Women (1)	Children Ever Born (2)	Number of Women (3)	Children Ever Born (4)	Number of Women (5)	Children Ever Born (6)	(4)/(6) (7)	(4)/(2) (8)
<u>20-24:</u>								
None	131	1.63	338	1.48	1672	2.13	.69	.91
Primary	1505	1.34	2833	1.08	5119	1.59	.68	.81
Secondary	1965	.56	1602	.63	1013	.56	1.13	1.13
Higher	391	.17	218	.11	15	.20	.55**	.65
All	3992	.85	4991	.92	7819	1.57	.59	1.08
<u>25-29:</u>								
None	108	20	388	2.40	1696	3.85	.62	.75
Primary	1066	2.48	2840	2.28	4254	3.29	.69	.92
Secondary	1045	1.46	1289	1.46	538	1.70	.86	1.00
Higher	169	.67	182	.74	9	.34	2.18**	1.10
All	2388	1.94	4699	2.01	6497	3.30	.61	1.04
<u>30-34:</u>								
None	120	4.07	423	4.11	1738	5.29	.78	1.01
Primary	902	3.81	2501	3.51	3513	4.97	.71	.92
Secondary	618	2.40	957	2.55	305	2.98	.86	1.06
Higher	66	1.68	107	.170	3	2.33	.76**	1.05
All	1706	3.24	3988	3.29	5559	4.96	.66	1.02
<u>35-39:</u>								
None	75	4.96	526	5.02	2013	6.25	.72	1.01
Primary	788	4.66	2387	4.42	3357	6.25	.71	.95
Secondary	478	3.30	786	3.35	224	4.36	.77	1.02
Higher	47	2.74	70	2.30	3	2.67	.86**	.84
All	1388	4.14	3769	4.24	5597	6.17	.69	1.02
<u>40-44:</u>								
None	90	6.34	481	5.59	1810	6.94	.81	.88
Primary	662	5.19	1903	5.20	2515	7.02	.74	1.00
Secondary	387	3.94	625	4.36	162	5.83	.75	1.11
Higher	32	2.34	42	2.64	-	-	-	1.13
All	1171	4.79	3111	5.06	4487	6.95	.73	1.06
<u>45-49:</u>								
None	83	6.73	487	5.51	1552	7.12	.77	.82
Primary	495	5.61	1552	5.64	2034	7.45	.76	1.01
Secondary	245	4.38	545	4.42	119	4.62	.96	1.01
Higher	11	2.73	26	4.08	-	-	-	1.49**
All	834	5.32	2610	5.34	3705	7.22	.74	1.00

- No women in sample in specific category.

* Education levels do not indicate completion of a respective level of schooling but only some exposure. All refers only to women reporting one of the four categories of educational attainment enumerated.

** Less than 25 observations are used in the derivation of this ratio, and thus the reported ratio is subject to large sampling error.

[†] For all women, regardless of whether they are currently in a union or not.

Source: Derived from Tables A-1 and A-2.

and natives resident in towns and rural areas, respectively. Columns (1), (3) and (5) provide the size of the census sample in these categories. Column (8) is the ratio of migrant to native fertility at destination, which is roughly comparable to row (a) in Table 2, except that Table 5 is constructed only for migrants from one origin: towns and rural areas. As noted with respect to Table 2, migrants to the large cities have about the same level of fertility as do city natives -- somewhat higher fertility among migrant women with some secondary or higher education, and somewhat lower fertility among migrant women with less than a secondary education.

Column (7) in Table 5 shows the ratio of migrant to native fertility at origin. Here we observe fertility among the large city migrants is 20 to 40 percent lower than the fertility of similarly educated women still living in the towns and rural areas where the migrants were born. These substantial differentials between migrant and native fertility at origin can be interpreted as a combination of (1) the effect of the selective differences between migrants and nonmigrants at origin in their reproductive "preferences" and (2) the effect of the distinct urban and rural price and income constraints on adaptive reproductive behavior. Clearly, if the entire difference in fertility between migrants and natives at origin were due to migrants adapting to unexpected urban instead of rural environmental constraints, rural-urban internal migration could be assigned a major role in accounting for the recent national decline in Colombian fertility. Given the evidence presented, however, that migrants reveal their reproductive preferences in their

decision whether and where to migrate, one cannot ascribe all of these migrant-native differentials at origin to internal migration per se. Conversely, the rate of selective internal migration in Colombia also suggests that rural fertility should decline more slowly than one might anticipate based on the population's age, education, and environmental opportunities.

Migrant-native fertility comparisons within relatively similar educational attainment groups have helped to discriminate among alternative explanations for migrant fertility behavior. The family-origin hypothesis that migrant fertility is determined by norms adopted at childhood is not supported by these data, except perhaps in the case of women with secondary or higher schooling, who have migrated to medium and large sized cities. Among less educated migrants to the cities, who are the majority of all migrants in Colombia (Table A-2) and migrants to rural areas, fertility is lower than that of urban natives in the first case, and higher than that of rural natives in the second case. This reversed pattern of migrant-native fertility in urban and rural areas contradicts the hypothesis that norms at origin determine the migrant's reproductive behavior.

The "adaptation" hypothesis is not much more successful in accounting for the migrant-native fertility differences. It also predicts that migrants, at least on arrival, should behave like those that they were drawn from at origin, and only with duration of residence would their childbearing pattern converge to that of natives, as they adapt to local conditions. Although duration of migrant's residence at destination has not been considered explicitly in Table 5, the observation that migrants

generally have smaller families than non-migrants of the same age and education living in the origin indicates the the adaptation hypothesis does not seem to be a complete explanation of migrant fertility behavior in Colombia. The regression analysis that follows examines the adaptation hypothesis in more detail.

Regression Analysis of Duration of Residence and Migrant Fertility

The adaptation and selectivity hypotheses for migrant fertility behavior can be explored in greater detail using a parallel regression framework for evaluating the effect on migrant fertility of duration of residence at destination. In order to hold constant for the woman's age, education, migration status and husband's monthly income, our sample is restricted to women in marital or common-law unions in which the husband is present. The observed similarity of migrant and native fertility at destination seen in Tables 2 and 5 is potentially consistent with either the adaptation or selectivity hypotheses, but the adaptation hypothesis also implies that the fertility of migrants should converge with duration of residence at destination toward the level of native fertility. Moreover, in approaching parity with native fertility at destination, migrant fertility should initially deviate from native fertility in the direction of the fertility levels at their migrant origin. Namely, one anticipates that rural-city migrants would with duration of residence at destination report a decline in their migrant-native fertility ratio toward unity, and conversely for urban-rural migrants. If, on the other

hand, rural-urban migrants from the moment they arrive exhibit similar or lower levels of fertility than do long term rural-urban migrants and urban natives, the evidence would suggest migrants are selectively drawn toward their destinations and accept the fertility goals of the destination natives upon arrival, if not before.

The dependent variable in the regressions reported in Table 6 is the number of children ever born per woman (living in a union with spouse present), within five year age groups of wives by current residential areas; the explanatory variables are the wife's age, education, husband's monthly income, and two alternative parameterizations of migration status. In the first specification of the regression equation, categorical variables indicate the duration of migrant residence at destination by four levels. The first test statistic reported at the bottom of the table indicates whether this set of migration/duration categories is jointly statistically significant according to the F ratio. The second specification of the regression equation includes categorical variables that capture both the fertility differences associated with duration of residence at destination for migrants from rural or town areas (indistinguishable as birth place in the census), and whether the migrant had alternatively been born in a large or medium sized city. At the bottom of Table 6, two F ratio statistics are reported for the joint statistical significance of the three additional duration of migration effects for migrants from town-rural origins¹⁴ and for the three origin (large city, medium city and town-rural) effects.

¹⁴ With degrees of freedom of 3 and 2500, the F ratio is statistically significant at the 5 percent level if it exceeds 2.60. If the degrees of freedom are 4 and 2500 the significant level of F is 2.37.

Table 6

Regressions on Children Ever Born, Wife's Age 20-24,
by Type of Current Residence:
Effects of Wife's Education, Husband's Income, and Migration Status

EXPLANATORY VARIABLES	RESIDENT AREAS (destination)					
	Large Cities ^{a/}		Medium Cities ^{a/}		Town and Rural Areas ^{a/}	
	(1)	(2)	(1)	(2)	(1)	(2)
Age of wife (years)	.20	.20	.26	.26	.31	.31
(t test)	(13.02)	(13.03)	(16.45)	(16.46)	(17.77)	(17.78)
Education of wife:						
No education	.56	.57	.48	.48	.31	.31
Secondary	-.58	-.59	-.67	-.67	-.74	-.74
University	-1.15	-1.19	-1.30	-1.30	-2.16	-1.98
Other	-.63	-.65	-.09	-.10	2.27	2.27
Not reported	-.16	.16	.41	.41	.41	.40
Income of husband (pesos/month)						
0-300	.10	.09	.11	.11	.10	.10
301-600	-.12	-.13	.04	.04	.04	.03
1001-1800	.02	.01	-.03	-.03	-.16	-.17
1801-4000	-.09	-.11	-.03	-.03	-.34	-.32
40001+	-.18	-.21	-.11	-.12	.11	.12
Not reported	.17	.16	.06	.06	.03	.03
Wife migrant-duration (years)						
0-1						
2-5	-.23		-.16		-.17	
6-10	-.07		-.05		.00	
10+	.03		.20		.52	
Wife migrant origin & duration ^{b/}						
Rural or town 0-1 (years)						
Rural or town 2-5		-.31		-.17		-.19
Rural or town 6-10		-.13		-.06		-.02
Rural or town 10+		-.02		.19		.49
Medium Cities		.02		.04		.23
Four largest cities		.37		-.05		-.35
Intercept		.12		.07		.18
R ²		-.257		-3.74		-4.32
Standard Error of Estimate		1.15		1.30		1.48
Mean		1.63		1.98		2.61
Sample Size ^{c/}		2969		3589		3738
Joint F tests:						
Regress. (1) Mig. Dura. (df lost 4) ^{a/}	3.92		4.90		11.56	
Regress. (2) Mig. Dura. (df lost 3) ^{d/}		5.12		4.94		10.84
Regress. (2) Mig. Origin (df lost 3) ^{d/}		7.66		.73		2.79

Table 6

Regressions on Children Ever Born, Wife's Age 25-29,
by Type of Current Residence:
Effects of Wife's Education and Migration Status and Husband's Income

EXPLANATORY VARIABLES	RESIDENT AREAS (destination)					
	Large Cities ^{a/}		Medium Cities ^{a/}		Town and Rural Areas ^{a/}	
	(1)	(2)	(1)	(2)	(1)	(2)
Age of wife (years)	.20	.20	.27	.27	.31	.31
(t test)	(10.91)	(10.89)	(14.08)	(14.07)	(14.22)	(14.21)
Education of wife:						
No education	.37	.38	.66	.66	.54	.54
Secondary	-.77	-.78	-.97	-.96	-1.31	-1.31
University	-1.38	-1.40	-1.50	-1.49	-2.48	-2.42
Other	-.67	-.67	-1.07	-1.06	-.33	-.33
Not reported	.31	.32	.58	.58	.25	.25
Income of husband (pesos/month)						
0-300	.18	.17	.12	.12	-.27	-.27
301-600	.21	.21	.05	.05	-.22	-.22
1001-1800	-.11	-.12	-.24	-.24	-.57	-.57
1801-4000	-.20	-.21	-.25	-.25	-.24	-.24
40001+	-.25	-.28	-.45	-.44	-.06	-.05
Not reported	.23	.22	-.07	-.07	-.13	-.13
Wife migrant-duration (years)						
0-1	-.33		-.38		-.52	
2-5	-.28		-.24		-.32	
6-10	-.12		-.04		.11	
10+	.01		.21		.45	
Wife migrant origin & duration ^{b/}						
Rural or town 0-1 (years)		-.39		-.36		-.52
Rural or town 2-5		-.34		-.23		-.32
Rural or town 6-10		-.16		-.02		.11
Rural or town 10+		-.04		.22		.45
Medium Cities		.17		-.14		-.11
Four largest cities		.15		-.03		.02
Intercept	-2.27	-2.24	-3.69	-3.70	-3.89	-3.89
R ²	.14	.14	.16	.15	.09	.09
Standard Error of Estimate	1.55	1.55	1.84	1.84	2.04	2.04
Mean						
Sample Size ^{c/}	2.56		3.27		4.28	
	3866		4686		4463	
Joint F tests:						
Regress. (1) Mig. Dura. (df lost 4) ^{d/}	5.67		11.31		13.92	
Regress. (2) Mig. Dura. (df lost 3) ^{d/}		6.67		10.85		13.89
Regress. (2) Mig. Origin (df lost 1) ^{d/}		2.83		.45		.53

Table 6

Regressions on Children Ever Born, Wife's Age 30-34,
by Type of Current Residence:
Effects of Wife's Education and Migration Status and Husband's Income

EXPLANATORY VARIABLES	RESIDENT AREAS (destination)					
	Large Cities ^{a/}		Medium Cities ^{a/}		Town and Rural Areas ^{a/}	
	(1)	(2)	(1)	(2)	(1)	(2)
Age of wife (years) (t test)	.24 (8.46)	.24 (8.45)	.30 (11.49)	.30 (11.51)	.29 (10.39)	.29 (10.39)
Education of wife:						
No education	.48	.48	.77	.77	.39	.39
Secondary	-.83	-.83	-1.20	-1.21	-1.58	-1.58
University	-1.52	-1.52	-2.46	-2.49	-3.39	-3.41
Other	-1.04	-1.04	-1.41	-1.40	-.33	-.34
Not reported	-.11	-.11	.68	.68	.29	.29
Income of husband (pesos/month)						
0-300	.95	.95	.07	.07	-.11	-.11
301-600	.10	.10	.04	.04	.18	.18
1001-1800	.00	.00	-.19	-.19	.04	.03
1801-4000	-.02	-.02	-.41	-.41	.15	.15
4000+	-.28	-.28	-.30	-.31	-.65	-.66
Not reported	.12	.12	.08	.08	.04	.03
Wife migrant-duration (years)						
0-1						
2-5	-.30		-.56		-.79	
6-10	-.02		-.41		-.51	
10+	-.46		-.47		-.16	
10+	-.10		.02		.28	
Wife migrant origin & duration ^{b/}						
Rural or town 0-1 (years)		-.31		-.56		-.80
Rural or town 2-5		-.03		-.41		-.53
Rural or town 6-10		-.46		-.47		-.18
Rural or town 10+		-.10		.01		.27
Medium Cities		.02		.26		.05
Four largest cities		.01		-.05		.08
Intercept	-3.48	-3.48	-4.23	-4.24	-3.37	-3.37
R ²	.10	.10	.12	.12	.05	.05
Standard Error of Estimate	2.09	2.09	2.44	2.44	2.71	2.71
Mean						
Sample Size ^{c/}	3.81 3515		4.79 4336		5.88 4239	
Joint F tests:						
Regress. (1) Mig. Dura. (df lost 4) ^{d/}	5.14		9.52		9.57	
Regress. (2) Mig. Dura. (df lost 3) ^{d/}		5.05		9.32		9.60
Regress. (2) Mig. Origin (df lost 3) ^{d/}		.01		.86		.08

Table 6

Regressions on Children Ever Born, Wife's Age 35-39,
by Type of Current Residence:
Effects of Wife's Education and Migration Status and Husband's Income

EXPLANATORY VARIABLES	RESIDENT AREAS (destination)					
	Large Cities ^{a/}		Medium Cities ^{a/}		Town and Rural Areas ^{a/}	
	(1)	(2)	(1)	(2)	(1)	(2)
Age of wife (years)	.21	.21	.23	.23	.25	.25
(t test)	(6.28)	(6.28)	(6.76)	(6.76)	(7.20)	(7.20)
Education of wife:						
No education	.55	.55	.77	.76	.12	.12
Secondary	-.88	-.87	-1.30	-1.29	-2.30	-2.26
University	-1.66	-1.65	-2.64	-2.56	-4.97	-5.00
Other	-.87	-.85	-2.65	-2.66	.66	.66
Not reported	.43	.45	-.33	-.31	.21	.21
Income of husband (pesos/month)						
0-300	.54	.54	-.09	-.09	-.54	-.54
301-600	-.02	-.02	.37	.37	-	-
1001-1800	-.07	-.07	-.18	-.18	.06	.06
1801-4000	-.27	-.27	-.40	-.40	.05	.05
40001+	-.61	-.60	-.84	-.80	-.05	-.02
Not reported	-.11	-.11	-.35	-.33	-.17	-.17
Wife migrant-duration (years)						
0-1						
2-5	.22		-.36		-.48	
6-10	-.18		-.31		-.31	
10+	-.03		-.08		-.36	
10+	.07		-.03		.44	
Wife migrant origin & duration ^{b/}						
Rural or town 0-1 (years)		.25		-.27		-.48
Rural or town 2-5		-.15		-.20		-.31
Rural or town 6-10		.01		-.02		-.36
Rural or town 10+		.01		.05		.43
Medium Cities		.10		-.40		-.71
Four largest cities		.10		-.43		.09
Intercept	-2.54	-2.54	-1.87	-1.88	-1.70	-1.72
R ²	.08	.08	.08	.08	.03	.03
Standard Error of Estimate	2.64	2.64	3.08	3.08	3.28	3.28
Mean		4.80		6.08		7.24
Sample Size ^{c/}		3201		4293		4443
Joint F tests:						
Regress. (1) Mig. Dura. (df lost 4) ^{d/}	.78		1.46		6.48	
Regress. (2) Mig. Dura. (df lost 3) ^{d/}		.76		1.03		6.42
Regress. (2) Mig. Origin (df lost 3) ^{d/}		.31		4.43		.79

Table 6

Regressions on Children Ever Born, Wife's Age 40-44,
by Type of Current Residence:
Effects of Wife's Education and Migration Status and Husband's Income

EXPLANATORY VARIABLES	RESIDENT AREAS (destination)					
	Large Cities ^{a/}		Medium Cities ^{a/}		Town and Rural Areas ^{a/}	
	(1)	(2)	(1)	(2)	(1)	(2)
Age of wife (years) (t test)	.17 (3.72)	.16 (3.55)	.25 (5.61)	.25 (5.63)	.30 (6.72)	.30 (6.75)
Education of wife:						
No education	.50	.50	.26	.26	.08	.07
Secondary	-.61	-.59	-1.14	-1.15	-1.42	-1.44
University	-2.19	-2.19	-2.11	-2.10	-4.81	-4.77
Other	-1.28	-1.28	-.39	-.40	-5.22	-5.43
Not reported	-.63	-.65	-.72	-.71	-.13	-.15
Income of husband (pesos/month)						
0-300	.56	.57	.05	.05	-.79	-.77
301-600	.27	.24	-.15	-.15	.06	.06
1001-1800	.36	.35	-.22	-.23	-.66	-.65
1801-4000	-.16	-.15	-.45	-.46	.18	.19
40001+	-.61	-.58	-.66	-.68	.63	.66
Not reported	-.60	-.59	.18	.17	.14	.15
Wife migrant-duration (years)						
0-1	.46		-.87		.21	
2-5	.53		-.76		-.06	
6-10	.33		-.32		.20	
10+	.18		-.38		.13	
Wife migrant origin & duration ^{b/}						
Rural or town 0-1 (years)		.57		-.90		.17
Rural or town 2-5		.63		-.79		-.11
Rural or town 6-10		.43		-.35		.15
Rural or town 10+		.29		-.41		.08
Medium Cities		-.12		.42		-.26
Four largest cities		-.48		.06		.47
Intercept	-1.29	-.99	-2.71	-2.76	-4.01	-4.06
R ²	.05	.05	.04	.04	.03	.03
Standard Error of Estimate	3.23	3.23	3.72	3.72	3.79	3.79
Mean		5.70		6.95		8.06
Sample Size ^{c/}		2494		3427		3395
Joint F tests:						
Regress. (1) Mig. Dura. (df lost 4) ^{d/}	1.17		4.27		.33	
Regress. (2) Mig. Dura. (df lost 3) ^{d/}		1.69		4.35		.21
Regress. (2) Mig. Origin (df lost 3) ^{d/}		3.24		.55		1.07

Table 6

Regressions on Children Ever Born, Wife's Age 45-49,
by Type of Current Residence:
Effects of Wife's Education and Migration Status and Husband's Income

EXPLANATORY VARIABLES	RESIDENT AREAS (destination)					
	Large Cities ^{a/}		Medium Cities ^{a/}		Town and Rural Areas ^{a/}	
	(1)	(2)	(1)	(2)	(1)	(2)
Age of wife (years)	.07	.07	.06	.06	.10	.10
(t test)	(1.13)	(1.16)	(.32)	(.99)	(1.79)	(1.80)
Education of wife:						
No education	.17	.17	.25	.25	-.28	-.28
Secondary	-1.03	-1.00	-1.09	-1.09	-3.07	-3.00
University	-2.42	-2.48	-3.38	-3.39	-	-
Other	-1.48	-1.33	-1.36	-1.38	1.45	1.44
Not reported	-.71	-.66	-.42	-.41	-.98	-.98
Income of husband (pesos/month)						
0-300	.33	.33	-.42	-.42	-.90	-.90
301-600	.23	.23	.03	.03	-.20	-.20
1001-1800	-	.03	-.73	-.73	-.07	-.07
1801-4000	-.05	.02	-.88	-.88	.09	.09
40001+	-.40	-.32	-.88	-.87	.46	.47
Not reported	.46	.48	-.13	-.13	-.44	-.44
Wife migrant-duration (years)						
0-1	-.52		-.76		.02	
2-5	.54		.40		-.28	
6-10	.30		-.73		-	
10+	-.61		-.30		.32	
Wife migrant origin & duration ^{b/}						
Rural or town 0-1 (years)		-.41		-.72		-.09
Rural or town 2-5		.70		.43		-.20
Rural or town 6-10		.42		-.70		.07
Rural or town 10+		-.47		-.25		.38
Medium Cities		-.67		.27		-.56
Four largest cities		-.01		-.24		-.48
Intercept	3.49	3.35	5.54	5.56	4.26	4.25
R ²	.05	.05	.03	.03	.02	.02
Standard Error of Estimate	3.59	3.59	4.12	4.12	4.16	4.16
Mean		6.09		7.41		8.40
Sample Size ^{c/}		1792		2675		2584
Joint F tests:						
Regress. (1) Mig. Dura. (df lost 4) ^{d/}			5.69			
Regress. (2) Mig. Dura. (df lost 3) ^{d/}				3.28	.86	
Regress. (2) Mig. Origin (df lost 3) ^{d/}		5.23				.97
		3.80				.68

Footnotes to Table 6:

a/ The four largest cities are: Bogotá, Cali, Medellín and Barranquilla. Medium Cities include other cities with population size larger than 35,000 at the time of the 1973 Population Census. Town and rural areas include cities with population size smaller than 35,000 at the time of the 1973 Population Census and all areas classified as rural in the Census questionnaire.

b/ The omitted category is migrants born in rural areas or towns. The coefficients for the origin/duration dummies in this regression should be interpreted as deviations from natives (non-migrants).

c/ Samples include all women with husband present reporting their age, birthplace, current residence and duration of residence.

d/ The F is defined for a set of dummy variables, for example, the four dummy variables that indicate the wife's duration of migration in regression (1). The degrees of freedom for the F test are defined by the number of restrictions due to the set of dummy variables, and the sample size minus the number of independent variables in the regression plus one.

Summarizing the regressions reported in Table 6, the fertility of women currently in unions is lower the higher is the woman's education, holding constant for her age and husband's income. These large differences reflect perhaps the higher opportunity cost of the more educated woman's time in the labor market that is required in additional childbearing, and the lower "cost" of acquiring and using family planning to women with more education. In urban areas, increases in husband's income are associated with lower fertility after the wife is age 30 or older. In towns and rural areas, however, fertility among women over age 30 is often directly associated with husband's income. A similar reversal in the fertility effect of husband's income (or husband's education) between urban and rural areas of Colombia has been noted before (Schultz, 1979). It was then suggested that the demand for children increases with a husband's income in a more traditional rural-agricultural economy such as in Colombia, but in urban areas where child labor is of less value husband's income, on balance, decreases the demand for children. Even in the urban areas, however, the reduction in fertility associated with the mother's education is substantially greater (two to three children) than that associated with the father's income (one-half to one child). The greater effect of women's education (and wage) relative to the man's education (and wage) is consistent with the simplest form of the household demand model for fertility (Schultz, 1973).

Although differences in migrant-native fertility are not always statistically significant, some patterns can be noted.¹⁵ Migrants under the

¹⁵Regressions were also performed within three educational strata, with intercept shifts for the two educational groups included in each strata: (1) less than secondary, (2) some secondary or more, and (3) other education and unreported. No distinct patterns were noted within these educational strata in the duration or origin effects, even for large cities where migrant-native comparisons in Table 2 appeared quite different for more and less educated women.

age of 30 to any type of residence generally have lower fertility than longer-term migrants or natives living there. Origin matters for young migrants (age 20-29) in large cities, where those coming from medium-sized and large cities have higher fertility than the rural or town born. Migrants coming from towns or rural areas have lower fertility than natives, except if they moved more than ten years ago at a very young age. This pattern is consistent with the migrant selection hypothesis where those who are drawn from the countryside are predisposed to restrict their fertility and only with ten or more years of large city residence do they reach a fertility level similar to that of natives. Intra urban migrants in large cities do not exhibit this restraint. In the older age groups (40 and more), however, migrants from urban origins living in large cities have lower fertility than natives, while those from towns and rural areas often have higher fertility, probably indicating that origin conditioned demand for children is a more valid hypothesis to explain the fertility behavior of older migrants to large cities, many of whom began childbearing before migrating.

Two interpretations of this evidence are possible, but a single cross section does not permit one to distinguish which is more accurate. If the differences in migrant-native fertility across age groups represent the experience of all cohorts as they age, then migrants from rural origins currently living in large cities delay childbearing compared with intra-urban migrants and urban natives, but these rural born migrants have greater fertility later in life, allowing them to catch up with natives and perhaps surpass the fertility of urban born migrants.

Conversely, if the differences in fertility across age groups represent persistent differences in the lifecycle path of fertility for different birth cohorts, then younger rural born city migrants are more strongly inclined toward, or more capable of achieving, lower fertility than are the older generations of rural to city migrants in Colombia. This second interpretation contrasts with Balan and Hendershot's hypothesis that the "selectivity" of migration diminishes with development; these data are consistent with an increase over time in migrant "selectivity," defined in terms of their lower fertility relative to natives at destination, within an educational strata.

The effect of duration of migration is generally to increase urban fertility, particularly at younger ages in the urban sector (20-29), and increase at all ages in the rural sector.¹⁶ But this pattern is less regular after age 30, leading us to conclude that for older women the adaptation process is not confirmed. Generalizing from this evidence, it appears that younger migrants to cities from rural areas restrict or at least delay their fertility, relative to natives. At later ages, the migrants have already had most of their children, and we observe no clear relationship between their duration of residence after migration and cumulative fertility.¹⁷

¹⁶ This result is parallel to that of Goldstein (1973) for Thailand, in which he noted that there was some evidence of catching up of migrants to the levels of fertility reported by native city dwellers, and that the deficit in migrant fertility was probably only a transitory phenomenon. (See also Macisco et al. (1975).)

¹⁷ In rural areas migrant fertility continues to be positively associated with duration of residence at least through age 39, corresponding to the adaptation hypothesis.

Conclusions

Within age and education groups, living in the same size of residential area, migrant-native fertility differences are relatively unimportant in Colombia. Differentials by size of residential area are substantial by comparison, and fertility behavior of migrants does not narrow these regional differences, as we have shown, but actually widens them. Different conditions in city, town or rural environment appear to elicit different levels of fertility, but both migrants and natives respond similarly to these local conditions. In other words, origins do not explain cumulative fertility within age and education groups; current living conditions do. The accommodation of migrants to newly adopted conditions at destination is so complete (or excessive) and so prompt that one must adduce an additional reason for these reversing patterns of migrant behavior.

Our interpretation of these data is that migrants differ notably from non-migrants in their preferences for children. Migrants are assumed to move to areas in which conditions are propitious for them to behave according to their distinctive preferences. From an economic perspective, relative wages of men, women and children and other prices distinguish residential regions and favor or penalize particular forms of consumption and demographic behavior in each. Migrants who prefer a specific form of behavior or consumption are drawn to regions where it is most advantageously pursued, or is least costly. In the case at hand, it is assumed that migrants are systematically drawn toward locations where the costs of having their preferred family size are relatively low, other things

being equal. One anticipates, according to this conception of migrant selectivity, that the ratio of rural to urban fertility will tend to be greater for migrants at destination than for natives, since preference orderings of natives for fertility would be more nearly random than would be the case for migrants who had chosen their location with relative costs of childbearing in mind. Despite the fact that the sluggish process of adapting behavior to fit one's adopted environment works in the opposite direction, Table 4 summarized the evidence that in 19 out of 24 pairwise comparisons of women by age and education the rural-urban fertility ratios were wider for migrants than for natives, confirming a potent role for migrant selectivity. The strength of selection on migrant fertility would, of course, depend on the extent of rural-urban differences in child costs and on the economic and social forces motivating migration in a country. Colombia may be a special case, but it does not appear particularly unusual in these regards.

In the long run, regional differentials in fertility have tended to narrow with economic development, just as racial and ethnic fertility differentials narrow as populations become more integrated. Rural-urban and even farm-nonfarm fertility differentials have generally closed during the mid-twentieth century in high income countries. The selectivity of migration according to fertility preferences, which is postulated in this paper, tends to resist pressure for fertility to converge across regions. In contrast, it is more common to assume that internal migration and the rapid redistribution of a national population contributes to behavioral homogeneity. Beyond some point in

the development process, growing interpenetration of regional factor and goods markets appears to foster a reduction in differences in regional prices, wage rates, and other opportunities. As these regional markets become one national market and the mobility of the population continues to increase with education, regional fertility differences might be expected to decline. Nonetheless, if fixed differences in regional environments, such as climate, continued to influence substantially the regional costs and benefits of childbearing, selectivity of migration with respect to fertility preferences might sustain indefinitely regional differences in fertility and family size within a closed population.

TABLE A-1.1

Children Ever Born of All Women and Women in Current Unions, Age 15-19, and 20-24
by Education, Current Residence and Migration Status*

Current Residence : Age, Marital Status and Education	Large City			Medium City		Town		Rural	
	Native Born	All Migrants	Migrants Born in Town or Rural Areas	Native Born	All Migrants	Native Born	All Migrants	Native Born	All Migrants
<u>Age 15-19</u>									
<u>All women</u>									
None	.33	.32	.30	.37	.49	.45	.63	.46	.72
Primary	.22	.20	.18	.27	.25	.21	.32	.25	.49
Secondary	.07	.11	.10	.08	.12	.04	.12	.08	.25
Higher	.05	.02	.03	.10	.10	-	-	-	-
<u>Women in Unions</u>									
None	1.05	1.09	1.00	.94	1.21	.99	1.28	1.12	1.15
Primary	.91	.92	.94	1.04	.82	.94	.91	.98	1.08
Secondary	.64	.71	.69	.78	.79	.63	.76	.81	1.05
Higher	1.67	.50	-	-	-	-	-	-	-
<u>Age 20-24</u>									
<u>All women</u>									
None	1.63	1.46	1.48	1.76	1.93	2.00	2.18	2.16	2.48
Primary	1.34	1.15	1.08	1.35	1.46	1.46	1.69	1.64	2.14
Secondary	.56	.68	.63	.66	.79	.51	.70	.70	.99
Higher	.17	.18	.11	.17	.30	.09	.17	-	-
<u>Women in Unions</u>									
None	2.53	2.30	2.40	2.26	2.47	2.67	2.70	2.77	2.83
Primary	1.88	1.84	1.79	1.96	2.07	2.09	2.16	2.40	2.52
Secondary	1.20	1.28	1.24	1.32	1.43	1.26	1.36	1.61	1.66
Higher	.71	.75	.50	1.14	.79	-	-	-	-

*Of those women reporting children ever born. In this age group 36.5% age 15-19 and 19.2% age 20-24 of all women, and 12.7% age 15-19 and 6.2% age 20-24 of women in unions, did not answer the children ever born question in the Census questionnaire. Educational levels do not indicate completion of a respective level of schooling, e.g. primary includes women with one or more years of primary schooling but no exposure to secondary school, etc.

TABLE A-1.2

Children Ever Born of All Women and Women in Current Unions, Age 25-29, and 30-34
by Education, Current Residence and Migration Status

Current Residence: Age, Marital Status and Education	Large City			Medium City		Town		Rural	
	Native Born	All Migrants	Migrants Born in Town or Rural Areas	Native Born	All Migrants	Native Born	All Migrants	Native Born	All Migrants
Age 25-29									
<u>All women</u>									
None	3.20	2.48	2.40	3.41	3.26	3.56	4.04	3.92	4.24
Primary	2.48	2.33	2.28	2.83	2.82	2.94	3.10	3.42	3.81
Secondary	1.46	1.54	1.46	1.50	1.70	1.58	2.06	2.05	2.22
Higher	.67	.74	.74	.83	1.12	-	1.23	-	-
<u>Women in Unions</u>									
None	3.97	3.26	3.19	4.14	3.88	4.26	4.43	4.52	4.55
Primary	2.99	2.88	2.87	3.37	3.27	3.53	3.51	3.97	4.10
Secondary	2.03	2.06	2.02	2.07	2.17	2.27	2.48	2.59	2.64
Higher	1.23	1.26	1.34	1.58	1.59	-	1.78	-	-
Age 30-34									
<u>All women</u>									
None	4.07	4.21	4.11	4.80	4.69	5.26	5.17	5.30	5.88
Primary	3.81	3.49	3.51	4.20	4.17	4.66	4.74	5.10	6.36
Secondary	2.40	2.59	2.55	2.81	3.02	2.77	3.18	3.49	3.70
Higher	1.68	1.78	1.70	1.18	1.68	-	1.75	-	-
<u>Women in Unions</u>									
None	5.05	4.85	4.73	5.82	5.33	6.09	5.90	6.04	6.08
Primary	4.38	4.06	4.10	4.74	4.60	5.33	5.07	5.72	5.62
Secondary	3.00	3.11	3.09	3.49	3.44	3.51	3.59	4.08	4.00
Higher	2.67	2.27	2.32	2.00	2.30	-	-	-	-

* Of those women reporting children ever born. In this age group 10.5% age 25-29 and 7.0% age 30-34 of all women, and 3.7% age 25-29 and 3.0% of women in unions, did not answer the children ever born question in the Census questionnaire. Educational levels do not indicate completion of a respective level of schooling, e.g., primary includes women with one or more years of primary schooling but no exposure to secondary school, etc.

TABLE A-1.3

Children Ever Born of All Women and Women in Current Unions, Age 35-39, and 40-44
by Education, Current Residence and Migration Status*

Current Residence : Age, Marital Status and Education	Large City			Medium City		Town		Rural	
	Native Born	All Migrants	Migrants Born in Town or Rural Areas	Native Born	All Migrants	Native Born	All Migrants	Native Born	All Migrants
<u>Age 35-39</u>									
<u>All women</u>									
None	4.96	5.02	5.02	5.58	5.95	6.36	6.33	6.22	7.09
Primary	4.66	4.42	4.42	5.26	5.17	5.82	5.84	6.45	6.93
Secondary	3.30	3.37	3.35	3.46	4.01	4.07	4.71	5.48	3.99
Higher	2.74	2.21	2.30	-	2.00	-	-	-	-
<u>Women in Unions</u>									
None	5.44	5.86	5.76	6.47	6.86	7.23	7.02	7.00	7.40
Primary	5.09	5.09	5.14	5.74	5.78	6.51	6.43	7.07	7.20
Secondary	3.82	4.00	4.07	4.07	4.51	4.84	5.00	6.02	4.21
Higher	3.40	2.78	2.70	-	3.09	-	-	-	-
<u>Age 40-44</u>									
<u>All women</u>									
None	6.34	5.56	5.59	6.70	5.82	6.90	6.71	6.95	7.76
Primary	5.19	5.19	5.20	5.90	6.20	6.66	6.78	7.20	7.75
Secondary	3.94	4.32	4.36	4.41	5.03	5.70	5.30	6.22	5.65
Higher	2.34	2.77	2.64	-	-	-	-	-	-
<u>Women in Unions</u>									
None	7.46	6.41	6.54	7.79	6.78	7.70	7.54	7.79	8.30
Primary	5.86	6.03	6.10	6.62	6.83	7.73	7.23	7.95	8.08
Secondary	4.51	4.99	5.13	5.42	5.53	6.75	5.97	7.00	6.47
Higher	2.88	3.53	3.57	-	-	-	-	-	-

* Of those women reporting children ever born. In this age group 5.7% age 35-39 and 5.3% age 40-44 of all women, and 3.1% age 35-39 and 2.8% age 40-44 of women in unions, did not answer the children ever born question in the Census questionnaire. Educational levels do not indicate completion of a respective level of schooling, e.g., primary includes women with one or more years of primary schooling but no exposure to secondary school, etc.

TABLE A-1.4

Children Ever Born of All Women and Women in Current Unions, Age 45-49, and 50-59
by Education, Current Residence and Migration Status*

Current Residence: Age, Marital Status and Education	Large City			Medium City		Town		Rural	
	Native Born	All Migrants	Migrants Born in Town or Rural Areas	Native Born	All Migrants	Native Born	All Migrants	Native Born	All Migrants
<u>Age 45-49</u>									
<u>All women</u>									
None	6.73	5.48	5.51	6.90	6.76	6.94	6.86	7.16	7.78
Primary	5.61	5.57	5.64	6.00	6.62	6.90	6.93	7.76	8.39
Secondary	4.38	4.45	4.42	4.15	5.70	4.66	5.62	4.48	5.52
Higher	2.73	3.70	4.08	-	-	-	-	-	-
<u>Women in Unions</u>									
None	7.88	6.63	6.78	7.85	7.44	8.29	7.38	7.85	8.39
Primary	6.68	6.31	6.40	6.57	7.31	8.13	7.61	8.50	8.68
Secondary	5.15	5.13	5.23	4.98	6.42	6.35	6.16	5.10	6.35
Higher	3.00	3.92	4.13	-	-	-	-	-	-
<u>Age 50-59</u>									
<u>All women</u>									
None	4.88	5.60	5.50	6.17	6.09	6.49	6.49	6.56	7.10
Primary	5.15	5.40	5.55	5.84	6.10	6.24	6.69	7.15	7.84
Secondary	3.61	4.59	4.71	4.44	5.40	5.73	5.01	5.26	6.38
Higher	-	3.14	2.90	-	-	-	-	-	-
<u>Women in Unions</u>									
None	5.54	6.51	6.41	6.55	7.26	7.77	7.30	7.35	7.55
Primary	6.19	6.45	6.58	6.86	6.93	7.59	7.45	7.92	8.35
Secondary	4.55	5.38	5.60	5.95	6.31	7.26	5.87	6.45	8.00
Higher	3.67	3.38	-	-	-	-	-	-	-

*Of those women reporting children ever born. In this age group 6.1% age 45-49 and 10.8% age 50-59 of all women, and 3.9% age 45-49 and 8.3% age 50-59 of women in unions, did not answer the children ever born question in the Census questionnaire. Educational levels do not indicate completion of a respective level of schooling, e.g., primary includes women with one or more years of primary schooling but no exposure to secondary school, etc.

TABLE A-1.5

Children Ever Born of All Women and Women in Current Unions, Age 60+
by Education, Current Residence and Migration Status *

Current Residence : Age, Marital Status and Education	Large City			Medium City		Town		Rural	
	Native Born	All Migrants	Migrants Born in Town or Rural Areas	Native Born	All Migrants	Native Born	All Migrants	Native Born	All Migrants
<u>Age 60+</u>									
<u>All women</u>									
None	4.61	5.46	5.48	5.63	6.08	6.11	6.15	6.09	6.62
Primary	4.58	5.63	5.68	5.25	6.25	5.81	6.18	6.44	7.53
Secondary	3.79	4.42	4.49	4.26	4.81	4.18	5.28	4.38	5.09
Higher	-	1.84	-	1.23	-	-	-	-	-
<u>Women in Unions</u>									
None	6.11	6.04	5.95	6.45	6.63	7.58	6.88	6.74	6.89
Primary	5.58	6.69	6.74	6.76	7.07	7.06	7.09	7.30	7.71
Secondary	5.00	5.19	5.45	5.57	4.84	4.96	5.98	8.40	6.61
Higher	-	-	-	-	-	-	-	-	-

*Of those women reporting children ever born. In this age group 14.7% of all women and 10.9% of women in unions did not answer the children ever born question in the Census questionnaire. Educational levels do not indicate completion of a respective level of schooling, e.g., primary includes women with one or more years of primary schooling but no exposure to secondary school, etc.

TABLE A-2.1

Number of Women in Census Sample Tabulation Cells Reported in Paper

by Age, Marital Status, Education, Current Residence and Migrant Status, Age 15-19 and 20-24.*

Current Residence :	Large City			Medium City		Town		Rural	
	Native Born	All Migrants	Migrants Born in Town or Rural Areas	Native Born	All Migrants	Native Born	All Migrants	Native Born	All Migrants
Age 15-19									
<u>All women</u>									
None	150	438	340	156	197	296	267	1148	399
Primary	1788	3338	2541	986	1334	1670	1306	4217	1332
Secondary	2965	2320	1308	1094	995	1290	831	409	182
Higher	98	88	36	10	10	5	7	-	-
<u>Women in Unions</u>									
None	22	79	61	31	43	94	82	354	205
Primary	325	499	343	190	286	271	324	844	514
Secondary	253	295	157	98	124	72	111	36	38
Higher	3	4	1	1	2	1	-	-	1
Age 20-24									
<u>All women</u>									
None	131	435	338	147	242	323	362	1349	569
Primary	1505	3725	2833	880	1500	1368	1511	3751	1661
Secondary	1065	2553	1602	711	941	740	679	273	239
Higher	391	467	218	48	73	11	29	4	4
<u>Women in Unions</u>									
None	62	196	148	92	146	196	218	903	442
Primary	907	1870	1354	480	859	770	980	2229	1307
Secondary	818	1220	739	296	464	273	326	99	137
Higher	84	118	44	7	28	1	10	2	3

*Of those women reporting children ever born. In this age group 36.5% age 15-19 and 19.2% age 20-24 of all women, and 12.7% age 15-19 and 6.2% age 20-24 of women in unions, did not answer the children ever born question in the Census questionnaire. Educational levels do not indicate completion of a respective level of schooling, e.g., primary includes women with one or more years of primary schooling but no exposure to secondary school, etc.

TABLE A-2. 2
Number of Women in Census Sample Tabulation Cells Reported in Paper

by Age, Marital Status, Education, Current Residence and Migrant Status, Age 25-29 and 30-34 *

Current Residence :	Large City			Medium City		Town		Rural	
	Native Born	All Migrants	Migrants Born in Town or Rural Areas	Native Born	All Migrants	Native Born	All Migrants	Native Born	All Migrants
Age 25-29									
<u>All women</u>									
None	108	474	388	142	298	311	354	1385	641
Primary	1066	3650	2840	722	1473	1167	1441	3087	1464
Secondary	1045	2063	1289	397	669	405	473	133	169
Higher	169	351	182	24	65	8	26	1	6
<u>Women in Unions</u>									
None	66	263	212	99	197	214	269	1062	426
Primary	771	2492	1914	515	1078	840	1082	2434	1269
Secondary	674	1411	852	260	483	259	362	93	136
Higher	90	196	94	42	44	2	18	-	6
Age 30-34									
<u>All women</u>									
None	120	508	423	126	293	314	421	1424	642
Primary	902	3154	2501	617	1346	1010	1238	2503	1287
Secondary	618	1523	957	212	466	214	303	91	91
Higher	66	183	107	11	38	3	16	-	5
<u>Women in Unions</u>									
None	74	332	278	83	206	231	293	1116	565
Primary	684	2324	1849	464	1041	786	1008	2049	1153
Secondary	451	1168	725	147	303	142	251	73	81
Higher	39	132	76	6	27	3	11	-	5

* Of those women reporting children ever born. In this age group 10.5% age 25-29 and 7.0% age 30-34 of all women, and 3.7% age 25-29 and 3.0% age 30-39 of women in unions, did not answer the children ever born question in the Census questionnaire. Educational levels do not indicate completion of a respective level of schooling, e.g., primary includes women with one or more years of primary schooling but no exposure to secondary school, etc.

TABLE A-2.3

Number of Women in Census Sample Tabulation Cells Reported in Paper

by Age, Marital Status, Education, Current Residence and Migrant Status, Age 35-39 and 40-44 *

Current Residence: Age, Marital Status and Education	Large City			Medium City		Town		Rural	
	Native Born	All Migrants	Migrants Born in Town or Rural Areas	Native Born	All Migrants	Native Born	All Migrants	Native Born	All Migrants
Age 35-39									
<u>All women</u>									
None	75	628	526	154	396	390	512	1623	876
Primary	788	3026	2387	561	1272	1047	1215	2310	1203
Secondary	478	1265	786	162	384	178	272	46	77
Higher	47	128	70	7	20	2	7	1	2
<u>Women in Unions</u>									
None	52	403	338	89	260	283	368	1242	757
Primary	604	2200	1746	420	958	827	958	1934	1084
Secondary	354	965	603	123	304	134	235	40	70
Higher	35	96	56	3	11	2	3	1	2
Age 40-44									
<u>All women</u>									
None	90	590	481	140	352	369	496	1441	772
Primary	662	2473	1963	410	1045	834	981	1681	918
Secondary	387	954	625	138	308	121	188	41	46
Higher	32	56	42	-	4	-	3	-	2
<u>Women in Unions</u>									
None	63	364	296	94	209	260	343	1092	620
Primary	488	1737	1373	306	781	628	763	1338	796
Secondary	282	726	479	98	253	93	145	32	38
Higher	24	38	28	-	4	-	2	-	2

* Of those women reporting children ever born. In this age group 5.7% age 35-39 and 5.3% age 40-44 of all women, and 3.1% age 35-39 and 2.8% age 40-44 of women in unions, did not answer the children ever born question in the Census questionnaire. Educational levels do not indicate completion of a respective level of schooling, e.g., primary includes women with one or more years of primary schooling but no exposure to secondary school, etc.

TABLE A-2.4

Number of Women in Census Sample Tabulation Cells Reported in Paper

by Age, Marital Status, Education, Current Residence and Migrant Status, Age 45-49 and 50-59*

Current Residence: Age, Marital Status and Education	Large City			Medium City		Town		Rural	
	Native Born	All Migrants	Migrants Born in Town or Rural Areas	Native Born	All Migrants	Native Born	All Migrants	Native Born	All Migrants
Age 45-49									
<u>All women</u>									
None	83	563	487	128	308	311	437	1241	593
Primary	405	1982	1552	349	934	729	833	1305	698
Secondary	245	812	545	86	211	94	159	25	46
Higher	11	37	26	6	6	-	6	-	2
<u>Women in Unions</u>									
None	50	331	281	68	194	197	281	910	448
Primary	333	1327	1046	250	636	517	572	1031	587
Secondary	175	574	382	61	163	52	124	20	34
Higher	10	24	16	-	5	-	5	-	2
Age 50-59									
<u>All women</u>									
None	96	854	747	168	477	540	652	1860	834
Primary	612	2836	2285	405	1087	932	1015	1570	851
Secondary	307	1029	722	116	235	113	182	27	39
Higher	9	29	20	-	4	-	2	-	-
<u>Women in Unions</u>									
None	46	443	393	95	234	312	354	1235	572
Primary	355	1627	1324	240	647	563	644	1128	634
Secondary	179	629	454	60	138	73	111	20	23
Higher	6	16	11	-	3	-	1	-	-

* Of those women reporting children ever born. In this age group 6.1% age 45-49 and 10.8% age 50-59 of all women, and 3.9% age 45-49 and 8.3% age 50-59 of women in unions, did not answer the children ever born question in the Census questionnaire. Educational levels do not indicate completion of a respective level of schooling, e.g., primary includes women with one or more years of primary schooling but no exposure to secondary school, etc.

TABLE A-3
Percentage of All Women by Education Level, within Age, Current Residence and Migrant Status Groups:
Colombia 1973*

Current Residence:	Large City		Medium City		Town		Rural	
	Native Born	All Migrants	Native Born	All Migrants	Native Born	All Migrants	Native Born	All Migrants
<u>15-19</u> None	3.0	7.0	6.8	7.6	9.0	10.9	19.4	20.5
Primary	35.1	53.2	43.0	51.6	50.6	53.5	71.3	68.3
Secondary	58.3	37.0	47.7	38.5	39.1	34.0	6.9	9.3
Higher	1.9	1.4	.4	.4	.1	.3	-	.1
<u>20-24</u> None	3.2	5.9	8.0	8.6	13.1	13.8	24.3	22.4
Primary	36.8	50.9	47.9	53.4	55.4	57.6	67.8	65.3
Secondary	48.0	34.9	38.7	33.5	30.0	25.9	4.9	9.4
Higher	9.6	6.4	2.6	2.6	.8	1.1	.1	.2
<u>25-29</u> None	4.4	7.1	10.8	11.7	16.2	15.1	28.9	27.3
Primary	43.2	54.8	54.9	57.7	60.8	61.5	64.5	62.4
Secondary	42.3	31.0	30.2	26.2	21.1	20.2	2.8	7.2
Higher	6.8	5.3	1.8	2.6	.4	1.1	.02	.3
<u>30-34</u> None	6.9	9.3	12.7	13.4	19.9	20.9	34.2	30.7
Primary	51.5	57.6	62.1	61.6	64.0	61.4	60.1	61.6
Secondary	35.3	27.8	21.4	21.3	13.6	15.0	2.2	4.4
Higher	3.8	3.3	1.1	1.7	.2	.8	-	.2
<u>35-39</u> None	5.3	12.6	17.1	18.0	23.6	25.1	39.1	39.5
Primary	55.4	59.1	62.3	60.6	63.2	59.5	55.7	54.2
Secondary	33.5	24.7	18.0	18.3	10.8	13.3	1.1	3.5
Higher	3.3	2.5	.8	.9	.1	.3	.02	.1
<u>40-44</u> None	7.5	14.2	19.7	20.2	27.2	29.1	43.3	43.2
Primary	55.1	59.2	57.8	59.9	61.4	57.7	50.5	51.3
Secondary	32.2	23.0	19.4	17.6	8.9	11.1	1.2	2.6
Higher	2.7	1.4	-	.2	-	.2	-	.1
<u>45-49</u> None	9.7	16.3	22.0	20.6	26.7	29.8	46.2	42.9
Primary	58.0	57.4	59.9	62.5	62.7	56.7	48.6	50.5
Secondary	28.7	23.5	14.8	14.1	8.1	10.8	.9	3.3
Higher	1.3	1.1	-	.4	-	.4	-	.1
<u>50-59</u> None	9.2	17.6	23.8	26.0	33.2	34.6	50.9	46.5
Primary	58.6	58.4	57.3	59.2	57.3	53.9	43.0	47.5
Secondary	29.4	21.1	16.4	12.8	7.0	9.7	.7	2.2
Higher	.9	.6	-	.2	-	.1	-	-

* Each educational level includes women who have done some years in the level and those who have completed it.
100.0 because the category "other" has been excluded.

TABLE A-4

Children Ever Born of All Women by Age, Current Residence and Migration Status: Colombia 1973*

Residence:	Large City			Medium City		Town		Rural	
	Native Born	All Migrants	Migrants Born Town or Rural	Native Born	All Migrants	Native Born	All Migrants	Native Born	All Migrants
<u>15-19</u>	.13	.17	.17	.19	.22	.17	.29	.29	.51
<u>20-24</u>	.85	.93	.98	1.07	1.24	1.24	1.49	1.73	2.12
<u>25-29</u>	1.93	2.01	2.01	2.45	2.53	2.75	3.02	3.54	3.81
<u>30-34</u>	3.23	3.24	3.29	3.92	3.94	4.54	4.58	5.12	5.47
<u>35-39</u>	4.15	4.17	4.24	4.99	5.09	5.74	5.79	6.37	6.89
<u>40-44</u>	4.78	5.00	5.07	5.77	5.88	6.63	6.57	7.05	7.69
<u>45-49</u>	5.30	5.25	5.33	5.97	6.48	6.72	6.73	7.43	7.94
<u>50-59</u>	4.67	5.23	5.35	6.68	5.99	6.28	6.44	6.81	7.43
<u>60+</u>	4.38	5.36	5.42	5.31	6.07	5.86	6.12	6.18	6.88

* Of those women reporting children ever born, 16.4 percent did not answer the children ever born question in the Census questionnaire.

TABLE A-5

Children Ever Born of Women Married or in Common Law Union
by Age, Current Residence and Migration Status: Colombia 1973*

Residence	Large City			Medium City		Town		Rural	
	Native Born	All Migrants	Migrants Born Town or Rural	Native Born	All Migrants	Native Born	All Migrants	Native Born	All Migrants
<u>15-19</u>	.80	.87	.88	.95	.85	.90	.93	1.02	1.09
<u>20-24</u>	1.55	1.63	1.63	1.77	1.88	2.00	2.07	2.47	2.55
<u>25-29</u>	2.52	2.57	2.62	3.06	3.00	3.41	3.43	4.11	4.12
<u>30-34</u>	3.86	3.78	3.85	4.57	4.40	5.27	4.97	5.78	5.72
<u>35-39</u>	4.64	4.82	4.93	5.53	5.70	6.48	6.34	7.04	7.15
<u>40-44</u>	5.44	5.78	5.91	6.61	6.54	7.63	7.15	7.86	8.13
<u>45-49</u>	6.24	6.03	6.18	6.58	7.16	8.03	7.34	8.15	8.47
<u>50-59</u>	5.65	6.17	6.31	6.66	6.90	7.58	7.23	7.59	7.94
<u>60+</u>	5.51	6.20	6.27	6.54	6.68	7.15	6.91	6.94	7.15

* Of those women reporting children ever born. 5.3 percent did not answer the children ever born question in the Census questionnaire.

TABLE A-6
Proportion of Women Married or in Common Law Union, By Age, Education, Migrant Status and Residence:
Colombia 1973

Current Residence:	Large City		Medium City		Town		Rural	
	Native Born	All Migrants	Native Born	All Migrants	Native Born	All Migrants	Native Born	All Migrants
<u>15-19</u> None	14.7	18.0	19.9	21.8	31.8	30.7	30.8	51.4
	18.2	14.8	19.3	21.4	16.7	24.8	20.0	38.6
	8.5	12.7	9.0	12.5	5.6	13.4	8.8	20.9
	-	-	-	-	-	-	-	-
<u>20-24</u> None	47.3	45.2	62.6	60.3	60.7	60.2	66.9	77.7
	60.3	50.2	54.5	57.3	56.3	64.9	60.8	68.7
	41.6	47.8	41.6	49.3	36.9	48.0	36.6	57.3
	21.5	25.3	-	-	-	-	-	-
<u>25-29</u> None	61.1	55.5	69.7	66.1	68.8	76.0	76.7	85.2
	72.3	68.3	71.3	73.2	72.0	75.1	78.8	86.7
	64.5	68.4	65.5	72.2	64.0	76.5	69.9	80.5
	53.3	55.8	50.0	67.7	-	-	-	-
<u>30-34</u> None	61.7	65.4	65.9	70.3	73.6	69.6	78.4	88.0
	75.8	73.7	75.2	77.3	77.8	81.4	81.9	89.6
	73.0	76.7	69.3	79.0	66.4	82.8	80.2	89.0
	59.1	72.1	54.5	71.1	-	-	-	-
<u>35-39</u> None	69.3	64.2	57.8	65.7	72.6	71.9	76.5	86.4
	76.6	72.7	74.9	75.3	79.0	78.8	83.7	90.1
	74.4	76.3	75.9	79.2	75.3	86.4	87.0	90.9
	74.4	75.0	-	-	-	-	-	-
<u>40-44</u> None	70.0	61.7	67.1	59.4	70.5	69.2	75.8	80.3
	73.7	70.2	74.6	74.7	75.3	77.8	79.6	86.7
	72.9	76.1	71.0	82.1	76.9	77.1	78.0	82.6
	75.0	67.9	-	-	-	-	-	-
<u>45-49</u> None	60.2	58.8	53.1	63.0	63.3	64.3	73.3	75.5
	67.3	67.0	71.6	68.1	70.9	68.7	79.0	84.1
	58.3	61.1	51.7	58.7	64.6	61.0	74.1	59.0
	-	64.9	-	-	-	-	-	-
<u>50-59</u> None	47.9	51.9	56.5	49.1	57.8	54.3	66.4	68.6
	58.0	57.4	59.3	59.5	60.4	63.4	71.8	74.5
	58.3	61.1	51.7	58.7	64.6	61.0	74.1	59.0
	-	-	-	-	-	-	-	-

* Each educational level includes women who have done some years in the level and those who have finished it.

TABLE A-7

Women by Migrant Status and Current Residence: Colombia 1973

Residence	Percentages			Totals (in sample)		
	Total	Native	Migrant	Total	Native	Migrant
Large Cities	35.8	22.6	46.4	66877	18921	47756
Medium Cities	15.6	12.0	18.6	29241	10069	19172
Town	18.9	20.2	17.9	35370	16862	18508
Rural	29.7	66.3	17.1	55465	37770	17695
Total	100.0	100.0	100.0	186953	83622	10331

TABLE A-8

Migrant Women by Current Residence,
Type of Origin and Marital Status: Colombia 1973

Current Residence:	Large Cities	Medium Cities	Town	Rural
Type of Origin				
<u>All Women</u>				
Large Cities	5.4	5.5	4.6	2.2
Medium Cities	20.6	22.9	14.9	14.6
Town & Rural	73.9	71.7	80.5	83.2
All Origins	100.0	100.0	100.0	100.0
<u>Women in Unions</u>				
Large Cities	5.4	5.2	4.0	2.0
Medium Cities	20.9	22.7	14.8	14.6
Town & Rural	73.7	72.1	81.1	83.4
All Origins	100.0	100.0	100.0	100.0

PROPORTION OF MIGRANT WOMEN BY TYPE OF ORIGIN,
CURRENT RESIDENCE AND EDUCATIONAL LEVEL

Education and Current Residence	Type of Origin		
	Large Cities	Medium Cities	Town and Rural
<u>None</u>			
Large Cities	29.7	29.2	29.4
Medium Cities	22.7	20.2	15.5
Towns	28.3	19.1	22.7
Rural Areas	19.3	31.5	32.4
Total	100.0	100.0	100.0
<u>Primary</u>			
Large Cities	42.6	47.9	45.6
Medium Cities	25.8	23.0	17.7
Towns	19.6	15.5	18.6
Rural Areas	11.9	13.5	18.1
Total	100.0	100.0	100.0
<u>Secondary</u>			
Large Cities	61.8	64.3	59.6
Medium Cities	19.3	22.8	19.1
Towns	15.1	9.7	16.7
Rural Areas	3.9	3.3	4.7
Total	100.0	100.0	100.0
<u>Higher</u>			
Large Cities	79.9	79.3	80.0
Medium Cities	8.6	16.9	12.6
Towns	9.6	3.0	5.8
Rural Areas	1.9	.8	1.6
Total	100.0	100.0	100.0

BIBLIOGRAPHY

- Alers, J. O. and R. P. Appelbaum, "La migración en el Perú: Un inventario de Proposiciones," Estudios de Población y Desarrollo, Vol. 1, No. 4, serie original No. 2, p. 32, 1968.
- Arriaga, E. E., "Components of City Growth in Specified Latin American Countries," Milbank Memorial Fund Quarterly, Vol. 46, No. 2, Pt. 1, pp. 237-252, April 1968.
- Balan, J., "Migrant, Native Socioeconomic Differences in Latin American Cities: A Structural Analysis," Latin American Research Review, Vol. 4, No. 1, pp. 3-29, Spring 1969.
- Birdsall, Nancy, Colombia: Declining Fertility and Future Welfare, World Bank, mimeo, 1979.
- Berqueo, E. et al., "Levels and Variations of Fertility in Sao Paulo," Milbank Memorial Fund Quarterly, XLVI, Part 2, pp. 167-185, 1968.
- Boulier, B. and M. R. Rosenzweig, "Age, Biological Factors and Socio-economic Determinants of Fertility," Demography, Vol. 15, No. 4, November 1978.
- Brito, Enrique, "La Fedundidad según Status Económico: Análisis Comparativo de las Ciudades de Mexico y Buenos Aires," Demografía y Economía, III, pp. 156-185, 1969.
- Carleton, R. O., "Fertility Trends and Differentials in Latin America," Milbank Memorial Fund Quarterly, 43, pp. 26-27, October 1965.
- Duncan, O. D., "Farm Background and Differential Fertility," Demography, 2, pp. 240-249, 1965.
- Easterlin, R. A., Population, Labor Force and Long Swings in Economic Growth, New York: Columbia University Press, 1968.
- Edmonston, B. and S. McGinnis, "Migrant-Nonmigrant Fertility Differentials in Metropolitan Areas in Latin America," in The Dynamics of Migration: Internal Migration and Migration and Fertility, Occasional Monograph Series, Vol. 1, No. 5, Interdisciplinary Communications Program, Smithsonian Institution, 1976.
- El-Badry, M. A., "A Study of Differential Fertility in Bombay," Demography, Vol. 4, No. 2, pp. 626-640, 1967.
- Elizaga, J. C., "A Study of Immigration to Greater Santiago, Chile," Demography, 3, pp. 353-377, 1966.

- Fields, G. S. and T. P. Schultz, "Regional Inequality and Other Sources of Income Variation in Colombia," Economic Development and Cultural Change, April 1980.
- Goldberg, D., "The Fertility of Two Generation Urbanites," Population Studies 12, pp. 214-222, 1959.
- Goldberg, D., "Another Look at the Indiana Policy Fertility Data," Milbank Memorial Fund Quarterly, Vol. 38, pp. 23-36, 1960.
- Goldstein, S., "Interrelations Between Migration and Fertility in Thailand," Demography, Vol. 10, No. 2, pp. 225-241, May 1973.
- Goldstein, S. and P. Tirasawat, The Fertility of Migrants to Urban Places in Thailand, East-West Population Institute, Paper No. 43, April 1977.
- Gonzalez de Villacorta, V., "Perú, Migración, Educación y Fecundidad en los Estratos Sociales Bajos de Lima Metropolitana", Santiago, Chile, CELADE, 1970.
- Hendershot, G. E., "Social Class, Migration and Fertility in the Philippines," in The Dynamics of Migration: Internal Migration and Fertility, Occasional Monograph Series, No. 5, Vol. 1, Interdisciplinary Communications Program, Smithsonian Institution, 1976.
- _____, "City Migration and Urban Fertility in the Philippines," Philippines Sociological Review, Vol. 19, 1971.
- Hernandez, Alberto, Hacia un Análisis de la Nupcialidad en Colombia, CCRP, Bogotá, July 1978.
- Hernandez, A. and C. E. Florez, Participación y Ocupación de la Mujer en la Fuerza de Trabajo en Colombia según su Estado Civil, CCRP, Bogotá, October 1978.
- _____, Tendencias y Diferenciales de la Fecundidad en Colombia, CCRP, Bogotá, February 1978.
- Hiday, Virginia, "Migration, Urbanization and Fertility in the Philippines," International Migration Review, pp. 370-383, Fall 1978.
- Hutchinson, B., "Fertility, Social Mobility and Urban Migration in Brazil," Population Studies 14, pp. 182-189, March 1961.
- Iutaka, S., Bock, E. W. and Warnes, W. G., "Factors Affecting Fertility of Natives and Migrants in Brazil," Population Studies, Vol. 25, No. 1, pp. 55-62, March 1971.

- Kuznets, S., "Introduction," in H. T. Eldridge and D. S. Thomas, Population Redistribution and Economic Growth, United States, 1870-1950, Vol. III, Philadelphia Pennsylvania: American Philosophical Society, 1964.
- Lee, B.S. and S. Farber, Investigation of the Influence of Rural to Urban Migration on Migrant Fertility in Less Developed Countries, Interim Report, Louisiana State University, April 1980.
- Macisco, J., Bouvier, L. and Renzi, M. J., "Migration Status, Education and Fertility in Puerto Rico, 1960," Milbank Memorial Fund Quarterly, Vol. 47, No. 2, pp. 167-187, April 1969.
- Macisco, J., Bouvier, L. and Weller, R., "The Effect of Labor Force Participation on the Relation Between Migration Status and Fertility in San Juan, Puerto Rico," Milbank Memorial Fund Quarterly, Vol. 48, No. 1, pp. 51-70, January 1970.
- Martine, George, "Migrant Fertility Adjustment and Urban Growth in Latin America," International Migration Review, pp. 179-191, Summer 1975.
- McGirr, N. J. and C. Hirschman, "The Two Generation Urbanite Hypothesis Revisited," Demography, Vol. 16, No. 1, pp. 27-35, February 1979.
- Myers, G.C. and J. J. Macisco, "Revised Bibliography on Migration and Fertility," International Migration Review, Vol. 49, No. 2, pp. 221-231, Summer 1975.
- Myers, G. C. and W. W. Morris, "Migration and Fertility in Puerto Rico," Population Studies, Vol. 20, No. 1, July 1966.
- Park, Jai-Young and I. H. Park, "Migration and Female Labor Force Impact on Korean Fertility," in The Dynamics of Migration: Internal Migration and Migration and Fertility, Occasional Monograph Series, No. 5, Vol. 1, Interdisciplinary Communications Program, Smithsonian Institution, 1976.
- Potter, J. E., M. Ordóñez and A. R. Measham, "The Rapid Decline in Colombian Fertility," Population and Development Review, Vol. 2, No. 314, pp. 509-528, September/December 1976.
- Ribe, Helena, "Income of Migrants Relative to Non-Migrants in Colombia: An Economic Analysis of the 1973 Census Sample," Dissertation, Yale University, December 1979.
- Ro, Kong-Kyun, "Migration and Fertility in Korea," in The Dynamics of Migration: Internal Migration and Fertility, Occasional Monograph Series, No. 5, Vol. 1, Interdisciplinary Communications Program, The Smithsonian Institution, 1976.
- Salazar, Julia, "Aspectos Demográficos de la Fecundidad en Lima Metropolitana," Boletín de Análisis Demográfico, No. 8, 1-34, Dirección Nacional de Estadística y Censo, Perú.

Schultz, T.P., "A Preliminary Survey of Economic Analyses of Fertility," American Economic Review, Vol. 63, No. 2, May 1973.

_____, "Interrelationships Between Mortality and Fertility,"
Ridker, Population and Development, The Search for Selective Interventions, Baltimore, Maryland: Johns Hopkins University Press, 1976.

_____, "A Conditional Logit Model of Internal Migration: Venezuelan Lifetime Migration Within Educational Strata", Yale University, Economic Growth Center Discussion Paper 266, September 1977.

_____, "Interpretation of Relations Among Mortality, Economics of the Household, and the Health Environment," UN/WHO conference on Socioeconomic Determinants and Consequences of Mortality Differentials, Geneva, forthcoming. (Yale University, Economic Growth Center Discussion Paper 318, September 1979.)

_____, "An Economic Interpretation of the Decline in Fertility in a Rapidly Developing Country" in (ed.) R.A. Easterlin, Population and Economic Change in Developing Countries, National Bureau of Economic Research, Chicago: University of Chicago Press, 1980.

Schultz, T. W., "The Value of Ability to Deal with Disequilibria," Journal of Economic Literature, Vol. 13, No. 3, pp. 827-846, September 1975.

Simmons, A. B. and R. Cardona G., "Rural-Urban Migration: Who Comes, Who Stays, Who Returns? The Case of Bogota, Colombia, 1929-1968," The International Migration Review, pp. 166-181, Summer 1972.

Simmons, Alan, et al., Social Change and Internal Migration, International Development Research Center, Ottawa, 1977.

Whiteford, Michael, "Women, Migration and Social Change," International Migration Review, pp. 236-247, Summer, 1978.

Yap, Lorene, "The Attraction of Cities: A Review of the Migration Literature," Journal of Development Economics, Vol. 4, pp. 239-264, 1977.

Zarate, A. O., "Some Factors Associated with Rural-Urban Fertility Differentials in Mexico," Population Studies 21, pp. 283-293, 1967.

_____, "Differential Fertility in Monterey, Mexico, Prelude to Transition?", Milbank Memorial Fund Quarterly, Vol. 45, pp. 213-228, 1967.

_____, and A.U. de Zarate, "On the Reconciliation of Research Findings of Migrant-Nonmigrant Fertility Differentials in Urban Areas," International Migration Review, Vol. 19, pp. 115-156, Summer 1975.