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A COMPARATIVE STUDY OF INTERNAL MIGRATION

by

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A dissertation submitted to the
Graduate Faculty in Economics
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy, City
University of New York.

1974

This manuscript has been read and accepted for the Graduate Faculty in Economics in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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Abstract

A COMPARATIVE ANALYSIS OF INTERNAL MIGRATION

by

Albert C. Ovedovitz

Advisor: Professor Stephen Resnick

In this study the economic aspects of internal migration are examined on a comparative basis throught the application of a simple economic model to a series of case studies. Internal migration is analyzed in the context of human capital theory. It is shown that the push-pull hypothesis of migration and the selectivity hypothesis can be integrated within the human capital approach.

The model examined in this dissertation reflects the influence of the various schools of thought concerning internal migration. The roles of wage and income differentials, urbanization, education and the costs of migration are explored in the cases of Brazil, Canada, Ghana, Jamaica, and Mexico.

The results obtained in the aforementioned case studies are then compared with similar studies made of migration in countries falling generally in the same economic stratum. It is concluded that migration is particularly responsive to variables tending to effect directly the investment in human capital. The direct return to the migrant is found

to be of primary importance irrespective of the level of development of the country.

ACKNOWLEDGEMENTS

I would like to thank my wife, Rita Lee, without whose patience and encouragement this would never have been possible.

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CHAPTER I

THE ECONOMIC THEORY OF INTERNAL MIGRATION

> Real life is complex, and the
> behavior of men has diverse motivations.
> If many variables affect a result, however,
> it does not mean that a particular one is
> without influence. [1]
>
> S. Rottenberg

1. Introduction

The close connection between economic development and migration has received much attention in the literature. Much of the literature in the field has been confined to the sequence from migration to development (See A.W. Lewis, Ranis and Feis), little to the study of migration at various stages of development. The extent to which migration serves as an equilibrating mechanism in market economies at a selection of points on the development spectrum has not been explored on a comparative basis.

The aim of this study is to examine the economic aspects of migration on a comparative basis through the use of a simple econometric model of migration as applied to a series of case studies. This study begins with an examination of the economic factors influencing migration. The roles of wage and income differentials, urbanization, education and costs are explored in this chapter.

The second chapter contains a model of migration in terms of the

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[1] "On Choice in Labor Markets," S. Rottenberg in The Labor Market, ed. B.J. McCormick and E. Owen Smith (Baltimore, 1968), p. 58.

variables examined in chapter one. A detailed examination of the data is made; and the model is tested for five countries at varying levels of development. The specification of the model is examined and the individual results analyzed on a country-by-country basis for Brazil, Canada, Ghana, Jamaica and Mexico.

In the last chapter the results obtained are compared to those of other case studies of internal migration. Comparisons are made with a view to discerning noticeable differences in results. Conclusions are drawn and general policy recommendations are made where warranted.

2. Migration: A Benefit-Cost Analysis

Migration can be viewed as a means to more efficient resource allocation as it applies to the labor market.

> Everywhere there is massive aggregative evidence that people move from low-income areas to high, and from areas of thin opportunity, where long-run earnings are likely to be low, to thick opportunity areas where earnings are likely to be high.[1]

Migration, as education, may be looked at as an investment in human capital. The migrant moves in response to wage differentials. Sjaastad, in 1962, was first to examine migration as an investment.[2] He analyzed migration in terms of costs and returns. The returns to migration consist of the increment to the real earnings stream resulting from

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[1]Ibid., p. 56.

[2]Larry A. Sjaastad, "The Costs and Returns of Human Migration," Journal of Political Economy, Vol. LXX, Supplement, Oct. 1962, No.5, Part 2, Op. cit.

migration. The discounted sum of these earnings would yield the present value of returns accruing to the migrant.[1]

Costs were divided into monetary and non-monetary. Monetary costs would be those reflected in a move, e.g. transportation and the related costs of moving. Additionally, one would include the cost of subsistence during the job search period and the period before the first paycheck is received. Nonmonetary costs were divided into two categories: (1) opportunity costs, i.e. earnings foregone while travelling, searching and learning a new job, and (2) "psychic" costs - those basically unquantifiable costs associated with the breaking of origin-region ties and establishing oneself in an alien environment in the destination region. Sjaastad reasoned that non-monetary costs could be treated as producer's surplus - an amount that a person could be taxed in region i before that person would decide to move to region j. Thus these non-monetary costs would not be considered a resource cost.[2]

Sjaastad's initial statement was built upon by others in attempts to formalize the benefit-cost model implied. In a study by A. Speare, Jr., dealing with the rural-urban migration in Taiwan, the benefit-cost model was expanded.[3] Speare's work was based primarily on the work of

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[1]Ibid., p. 86.

[2]Ibid., p. 83.

[3]A. Speare, Jr. The Determinants of Rural to Urban Migration in Taiwan (Ann Arbor, Michigan, 1969), op. cit.

Sjaastad and Lee.[1] Speare constructed a theory of individual migration. Speare's model could be expressed in its broadest terms in the following equation:

$$(1) \quad \sum_{j=1}^{N} \frac{(Y_{d_j} - Y_{o_j})}{(1+r)^j} - T > 0$$

where:

Y_{d_j} = earnings in the jth year at the destination

Y_{o_j} = earnings in the jth year at the origin

T = the cost of moving

N = the total number of years in which future returns are expected

r = the rate of interest used to discount future earnings[2]

Equation (1) states that a move will occur if the difference between net returns discounted and the costs of moving (T) is greater than zero. Speare suggests certain simplifications of equation (1). These simplifications rest on a number of assumptions. The first assumption is that the difference between the destination and origin income is constant over the timespan considered by the migrant; and the second assumption is that this timespan is short. If one assumes $Y_{d_j} - Y_{o_j}$ is a constant, this reduces the complexity of the summation indicated in equation (1). However, this leaves the rate of interest to be dealt with in terms of

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[1]Everett S. Lee, "Migration Differentials by State of Birth in the United States," Proceedings of the International Population Conference, (New York, 1961), Paper No. 61, op. cit.

[2]Speare, p. 166.

discounting the value of future income differentials:

$$(1a) \quad C \sum_{j=1}^{N} \frac{1}{(1+r)^j} - T > 0$$

where: C = the constant differential: $Y_{d_j} - Y_{o_j}$

All other symbols have been previously defined.

If the relevant timespan is short, the effect of the interest rate is insignificant, and may be ignored. One may consider instead the number of years over which the migrant is willing to amortize the move.[1] The equation in its most simplified form reduces to:

$$(1b) \quad C - T/h > 0$$

where: h = the number of years over which the migrant is willing to amortize the move.

All other symbols have been previously defined.

Thus, the differential over a given period must exceed the cost of the move over the same period as perceived by the potential migrant.

Speare suggests that certain factors not heretofore mentioned must also be taken into account. The first of these is the cost of living. If the cost of living is the same in both destination and origin regions there is no problem. If, on the other hand, there exists a difference, then the cost of living factor must be introduced into the equation. This author suggests, in fact, that the migrant only considers nominal values; and, if this is the case, it would be unnecessary to introduce this factor into the equation.

The second of these factors that must be reckoned with is the

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[1]Ibid., p. 167.

influence of non-monetary factors. Speare suggests that if a monetary value could be attached to these, they could then be taken into account.

The model as stated assumes certainty insofar as it implies the migrant (or potential migrant) has perfect knowledge of market conditions. The migrant moves only with the expectation of finding employment. As Speare points out this was certainly the case in Taiwan.[1] Speare pointed out that the return at the destination must be viewed in probabilistic terms. An article by M. P. Todaro addressed the same problem.[2]

The Todaro model, an aggregative model, shares many similarities with Speare's formulation. Todaro sees migration as a two stage process whereby the migrant (the unskilled rural worker) first migrates to the urban area to work in the "urban traditional sector." After a period of time the migrant would obtain a more permanent job in the modern sector.[3]

Todaro's model rests on the following basic formulation:

$$(2) \quad \frac{\dot{S}}{S}(t) = F\left[\frac{V_u(t) - V_r(t)}{V_r(t)}\right], \quad F' > 0$$

where: $\dot{S}$ = net rural-urban migration

S = the existing size of the urban labor force

$V_u(t)$ = the discounted earnings stream in the urban sector

$V_r(t)$ = the discounted earnings stream in the rural sector.[4]

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[1]Ibid., p. 168.

[2]Michael P. Todaro, "A Model of Labor Migration and Urban Unemployment in Less Developed Countries," American Economic Review (March 1969), Vol. LIX, op. cit.

[3]Ibid., p. 139.

[4]Ibid., p. 141.

Earnings in the rural sector may be simply represented as equation (3).

$$(3) \quad V_r(t) = \int_{t=0}^{n} Y_r(t)e^{-rt}dt$$

where: $Y_r(t)$ = net expected rural real income in period t

r = the discount factor reflecting the degree of consumption time preference of the typical rural unskilled worker.

If one makes the same assumptions regarding degree of consumption time preference as Speare suggested, V_r becomes roughly equal to $\sum_{j=1}^{N} Y_{oj}$. It will be observed that the same can be said concerning V_u and $\sum_{j=1}^{N} Y_{dj}$. $V_u(t)$ can be expressed in slightly more complicated terms than $V_r(t)$.

$$(4) \quad V_u(t) = \int_{t=0}^{n} p(t)Y_u(t)e^{-rt}dt - C(0)$$

where: $Y_u(t)$ = net expected urban real income in period t

$C(0)$ = initial fixed cost of migration and relocation

$p(t)$ = probability of having a modern-sector job in period t[1]

Todaro has defined $Y_u(t)$ to be much more comprehensive than $Y_r(t)$. $Y_u(t)$ includes not only wages, adjusted for the cost of living, but various qualitative elements which would be difficult if not impossible to quantify.

> $Y_u(t)$ might equal aw/p where w is the urban wage, p is the urban price deflator, and $a > 1$ is a scalar proxy for "city lights" and other amenities.[2]

The complex nature of p(t) must be explored in more detail. The probability of having a job in any period p(t) is directly related to

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[1] Ibid., p. 142.

[2] Ibid.

the probability of being selected from the pool of urban traditional workers (defined as g(t)). The probability of obtaining a job in period t, as defined by Todaro is equal to the probability of being selected in period zero plus the probability of not being selected in period t-1 and being selected in period t.

$$(5) \quad p(t) = p(t-1) + [1-p(t-1)]g(t)$$

g(t) must be further specified as a function of modern sector employment. Briefly, Todaro considers the ratio of the growth of modern sector employment to the size of the traditional sector labor force.[1]

Within the context of the human capital approach to migration two other approaches may be seen to be consistent. One concerns the relative characteristics of the origin and destination locations, while the other the relative characteristics of migrants and non-migrants. The first hypothesis, known as the push-pull hypothesis, was first introduced by E.G. Ravenstein in 1885.[2]

Lauchlin Currie drew the following line between push and pull factors:

> Migration away from an activity because of depressed conditions has been migration in response to a "push," whereas if outside opportunities cause people to migrate, it is called migration in response to a "pull."[2]

There are several push factors. The exhaustion of natural resources

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[1]Ibid., p. 143

[2]E.G. Ravenstein, "The Laws of Migration," Journal of the Royal Statistical Society (June, 1885), Vol. XLVIII, No. 2; JRSS (June 1889), Vol. LII, No. 2, op. cit.

[3]Lauchlin Currie, Accelerating Development - The Necessity and the Means (New York, 1966), p. 37.

has played a role in many areas throughout the world.[1] Unscientific methods of farming eventually ruin the land.[2] Once such natural resources are depleted, labor must look elsewhere for employment. This contributes to the flows between regions, especially to the urban areas.

The land/labor ratio exerts a significant role in forcing labor from the land. In Sweden the inadequate size of holdings, particularly in the two to ten hectare size group, has driven labor from agriculture.[3] The situation in India is worse:

> The small size of agricultural holdings, in conjunction with low intensity of production is another factor driving the cultivator to abandon farming. The estimated average size of ownership holdings for all households in India is 4.72 acres; if those who have no land are excluded the average rises to 6 acres. According to the census of land holdings carried out in 22 states in 1953/54, 50% of the households cultivated holdings smaller than 1.28 acres and 74% of the households owned less than 5 acres each. A large proportion of holdings are below the economic minimum.[4]

Closely related to the low land/labor ratio is the lack of employment opportunities. In Venezuela one of the major factors in the rural exodus has been the lack of opportunity in the rural areas - the primitive system of agriculture being blamed.[5] Lack of employment opportu-

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[1]Philip M. Hauser, ed. Handbook for Social Research in Urban Areas (Paris, 1965), p. 92.

[2]U.N. (1965 World Population Conference), E/CONF.41/5, p. 510.

[3]International Labour Organization, Why Labour Leaves the Land - A Comparative Study of the Movement Out of Agriculture (Geneva, 1960), New Series, No. 59, p. 91.

[4]Ibid., p. 127.

[5]Ibid., p. 157.

nities appears to be a factor on the African continent as well.

> Much has been written about the desirability of regulating the flows of migrants to the African cities. ... The information that exists on the subject suggests the need for jobs tops the list of reasons for migration.[1]

At the same time "push" elements operate on potential migrants, "pull" elements also operate. Urban areas offer a variety of opportunities not found in the countryside. Sjoberg cites the lack of educational facilities in villages as a major factor in encouraging out migration.[2]

In addition to the greater availability of educational facilities in urban areas, public goods such as medical care, environmental sanitation, housing and welfare are found to a much greater degree in the city than in rural villages or small towns.[3] Illustrative material as concerns the availability of medical services exists for a number of countries:

> In many developing countries, in Central and South America, Africa, and Asia, the distribution of facilities between city and countryside is radically uneven. On the average there are in Latin America five times as many physicians in the capitals and the large cities as in the rest of the country: about 15 per 10,000 as against 3 per 10,000 in Chile...Santiago had 30 per cent of the population but 64 per cent of all the doctors in 1957.
>
> . . .

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[1]United Nations, ST/SOA/Ser.X/1, p. 40.

[2]Gideon Sjoberg, "Rural-Urban Balance and Models of Economic Development," Social Structure and Mobility in Economic Development, ed. Neil J. Smelser and Martin Lipset (Chicago, 1966), p. 243.

[3]United Nations, ST/SOA/Ser.X/1, p. 92.

> The situation in many African countries is similar. In Nigeria in 1963 the doctor population ratio was roughly one to 40,000, but in Lagos the ratio was about one to 4,000. In Uganda the ratio was estimated at one to 1,000 in the Kampala area and about one to 22,000 in the Ankole District in the Northern Region.[1]

The distribution of facilities for social welfare of the population, however, is not an isolated factor. The importance of social legislation-laws regulating wages and hours, working conditions, tenure, sickleave, vacation and social security are facets of modern society which are less likely to be found in the "traditional" (rural) environment.[2] Usually rural areas are last to be affected by such legislative changes. A case in point is that of the migrant farm labor in the United States. This group has been ignored in terms of legislation. Similarly legislation concerning the minimum wage in its application to agricultural labor has been only a recent development in the United States.[3]

The news of improved conditions in urban areas has spread from the urban areas to the rural and has played an important role in attracting peasants to the cities. The peasant moves to the city with the expectation of a higher real income.

The push-pull hypothesis does not apply solely to purely economic factors; it applies to other personal factors as well. In a study of a Lebanese village, data were collected on the push and pull factors

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[1]Ibid., p. 93. It should be noted that in the case of Kampala, the fact that many doctors remain at the medical school in teaching positions has influenced this ratio.

[2]T. Lynn Smith, "Un Analisis Comparativo de la Migración Rural-Urbana en Latino-america," Estadistica, Vol. XVI, No. 61 (Dec. 1958), p. 446.

[3]New York Times, 1968, op. cit.

underlying migration. Table 1.1 summarizes the results of this study.[1]

Table 1.1 - Factors underlying migration in a Lebanese village

Factor	Frequency of Mention
Push	
Restriction of freedom of speech	33%
Monopoly of decision-making by the few	31
Dissatisfaction with the management of village affairs	31
Dissatisfaction with life in the village	28
Pull	
Greater employment opportunity in the city	68
Better educational opportunity in the city	22
Better social life	16
Better recreation	12

> The unattractiveness of the rural environment is reflected in the absence or inadequacy of social, educational, health, and recreational facilities in the villages of this area as compared to the cities. Perhaps the most sensitive indicator of the dreariness of rural life is the villagers' conception of their own environment and capacities.
>
> A survey carried in Lebanon, Syria and Jordan led to the conclusion that city dwellers had a much greater belief in their capacity to solve their own private and public problems than had the traditional population of the villages; the villagers also declared themselves to be unhappier than their urban counterparts.[2]

The bleak picture of the rural areas makes the urban areas appear all the more attractive. There exists a strong desire to escape the

[1]United Nations, Studies on Selected Development Problems in Various Countries in the Middle East, ST/UNESOB/7, "Inquiry into a Lebanese Village," p. 125.

[2]United Nations, "Population Distribution, Urban Growth and Planning in Some Middle Eastern Countries," ST/SOA/Ser.X/1, p. 64.

constraints of traditional social organization in exchange for the social freedom of the towns. Although ostensibly young migrants leave rural households in search of a better income, much migration may arise from restlessness and boredom as well as dissatisfaction with rural life.

The push-pull hypothesis falls well within the framework of the human capital approach. The characteristics of destination places vis-a-vis origin places can be associated with expectations of higher real income, both in monetary as well as non-monetary ("psychic") terms.

The selectivity hypothesis, concerned with the relative characteristics of migrants and non-migrants, may also be reconciled with the human capital approach. The selectivity hypothesis, as the name implies, emphasizes the fact that migrants do not represent random samples of the population. It will be shown that generally migrants represent those categories of the population which can maximize the discounted value of their income streams by migrating. Migrants exhibit certain specific characteristics: age selectivity, sex selectivity, and quality selectivity.

Age selectivity plays a crucial role in influencing internal migration. "Rural-urban migration is in most cases the movement of young adults."[1] In an essay entitled "Migration-a Sociological Problem," Jansen stated that the only universal migration differential is age. Persons 20-34 are more prone to migrate than other age groups. Bogue suggested, in fact, that no other univerals exist.[2]

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[1]United Nations, ST/SOA/Ser.A/17, p. 40.

[2]Clifford J. Jansen, "Migration - a Sociological Problem," Readings in the Sociology of Migration, ed. C.J. Jansen (Oxford, 1970), p. 14.

> Characteristically, the curve of age specific rates has a maximum at ages 25 to 29 years and falls away in a more or less regular fashion to the younger ages on the one hand and to the older ages on the other, forming a roughly bell-shaped curve with a long tail to the right.[1]

In a study of life cycles and migration in the United States, it was shown that the mobility rate was significantly higher when the head of the family was under 35 years of age (twice as high as those in which the head was 35-44, and five times as high as when the head was 65 and over).[2]

The role of a person's position in the life cycle has been examined in other developed countries as well. In England 64% of labor migration from Wales to Oxford consisted of those in the 20-34 year age cohort. Similarly 44% of the migrants to Paris were between 20 and 34 years of age.[3]

Selectivity with respect to age is not peculiar to the developed countries alone. There have been a number of studies of internal migration in Latin America. The conclusions have been similar.

> Ultimately the conditions existing to discourage or stimulate migration depend upon personal factors or on the point in the life cycle of the individual.[4]

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[1]Hope T. Eldridge and Dorothy Swaine Thomas, Population Redistribution and Economic Growth - United States, 1870-1950, Vol. III, Demographic Analyses and Interrelations (Philadelphia, 1964), p. 132.

[2]G.H. Leslie and A.H. Richardson, "Life-Cycle, Career Pattern and Decision to Move," Population and Society, ed. Charles B. Nam (New York, 1968), p. 349.

[3]C.J. Jansen, p. 14.

[4]Juan C. Elizaga, "Migraciones Interiores - Evolución reciente y estado actual de los estudios," Las Migraciones Internas, ed. Ramiro Cardona (Bogotá, 1971), p. 39.

Migrants to Bogotá revealed the following age distribution:[1]

Table 1.2 - A percentage breakdown of migrants to Bogotá by age.

Age Group	Percentage
Less than 9	9
10-14	19
15-19	33
20-24	21
25-34	14
35 and over	4

Migrants to Montevideo, Uruguay exhibited a similar pattern.[2]

Table 1.3 - A percentage breakdown of migrants to Montevideo by age.

Age Group	Percentage
Less than 12	22.7
13-18	19.8
19-28	31.3
29-35	8.0
36 and over	18.2

The same pattern was revealed with respect to migrants to Santiago, Chile and Lima, Peru. Between 45 and 50 per cent of the migrants were

[1]Ramiro Cardona, Alan B. Simmons, "Migración a Bogotá - La Selectividad de la Migración en una perspectiva en el tiempo, 1929-1968," Las Migraciones Internas (Bogotá, Colombia, 1971), p. 165.

[2]Nestor Campaglia, Migración Interna en el Uruguay (Universidad de la Republica, Montevideo, 1970), p. 151.

between 15 and 29 years of age at the time of arrival; and a major part of these were between 15 and 19 years of age.[1]

Age selectivity may be integrated with the more general human capital approach. Those migrating at an early age will have a greater chance to acquire those skills and characteristics of natives of the regions migrated to (particularly urban areas). The early acquisition of such characteristics and skills will increase the levels of the income streams flowing to the migrants.[2]

Sex selectivity plays a varied role depending upon the area being studied. Illsley found that "demographic research has demonstrated convincingly the comparative youth of migrant populations and the preponderance of females, particularly from rural areas."[3] In "An Inquiry into a Lebanese Village," one of the conclusions reached by the authors was:

> Further analysis shows some differences in response in terms of sex and age that appear to be significant. For instance, females more so than males and younger persons more so than elders, were found to show a greater predisposition to accept migration. In other words, it is the younger girls who are most ready to accept migration; boys show a similar trend though not to the same degree.[4]

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[1]Cardona, p. 43.

[2]Ibid., p. 42.

[3]Illsley, Finlayson and Thompson, "The Motivation and Characteristics of Internal Migrants - A Socio-Medical Study of Young Migrants in Scotland," Milbank Memorial Fund Quarterly, Vol. XLI (1963), No. 2, pp. 121-122.

[4]United Nations, ST/UNESOB/7, p. 125.

In the United States male and female migration rates have converged over time. Beginning in the 1870's male migration rates exceeded female migration rates. However, by the 1940-50 period the two rates were nearly equal for the population 10 years of age and over, and they were equal as well for the 20-35 age cohort.[1] Examination of the study by Lee confirms the view that there is little, if any, sex selectivity in internal migration in the United States.[2]

Studying migration to Bogotá it was found that women dominated short migrations, while men dominated long migrations.[3] Arias, studying migration in Guatemala found males predominant, except with respect to the flow to the capital.[4] A similar variety of results were found in other studies as well. Sjoberg found an interesting relationship to exist between sex selectivity and the level of development. During the early stages of urbanization men have been far more mobile than women, particularly in Asia and Africa. On the other hand, the converse was found to be true in Latin America. Sjoberg attributes this to the rapidity of urbanization in Latin America as opposed to Asia or Africa.[5]

Quality selectivity, viz. indicated by the level of education or

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[1]Eldridge, p. 182.

[2]Lee, Everett S., "Migration Differentials by State of Birth in the United States," International Population Converence, 1961, paper 61, op. cit.

[3]Cardona, p. 165.

[4]Arias, J.B., "Internal Migration in Guatemala," International Population Conference, 1961, paper 120, op. cit.

[5]Sjoberg, p. 242.

skill, plays an influential role in the migration process. A United Nations study of Latin American trends summarized the effect of quality selectivity:

> Through a process of self-selection, the migrants have been predominantly young adults, better educated and possessing higher levels of skills than the averages for the population of their places of origin, although below the averages for the native populations of the cities to which they have migrated.[1]

Quality selectivity appears to have a more universal applicability to the analysis of internal migration than sex selectivity. The Illsley study, in analyzing out-migration from Aberdeen indicated differences in migration as related to skill categories in the labor force. The labor force was divided into five categories: professional, intermediate-including managers, proprietors, and highly skilled technicians, skilled manual and clerical, partly skilled, and unskilled. Within the five year period following the birth of the first child 63% of the professional group migrated, 33% of the intermediate group migrated, 19% of the skilled group migrated, and 10% each of the remaining groups migrated.[2]

> The high rate among university trained or professionally qualified workers...indicates a way of life and a career structure in a large and increasing section of society. It is in sharp distinction to the rate among men in managerial occupations, the group most similar in income and responsibilities; within the latter group the migration rate is high only among employees of large-scale national organizations.[3]

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[1]United Nations, E/CN.12/874, p. 13.

[2]Illsley, pp. 135-36.

[3]Ibid., pp. 136-37.

Quality selectivity is reflected in the family background of migrants as well. In Bogotá it was found that migrants' parents had somewhat higher social status than the parents of non-migrants.[1]

Quality selectivity, like age selectivity, may be easily integrated with the general human capital approach. Simply stated: those people who migrate have the most to gain potentially from such a move. One possible explanation of observed quality selectivity is that for those at higher salary levels, the differentials in income exceed those of less skilled labor in an absolute sense. In the context of labor force qualifications, those with little or no skills stand to gain the least by migration.

> (Higher levels of education and professional training) in particular involve greater potential mobility since it may call for at least one move toward the location of advanced education, and since it may result in increasing proportions of highly trained personnel, the market for whose services is truly nationwide (and indeed may be international). Consequently the obstacles to internal migration within a country for this group of less skilled employees for whom economic opportunity differentials are smaller - and who may be more dependent upon familiarity and non-economic ties.[2]

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[1]Cardona, p. 167. Social status was defined in this study in terms of the occupations of parents. Six catefories were used: (1) Very low - persons with unskilled jobs, e.g. peasants, day laborers, (2) Low - persons with limited qualification, e.g. chauffers, policemen, (3) Low middle - persons skilled in manual labor, office workers, (4) Middle - low level professionals, (5) High middle - professionals, administrators, and (6) High - managers of large establishments, owners of such, and leaders of industry.

[2]Simon Kuznets, "Introduction: Population Redistribution, Migration, and Economic Growth," Population Redistribution and Economic Growth in the United States, 1870-1950, Volume III, Eldridge and Thompson, p. xxviii.

3. Summary

Migration is a complex phenomenon, which can be analyzed in the context of the human capital hypothesis. The general human capital hypothesis of migration, the push-pull hypothesis and the selectivity hypothesis, do not represent conflicting viewpoints, but only different aspects of the same phenomenon.

Briefly the human capital approach provides the basis for analyzing moves as investments made on the basis of benefit - cost analyses considering the stream of income accruing to the migrant to the migrant over time. It can be demonstrated that the push-pull hypothesis, concentrating on the characteristics of origin and destination regions, is consistent with the human capital approach. Migrants flow to areas where there is an expectation of higher real income.

Similarly, it can be demonstrated that the selectivity approach is also consistent with the general human capital hypothesis. There is a tendency for migrants not to be a simple random sample selected from the origin region, but rather for migrants to have certain characteristics which will enhance the probability of success (defined in terms of securing employment in the modern - non-traditional - sector). Viewed after the fact, selectivity is observed.

Any model of migration should reflect these aspects of migration. In the next chapter these aspects of migration are considered in the context of a model. The model, its properties, data for five case studies, and results are examined. This examination will form the basis of the comparative study of internal migration presented in Chapter III.

CHAPTER II

A MODEL OF INTERNAL MIGRATION

1. Introduction

This chapter is divided into two main parts. In the first part of this chapter the model of migration is described in detail. This is followed by a discussion of the estimation techniques and the specification of the model. The first part concludes with a discussion of the data. The data is examined from two viewpoints: what would be desirable as opposed to what is available.

The second part of this chapter contains five case studies. The model is applied to Brazil, Canada, Ghana, Jamaica and Mexico. The results of this study are compared with those obtained by other students of migration. Thus the framework is established for the comparative analysis of migration made in Chapter III.

2. The Model

The model is defined as in equations (1) and (2). Equations (1) and (2) are alternatives, differing only with respect to the education variable (as defined below). The functional form is the same for each country examined. The equation is fitted separately for each country, allowing parameter values to differ among countries.

$$(1) \quad M_{ij_t} = \alpha \dot{W}_t^{\beta 1} \dot{U}_t^{\beta 2} \dot{E}_{t1}^{\beta 3} D_{ij}^{\beta 5} u_t$$

$$(2) \quad M_{ij_t} = \alpha \dot{W}_t^{\beta 1} \dot{U}_t^{\beta 2} \dot{E}_{t2}^{\beta 4} D_{ij}^{\beta 5} u_t$$

where:

M_{ij_t} is a migration variable defined to be the number of lifetime migrants from region i to region j as of time period t (t refers to a particular year).

$\dot{W}_t$ is a wage variable defined to be the relative average wage between regions i and j, i.e. [(the average wage in region j)/(the average wage in region i)] in time period t.

$\dot{U}_t$ is an urbanization variable defined to be the relative degree of urbanization, as measured by the percentage of population living in towns over a critical size.[1]

$\dot{E}_{t1}$ is an education variable defined to be the relative percentage of population possessing higher education.[2]

$\dot{E}_{t2}$ is an education variable defined to be the relative percentage of uneducated people, i.e. those possessing no formal education or those who are illiterate.[2]

D_{ij} is a geographic variable defined to be the distance between regional capitals in terms of miles or kilometers.

α and u_t are, respectively, the intercept and random error terms.

Although it has been pointed out that the three theories concerning internal migration contain certain common elements of thought, it is still possible to associate particular variables in the equations more closely with one approach than another. Relative wages and distance most clearly reflect the returns to and cost of migration. Relative wages, representing the average ratio of wages in one region as compared with another, indicate to some extent the degree to which the expected

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[1]The criterion for defining urban varies from country to country depending on the practice adopted in each national census. See Table 2.1 for further details.

[2]The criteria for defining level of education vary from country to country. See Table 2.1 for further details.

Table 2.1 - The characteristics of the country data sets.

Country	Internal Migration*	Relative Wages	Relative Urbanization	Relative Education: Relative Higher Ed.	Relative Education: Relative Illiteracy
BRAZIL	POB(1950) 1950 Census	legal minimum wage series 1943-51	% of pop. in municipalities of 5,000 &+ (1940)	% of pop. 10 yrs. of age &+, with a univ. ed. (1950)	% of pop. 5 yrs of age &+, unable to read or write (1940)
CANADA	Place of residence (POR) 1961 vs. 1956, 1961 Census	Median earnings of males, 15 yrs. of age &+ (1951)	% of pop. in municipalities of 1,000 &+, and fringe metropolitan areas (1951)	% of pop. 5 yrs of age &+, with a univ. ed. (1961)	% of pop. 5 yrs. of age &+, who never attended school (1961)
GHANA	POB(1960) Post Enumeration Survey, 1960 Census	Arithmetic avg. of wages (1955) weighted by 1960 employment figs.	% of pop. in municipalities of 5,000 &+, (1960)	% of total pop. with teacher training or with a univ. ed. (1960)	% of total pop. unable to read or write (1960)
JAMAICA	POB(1960) 1960 Census	Median incomes of male wage earners (1960)	% of pop. in municipalities of 2,000 &+ (1960)	% of pop. 10 yrs of age &+, having completed secondary school, or attended univ. (1943)	% of pop. 7 yrs of age &+, unable to read or write (1943)
MEXICO	POB(1960) 1960 Census	legal minimum wage series urban areas 1956/57	% of pop. in municipalities of 2,500 &+ (1950)	N.A.	% of pop. 6 yrs of age &+ unable to read or write (1950)

*POB is "Place of Birth data." POR is "Place of Residence data." These are discussed in detail in the section on migration data below.

income stream in one region is more (or less) than the expected income stream in another region. The percentage differential in earnings (ΔE) between two regions can be expressed as follows:

$$\Delta E = \frac{\sum_{t=0}^{n-1} W_{jt} - \sum_{t=0}^{n-1} W_{it}}{\sum_{t=0}^{n-1} W_{it}} = \frac{\sum_{t=0}^{n-1} W_{jt}}{\sum_{t=0}^{n-1} W_{it}} - 1$$

Relative wages, while simply the ratio of wages in region j to region i for a single period, reflect the percentage difference in earnings.

Distance is a reflection of the costs of migration. The costs of migration have been examined earlier in this thesis. Although these costs are incurred over time, they diminish with the passage of time. The costs would be greatest in the initial period, e.g. the costs of moving, etc; as the migrant adjusts to the new situation, they would slowly diminish; and finally when the migrant had become integrated in the new environment, these costs would disappear.

The inclusion of relative urbanization in the model is suggested by Ravenstein's formulation. The attractiveness of the urban environment was explored in the first chapter. The education variables included in the model reflect in part the expected income differentials accruing to educated migrants, and in addition these variables (relative higher education and relative illiteracy) are indicative of the surrounding environment.

The Estimation Technique

The estimation technique involved a number of steps. Once the initial data set was compiled, relatives (as defined above) were

computed. For each country all the flows between regions were considered, i.e. n(n-1) flows for each country. Thus for wages, urbanization, higher education and illiteracy relatives were calculated. Appendix I, "Input Data," contains this information as well as a listing for the migration and distance data for each observation. Each observation is followed by a code, in which the two digits on the right represent the jth region and the remaining digit(s), the ith region. Thus M_{ij} represents the migration stream from region i and region j. The relatives for region i and region j, the R_{ij} with respect to each variable X, are defined as X_j/X_i.

Equations (1) and (2) are specified in double logarithmic form as in equations (3) and (4).

$$(3)\quad \ln M_{ij_t} = \ln\alpha + \beta_1 \ln\dot{W}_t + \beta_2 \ln\dot{U}_t + \beta_3 \ln\dot{E}_{t1} + \beta_5 \ln D_{ij} + \ln u_t$$

$$(4)\quad \ln M_{ij_t} = \ln\alpha + \beta_1 \ln\dot{W}_t + \beta_2 \ln\dot{U}_t + \beta_4 \ln\dot{E}_{t2} + \beta_5 \ln D_{ij} + \ln u_t$$

Equations (3) and (4) are then estimated by ordinary least squares.

Because there are differences between the true values and the observed values, especially with regard to relative wages, relative urbanization, and relative education, but to a lesser extent with respect to distance, the estimates of the coefficients, (the β_i), will

be underestimates of the true values.[1]

Specification of the Model

The coefficient for relative wages β_1 is expected to be positive, indicating wage-pull a primary factor in migration. In a competitive labor market, labor will tend to gravitate toward the areas where higher wages prevail. The demands for labor in the urban sector will cause wages to exceed those in the rural sector and the resulting differential will induce migration.

Turning to relative urbanization, it is expected that the coefficient will be positive. The apparent attraction of urban areas may far exceed the real attraction. Stories told by relatives, friends, and those in the business of transporting migrants, may excite the curiousity and hopes of potential migrants. Thoughts about a new environment, unbound by traditional laws and customs, serve to attract those who feel the rural life confining. This attraction of the "city lights," to quote Ravenstein, plays an important role. The role of urbanization complements that of other variables.

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[1] J. Johnston, Econometric Methods (New York, 1963), pp. 148-150. This may be illustrated with respect to the two variable case, where there are errors in both variables. It is seen that the limiting value of b_n tends in probability to:

$$\text{plim } b_n = \frac{\beta}{1 + \sigma_u^2/\sigma_x^2}$$

where: b_n is the estimated value of beta

σ_u^2 is the variance of the disturbance term u, defined as the difference between x, the true value of the independent variable, and X, the observed value of the independent variable.

σ_x^2 is the variance of the true values of the independent variable.

Insofar as the education variable plays a complex role, it is difficult to hypothesize its expected sign. Greater education, it was explained, is associated with a greater propensity to migrate (see the explanation by Kuznets in Chapter I). Stemming from this, one would initially expect that areas producing large numbers of educated people would experience out-migrations. After the fact, however, the areas offering the best opportunities would contain the relatively higher educated population. Thus it would not be surprising to find either a positive or negative relationship. The same arguments can be applied to the illiterate population, yielding exactly the opposite results for the illiterate population. The illiterate population would be less likely to be aware of opportunities in addition to the fact that the income differentials existing between origin and destination regions for this group would be less substantial than those existing for the more highly educated portion of the population.

Lastly, the coefficient for distance, β_5, represents the costs of migration. It is assumed that this variable is a proxy for those non-quantifiable obstacles to migration which are accentuated by distance, e.g. the decreasing flow of information over space, differences in language, food and social practice. For these reasons, it is expected that β_5 will be negative.

The Data - a general statement

If one were able to determine the exact specifications of the data one were to use in a comparative study, the first consideration would be that the data be the "best" with respect to the theoretical construct

being examined. Satisfying this consideration would logically imply that the data examined for each case study would be comparable, insofar as the "best" data set (an ideal) would be unique.

In reality it is necessary to be content with the "best available" data set. "Best available" differs from "best" insofar as case study by case study, available information will differ. This introduces two causes for bias in results. First, that caused by the difference between the "best" and "best available" statistics; and second, that caused by the difference between "best available" statistics between case studies.

If we turn to the model once again, given as either

$$M_{ij} = f(\dot{W},\dot{U},\dot{E}_1,D_{ij}) \quad \text{or} \quad M_{ij} = f(\dot{W},\dot{U},\dot{E}_2,D_{ij})$$

where all the variables have been previously defined, we may proceed to examine each variable, beginning with migration.

Migration

The question addressed at this point is "What would constitute the perfect data set?" Migration would refer to a fixed period of time, and relate to areal units of the same size and areal units of the same shape.[1] It would be desirable to have fixed time limits on migration, so that the influence of independent variables at any particular time could more clearly be related to internal migration at that particular time or some particular time or some particular time afterwards. In terms of time periods, probably a year would be sufficient. This would be long enough to eliminate seasonal movements.

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[1]Larry H. Long, "On Measuring Geographic Mobility," Journal of the American Statistical Association (September, 1970), Vol. 65, No. 331, op. cit.

A short migration period yields another advantage as well. It reduces the occurence of repeat migrations. In a study of movement out of the Copenhagen Metropolitan Area, it was found that during the period 1950-1961, 8.6% of the out-migrants re-entered the area within the period. This tendency was found most prevalent in the 45-64 age group, where 13.0% re-entered. It was also more marked in the male cohort.[1] In terms of the case studies, the magnitude of this element of repeat migrations is largely unknown. It would be desirable to minimize this element.

> It would also be desirable to have areal units of the same size and shape. The local administrative units used to define internal migration vary greatly in size and shape from country to country. Because no statistical procedure has been devised to correct for variation, it has not been possible to compare in a very exact manner different countries in terms of the amount of geographic mobility within their borders.[2]

Duncan, Cuzzort and Duncan observed that in such a situation "students of internal migration for the most part have had to content themselves with making informal allowance for the non-comparability of migration rates arising from differences in the size and shape of areal units."[3] It is pointed out that using, for example, municipios to define internal migration in Puerto Rico results in a much higher rate of migration than that recorded if larger units are used, because much

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[1]Sidney Goldstein, "The Extent of Repeated Migration: An Analysis Based on the Danish Population Register," Journal of the American Statistical Association (December, 1964), p. 1128.

[2]Larry H. Long, p. 1165.

[3]D.D. Duncan, R.P. Cuzzort and B. Duncan, Statistical Geography (Glencoe, Illinois, 1961), p. 34.

movement is only between municipios of the San Juan Metropolitan Area.[1]

> Because of these differences in definition and measurement, it is impossible to make really precise international comparisons either of rates of internal migration, in general, or of rates of urbanization, in particular. Fully precise comparisons would require both application of identical definitions and subdivisions into identically-sized administrative units.[2]

Among the countries examined the size of the administrative units varies widely. An appreciation of the size factor can be gleaned from the information contained in Table 2.2.[3]

Table 2.2 - Areas and administrative subdivisions of the case studies

Country	Area[a] (in square miles)	Number of Administrative Subdivisions[b]
Canada	3,850,790	12
Brazil	3,285,618	26
Mexico	761,403	32
Ghana	92,100	7
Jamaica	4,411	14

[a] N.Y. Times Encyclopedic Almanac, 1970 edition.
[b] See sources under each country heading (Section II, this chapter).

The size factor should not be considered in a vacuum, however. Migration may not necessarily be understated for a large region if it is

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[1] A System of Demographic, Manpower, and Social Statistics - Migration Statistics - Proposals for the Improvement of Internal Migration Statistics, Report of the Secretary General, United Nations, E/CN.3/435, p. 5.

[2] Ibid., pp. 5-6.

[3] The administrative subdivision corresponds to the unit used to measure internal migration, e.g. a province or parish.

sparsely populated.

Yet another source of incomparability in making international comparisons is the concept under which migration is defined, viz. de facto vs. de jure. Most sample surveys refer to de facto residence, while most national censuses refer to the de jure concept.[1]

Two types of migration data were used in this study. In the cases of Brazil, Ghana, Jamaica and Mexico, place-of-birth (POB) data were used. In the case of Canada, place-of-residence (POR) data were used. The place of birth question is the most widely used question on migration. The time span involved is the lifetime. On the basis of the POB question the population may then be divided into two groups: those who were enumerated in a place different from the place of birth - migrants - and those enumerated at the POB. The result of information on POB is a set of migration streams from specific birth places to specific places of residence.[2]

There are certain problems of adequacy and accuracy associated with the POB technique. Concerning adequacy, there are three points to be mentioned. In certain societies the mother will go to the parents' household to give birth. Thus the POB will not be the true initial residence for all intents and purposes. With POB statistics the timing of the migration is unknown. Finally, migrations between the place of

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[1] E/CN.3/435, p. 7. "De facto" refers to all those present in an area at a given time, while "de jure" refers to those who "belong" in an area, e.g. legal residents.

[2] Population Studies, No. 47, Manuals on Methods of Estimating Population, Manual VI, Methods of Measuring Internal Migration (United Nations, New York, 1970), ST/SOA/Ser.A/47, p. 5.

birth and the time of the census are ignored. Thus, had one out-migrated from an area and subsequently returned during an intercensal period, there would be no record of the migration.[1]

There are two general types of inaccuracies associated with POB statistics: unintentional mis-statement and deliberate mis-statement. In the first category the sources of usual error are: (a) statement by the head of the household - who may not know the exact birthplace of each member of the household, (b) the poor memory of a person who has lived in one place for a long time, i.e. there may be a tendency to report it as his birthplace, or (c) there may be boundary changes of geographic units. As towns and cities grow in terms of population, there is often a corresponding growth in the size of the area labelled as part of the community.[2]

Deliberate mis-statement is often made for purposes of prestige or political reasons.

> The endeavor to identify the area of birth can also introduce a bias in terms of the urban or rural origin of a migrant. A person born in a little-known rural place may prefer to state the name of a better known nearby town or city, so as to specify his geographic origin more clearly. As a result, many migrants may be reported as having been born in an urban place, though they were born in a rural place.[3]

Place of Residence (POR) data is defined in terms of two fixed points in time, i.e. the beginning of the reference period and the end

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[1] Ibid., pp. 13-14.

[2] Ibid., p. 13.

[3] Idem.

of same. In the case of Canada, the population was observed in 1956 and 1961; and the question asked was, "Has there been any change in residence over the reference period?" In certain respects such data is likely to be more reliable than POB data, as for example, with respect to the recall element involved in POB data. Also there are less likely to be changes in boundaries in a shorter period of time. Finally, the occurrence of repeat migrations is minimized.

Wages

If all units of labor were homogeneous, or if the mix of labor of various skills and wage levels were the same in all regions, then the average wage prevailing in each region would be a good indicator of a wage earner's potential, all other things being equal. This is, of course, not the case.

There are a number of problems relating to the measurement of earnings, as well as to international comparisons of earnings. Morgenstern points to some sources of error:

> It is possible to measure money flows to wage earners with the usual error components, which are small in large corporate organizations (especially where electronic data processing is used), but large when the business units are small. These payments take into consideration time worked, overtime, premiums, etc., and therefore are not simple entities.
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> . . . .
>
> It is clearly not easy to compare the wage income of a worker in a country who receives a certain amount of money and nothing else with that of girl workers in Japanese electronics companies who are housed free in dormitories and receive as part of their compensation gratis instruction in flower arranging (as is actually

> the case). Working conditions (light, ventilation, distance of place of work, etc.) are always part of the working contract and hence influence the "wage."[1]

Supposing, for the moment, one could put aside the questions posed by Morgenstern, there remain various problems in comparing wage data from various countries. Briefly summarizing the information on wages, it is seen that for Canada and Jamaica the median wage was used; and for Ghana, the arithmetic average was used.

The question arises concerning the effect of using the legal minimum wage series in lieu of better but non-existent data. Considering that the legal minimum wage may have corresponded to conditions in the labor market at the time of its imposition, it is unlikely (given changes in productivity and the influence of inflation) that during the time over which the legal minimum wage was is effect, it could adequately reflect changes in the labor market situation. In Brazil the legal minimum wages used were in effect between 1943 and 1951, during which time the consumer price index for all items increased by 206%. Legal minimum wages used for Mexico were for the biennium 1956/57. Between January 1956 and December 1957, Mexico experienced price increases of 11.3%.[2] To further complicate matters, it is safe to assume that inflation differentially effects various areas of the country.[3]

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[1] Oskar Morgenstern, On the Accuracy of Economic Observations, 2nd ed. (Princeton, N.J., 1965), pp. 186-187.

[2] United Nations, Monthly Bulletin of Statistics, selected issues.

[3] The degree to which inflation effects different areas of a country depends in part on the role of the subsistence sector in each area. Where own-account production plays a significant role in satisfying the needs of a consuming unit, inflation will play a less significant role than where own-account production does not account significantly.

Legal minimum wages are used in the two aforementioned cases because they were the only data available. It is conceivable that they are at best a poor substitute for market wages. Minimum wages per se may affect migration decisions through increasing the pay of those who get employed and reducing the probability of becoming employed. If, in fact, the legal minimum is an accurate proxy for the true wage, then the coefficient on the legal minimum will tend to be biased downward because of the employment effect.

Urbanization

> The concept of urban is almost universally understood to have reference to the relatively large and relatively dense settled populations engaged primarily in non-agricultural economic pursuits.[1]

Although there is general agreement on what "urban" means, the precise operational definition of urban varies among countries. Ideally one would use the same criterion to define a characteristic irrespective of the country studied. Thus, strict comparability would be insured among data sets. Unfortunately, this is not the case.

> Internationally comparable statistics on urban population are not easily assembled. The two criteria which generally distinguish the urban element in a country's population are quantitive, in terms of population concentration, and the qualitative such as characteristics of the economy and modes of living.
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[1]Philip M. Hauser and Judah Matras, "Areal Units for Urban Analysis," Handbook for Social Research in Urban Areas, ed. Philip M. Hauser (UNESCO, 1964), p. 26.

> For the various parts of the world, the data differ in definition, period of coverage, and number of observations, and recency.[1]

Looking at the case studies examined in this paper, we find that the definition of urban varies greatly. An area is considered urban in Brazil or Ghana if it has a population of 5,000 or more; in Mexico, 2,500 or more; and in Jamaica, 2,000 or more. Canada's definition encompasses somewhat more - municipalities of 1,000 or more, and fringe metropolitan areas.

If the absolute values of percent urban were used in lieu of the relatives, there would be a relative overstatement of urbanization in cases where a lower cut-off point were employed. Using relatives, however, reduces distortions.

Education

Ideally one would wish to be able to distinguish between the variety of mechanisms accounting for the contribution of the education variable in the human capital model of migration. In particular, it would be interesting to know if low skill-low education migrants move in one direction while high skill-high education migrants move in the opposite way in response to initial relative endowments of human capital in the regions. Does education serve as a means of standardizing for the varying composition of the labor force in different regions? Unfortunately, the data available does not enable us to distinguish between the variety of mechanisms accounting for the contribution of education

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[1]United Nations, International Social Development Review, No. 1, Urbanization, Development Policies and Planning, ST/SOA/Ser.X/1, p. 9.

in the human capital model of migration.

Like the data for urbanization the data for education vary from country to country. Information on relative higher education were found for four of the five countries studied. None appears for Mexico. In each country higher education refers to a somewhat different concept, where either the base for the percentage of the population possessing higher education, or the criterion for higher education varies. Were the percentage with higher education used directly, there would be a tendency to understate the percentage with higher education where there existed no age cut-off or a very young age cut-off point for the base population. Using relatives, however, reduces bias from this source.

The same arguments apply to relative illiteracy as to relative higher education. Here, however, although the cut-off point varies, there is at least greater agreement on what constitutes illiteracy. In four out of five countries, illiteracy is indicated by those unable to read or write. In Canada, those who never attended school are considered illiterate. In the latter case there may be a considerable number who learned how to read and write outside the formal educational structure. The use of relatives reduces the bias here, too.

3. Case Studies

In this section data and results are discussed. At this point the discussion for each country is self-contained, as a comparative analysis of results across countries is left for Chapter III.

Brazil

Brazil consists of 26 states and 1 territory. Owing to a lack of data for the territory Serra dos Aimorés, and the state of Fernando de Noronha, these were omitted from the study. The basic source for demographic data was the Census of 1950,[1] which was the last published census to date for internal migration.

Because migration data of the POB variety reflect the totality of forces acting on the population over the period of at least a generation, wherever possible, data for earlier years for the independent variables were employed. This was not always possible, and where earlier data were unavailable - for reasons of either nonexistence or inaccessibility, data for the same year were employed.

Preferably average or median wages on a state basis would have served as the best indicator of state wage differentials. Such series were not available. As a result, legal minimum wage series were employed. The legal minimum wages are set by each state. This series was available for several time periods.[2] The December 1943 to December 1951 time period was selected. This was done in keeping with the proviso of wherever possible obtaining data for an earlier period for the reasons cited above.

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[1] Recenseamento Geral de 1950, Censo Demográfico: Estados Unidos do Brasil, Table 43, "Brasileiros Natos Presentes, Discriminados Pelas Regioes Fisiográficas E Unidades da Federacao, Por Sexo, Segundo o Lugar de Nascimento," pp. 74-79.

[2] Brasil Series Estatística Retrospectivas - 1970, Fundacao IBGE Instituto Brasileiro de Estatística, "Trabahlo Salario minimo establecido paraos da Capitais - 1943/69," p. 226.

Data on urbanization for 1940 were available from the 1950 Census.[1] The Brazilian Census authorities defined population agglomerations of 5,000 and over as urban. For all but three states, data were available for 1940. For those three states, 1950 data were used.

Two sets of data were compiled on education.[2] The first was the percentage of the population with a higher education (defined here as a university education). The second set was the percentage of population unable to read or write. Although both sets of data come from the census, that pertaining to higher education was available for 1950 only. That pertaining to illiteracy was available for 1940.

Further details concerning the data utilized for Brazil will be found in Table 2.2. In Table 2.3 the results of the regression analyses will be found. Regressions (1) and (2) pertain to Brazil.

In regression (1) three of the elasticity coefficients are found to be significant: relative urbanization, relative education, and distance. However, relative urbanization does not have the expected sign. Although relative wages does not have the expected sign, it is not significant. Distance exerted the strongest influence in regression (1). A one per cent change in distance (or in the costs of migration) is associated with a two per cent change in migration. This highlights the

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[1] Conselho Nacional de Estatística Servicio Nacional de Recenseamento, Serie Nacional, Vol. I, Brasil Censo Demográfico (Rio de Janeiro, 1956), "Populacao Presente, na data dos censos demográficos de 1940 e 1950," p. 261.

[2] Ibid., "Pessoas presentes de 10 Anos e Mais que Posseum Curso Completo, Por Sexo y Grau," p. 100. "Pessoas Presentes, de 5 Anos e Mais que Sabem ler & Escrever na data do censos demográficas de 1940 e 1950, por sexo, segundo regioes fisiográficas as unidades de federacao," p. 257.

Table 2.3 - The regression results.

Country	Reg. no.***	The constant a	Relative wages b_1	Relative urbanization b_2	Relative higher ed. b_3	Relative illiteracy b_4	distance b_5	R^2	F
BRAZIL	1	8.89	-0.93 (0.50)	-0.93** (0.39)	1.33** (0.22)		-1.95** (0.15)	.29	60.39
	2	8.94	0.04 (0.49)	0.44 (0.30)		-1.29** (0.45)	-1.96** (0.16)	.26	51.07
CANADA	3	6.07	0.40 (0.72)	0.12 (0.28)	-0.08 (0.37)		-0.96** (0.19)	.21	6.96
	4	6.07	0.34 (0.58)	0.03 (0.45)		-0.06 (0.33)	-0.96** (0.18)	.21	6.96
GHANA	5	5.87	2.56 (3.25)	1.21** (0.27)	-0.99** (0.30)		-0.91** (0.26)	.50	9.17
	6	5.87	1.53 (4.77)	0.99* (0.48)		2.59 (2.12)	-0.91** (0.29)	.37	5.54
JAMAICA	7	5.47	1.01** (0.39)	0.30* (0.15)	-0.46* (0.21)		-1.34** (0.13)	.52	40.52
	8	5.47	0.73 (0.39)	0.14 (0.15)		-0.13 (0.30)	-1.35** (0.13)	.50	38.06
MEXICO	9	5.96	0.37* (0.15)	0.06 (0.15)		-0.51** (0.17)	-1.11** (0.06)	.30	98.39

* = significant at the 5 per cent level.
** = significant at the 1 per cent level.
***= all equations are significant.

Standard errors appear in parentheses below the regression coefficients.

crucial role of costs in considering any move by the potential migrant. In Brazil education exerts a positive influence on migration. A one per cent change in relative higher education would induce a 1.33% change in migration. It is interesting to note that relative higher education and relative urbanization are highly correlated, r = 0.91. This high correlation between these two independent variables may account, in part, for the unexpected coefficient for relative urbanization.[1]

Regression (2) yields results with the expected signs. However, the elasticity coefficients for relative wages and urbanization are not significantly different, from zero. In comparing regressions (1) and (2) with respect to relative urbanization, it should be noted that relative illiteracy is not as strongly correlated with relative urbanization as relative higher education. The coefficient of correlation between relative illiteracy and relative urbanization is 0.75, considerably less than that between relative higher education and relative urbanization. Relative illiteracy is significant at the one per cent level, as is relative higher education in equation 1, confirming the importance of education in this case study. Distance or cost dominates the equation.

It is interesting to compare the results of this migration model with one previously done by Sahota.[2] Sahota, using a semi-logarithmic equation, regressed the logarithm of (M_{ij}/M_i) on the relatives of several variables including wages, urbanization, education and distance.

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[1]Johnston, Econometric Methods (New York, 1963), pp. 206-207.

[2]Gian S. Sahota, "An Economic Analysis of Internal Migration in Brazil," Journal of Political Economy, Vol. 76 (1968), pp. 218-245.

He did this for two age groups - one ages 15-29 and the other ages 30-59. Relatives were computed in the same manner as the present study. His results are compared with respect to signs and significance with regression (2) for Brazil. In Table 2.4, the first line shows the sign of the particular coefficient, while the second answers the question of statistical significance.

Table 2.4 - A comparison of results for Brazil

Variable		Relative wages	Relative urbanization	Relative education	Distance
Equation 2	sign	+	+	-[a]	-
	signif.	no	no	yes	yes
Sahota ages 15-29	sign	+	+	-, +, -[b]	-
	signif.	yes	no	yes, no, yes	yes
Sahota ages 30-59	sign	+	+	-, +, -[b]	-
	signif.	no	no	yes, no, no	yes

[a]Relative education in equation 2 was measured by relative illiteracy, thus the positive influence of education is reflected by a negative sign.

[b]The first coefficient refers to the percentage of educated people ages 15-59; the second to the percentage of educated people in the agricultural sector; the third to the percentage of educated people in the non-agricultural sector.

The estimated results of equation 2 are somewhat similar to those Sahota found. Relative wages were found to be positive in all three equations; however, only in the case of the younger age cohort was it found to be significant statistically. Relative urbanization was found to be positive in all three equations, but insignificant in all three equations. There was agreement as well on the sign and significance of the distance (cost) variable. Costs appear to dominate many of the

relationships between migration and other independent variables included in this study.

Sahota's results differ from those of the present study with respect to the education variable. Education is seen as a positive influence in equation 2, while in Sahota's equations exhibit mixed results. In Sahota's first equation, dealing with the younger age cohort, education is seen to be significant and negatively related to migration with respect to the percentage of educated people ages 15-59, and percentage of educated people in the non-agricultural sector. In Sahota's second equation, education is seen to be significant only with respect to the percentage of people ages 15-59, and negative again. Sahota considers that multicollinearity may account for the strange results.

Canada

Canada, is composed of ten provinces and two territories. Although, for a number of variables, separate data were available for the Yukon and Northwest Territories, for certain crucial data, e.g. the migration series - no such breakdown existed. Thus the two areas, encompassing a vast territory, had to be combined for purposes of analysis.

Migration data, of the Place of Residence variety, were available in a research monograph of the Census Division of the Dominion Bureau of Statistics.[1] As this data came from unpublished basic migration tabulations, and it appeared to be the sole source of interprovincial migra-

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[1] Internal Migration in Canada - Demographic Analysis, M.V. George, Demographic Analysis and Research Section, Census Division, D.B.S. (Ottawa, 1970), Table 6.3, p. 131.

tion data, there was little that could be done to improve the comparability of the data. It would have been better of POB data were available, as in the cases of the other countries considered.

Wage data refer to the 12 months directly prior to the Census of 1951.[1] For Canada median earnings of males, aged 15 and over were available on a province basis. Since separate data were available for the territories, these were combined, using population weights to yield a single figure.[2]

In the Canadian Census a definition of urban was used which included all cities, towns and villages of 1,000 and over as well as fringe parts of metropolitan areas. Data for 1951 were available.[3]

Data on illiteracy as well as higher education appeared in the same volume.[4] The percentage of the population possessing a university degree was the measure of higher education. The percentage of the population who had never attended school was used as a measure of illiteracy. Both sets of data refer to 1961.

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[1] Census of Canada (1961), "Labour Force Earnings and Weeks of Employment of Wage Earners, by Provinces, Incorporated Centres," Bulletin 3.3-2 (18 Sept. 1963), D.B.S.

[2] It should be noted that wages in the two territories were $2596 and $2594 in the Yukon and Northwest, respectively. To the nearest dollar the weighted average was $2595.

[3] Ibid., Series 1.1, "Population Rural and Urban Distribution," Bulletin 1.1-1.7 (2 Feb. 1963), Table 12, "Population by sex, for provinces and territories, rural and urban, 1901-1951, 1956, 1961."

[4] Ibid., Series 1.2, "Population - School Attendance and Schooling," Bulletin 1.2-10, Table "School Attendance and Schooling: Percentage Distribution of the population 5 years of age and over attending and not attending school by highest grade attended for provinces and territories, 1961" (29 March 1963), D.B.S.

In regressions 3 and 4 (Table 2.3) the model is examined with respect to Canada. It is seen that distance exerts the strongest influence in either equation, and in fact is the only significant variable. A one per cent increase in distance (or cost) would be associated with an approximately one per cent decrease in migration.

There are two reasons that may explain these poor results. Firstly, the vast size of the provinces (the units for measuring internal migration) may conceal much of the rural-urban movement in the country. For example, an examination of Appendix I reveals that the flows between Newfoundland and the Yukon and Northwest Territories (flow no. 111), between Prince Edward Island and Saskatchewan (flow no. 208), and between Saskatchewan and Newfoundland (flow no. 801) are all less than 100 over the 1956-61 span. Secondly, the existence of a language barrier between Frence- and English-speaking areas may discourage interprovincial migration to some extent. Movement to and from Quebec and New Brunswick, both with large French-speaking populations would be tempered by language considerations.

In a book entitled Migration in Canada - Regional Aspects, Leroy Stone examined net migration, i.e. $M_{ij} - M_{ji}$.[1] Stone's study differed from the present study in two ways. Rather than study gross migration, he examined net migration. Instead of analyzing migration between all regions, he analyzed data for 21 pairs of regions (with large flows). Stone calculated several regression models with a variety of results. The explanatory variables Stone used were:

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[1]Leroy Stone, Migration in Canada - Regional Aspects (1961 Census Monograph), Dominion Bureau of Statistics, 1969, op. cit.

P = the sum of the populations of i and j or the relevant sub-group of the population.

Y = the average difference between pairs of regions in Personal Income per worker over the years 1955 to 1960.

W*= the difference between pairs of regions in adjusted wage and salary earnings in the 12-month period preceding June 1961, as reported in the 1961 Census.

D = the highway mileage between the principal urban centres of the ith and jth regions.

B = the number of persons born in the net losing region but residing in the net gaining region in 1956.

U = the average rate of unemployment in the net gaining region over 1956-60 period.

U*= the average ratio over 1956-60 in the net losing region of persons receiving unemployment insurance benefits for 20 weeks or more to the total number of workers with unemployment insurance...to measure long-term employed - a measure of economic distress.

E = represents expectations and is measured by the ratio in the net gaining region to the net losing region of per cent growth of per capita income 1953-58.[2]

Including all the above-mentioned variables in a single regression, Stone found that only one variable proved to be statistically significant at the 5 per cent level: B (the number of persons born in the net losing region, but residing in the net gaining region). "B" was used as a proxy for the flow of information about economic opportunity.

Dropping several of the variables in the model, Stone performed a regression on Y (the average difference between pairs of regions in Personal Income per worker over the years 1955 to 1960), D (distance between principal urban centers), and B (defined above). Stone found

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[1]Ibid., pp. 177-178.

all the coefficients in the equation to have the expected signs. However, only B was statistically significant. The coefficient of correlation between B and Y was found to be 0.45; that between B and D was found to be -0.57. Stone concluded that B introduced multicollinearity to such a degree as to confuse the test of the economic role of migration postulated.[1] This would suggest that the addition of B adds little to the explanation, in effect leaving wage differentials and distance as the factors explaining migration. The role of distance is confirmed in the present study.

Ghana

Ghana is divided into seven regions. The migration data were selected in a post-enumeration survey in connection with the 1960 Population Census of Ghana. The post-enumeration survey was based on a ten per cent sample of the population.[2]

No regional wage data were directly available in the case of Ghana. However, the elements needed to arrive at a set of regional wage estimates were available. The regional wage estimates were derived utilizing the following formulae:

$$(1) \quad W_r = \frac{\sum_{i=1}^{8} N_{ir} W'_{ir}}{\sum_{i=1}^{8} N_{ir}}$$

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[1] Ibid., p. 182.

[2] 1960 Population Census of Ghana, Vol. VI, Post Enumeration Survey (Supplementary Enquiry), B. Gil, K.T. de Graff-Johnson, E.N. Colecraft (Census Office of Accra, 1971), pp. 367-370.

where:

W_r = the estimated regional wage rate per month

N_{ir} = the number of employees in each industry (i) per region (r).[1]

W'_{ir} = the average monthly wage in each industry (i) per region (r) per month as derived in equation (2) below:

$$(2) \quad W'_{ir} = \frac{W_{air}N_{air} + W_{nair}N_{nair}}{N_{ir}}$$

where:

W_{air}, W_{nair} are the monthly wages of Africans and Non-Africans, respectively in industry (i) in region (r).[2]

N_{air}, N_{nair} are the number of African and Non-Africans, respectively, in industry (i) in region (r).[3]

It should be noted that the W_r calculated through the application of formulae (1) and (2) are estimates of the true regional wage rates in 1955. These estimates differ from the true figures insofar as the weights in the formulae changed between 1955 and 1960.

Data on urbanization were found in the Advance Report of the 1960

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[1] 1962 Statistical Yearbook - Second Issue, Central Bureau of Statistics (Accra, Ghana, 1964), Table 87, "Recorded Number of Employees by Industry, Sector, and Region as of the end of the year, 1960," p. 76.

[2] Ibid., Table 94, "Average Monthly Earnings for Africans and Non-Africans in Reporting Establishments by Industry," p. 83. The wage data are for 1955.

[3] Ibid., Table 89, "Recorded Number of Employees by Race, Sex and Industry," p. 79.

Population Census.[1] Urban was defined by the Census Office to be any place with a population of 5,000 or over. The reference period was 1960.

By combining information of the advance tabulation and the post-enumeration survey (mentioned above) it was possible to calculate the percentage of population with higher education, where higher education was defined as those with teacher training or those who had attended university.[2] Data on literacy were also found in the post-enumeration survey.[3]

In regression 5, three elasticity coefficients were found to be statistically significant: relative urbanization, relative higher education and distance. Urbanization and distance were found to have the expected signs. Relative higher education had a negative sign. From this equation it is seen that the attraction of the city and the cost of migration play the most important role with respect to this model. A one per cent increase in urbanization accounts for a 1.21% increase in migration, while a one per cent increase in the costs of migration would account for only a 0.91 per cent decrease in migration.

The results of regression 6 further confirm the conclusions reached in the analysis of regression 5. Urbanization and distance are significant and have the expected signs. However, relative illiteracy is not significant. It should be noted that relative illiteracy and relative

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[1] 1960 Population Census of Ghana, Advance Report of Volumes III and IV, Demographic and Economic Characteristics of Regions, Census Office, Accra, p.2.

[2] Post Enumeration Survey, Table 21, "Past School Attendance by Type of School, Urban-Rural, Sex and Region," p. 29.

[3] Ibid., Table F-2, "Adults by Sex, Age, Literacy and Language by Regions," p. 335.

urbanization are strongly correlated, r = -0.89. Both relative illiteracy and relative higher education are weakly correlated with migration, -0.28 and 0.12, respectively.

It is interesting to compare the results of this study with one done by Beals, Levy, and Moses, using regression analysis to study internal migration in Ghana.[1] The authors used the following model:

$$(M_{ij}/P_i) = f(d_{ij}, Y_i, Y_j, P_i, P_j, E_i, E_j, U_i, U_j, u)^2$$

where:

M_{ij}/P_i = the percentage of migrants from region i to j, using the number of Ghanaian males, age 15-54 born in region i.

d_{ij} = the distance between the major urban centers in the origin and destination region.

Y_i = average African labor income in the origin region.

Y_j = average African labor income in the destination region.

P_i = the number of Ghanaian males aged 15-54 born in the origin region.

P_j = the number of Ghanaian males ages 15-54 born in the destination region.

E_i = the percentage of males aged 15 and over who have attended school in the origin region.

E_j = the percentage of males aged 15 and over who have attended school in the destination region.

U_i = the percentage of population residing in cities of 5,000 and over in the origin region

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[1]Ralph Beals, Mildred B. Levy, and Leon N. Moses, "Rationality and Migration in Ghana," Review of Economics and Statistics, Vol. XLIX (Nov. 1967), op. cit.

[2]Ibid., p. 482.

U_j = the percentage of population residing in cities of 5,000 and over in the destination region.

u = random errors.

The authors found results consistent with the results presented in this paper. As in the present study, the authors found distance negatively related in migration, wages positively related, and urbanization positively related. Education which was hypothesized to have a positive coefficient, had a negative coefficient. This result, it will be recalled, is shared by the present study. Table 2.5 shows the comparison between the results of Beal's study and equation 6 of the present study.[1]

Table 2.5 - A comparison of the results for Ghana.

	Dependent Variable	Wages Income	Urbanization	Education[b]	Distance
Equation 6	Log M_{ij}	$1.53\text{Log}\dot{W}$	$0.99\text{Log}\dot{U}$ (signif.)	$2.59\text{Log}\dot{E}$	-0.91LogD (signif.)
Beal's 1st[a] Equation	Log $\frac{M_{ij}}{P_i}$	$-2.321Y_i$ $1.962Y_j$	$0.749U_i$ $0.860U_j$	$-0.376E_i$ $-1.103E_j$	$-1.428D$
		(all coefficients are significant)			

[a] X_i = the value for the origin region; X_j = the value for the destination region.

[b] Relative education in equation 6 was measured by relative illiteracy, thus a negative sign would be expected. Similarly a positive sign would have been expected at the very least for the destination region.

Although in equation 6 relative illiteracy is statistically insignificant, relative higher education in equation 5 had a negative

[1] Ibid., p. 484.

coefficient, which was found to be statistically significant. It was argued earlier in this chapter that education might conceivably have a negative coefficient if the percentage of educated population were examined before any significant migration occurred. Such could be the case in Ghana, if either education facilities are relatively new, or relatively little migration occurred before the period in question.

Jamaica

The island of Jamaica is divided into 14 parishes. Migration data for these parishes were collected during the 1960 Census, and republished in a convenient summary in a book by O.C. Francis.[1] It should be pointed out that due to the special relationship between Kingston and St. Andrews Parishes, the urban portions which make up the Kingston Metropolitan Area, these two parishes were treated as one. Thus instead of 182 potential streams of migration only 156 were considered.

Median income data were also found in the same volume.[2] The median incomes of male wages earners for 1960 were used as proxi-variables for median incomes of both male and female wage earners. This was done because although median income series existed for both groups, no weights with which to combine them existed.

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[1] The People of Modern Jamaica, O.C. Francis, Department of Statistics (Kingston, Jamaica,1963), Table 2.3, "Jamaica-born Population Not Resident in Parish of Birth, Classified by Parish of Residence, April 7, 1960," ch.2, p.5.

[2] Ibid., Table 9.5, "Median Incomes of Wage Earners by Parishes and Sex, 1960," ch. 9, p. 10.

An urban area was defined by the Department of Statistics as one with a population of at least 2,000. Such data were to be found in a special study entitled Internal Migration in Jamaica.[1] Although parishes were ranked according to migration as of 1959, data for other characteristics, including urbanization were for 1960.

With respect to the education variables it was possible to use data of an earlier period than the 1960 Census. Data from the prior census were utilized.[2] The higher education variable was defined as referring to the percentage of population 10 years of age and over who had completed upper secondary school, preprofessional or professional school training. Illiteracy was defined with respect to the population 7 years of age and over.[3]

In regression 7 it was found that all the variables were significant at the 5 per cent level. Relative higher education had a negative sign. It will be recalled that the same result occurred with respect to Ghana. Both coefficients for costs and returns are significant at the 1 per cent level. A one per cent increase in relative wages would account for a 1.01 per cent increase in migration, while a one per cent increase in

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[1]Kalman Tekse, Internal Migration in Jamaica (Department of Statistics, April 1967), Table 19, "Selected Demographic, Economic, and Other Characteristics of Parishes by Net- and Out-Migration, 1959," p.24.

[2]Eighth Census of Jamaica (Central Bureau of Statistics, Kingston, 1945), Table 70, "Population 10 years of age and over classified according to standard of education and by sex, and by age groups for parishes (4 January 1943)," pp. 127-131. In the section on Brazilian data, the use of earlier data was explained.

[3]Ibid., Statement 5, "Percentage illiteracy of the population 7 years of age and over by parish and sex, Jamaica, 1943," p. LVIII.

the costs of migration would account for a 1.34 per cent decrease in same. The attraction of the cities plays a somewhat less important, though significant role. In regression 8, with the substitution of relative illiteracy for relative higher education in the equation (the correlation between these two variables is quite high, r = -0.86), only distance (or cost) was found to be significant.

Unfortunately, no such study of the type examined herein, e.g. Sahota's, Stone's or Beal's et. al. exists for Jamaica. However, an excellent study by Kalman Tekse provided a basis for comparison.[1] Tekse points to certain flows which tend to confirm the observations of migration (See Appendix I) and the results of the regression analysis:

> From these results the following main streams of migrations between parishes can be ascertained.
>
> 1. Intensive immigration to the centrally located parishes - Kingston (in the first stream), St. Andrew, as well as to the parish of St. Catherine. The only parishes with continuous migration gains are St. Andrew and St. Catherine. In every other parish, considerable migration losses were observed.
>
> 2. A movement of population from western parishes to the eastern parishes (St. Thomas, Portland and St. Mary).
>
> 3. Migration from the western and south-western parishes to the central parishes on the north coast.[2]

Taking these flows point by point, it is observed that the Kingston-

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[1]Kalman Tekse, op. cit.

[2]Ibid., p. 11.

St. Andrew area had an inflow of 175,067 and an outflow of 26,835, or a net inflow of 148,232. This confirms with Tekse's first point. At the same time St. Catherine experienced an inflow of 32,393 and an outflow of 34,963. If the Kingston-St. Andrew area is omitted from the experience of St. Catherine, it too shows a net inflow. The magnitude of this net inflow with respect to all other parishes with the exception of Kingston and St. Andrew was 13,178. Insofar as Tekse's data covers a slightly different timespan, this may account in any discrepancy in the results. It will be noted that the observations of this study and the Tekse study are in perfect conformity.

Furthermore the relatives for the attracting regions, viz. wages, urbanization and distance tend to support the present model. The relatives for wages, urbanization, illiteracy were all correlated with migration. The correlations were 0.33, 0.32, and -0.30, respectively. Distance was most strongly correlated with migration, r = -0.57.

> As regards distance of internal migration, they are rather restricted because of the size of the island. Nevertheless, the relative short-distance migrations dominate. For example, in 1959, 45% of the total internal migration had occurred between adjoining parishes.[2]

Mexico

Mexico consists of 32 states and territories. Data were considered for 31 of these; one, namely Coahuila, was omitted due to a lack of certain economic and social data. Migration data were found in the

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[1]Ibid., p. 13.

1960 Census.[1]

For the wage variable data on legal minimum wages on a state-by-state basis were used.[2] These data related to the cities in these states with the exception of the states of San Luís Potosí, México, Morelos and Oaxaca, where a minimum wage figure for agricultural labor was used. These data were used as a proxy for average state wage statistics. The reference period for this data was 1956-57.

Data on orbanization were found in the statistical yearbook.[3] An urban area was defined by the Dirección General de Estadística as those having a population of over 2,500. Data refer to 1950. Only data on illiteracy were used for Mexico, owing to the apparent unavailability of data on higher education. The measure of illiteracy used was the percentage of the population six years of age and over which was illiterate in 1950.[4]

For Mexico only a single regression was analyzed due to a lack of data on higher education. The coefficients for wages, illiteracy and distance all proved to be significant.

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[1] VIII Censo General de Población, 1960, 8 de Junio de 1960, Resumén General (Mexico, D.F., 1962), Cuadro Numero 11, "Nacido en el País, Por Estado Federativa de Residencia, Nacimiento y Sexo, Comparativo con datos del Censo 1950 y Variación Percentual," pp. 148-243.

[2] Compendio Estadístico, 1958, Dirección General de Estadística, Mexico, Cuadro 328, "Salario Mínimo, por bienios, zonas y entidades, 1956-57," p. 461.

[3] Anuario Estadístico Compendiado 1964, "Población Urbana y Rural por entidades federativas, 1950 y 1960," pp. 18-19.

[4] Compendio Estadístico, 1958, Cuadro 23, "Alfabetismo de la Población por entidades."

Sjaastad's costs-returns model accurately described internal migration in Mexico. Distance or the cost of migration plays the most important role in the equation. Migration is highly cost-elastic: a one per cent increase in the cost of migration would require a three per cent increase in the expected returns, as expressed in terms of relative wages. The role of distance was pointed out in an article by N.L. Whetten and R.G. Burnight. Reduction in the cost of migration through the construction of highways led to rapid growth of a number of urban centers during the period 1930-1950, in particular Mexico City, Guadalajara, Puebla, and Torreón.[1]

Whetten and Burnight indicate that the states of Baja California (2) and the Federal District (08) experienced great migrations.[2] Examining the corresponding flows in Appendix I (Flows nos. i02 and i08), it will be observed that the migratory flows were associated with high relative wages, high relative urbanization, and low relative illiteracy. Relative wages, for example, were on the average 2.74 times those in other states in Baja California and 1.55 times those in other states in the Federal District. Examination of relative urbanization reveals a similar conclusion. Likewise, relative illiteracy in these areas was correspondingly lower.

Similarly in states experiencing significant out migration relative wages were found to be lower. Guanajuarto (10) and México (14) both

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[1] N.L. Whetten and R.G. Burnight, "Internal Migration in Mexico," Estadística (Journal of the Inter-American Statistical Institute), Vol. XVI, No. 58 (March, 1958), p. 66.

[2] Ibid., p. 69.

experienced significant out migration.[1] Relative wages in the former were on the average 97% of those in other states, while relative wages in the latter were 80% of those in other states. Further inspection of Appendix I will show that these states exhibit low relative urbanization and high relative illiteracy.

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[1]Ibid., p. 68.

CHAPTER III

A COMPARATIVE ANALYSIS OF INTERNAL MIGRATION

1. Introduction

In Chapter I the forces behind internal migration were examined. Chapter II contained the analysis of these forces in terms of a regression model. Results obtained were examined on a country by country basis for the five case studies. The purpose of this chapter is to examine the hypothesis put forth in terms of the results of the regression model.

This chapter is divided into two parts. In the first part a comparison is made of the results obtained for the five countries whose data were analyzed in this paper as well as for other countries at varying levels of development. The second part of this chapter consists of summary of the major conclusions reached in this study. The issues posed by the human capital theory of migration are viewed in light of the empirical work reported on in this study.

2. A Comparative Analysis of Internal Migration

In order to provide a broader basis for the comparative analysis of the results of this study seven additional case studies of internal migration are examined in comparison to the five already included in the present study. The major findings of the present study are summarized in the table below.

Table 3.1 - The regression results summarized.

Country	Regression number	Constant	Rel. wages	Rel. urb.	Rel. illit.	Dist.	R^2
Brazil	2	8.94	0.04 (0.49)	0.44 (0.50)	-1.29** (0.45)	-1.96** (0.16)	.26
Ghana	6	5.87	1.53 (4.77)	0.99* (0.48)	2.59 (2.12)	-0.91** (0.29)	.37
Jamaica[a]	7	5.47	1.01** (0.39)	0.30* (0.15)	-0.46* (0.21)	-1.34** (0.13)	.52
Mexico	9	5.96	0.37* (0.15)	0.06 (0.15)	-0.51** (0.17)	-1.11** (0.06)	.30
Canada	4	6.07	0.34 (0.58)	0.03 (0.45)	-0.06 (0.33)	-0.96** (0.18)	.21

* = significant at the 5% level.
** = significant at the 1% level.
Standard errors appear below the regression coefficients.
[a]For Jamaica relative higher education was used instead of relative illiteracy.

In this section the human capital model is examined. It is examined with respect to eleven countries. These countries, when ordered in terms of per capita incomes (See Table 3.2) fall into three groups. The first group consists of the lower per capita income countries: $100 to $299; the second group contains the middle per capita income countries: $300 to $499; and the third group contains the high per capita income countries: $1,000 and over.

Table 3.2 - Countries included in the comparative analysis.

Country	Year of Study	Per Capita Income[a]	Country	Year of Study	Per Capita Income[a]
Ghana	1960	$166	Mexico	1960	$331
Taiwan	1967	211	Jamaica	1960	402
El Salvador	1960	213	U. K.	1960	1150
Colombia	1964	249	France	1960	1298
Brazil	1950	268	Canada	1961	1806
Chile	1952	321			

[a]United Nations, Monthly Bulletin of Statistics.

The discussion in this section is concentrated on each of the per capita income groups. Results for Brazil and Ghana are compared with findings on Taiwan, El Salvador, and Colombia. Results for Jamaica and Mexico are compared with findings for Chile. Lastly, results for Canada and findings for France and the United Kingdom are compared. This analysis serves as the focal point of the common factors found to influence migration.

It should be noted that no two studies are exactly the same. Studies differ for a variety of reasons. In those of an econometric nature, the formulation of model may differ although the same hypothesis is being tested. The inclusion or exclusion of selected variables will change the values of the parameters to be estimated. Differences in definition will account for greater or lessor correlation between variables studied. Finally, the focus of a study, e.g. if it is macro or micro, further contributes to differences in the results obtained.

Methodological differences between studies may make comparisons between them difficult. Results obtained from sample surveys concerning the characteristics of migrant populations are of a vastly different nature than those obtained through regression analysis. Data generated from a sample survey provide concrete indications of individual motives, while those gathered from censuses or other headcounts only indirectly shed light on motives. Such individualized data has definite advantages in studying the human capital hypothesis. In a survey questions such as "Why did you move?" and related questions concerning motivation and background data may be posed to the migrant. In the case of the present study (and other aggregative studies), it is impossible to ask questions

of the aforementioned nature. Aggregative data provide information on population characteristics for areal units from which one can only make inferences concerning individual motives. It can be stated that micro-data are far superior to aggregative data in such an exercise. Unfortunately, micro-data are much more difficult and costly to assemble.

Despite differences in model formulation and methodology, comparisons between studies can be made. Questions of consistency between results may be addressed. Furthermore, and equally important, the question may be asked: "Do the results obtained support or refute the hypothesis considered?"

Briefly reviewing, we are concerned with the human capital hypothesis with respect to migration, i.e. that migration is a cost-benefit phenomenon: a person migrates in the expectation that the returns will exceed the costs.

We turn now to an examination of case studies.

The Lower Per Capita Income Group

Internal migration in Taiwan, particularly rural-urban movements, was the subject of a study by Speare.[1] He conducted a sample survey of migrants in Taichung. Unlike the present study, where data were generated from individual observations of migrant characteristics.

The model utilized by Speare contained five basic elements: (i) the migrant's expectations with respect to income, (ii) whether he was employed or unemployed, (iii) whether he had or hadn't private

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[1] A. Speare, Jr. (See footnotes Ch. I), op. cit.

sources of information, (iv) the cost of moving, and (v) whether or not he owned his home. As it is seen variables (ii), (iii) and (v) are qualitative in nature, requiring a positive or negative response. A regression performed on these variables explained 36% of the variation in rural-urban migration. Speare modified his basic model by adding a proxi-variable for the change in the cost of living upon moving to the city. On the assumption that in a rural area a large family might mean more hands to do the chores in the household, it might be assumed that in urban areas a larger family would mean more mouths to feed. Thus Speare reasoned that family size could be used as a proxi-variable for the cost of living. If was found to be statistically insignificant. The results of Speare's regression analysis appear in Table 3.3.

Table 3.3 - Regression coefficients for two models of migration - Taiwan[1]

Model	Const.	Expected Change in Income	Un-employ-ment	Priv. Source of info.	Cost of Move	Home Owner-ship	Family Size	R^2
Basic	0.543	0.155 (.023)	0.323 (.071)	0.231 (.033)	-.342 (.033)	-.103 (.034)	---	.36
Basic modi-fied	0.605	0.153 (.023)	0.321 (.071)	0.223 (.035)	-.343 (.033)	-.088 (.036)	-.021 (.014)	.36

Standard errors appear below the coefficients.

Speare expected the cost-benefit variables in the model to reflect certain basic characteristics associated with migration, age, educational status and family background. He felt the weakness of his model was due to possible omission of some of the relevant costs and benefits

[1]Ibid., p. 180, 184.

connected with migration. Because the study was directed at "migrants who moved relatively short distances," this may have accounted for in part the weakness of the relationship observed. Over longer distances several of these factors may have been more pronounced. Nevertheless, it will be noted that Speare's results in his basic model were all significant.

Speare's general conclusions tend to confirm the results of the present study, particularly with respect to distance. At the same time education was shown to be associated with migration.

> Distance was positively correlated with the cost of moving and negatively correlated with the expectation of higher income...Those better educated were shown more likely to move than those with poorer education.[1]

A study of migration in the metropolitan area of San Salvador (1960) was conducted using sample survey techniques.[2] The survey covered 900 households, comprising 4560 persons, or approximately 2% of the metropolitan population.[3] The results of the survey covered most of the areas of interest considered in the regression analyses performed in the present study. A profile of the migrant population in San Salvador, the only major urban area in the country of El Salvador, is presented in figure 3.1.[4]

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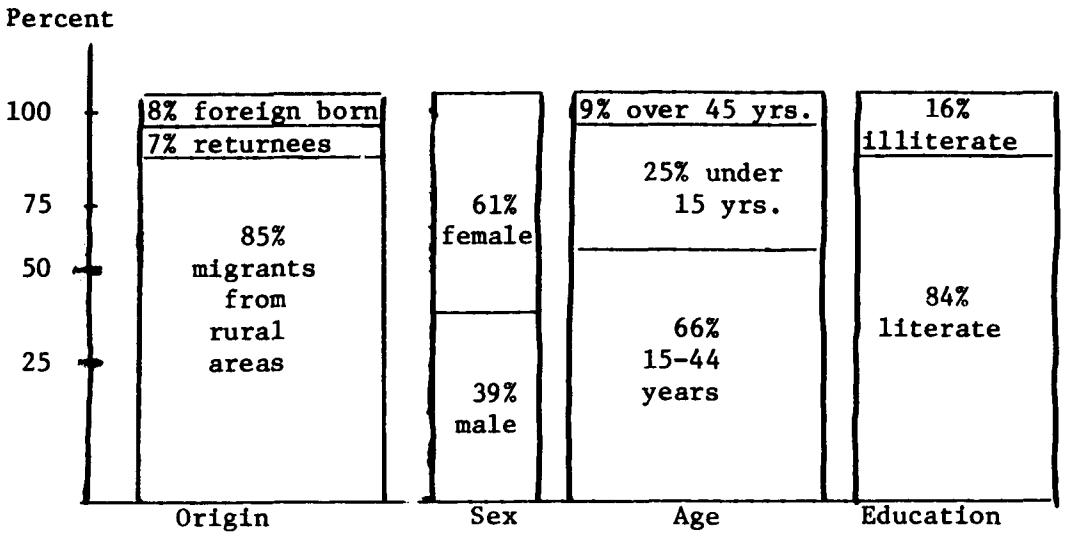
[1]Ibid., pp. 220-221.

[2]L.J. Ducoff, "The Migrant Population of A Metropolitan Area in a Developing Country - A Preliminary Report on a Case Study of Salvador," in Readings in the Sociology of Migration, ed. C.J. Jansen (Oxford, 1970), op. cit.

[3]Ibid., p. 387.

[4]Idem.

Figure 3.1 - A profile of the migrant population of San Salvador.



San Salvador exerts considerable pull in the migration process: 42% of its population was migrant, at least 85% of which came from rural areas. Approximately 61% of the migrant population was female as compared with 52% of the resident population.[1] A major factor explaining this was the search for employment. Many young women came to the city to seek domestic employment. In addition, women who had been either separated or widowed came to seek jobs.

With respect to age it is seen that two-thirds of the migrants were in their economic "prime of life." Only 9% were over 45 years of age. The 25% under 15 years of age can be attributed to migration of the head of the family for economic reasons or migration to take advantage of educational opportunities.[2]

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[1] Ibid., p. 390.

[2] Ibid., p. 391.

Differences between the migrant population of San Salvador and the native population were seen at both ends of the educational spectrum. While 16% of the migrants were illiterate, only 8% of the native urban population fell into this category. It was not true that migrants on the whole were different from non-migrants, however. For both populations with more than a rudimentary education (i.e. those having one year of education or more) there were no marked differences in educational status. It is interesting to note that amongst the very small portion of the population with university education or degrees representing some professional training, there were larger percentages of migrants than non-migrants.[1]

The picture presented in the Ducoff study in no way refutes the human capital hypothesis of migration. Although the Ducoff study provides a demographic portrait of the population, limited to age, sex and education, his observations can be seen to be consistent with the approach of the present study. Age, a reflection of earnings potential (as relative wages are in the present study) is related to migration. Closely related to earnings potential is higher relative education. Unfortunately, the Ducoff study omits considerations of distance or cost of migration.

Turning to a study of internal migration in Colombia, we find materials roughly comparable to the present study.[2] Schultz studied migration in 131 municipalities in Colombia. Net migration, the depen-

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[1] Ibid., p. 393.

[2] T. Paul Schultz, "Rural-Urban Migration in Colombia," Review of Economics and Statistics, Vol. LIII (May 1971) No. 2, op. cit.

dent variable, was defined as a percentage with respect to the population of the region in question. Schultz's equation was:

$$M_i/P_i = a_o + a_1W_i + a_2E_{1i} + a_3E_{2i} + a_4P_i + a_5(V_i/P_i) + a_6D_i + u_i$$

where:

M_i/P_i is the net migration ratio for the local ith region's population (greater than zero given net in-migration, less than zero given net out-migration).

W_i is the local male agricultural daily wage including food.

E_{1i} is the school enrollment rate for children 5 to 9 years of age.

E_{2i} is the school enrollment rate for children 10 to 14 years of age.

P_i is the estimated growth rate of the local potential labor supply (population growth).

V_i/P_i is the frequency of political violence in the locality.

D_i is the logarithm of time required to travel from the locality to the nearest major city.

u_i is a normally distributed stochastic disturbance term,

a_i are model parameters to be estimated.[1]

The regression was performed for a variety of groupings (in terms of age-sex cohorts) for rural migration. Owing to the fact that Schultz was able to classify this migration data by age and sex, one may perform an interesting analysis - not otherwise possible. The "goodness of fit" of the model as applied to migration of males at various ages may be compared to the goodness of fit as applied to female migration at various

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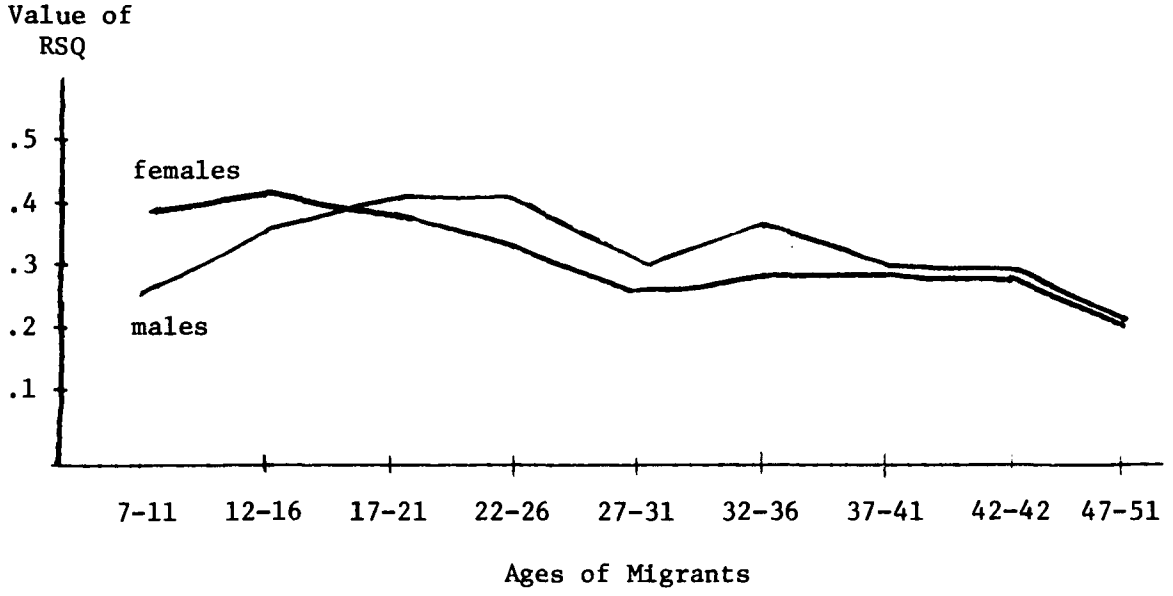
[1] Ibid., p. 160.

ages (Figure 3.2).[1] In terms of age-sex cohorts, Schultz was able to explain as much as 39% of migration for male migrants ages 17-21 and 22-26. For female migrants, Schultz was able to explain up to 41.7% of the migration for women ages 12-16. This model, having elements of the human capital approach, best explains migration for these three groups. The regression results for these groups appear in Table 3.4.[2]

Figure 3.2 - The "Goodness of Fit" of the Schultz model with respect to age-sex cohorts.



[1] Ibid., p. 162.

[2] Ibid.

Table 3.4 - Selected regressions of rural migration rates: Colombia 1951-1964

Dependent variable w.r.t. age & sex 1958	constant	W_i 1956	E_{1i}	E_{2i}	P_i	V_i/P_i 1958-63	D_i	R^2
				1964				
Females 12-16	13.3	1.12	.000508	-.115	-.276	-.0474	-.00220	.417
	(4.14)	(3.30)	(.01)	(-4.20)	(-4.43)	(-5.49)	(-1.16)	
Males 17-21	20.1	1.45	-.0166	-.133	-.437	-.0210	-.00320	.390
	(5.53)	(3.62)	(-.29)	(-4.05)	(-5.97)	(-2.14)	(-1.41)	
22-26	18.9	1.03	.0155	-.139	-.364	-.0319	-.00299	.390
	(5.34)	(2.66)	(.28)	(-4.30)	(-5.35)	(-3.55)	(-1.35)	

t-values are contained within the parentheses below the coefficients.

It is seen that rural migration rates for females and males, when taken separately, are not related to either the percentage between the ages 5-9 with primary schooling or to the distance from the city. Both variables are found to be significant, however, in more aggregative regressions (See Table 3.5). The role of wages, education, population growth and violence do exert significant influence.

> The association between daily wages in agriculture and migration is strongest for the young, among whom migration is most common. No significant effect of rural wages on male migration rates is evident after age 26 (in 1951).[1]

[1] Ibid., p. 161.

Table 3.5 - Regressions on aggregate migration rates for persons less than 45 in 1951: Colombia 1951 to 1964

Dependent Variable (Population Cohort)	Constant	W_i 1954	E_{1i}	E_{2i}	P_i 1951	V_i/P_i 1958-63	D_i	R^2
All municipalities								
Both sexes	13.3	.776	.175	-.145	-.255	-.0352	-.00437	.486
	(5.24)	(2.57)	(4.77)	(-6.44)	(-5.44)	(-4.75)	(-2.52)	
Males	14.1	.965	.192	-.168	-.280	-.0371	-.00474	.459
	(4.78)	(2.76)	(4.49)	(-6.37)	(-5.18)	(-4.45)	(-2.38)	
Females	13.2	.706	.188	-.147	-.265	-.0411	-.00479	.498
	(4.91)	(2.23)	(4.90)	(-6.26)	(-5.35)	(-5.09)	(-2.62)	

t-values appear below the coefficients.

As the t-values of Table 3.5 indicate, all the variables are significant. Interestingly, in this study it was also found that with respect to the education variable for ages 10-14, less migration occurs with more education. This was found to be true in the studies of Ghana, reported in Chapter II. This was confirmed in the present study, but with caution as the coefficient was statistically insignificant at the standard significance levels.

The Middle Per Capita Income Group

A case study of Chile provides a basis for the comparison of the results for Jamaica and Mexico.[1] Excellent results were obtained for migration in Jamaica; all the variables proved significant. The same problem arose concerning the education variable as in the Ghanian studies and the Colombian study. In the regression analysis for Mexico

[1]Bruce H. Herrick, Urban Migration and Economic Development (M.I.T. Press, Cambridge, Mass., 1965), op. cit.

only relative urbanization proved statistically insignificant.

Although Herrick did not construct an econometric model to describe Chilean migration, his analysis of the available data is most thorough. A labor force survey conducted in Greater Santiago sought to investigate the reasons for migration. Three major factors were found to motivate migrants: (1) economic advancement - cited by 36% of the respondents, (2) family reasons - cited by 53% of the respondents, and (3) educational opportunities - cited by 5% of the respondents.[1] It should be noted that these results must be accepted cautiously (as good as they are), due to the fact that respondents were given a questionnaire including these choices and a category for "other reasons" accounting for 4% of the responses.[2]

Concerning the first reason, migrants felt that through better opportunities to obtain work, better pay in the same occupation, or an administrative transfer by an employer, they could advance in economic terms. Family reasons for moving simply represented dependents accompanying the family breadwinner.[3]

Directly related to economic advancement and the possibility of higher wages is the availability of jobs. The probability of employment signaled in the literature (see the discussion in Chapter I), as a consideration of the migrant, does <u>not</u> appear to play a significant role in migration to Santiago.

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[1] Ibid., p. 15.

[2] No information was available for 2% of the sample, yielding 100%.

[3] Ibid., p. 15.

> Despite the plausibility of the hypothesis, the migration to Santiago does not seem to have been a function of the rate of unemployment within the capital.[1]

Age of migrants further bears on their ability to maximize the stream of returns accruing to them. Comparing the age distribution of the migrant population of San Salvador with that of the migrant population of Santiago yields interesting results. Of recent migrants to Santiago approximately 20% were under 15 years of age (25% in San Salvador), approximately 66% were 15 to 44 years of age (66% in San Salvador), and approximately 14% were 45 years of age and over (9% in San Salvador).[3] There exists a remarkable constancy in the percentage of migrants falling into the economically active category. The higher figure for San Salvador in the younger age group may be the consequence of the higher birth rate in El Salvador (47.4 per 1,000 population, 1955-59), as opposed to that in Chile (35.6 per 1,000 population, 1955-59). The higher percentage in the older age group for Santiago may be accounted for by the difference in mortality rates (13.2 per 1,000 [El Salvador] and 12.6 per 1,000 [Chile] for the same period).[4]

The role of sex in migration has been noted in several studies, and although not included explicitly in the present study, it is recognized as contributing to the potential earnings of migrants. The importance of women in the migration stream, noted by Ravenstein for 19th century

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[1]Ibid., p. 69.

[2]Ibid., p. 75.

[3]United Nations, Compendium of Social Statistics: 1963 (New York, 1963), pp. 99-100.

England, holds for Santiago as well. Among all migrants over age 14, there have been 142 women for every 100 men. This ratio has increased for "recent migrants" to 171 women for every 100 men.[1]

> The high ratio of women to men among the most recent migrants, not present among the older migrants, can be linked with the occupations and work histories of these recent migrants. Many young women came to Santiago, and the bulk of them enter domestic service. Domestic service is an unstable occupation, characterized by many small employers (that is, households which hire only one or two servants) and high turnover. Inevitably some of the migrant girls whose entire work experience in the city consists of domentic service become discouraged and return to their former homes. This accounts for the lowering of the sex ratio when the group of all migrants is considered: the return home of some of the female members of the recent migrant group pushes the ratio down.
>
> The mobility of Chilean women indicates fundamental changes occuring within the society. The move to the cities for them means a transfer from places where employment opportunities are virtually nonexistent to places where women's jobs may be found. Women's participation rates in the rural sector of the economy in 1960 were 10.0%; in the urban sector 27.2%. Within Greater Santiago, female participation was even more energetic: 34.7%. Thus the probability that any given Santiago women would be a labor force participant was three and one-half times that for her rural cousin.[2]

As relative urbanization is a variable in the model presented in this study, it is interesting to examine Herrick's observations concerning the origin of the migrants to Santiago. Columns (1) and (2) of Table 3.6, reproduced from Herrick's study, give an indication of the

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[1] Ibid., p. 75. These findings initially appeared in Algunos Resultados del XIII Censo and the June 1963 Employment Survey of the Institute of Economics of Santiago. "Recent migrants" are defined as those with 10 or fewer years of residence in Santiago.

[2] Ibid., pp. 73, 76.

relative attractiveness of Santiago to those from cities of various sizes in Chile. It is observed that a major number of migrants to Santiago came from cities with less than 10,000 population. Migration appears to have its heaviest incidence from cities with populations between 10,000 and 20,000. Other large cities with populations over 100,000 seem to be proportionately represented in the migrant group while those from rural villages (i.e. less than 10,000) are relatively underrepresented. Thus it might be concluded that migrants coming to Santiago are more likely to be coming from medium sized cities than from the other very large cities or the very small communities. This suggests that those having a taste of the urban environment are attracted by the "bright lights" of Chile's capital.

Table 3.6 - The movement toward Santiago.[1]

City size (1960)	(1) Distribution of Population outside Santiago	(2) Distribution of Migrant Birthplaces	(3) Incidence of Migration[2]
More than 100,000 (excluding Santiago)	9.4%	9.4%	1.00
50,000 - 100,000	10.4	20.0	1.92
20,000 - 50,000	13.1	16.5	1.26
10,000 - 20,000	6.1	14.2	2.33
Less than 10,000	60.9	33.8	0.56
Foreign born	--	6.1	--
Total population (excluding Santiago)	100.0%	100.0%	

[1] Ibid., p. 53.

[2] Incidence is defined as the percentage of migrants (2) divided by the percentage of population outside Santiago (1).

The role of education has been found to be significant in Chile as well as in Jamaica and Mexico. "Migrants were more than five times as likely to have university training as those they left behind." At the same time migrants lagged educationally behind Santiago natives.[1] Again this confirms the observations of the study of San Salvador. Also interesting is the same conclusion concerning the percentage of migrants with university education, viz. that it exceeded the percentage of natives of Santiago with university education. This too, was true of San Salvador.

Lastly we turn to the role of distance. The results of Herrick's study tend to confirm those of the present study. The effect of distance as a discouraging factor to migration was "surprisingly linear."[2]

The High Per Capita Income Group

The results for Canada were extremely poor. Although all the variables had the expected signs, only one proved statistically significant. The reasons for this poor showing have been discussed above. Studies for other developed countries, viz. England and France are compared with the Canadian analysis.

"A Study of Internal Migration in England and Wales," by D. Friedlander and R.J. Roshier was based on the National Marriage and Fertility Survey conducted between December 1959 and March 1960. A sample of 2,300 married couples between the ages of 18 and 60 was taken. The study concentrated on differentials in occupation, education and

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[1] Ibid., p. 78.

[2] Ibid., p. 50.

family size and the length of moves. Differentials in age were not dealt with in this survey.[1]

It will be observed that geographic mobility is directly related to educational level or occupational rank (Table 3.7).[2] Considering that occupational rank and educational level are highly correlated, the influence of the education variable can be plainly seen. Managerial personnel, etc. moved "more than 50 miles at approximately twice the rate as manual workers (both skilled manual and other manual)." At the same time it will be seen that better than twice as many skilled manual workers and other manual workers fell into the "no move" category as managerial personnel. The same characteristics are seen in the grammar school and non-grammar school categories.[3]

Most interesting from the development point of view is the point raised by the authors concerning the comparative status of these migrants with their forebearers.

> Previous studies have shown that, unlike migrants of the last century, who built the great industrial cities, the migrants out of these cities into the suburbs and residential towns during this century have been of relatively high socio-economic status when compared with the population at large.[4]

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[1]"A Study of Internal Migration in England and Wales: Part II, Recent Internal Migrants: Their Movements and Characteristics," D. Friedlander and R.J. Roshier, Population Studies (July, 1966), Vol. XX, No. 1, p. 45.

[2]Ibid., p. 50.

[3]Idem.

[4]Idem.

Table 3.7 - Information by distance of last move, husband's occupation (at marriage) and education (last school).

Husband's Occupation	All		Distance of last move: No move	1-9 miles	10-49 miles	More than 50 miles
	No.	%	%	%	%	%
Managerial and executive professional, high administrative	146	100.0	18.5	32.2	19.2	30.2
Other non-manual	461	100.0	31.9	27.6	23.0	17.6
Skilled manual	756	100.0	45.8	25.0	15.7	13.5
Other manual	728	100.0	47.8	25.0	14.0	13.2
Total	2,091	100.0	41.5	26.1	17.0	15.5
Husbands' Education						
Grammar School	426	100.0	21.4	32.2	21.6	24.9
Non-Grammar School	1,771	100.0	44.1	28.6	14.9	12.4

Two points stand out (1) the migrants are of higher socio-economic status, and (2) the direction of migration is out of the cities. The first point needs no further explanation; however, the second does require qualification. It may very well be that although a change in residence is observed, the actual location of employment may remain the same, i.e. the migrant may have simply become a commuter.

It will be recalled that the family size was used as a proxi-

variable for the cost of migration (See the study of migration in Taiwan). In that study the variable proved to have no statistical significance. Although no regression analysis was performed by Friedlander and Roshier, some interesting results emerge, which may in part explain the apparent lack of statistical significance in the Speare study. Friedlander and Roshier found that there was a striking difference between the manual group and the non-manual group.

> In the manual group there is a negative relationship, families with three or more children being almost 50% less mobile than families with no children. In the non-manual group, however, there is a strong positive relationship, families with 3 or more children being twice as mobile as families with no children. (It must be emphasized that these proportions are based on fairly small samples and are subject to substantial sampling variations. Nevertheless the differences are systematic and suggest that the pattern exists.[1]

If the described situation were to exist, for example, among the subjects of the Taichung Migration Survey, it is possible that a given occupational mix over a variety of family sizes could obscure any relationship within subgroups.

Two studies of France provide an insight into internal migration. The first study by G. Pourcher examined the origin of the population of Paris.[2] Pourcher makes the point that unlike England or Germany, which

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[1] Ibid., p. 54.

[2] G. Pourcher, "The Growing Population of Paris-Regional Origin - Social Composition - Attitudes and Motivations," in Readings in the Sociology of Migration, ed. C.J. Jensen (Oxford, 1970), op. cit.

posses several metropolitan centers, France has only one - Paris.[1] This is not unlike the situation in El Salvador, with just one metropolitan center - San Salvador.

Based on a sample Pourcher drew certain conclusions about the migrant population.[2] The first concerned age distribution. The average age of migrants coming to Paris on their own account was 26 years. Dividing the arriving migrants into three general age categories, viz. under 15, 15 to 44, and 45 years of age and over, a similar pattern is observed for Paris to that for Santiago or San Salvador.[3] The data for the three urban centers appear below.

Table 3.8 - Age distribution of migrant groups on arrival.

City	Percentage distribution			
	Less than 15 yrs.	15 to 44 yrs.	45 yrs. and over	Total
Paris	25%	72%	3%[a]	100%
San Salvador	25	66	9	100%
Santiago	20	66	14	100%

[a]There is a slight modification to this range for Paris: 45-59 is used instead of 45 and over. This may account for the low value of the percentage in this category.

Migration was primarily motivated by financial considerations; 83% of the migrants came for such reasons. Many of the migrants came because they had better prospects of advancement. It is emphasized that this

[1]Ibid., p. 181.

[2]The initial sample consisted of 6,627 names. Data were collected for 4,442 names, or 0.57% of the migrant population.

[3]Ibid., p. 192.

was not owing to a lack of employment outside Paris, however. Only 14% said that they lacked sufficient work and financial resources outside Paris.[1]

It is interesting to complement the results of the Friedlander and Roshier study with certain conclusions arrived at by Pourcher concerning motivations of manual and non-manual workers. Pourcher found that white collar, managerial class workers, and professionals came to Paris for educational opportunities or to take on professional appointments and/or high level jobs available in a greater abundance than elsewhere. Manual workers came mainly to earn higher salaries.[2]

Two other variables need be mentioned, but briefly, before concluding the discussion of Pourcher's study. Concerning distance, it was found that 60% of the migrants to Paris came from the immediately adjacnet regions to Paris.[3] This confirms the negative role of distance observed in the present study as well as the other econometric models examined.

Lastly a quick mention must be made concerning the relative cost of living as observed by the migrants. Contrary to expectations a majority of the migrants to Paris found higher salaries upon arrival and felt no increase in the cost of living.[4]

A second study of France, concentrating on the provinces, was made

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[1]Ibid., p. 193.

[2]Ibid., p. 193

[3]Ibid., p. 190

[4]Ibid., p. 197.

by A. Girard, H. Bastide, and G. Pourcher.[1] A probability proportional to size sample of 1989 migrants was selected.[2] The authors presented an interesting table (reproduced as Table 3.9) concerning the reasons for moving cross-classified by the ages of the migrants.[3] Examining Table 3.9 closely, we see that as age increases the relative importance of work as a factor increases, while that of family falls markedly. Only in the 20-24 year age group does family considerations outweigh work as a factor, and then only by two percentage points.

The authors also observed that the economic motive for migration becomes more pronounced as the size of the community in which the individual resides becomes larger, while family motives (marriage, etc.) are more common among the more rural part of the population. Table 3.10 summarizes their findings.[4]

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[1]A. Girard, H. Bastide, and G. Pourcher, "Geographic Mobility and Urban Concentration in France: A Study in the Provinces," in C.J. Jensen Readings in the Sociology of Migration (Oxford, 1970), op. cit.

[2]Probabilities proportional to size sampling is used where the sampler wishes to obtain equal sub-samples from clusters that vary in size. The technique is described in full in Survey Sampling, L. Kish (New York, 1965), pp. 217-253.

[3]Ibid., p. 217.

[4]Ibid., p. 215.

Table 3.9 - Reasons for the most recent move, according to age.

	Age (years) at most recent move						
	Under 20	20-24	25-29	30-34	35-39	40-49	50 or over
Numbers	97	328	274	150	106	112	136
	%	%	%	%	%	%	%
Work:	50	45	52	55	72	59	21
In order to find work, a farm or a small business	36	22	20	17	33	29	7
In order to find better employment, higher salary or larger firm	12	12	19	20	25	17	6
Appointment, transfer, advance within a firm, or firm itself moved	2	11	13	18	24	13	8
Family:	35	47	32	24	16	14	24
In order to marry	27	41	24	16	6	4	2
In order to move nearer to other members of the family	6	4	5	5	8	4	2
After a death or divorce	2	2	3	3	2	6	1
Accommodation:							
To be close to place of work, find better accommodation	5	9	10	9	10	6	5
Retirement:							
To retire	--	--	--	--	3	4	49
Political events: As a result of war the return of former colonial territories	3	2	1	3	2	3	1
Health:							
For reasons of health	1	1	1	3	3	6	4
Other reasons	5	5	5	11	7	4	4
Unknown	3	3	6	7	1	8	2
Total*	102	112	107	112	114	104	110

*Total greater than 100% due to multiple responses.

Table 3.10 - Reasons for moving to the provinces and to Paris according to residence at time of study.

	Less than 5000 inhabitants (%)	From 5000 to 100,000 inhabitants (%)	More than 100,000 inhabitants (%)	Paris (%)
Professional reasons	43	51	52	62
Family reasons	34	24	21	27
Marriage	26	16	12	10
Other reasons	23	25	27	11
Total	100	100	100	100

3. Summary and Conclusions

It is impossible to make valid comparisons concerning the magnitude of the estimates of parameters in different models. Tables 2.2 and 3.1 contain the results of the present study, where the same model is applied throughout. The magnitudes estimated for the present model of migration have been thoroughly discussed in the second chapter.

It is possible, however, to make comparisons or draw limited conclusions concerning the significance of certain factors. In Table 3.11 the results of the studies of the eleven countries discussed in this chapter have been arranged by income group and variable. The findings of each study have been summarized with respect to significance (either as observed in the case of all sample surveys or as established as a result of the regression analyses performed).

The reader should be cautioned to keep in mind the limitations of the data (See discussion in Chapter II). With this in mind the consi-

derations concerning results particularly for Canada, viz. statistical insignificance of relative wages, relative urbanization, and relative education must be tempered. Similarly, the use of minimum wage data for Brazil for the timespan considered would lead to a misstatement of the influence of relative wages in that country.

Taking these considerations into account one may draw the following inferences concerning the key variables of this study. The most pervasive influence is the cost of migration. Cost of migration, as measured in terms of distance moved, time expended in travel, or moving expenses, appears in all studies considering it as a significant factor.

Interestingly enough, is the fact that education, although accounting for a smaller "explanation" of migration than relative wages, plays a significant role in all but two countries: Ghana and Canada. The discrepancy insofar as expectations are concerned with respect to the Canadian results has been fully explored above. The results with respect to Ghana would warrant further investigation.

Part of the discrepancy in the Ghanaian case may be due to the transitory nature of migrants in Ghana. Long-term migration of the rural-urban variety is increasing in Ghana relative to seasonal migration. But seasonal migration is still a significant part of the African experience.[1] To the extent that this is true, migration statistics would inaccurately reflect the situation with regard to permanent moves.

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[1] The Determinants and Consequences of Population Trends, New Summary of the Interaction of Demographic, Economic and Social Factors, Vol. I (United Nations, New York, 1973), p. 180.

Table 3.11 - Factors considered and their influence.

Income group and Country	Change in income or wages	Urbanization	Education	Distance or cost of move	Employment or Unemployment	Source of Information	Home Ownership	Cost of Living/ Family Size	Sex	Age	Population Growth	Frequency of Violence	Family Reasons	Occupa-tional Status	If Relevant RSQ
Low p.c. income															
Ghana	I	S	I	S											.37
Taiwan	S		S	S	S	S	S	I		AS					.36
El Salvador			AS		AS				AS	AS					
Colombia	S		S	S							S	S			.49
Brazil	I	I	S	S											.26
Middle p.c. income															
Chile	AS	AS	AS	AS	I				AS	AS			AS		
Mexico	S	I	S	S											.30
Jamaica	S	S	S	S											.52
High p.c. income															
U.K.			AS	AS				AS						AS	
France	AS	AS	AS	AS				I		AS				AS	
Canada	I	I	I	S											.21

KEY TO SYMBOLS

S=significance
I=insignificance
AS=appears significant, as no significance tests were reported in these studies.

The role of wages was explored in nine cases. The results were mixed. Clearly in the case of the middle per capita income countries wages play a critical role. One would expect that this would be true in the developed countries too. This was found true in France, but again the Canadian results leave much to be desired. However, it is believed that this would be evident if migratory and other data for Canada dealt with smaller areal units.

In Taiwan and Colombia wages were found to play a significant role, but in neither Ghana nor Brazil. The nature of these economies may shed some light on this apparent inconsistency. The percentage of GDP originating in industry in Taiwan in 1967 was 46%, while in Colombia it was 35% in 1964. In contrast only 24% of GDP originated in industry in Brazil in 1950, while in Ghana (for the earliest year available - 1968) only 29% of GDP originated in industry. It could be safely assumed that a smaller percentage of GDP originated in industry in Ghana in 1960.[1] Thus for the time periods in question, it can be concluded that Taiwan and Colombia were considerably more industrialized; and this would explain the greater significance of the wage variable.

Urbanization was examined in seven cases. The influence of this variable is in no way clear, for in all income classes the result is mixed. In Ghana it is significant; it is not in Brazil. Among the middle group it was not significant in Mexico; it was in Chile and Jamaica. And in the high per capita income group it was significant in France, but not in Canada.

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[1] Yearbook of National Accounts Statistics, Vol. III, 1970 edition (United Nations, New York, 1972), op. cit.

In conclusion it is interesting to note that there exists a great degree of similarity in results irrespective of the level of economic development of the countries considered. Migration occurs in response to a variety of stimuli. It is particularly responsive to variables tending to effect directly the investment in human capital. Of primary importance is the direct return to the migrant: wages net of the cost of migration. An important, but secondary factor, is education, which provides returns over the longer run.

APPENDIX INPUT DATA

REGIONAL CODES

Brazil

01. Guaporé
02. Acre
03. Amazonas
04. Rio Branco
05. Pará
06. Amapá
07. Maranhao
08. Piauí
09. Ceará
10. Rio Grande do Norte
11. Paraíba
12. Pernambuco
13. Alagoas
14. Sergipe
15. Bahia
16. Minas Gerais
17. Espírito Santo
18. Rio de Janeiro
19. Distrito Federal
20. Sao Paulo
21. Paraná
22. Santa Catarina
23. Rio Grande do Sul
24. Mato Grosso
25. Goiás

Canada

01. Newfoundland
02. Prince Edward Island
03. Nova Scotia
04. New Brunswick
05. Quebec
06. Ontario
07. Manitoba
08. Saskatchewan
09. Alberta
10. British Columbia
11. Yukon and the Northwest Territories

Ghana

01. Western
02. Accra, C. D.
03. Eastern
04. Volta
05. Ashanti
06. Brong-Ahafo
07. Northern

Jamaica

01. Kingston
02. St. Andrew
03. St. Thomas
04. Portland
05. St. Mary
06. St. Ann
07. Trelawny
08. St. James
09. Hanover
10. Westmoreland
11. St. Elizabeth
12. Manchester
13. Clarendon
14. St. Catherine

Mexico

01. Aguasclaiente
02. Baja California
03. Baja California, Ter. Sur.
04. Campeché
05. Colima
06. Chiapas
07. Chihuahua
08. Distrito Federal
09. Durango
10. Guanajuarto
11. Guerrero
12. Hidalgo
13. Jalisco
14. Mexico
15. Michoacon
16. Moralos
17. Nayarit
18. Nuevo León
19. Oaxaca
20. Pueblá
21. Queretaro
22. Quintana Roo
23. San Luis Potosí
24. Sinaloa
25. Tabasco
27. Tamaulipas
28. Tlaxcala
29. Veracrúz
30. Yucatán
31. Zacatecos

BRAZIL - INPUT DATA

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
82.	0.931	0.474	0.476	1.180	457.	102
83.	0.897	0.639	0.762	1.133	771.	103
6.	0.724	0.757	1.286	1.089	1343.	104
57.	0.828	0.812	0.762	1.054	1857.	105
1.	0.655	0.991	1.048	1.097	1686.	106
2.	0.690	0.401	0.190	1.407	2231.	107
4.	0.690	0.406	0.238	1.446	2345.	108
12.	0.828	0.607	0.476	1.319	2860.	109
1.	0.724	0.572	0.429	1.303	3203.	110
1.	0.724	0.585	0.333	1.414	3232.	111
1.	0.828	0.783	0.714	1.339	3203.	112
1.	0.724	0.644	0.381	1.439	3089.	113
1.	0.724	0.819	0.381	1.302	2946.	114
2.	0.828	0.640	0.524	1.362	2803.	115
3.	0.931	0.672	1.000	1.196	2402.	116
1.	0.897	0.559	0.619	1.077	2803.	117
4.	1.103	1.003	1.476	1.028	2631.	118
10.	1.310	2.302	8.810	0.407	2603.	119
8.	1.241	1.179	2.333	0.857	2402.	120
1.	1.000	0.654	1.143	1.020	2317.	121
1.	0.931	0.676	0.571	0.909	2603.	122
1.	1.103	0.833	1.381	0.814	2660.	123
16.	0.828	0.796	1.000	1.063	1115.	124
1.	0.828	0.460	0.524	1.381	1773.	125
1083.	1.074	2.111	2.100	0.847	457.	201
7210.	0.963	1.350	1.600	0.960	1178.	203
139.	0.778	1.599	2.700	0.923	1659.	204
1665.	0.889	1.714	1.600	0.893	2317.	205
62.	0.704	2.093	2.200	0.929	2145.	206
96.	0.741	0.847	0.400	1.192	2717.	207
65.	0.741	0.857	0.500	1.226	2803.	208

BRAZIL (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
848.	0.889	1.282	1.000	1.118	3318.	209
76.	0.778	1.207	0.900	1.104	3604.	210
78.	0.778	1.235	0.700	1.198	3632.	211
92.	0.889	1.654	1.500	1.135	3718.	212
27.	0.778	1.359	0.800	1.219	3518.	213
17.	0.778	1.730	0.800	1.103	3346.	214
76.	0.889	1.350	1.100	1.154	3203.	215
67.	1.000	1.418	2.100	1.013	2774.	216
4.	0.963	1.181	1.300	0.913	3146.	217
181.	1.185	2.117	3.100	0.871	2974.	218
1115.	1.497	4.859	18.500	0.345	2946.	219
261.	1.333	2.490	4.900	0.726	2688.	220
16.	1.074	1.380	2.400	0.864	2574.	221
11.	1.000	1.215	1.200	0.770	2803.	222
22.	1.185	1.758	2.900	0.690	2808.	223
44.	0.889	1.681	2.100	0.901	1430.	224
8.	0.889	0.971	1.100	1.170	2116.	225
12056.	1.115	1.564	1.313	0.882	771.	301
6786.	1.038	0.741	0.625	1.041	1173.	302
10785	0.808	1.184	1.688	0.961	629.	304
6881.	0.923	1.270	1.000	0.930	1287.	305
179.	0.731	1.551	1.375	0.968	1030.	306
681,	0.769	0.627	0.250	1.241	1745.	307
350.	0.769	0.635	0.313	1.276	1945.	308
3264.	0.923	0.950	0.625	1.164	2431.	309
329.	0.808	0.894	0.562	1.150	2803.	210
287.	0.808	0.915	0.438	1.248	2889.	311
734.	0.923	1.225	0.938	1.182	2869	312
82.	0.808	1.007	0.500	1.269	2774.	313
60	0.808	1.281	0.500	1.149	2688.	314
317.	0.923	1.000	0.687	1.202	2603.	315

BRAZIL (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
347.	1.038	1.051	1.313	1.055	2545.	316
70.	1.000	0.875	0.813	0.950	2860.	317
1002.	1.231	1.568	1.938	0.907	2831.	318
6669.	1.462	3.599	11.562	0.359	2803.	319
1454.	1.385	1.844	3.063	0.756	2660.	320
123.	1.115	1.022	1.500	0.900	2688.	321
45.	1.038	0.900	0.750	0.802	2974.	322
149.	1.231	1.302	1.813	0.718	3089.	323
694.	0.923	1.245	1.313	0.938	1459.	324
56.	0.923	0.719	0.687	1.218	1919.	325
6.	1.381	1.321	0.778	0.918	1343.	401
1.	1.286	0.625	0.370	1.083	1659	402
56.	1.238	0.844	0.593	1.041	629.	403
11.	1.143	1.072	0.593	0.967	1459.	405
1.	0.905	1.309	0.815	1.007	1115.	406
24.	0.952	0.529	0.148	1.292	1802.	407
2.	0.952	0.536	0.185	1.328	2174.	408
5.	1.143	0.802	0.370	1.211	2603.	409
1.	1.000	0.755	0.333	1.196	3060.	410
2.	1.000	0.773	0.259	1.298	3146.	411
1.	1.143	1.035	0.556	1.230	3146.	412
1.	1.000	0.850	0.296	1.321	3117.	413
1.	1.000	1.082	0.296	1.195	3060.	414
2.	1.143	0.845	0.407	1.251	3089.	415
3.	1.286	0.887	0.778	1.098	3089.	416
1.	1.238	0.739	0.481	0.989	3432.	417
1.	1.524	1.324	1.148	0.944	3432.	418
1.	1.810	3.039	6.852	0.373	3403.	419
1.	1.714	1.557	1.815	0.786	3289.	420
1.	1.381	0.863	0.889	0.936	3375.	421
1.	1.286	0.760	0.444	0.835	3604.	422

BRAZIL (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
1.	1.524	1.100	1.074	0.748	3775.	423
1.	1.143	1.051	0.778	0.976	2116.	424
1.	1.143	0.607	0.407	1.268	2488.	425
2327.	1.208	1.232	1.313	0.949	1857.	501
1949.	1.125	0.583	0.625	1.120	2317.	502
11865.	1.083	0.788	1.000	1.076	1287.	503
551	0.875	0.933	1.688	1.034	1459.	504
28296.	0.792	1.221	1.375	1.041	343.	506
4925.	0.833	0.494	0.250	1.335	5821.	507
422.	0.833	0.500	0.313	1.373	5362.	508
2312	1.000	0.728	0.625	1.252	5411.	509
736.	0.875	0.704	0.562	1.237	5513.	510
354.	0.875	0.721	0.438	1.342	5301.	511
1230.	1.000	0.965	0.938	1.271	5157.	512
81.	0.875	0.793	0.500	1.365	4923.	513
45.	0.875	1.009	0.500	1.236	4617.	514
515.	1.000	0.788	0.687	1.293	4335.	515
542.	1.125	0.827	1.313	1.135	2969.	516
122.	1.083	0.689	0.818	1.022	3479.	517
2534.	1.333	1.235	1.938	0.976	3514.	518
16579.	1.583	2.835	11.562	0.386	3451.	519
2609.	1.500	1.453	3.063	0.813	3013.	520
216.	1.208	0.805	1.500	0.968	3421.	521
101.	1.125	0.709	0.750	0.863	3752.	522
427.	1.333	1.026	1.813	0.773	4136.	523
1057.	1.000	0.981	1.313	1.009	3118.	524
1608.	1.000	0.566	0.687	1.311	2082.	525
1.	1.526	1.009	0.955	0.912	1686.	601
1.	1.421	0.478	0.455	1.076	2145.	602
5.	1.368	0.645	0.727	1.033	1030.	603
1.	1.105	0.764	1.227	0.993	1115.	604

BRAZIL (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
66.	1.263	0.819	0.727	0.961	343.	605
2.	1.053	0.404	0.182	1.283	829.	607
1.	1.053	0.410	0.227	1.319	1115.	608
14.	1.263	0.613	0.455	1.203	1544.	609
1.	1.105	0.577	0.409	1.188	1945.	610
1.	1.105	0.590	0.318	1.289	2031.	611
1.	1.263	0.790	0.682	1.221	2059.	612
1.	1.105	0.650	0.364	1.312	2088.	613
1.	1.105	0.826	0.364	1.187	2002.	614
10.	1.263	0.645	0.500	1.242	2002.	615
1.	1.421	0.678	0.955	1.090	2345.	616
2.	1.368	0.564	0.591	0.982	2574.	617
1.	1.684	1.011	1.409	0.937	2680.	618
10.	2.000	2.321	8.409	0.371	2688.	619
2.	1.895	1.190	2.227	0.781	2660.	620
1.	1.526	0.659	1.091	0.930	2803.	621
1.	1.421	0.580	0.545	0.829	3060.	622
1.	1.684	0.840	1.318	0.742	3318.	623
2.	1.263	0.803	0.955	0.970	1802.	624
1.	1.263	0.464	0.500	1.259	1859.	625
759.	1.450	2.494	5.250	0.711	2231.	701
478.	1.350	1.181	2.500	0.839	2717.	702
1684.	1.300	1.595	4.000	0.806	1745.	703
394.	1.050	1.889	6.750	0.774	1802.	704
13470.	1.200	2.025	4.000	0.749	5821.	705
161.	0.950	2.473	5.500	0.780	829.	706
17379.	1.000	1.013	1.250	1.028	459.	708
2205.	1.200	1.515	2.500	0.938	4173.	709
288.	1.050	1.426	2.250	0.926	1688.	710
184.	1.050	1.459	1.750	1.005	1653	711
770.	1.200	1.954	3.750	0.952	1633.	712

BRAZIL (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT	DISTANCE	(IJ)
51.	1.050	1.606	2.000	1.022	1695.	713
33.	1.050	2.043	2.000	0.925	1671.	714
465.	1.200	1.595	2.750	0.968	1704.	715
573.	1.350	1.675	5.250	0.850	2852.	716
80.	1.300	1.395	3.250	0.766	2948.	717
1167.	1.600	2.501	7.750	0.731	3205.	718
8475.	1.900	5.740	46.250	0.289	435.	719
1409.	1.800	2.941	12.250	0.609	3434.	720
136.	1.450	1.630	6.000	0.725	3842.	721
50.	1.350	1.435	3.000	0.646	4173.	722
139.	1.600	2.077	7.250	0.579	4557.	723
2781.	1.200	1.985	5.250	0.756	4889.	724
47054.	1.200	1.147	2.750	0.982	3814.	725
387.	1.450	2.463	4.200	0.691	2345.	801
411.	1.350	1.167	2.000	0.816	2803.	802
721.	1.300	1.575	3.200	0.784	1945.	803
200.	1.050	1.865	5.400	0.753	2174.	804
2265.	1.200	1.999	3.200	0.729	5362.	805
39.	0.950	2.442	4.400	0.758	1115.	806
100617.	1.000	0.987	0.800	0.973	459.	807
7126.	1.200	1.496	2.000	0.912	644.	809
195.	1.050	1.408	1.800	0.901	1229.	810
233.	1.050	1.441	1.400	0.978	1194	811
4059.	1.200	1.930	3.000	0.926	1229.	812
98.	1.050	1.586	1.600	0.995	1236.	813
39.	1.050	2.018	1.600	0.900	1212.	814
4420.	1.200	1.575	2.200	0.942	1245.	815
866.	1.350	1.654	4.200	0.827	2393.	816
35.	1.300	1.378	2.600	0.745	2489.	817
585.	1.600	2.469	6.200	0.711	2746.	818
3581.	1.900	5.668	37.000	0.281	2683.	819

BRAZIL (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
5195.	1.800	2.905	0.980	0.059	2975.	820
646.	1.450	1.610	4.800	0.705	3383.	821
32.	1.350	1.417	2.400	0.629	3714.	822
105.	1.600	2.051	5.800	0.563	4098.	823
959.	1.200	1.960	4.200	0.735	4430.	824
12125.	1.200	1.132	2.200	0.955	3355.	825
3258.	1.208	1.647	2.100	0.758	2860.	901
14221.	1.125	0.780	1.000	0.894	3318.	902
18697.	1.083	1.053	1.600	0.859	2431.	903
878.	0.875	1.247	2.700	0.826	2603.	904
26912.	1.000	1.337	1.600	0.799	5411.	905
875.	0.792	1.632	2.200	0.831	1544.	906
40358.	0.833	0.660	0.400	1.066	4173.	907
50965.	0.833	0.669	0.500	1.096	644.	908
7595.	0.875	0.941	0.900	0.988	585.	910
10281.	0.875	0.963	0.700	1.072	815.	911
25701.	1.000	1.290	1.500	1.015	941.	912
2201.	0.875	1.060	0.800	1.090	1203.	913
332.	0.875	1.349	0.800	0.987	1499.	914
4293.	1.000	1.053	1.100	1.033	1294.	915
2015.	1.125	1.106	2.100	0.907	2442.	916
828.	1.083	0.921	1.300	0.816	2538.	917
3754.	1.333	1.651	3.100	0.799	2795.	918
18061.	1.583	3.790	18.500	0.308	2732.	919
29054.	1.500	1.942	4.900	0.649	3024.	920
2917.	1.208	1.076	2.400	0.773	3432.	921
106.	1.125	0.948	1.200	0.689	3763.	922
397.	1.333	1.371	2.900	0.617	4147.	923
2587.	1.000	1.311	2.100	0.806	4479.	924
2138.	1.000	0.757	1.100	1.047	3443.	925
887.	1.381	1.749	2.333	0.767	3203.	1001

BRAZIL (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
2227.	1.286	0.828	1.111	0.905	3604.	1002
2787.	1.238	1.118	1.778	0.870	2803.	1003
182.	1.000	1.324	3.000	0.836	3063.	1004
6943.	1.143	1.420	1.778	0.809	5513.	1005
133.	0.905	1.734	2.444	0.842	1945.	1006
2474.	0.952	0.701	0.444	1.080	1688.	1007
720.	0.952	0.710	0.556	1.110	1229.	1008
15980.	1.143	1.062	1.111	1.012	585.	1009
30151.	1.000	1.023	0.778	1.085	230.	1011
10100.	1.143	1.370	1.667	1.028	356.	1012
408.	1.000	1.126	0.889	1.104	618.	1013
121.	1.000	1.433	0.889	0.999	914.	1014
1026.	1.143	1.119	1.222	1.045	1236.	1015
2730.	1.286	1.175	2.333	0.918	2544.	1016
252.	1.238	0.978	1.444	0.826	2640.	1017
3942.	1.524	1.754	3.444	0.789	2897.	1018
13468.	1.810	4.025	2.055	6.031	2283.	1019
6987.	1.714	2.063	5.444	0.657	3126.	1020
652.	1.381	1.143	2.667	0.783	3534.	1021
54.	1.286	1.007	1.333	0.698	3865.	1022
223.	1.524	1.456	3.222	0.625	4249.	1023
555.	1.143	1.392	2.333	0.816	4581.	1024
552.	1.143	0.804	1.222	1.060	3506.	1025
836.	1.381	1.709	3.000	0.707	3232.	1101
1454.	1.286	0.810	1.429	0.835	3632.	1102
2597.	1.238	1.093	2.286	0.802	2889.	1103
315.	1.000	1.294	3.857	0.770	3146.	1104
3671.	1.143	1.387	2.286	0.745	5301.	1105
108.	0.905	1.694	3.143	0.776	2031.	1106
2541.	0.952	0.685	0.571	0.995	1653.	1107
1602.	0.952	0.694	0.714	1.023	1194.	1108
31031	1.143	1.038	1.429	0.933	815.	1109

BRAZIL (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
60654.	1.000	0.977	1.286	0.922	230.	1110
89849.	1.143	1.339	2.143	0.947	126.	1112
3478.	1.000	1.101	1.143	1.017	388.	1113
400.	1.000	1.400	1.143	0.921	684.	1114
4806.	1.143	1.093	1.571	0.963	1006.	1115
1247.	1.286	1.148	3.000	0.846	2314.	1116
596.	1.238	0.956	1.857	0.762	2410.	1117
4929.	1.524	1.714	4.429	0.727	2667.	1118
23209.	1.810	3.933	26.429	0.288	2604.	1119
10712.	1.714	2.016	7.000	0.606	2896.	1120
1022.	1.381	1.117	3.429	0.721	3304.	1121
161.	1.286	0.984	1.714	0.643	3635.	1122
326.	1.524	1.423	4.143	0.576	4019.	1123
644.	1.143	1.360	3.000	0.752	4351.	1124
532.	1.143	0.786	1.571	0.977	3276.	1125
505.	1.208	1.276	1.400	0.747	3203.	1201
730.	1.125	0.605	0.667	0.881	3718.	1202
1467.	1.083	0.816	1.067	0.846	2860.	1203
119.	0.875	0.967	1.800	0.813	3146.	1204
2035.	1.000	1.036	1.067	0.787	5157.	1205
59.	0.792	1.265	1.467	0.819	2059.	1206
5405.	0.833	0.512	0.267	1.050	1633.	1207
6344.	0.833	0.518	0.333	1.080	1229.	1208
26186.	1.000	0.775	0.667	0.985	941.	1209
4464.	0.875	0.730	0.600	0.973	356.	1210
54384.	0.875	0.747	0.467	1.056	126.	1211
52509.	0.875	0.822	0.533	1.074	262.	1213
2394.	0.875	1.046	0.533	0.972	558.	1214
17734.	1.000	0.816	0.733	1.017	880.	1215
3880.	1.125	0.857	1.400	0.893	2188.	1216
830.	1.083	0.714	0.867	0.804	2284.	1217
12156.	1.333	1.280	2.067	0.768	2541.	1218

BRAZIL (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
45148.	1.583	2.938	12.333	0.304	2478.	1219
62745.	1.500	1.505	3.267	0.640	2770.	1220
5745.	1.208	0.834	1.600	0.761	3178.	1221
258.	1.125	0.735	0.800	0.679	3509.	1222
916.	1.333	1.063	1.933	0.608	3893.	1223
3043.	1.000	1.016	1.400	0.794	4225.	1224
1761.	1.000	0.587	0.733	1.031	3150.	1225
216.	1.381	1.553	2.625	0.695	3089.	1301
223.	1.286	0.736	1.250	0.820	3518.	1302
430.	1.238	0.993	2.000	0.788	2774.	1303
29.	1.000	1.176	3.375	0.757	3117.	1304
602.	1.143	1.261	2.000	0.732	4923.	1305
23.	0.905	1.540	2.750	0.762	2088.	1306
338.	0.952	0.623	0.500	0.978	1695.	1307
274.	0.952	0.631	0.625	1.005	1236.	1308
14971.	1.143	0.943	1.250	0.917	1203.	1309
607.	1.000	0.888	1.125	0.906	618.	1310
131.	1.000	0.909	0.875	0.983	388.	1311
60387.	1.143	1.217	1.875	0.931	262.	1312
16376.	1.000	1.272	1.000	0.905	324.	1314
10708.	1.143	0.993	1.375	0.947	646.	1315
1305.	1.286	1.043	2.625	0.831	1954.	1316
1354.	1.238	0.869	1.625	0.749	2050.	1317
6986.	1.524	1.557	3.875	0.715	2307.	1318
27267.	1.810	3.574	23.125	0.283	2244.	1319
56788.	1.714	1.831	6.125	0.596	2536	1320
3982.	1.381	1.015	3.000	0.709	2944.	1321
126.	1.286	0.894	1.500	0.632	3275.	1322
339.	1.524	1.293	3.625	0.566	3659.	1323
889.	1.143	1.236	2.625	0.739	3991.	1324
327.	1.143	0.714	1.375	0.960	2916.	1325
120.	1.381	1.221	2.625	0.768	2946.	1401

BRAZIL (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
186.	1.286	0.578	1.250	0.906	3346.	1402
296.	1.238	0.780	2.000	0.871	2688.	1403
15.	1.000	0.924	3.375	0.837	3060.	1404
264.	1.143	0.991	2.000	0.809	4617.	1405
13.	0.905	1.210	2.750	0.842	1002.	1406
70.	0.952	0.489	0.500	1.081	1617.	1407
29.	0.952	0.496	0.625	1.111	1212.	1408
253.	1.143	0.741	1.250	1.013	1499.	1409
112.	1.000	0.698	1.125	1.001	914.	1410
435.	1.000	0.714	0.875	1.086	684.	1411
1211.	1.143	0.956	1.875	1.029	558.	1412
5067.	1.000	0.786	1.000	1.105	324.	1413
44365.	1.143	0.781	1.375	1.046	340.	1415
1267.	1.286	0.820	2.625	0.919	1648.	1416
1281.	1.238	0.683	1.625	0.827	1744.	1417
4995.	1.524	1.224	3.875	0.790	2001.	1418
20089.	1.810	2.809	23.125	0.312	1938.	1419
25033.	1.714	1.439	6.125	0.658	2230.	1420
1704.	1.381	0.798	3.000	0.783	2630.	1421
96.	1.286	0.702	1.500	0.698	2969.	1422
295.	1.524	1.016	3.625	0.625	3353.	1423
384.	1.143	0.972	2.625	0.817	3685.	1424
159.	1.143	0.561	1.375	1.061	2610.	1425
238.	1.208	1.563	1.909	0.734	2803.	1501
270.	1.125	0.740	0.909	0.866	3203.	1502
391.	1.083	1.000	1.455	0.832	2603.	1503
57.	0.875	1.184	2.455	0.800	3089.	1504
645.	1.000	1.269	1.455	0.773	4335.	1505
14.	0.792	1.550	2.000	0.805	2002.	1506
938.	0.833	0.627	0.364	1.033	1704.	1507
7391.	0.833	0.635	0.455	1.062	1245.	1508
799.	1.000	0.949	0.909	0.969	1294	1509

BRAZIL (CON'T)

M(IJ)	RE: WAGES	RE: URBAN	REL.H.ED.	REL ILLIT.	DISTANCE	(IJ)
318.	0.875	0.894	0.818	0.957	1236.	1510
140.	0.875	0.915	0.636	1.038	1006.	1511
6537.	1.000	1.225	1.364	0.983	880.	1512
1289.	0.875	1.007	0.727	1.056	646.	1513
15202.	0.875	1.281	0.727	0.956	340.	1514
59649.	1.125	1.050	1.909	0.878	1366.	1516
5490.	1.083	0.875	1.182	0.791	1462.	1517
9753.	1.333	0.567	2.818	0.755	1719.	1518
44936.	1.583	3.598	16.818	0.299	1656.	1519
189685.	1.500	1.844	4.455	0.629	1948.	1520
18764.	1.208	1.022	2.182	0.740	2356.	1521
242.	1.125	0.900	1.091	0.667	2687.	1522
754.	1.333	1.302	2.626	0.598	3071.	1523
18890.	1.000	1.244	1.909	0.781	3403.	1524
44277.	1.000	0.719	1.000	1.014	2328.	1525
61.	1.074	1.489	1.000	0.836	2402.	1601
38.	1.000	0.705	0.476	0.987	2774.	1602
106.	0.963	0.952	0.762	0.948	2545.	1603
14.	0.778	1.127	1.286	0.911	3089.	1604
284.	0.889	1.209	0.762	0.881	2969.	1605
12.	0.704	1.476	1.048	0.917	2345.	1606
97.	0.741	0.597	0.190	1.176	2852.	1607
91.	0.741	0.604	0.238	1.209	2393.	1608
274.	0.889	0.904	0.476	1.103	2442.	1609
199.	0.778	0.851	0.429	1.090	2544.	1610
2.	0.778	0.871	0.333	1.182	2314.	1611
687.	0.889	1.166	0.714	1.120	2188.	1612
92.	0.778	0.959	0.381	1.203	1954.	1613
120.	0.778	1.220	0.381	1.089	1648.	1614
44996.	0.889	0.952	0.524	1.139	1366.	1615
50911.	0.963	0.833	0.619	0.901	510.	1617

BRAZIL (CON'T)

M(1J)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
152909.	1.185	1.493	1.476	0.860	545.	1618
191917.	1.407	3.426	8.810	0.340	482.	1619
512736.	1.333	1.756	2.333	0.716	586.	1620
156848.	1.074	0.973	1.143	0.853	994.	1621
755.	1.000	0.857	0.571	0.760	1325.	1622
1624.	1.195	1.240	1.391	0.681	1709.	1523
10994.	0.889	1.185	1.000	0.889	2009.	1624
150033.	0.889	0.684	0.524	1.155	962.	1625
10.	1.115	1.787	1.615	0.928	2803.	1701
4.	1.038	0.847	0.760	1.096	3146.	1702
40.	1.000	1.043	1.231	1.052	2880.	1703
4.	0.808	1.354	2.077	1.011	3432.	1704
56.	0.923	1.451	1.231	0.978	3479.	1705
3.	0.731	1.772	1.692	1.018	2574.	1706
22.	0.769	0.717	0.308	1.306	2948.	1707
11.	0.769	0.726	0.385	1.343	2489.	1708
120.	0.923	1.086	0.769	1.225	2538.	1709
168.	0.808	1.022	0.692	1.210	2640.	1710
62.	0.808	1.046	0.538	1.313	2410.	1711
12.	0.923	1.400	1.154	1.244	2284.	1712
119.	0.808	1.151	0.615	1.336	2050.	1713
88.	0.808	1.464	0.615	1.209	1744.	1714
921.	0.923	1.143	0.846	1.265	1462.	1715
29163.	1.038	1.201	1.615	1.110	510.	1716
32054.	1.231	1.792	2.385	0.955	560.	1718
55746.	1.462	4.114	14.231	0.378	560.	1719
4569.	1.385	2.108	3.769	0.795	995.	1720
3436.	1.115	1.168	1.846	0.947	1403.	1721
75.	1.038	1.029	0.923	0.844	1734.	1722
245.	1.231	1.488	2.231	0.756	2118.	1723
100.	0.923	1.423	1.615	0.987	2507.	1724

BRAZIL (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL ILLIT.	DISTANCE	(IJ)
184.	0.923	0.822	0.846	1.282	1472.	1725
37.	0.906	0.997	0.677	0.973	2631.	1801
46.	0.844	0.472	0.323	1.148	2974.	1802
172.	0.812	0.638	0.516	1.102	2831.	1803
14.	0.656	0.755	0.871	1.059	3432.	1804
508.	0.750	0.810	0.516	1.025	3514.	1805
14.	0.594	0.989	0.710	1.067	2680.	1806
189.	0.625	0.400	0.129	1.368	3205.	1807
70.	0.625	0.405	0.161	1.407	2746.	1808
516.	0.750	0.606	0.323	1.283	2795.	1809
557.	0.656	0.570	0.290	1.268	2897.	1810
237.	0.656	0.584	0.226	1.375	2667.	1811
185.	0.750	0.781	0.484	1.303	2541.	1812
269.	0.656	0.642	0.258	1.399	2307.	1813
159.	0.656	0.817	0.258	1.266	2001.	1814
1262.	0.750	0.638	0.355	1.325	1719.	1815
36794.	0.844	0.670	0.677	1.163	545.	1816
28407.	0.812	0.558	0.419	1.048	560.	1817
360324.	1.188	2.295	5.968	0.396	133.	1819
55986.	1.125	1.176	1.581	0.833	435.	1820
9859.	0.906	0.652	0.774	0.992	843.	1821
747.	0.844	0.574	0.387	0.884	1174.	1822
1720.	1.000	0.830	0.935	0.792	1558.	1823
889.	0.750	0.794	0.677	1.034	2227.	1824
454.	0.750	0.459	0.355	1.343	1374.	1825
37.	0.763	0.434	0.114	2.459	2603.	1901
41.	0.711	0.206	0.054	2.902	2946.	1902
135.	0.684	0.278	0.086	2.787	2803.	1903
19.	0.553	0.329	0.146	2.678	3403.	1904
700.	0.632	0.353	0.086	2.591	3451.	1905
16.	0.500	0.431	0.119	2.697	2688.	1906

BRAZIL (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
97.	0.526	0.174	0.022	3.459	435.	1907
71.	0.526	0.176	0.027	3.556	2683.	1908
471.	0.632	0.264	0.054	3.244	2732.	1909
483.	0.553	0.248	0.049	3.204	2834.	1910
163.	0.553	0.254	0.038	3.488	2604.	1911
1751.	0.632	0.340	0.081	3.294	2478.	1912
217.	0.553	0.280	0.043	3.537	2244.	1913
305.	0.553	0.356	0.043	3.201	1938.	1914
1200.	0.632	0.278	0.059	3.349	1656.	1915
9691.	0.711	0.292	0.114	2.941	482.	1916
1357.	0.684	0.243	0.070	2.648	560.	1917
102108.	0.842	0.436	0.168	2.528	133.	1918
18172.	0.947	0.512	0.265	2.106	435.	1920
1823.	0.763	0.284	0.130	2.508	843.	1921
618.	0.711	0.250	0.065	2.235	1174.	1922
2047.	0.842	0.362	0.157	2.002	1558.	1923
634.	0.032	0.346	0.114	2.615	2227.	1924
425.	0.632	0.200	0.059	3.396	1374.	1925
39.	0.806	0.848	0.429	1.167	2402.	2001
33.	0.750	0.402	0.204	1.378	2688.	2002
118.	0.722	0.542	0.327	1.323	2660.	2003
8.	0.583	0.642	0.551	1.271	3289.	2004
384.	0.667	0.688	0.327	1.230	3013.	2005
12.	0.528	0.841	0.449	1.280	2660.	2006
115.	0.556	0.340	0.082	1.642	3434.	2007
146.	0.556	0.344	0.102	1.688	2975.	2008
650.	0.667	0.515	0.204	1.540	3024.	2009
274.	0.583	0.485	0.184	1.521	3126.	2010
201.	0.583	0.496	0.143	1.651	2896.	2011
1177.	0.667	0.664	0.306	1.564	2770.	2012
542.	0.583	0.546	0.163	1.679	2536.	2013

BRAZIL (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
377.	0.583	0.695	0.163	1.520	2230.	2014
2130.	0.667	0.542	0.224	1.590	1948.	2015
45554.	0.750	0.570	0.429	1.396	586.	2016
744.	0.722	0.474	0.265	1.257	995.	2017
18685.	0.889	0.850	0.633	1.200	435.	2018
46990.	1.056	1.951	3.776	0.475	435.	2019
352471.	0.806	0.554	0.490	1.191	408.	2021
2296.	0.750	0.488	0.245	1.061	739.	2022
4555.	0.889	0.706	0.592	0.951	1123.	2023
13925.	0.667	0.675	0.429	1.241	408.	2024
15230.	0.667	0.390	0.224	1.612	939.	2025
18.	1.000	1.530	0.875	0.981	2317.	2101
6.	0.931	0.725	0.417	1.157	2574.	2102
14.	0.897	0.978	0.667	1.111	2688.	2103
3.	0.724	1.159	1.125	1.068	3375.	2104
57.	0.828	1.242	0.667	1.033	3421.	2105
9.	0.655	1.517	0.917	1.075	2803.	2106
16.	0.690	1.613	0.167	1.379	3842.	2107
9.	0.690	1.621	0.208	1.418	3383.	2108
41.	0.828	0.929	0.417	1.294	3432.	2109
46.	0.724	0.875	0.375	1.278	3534.	2110
26.	0.724	1.199	0.292	1.387	3304.	2111
1678.	0.828	0.985	0.625	1.313	3178.	2112
20.	0.724	1.254	0.333	1.411	2944.	2113
18.	0.724	0.979	0.333	1.277	2638.	2114
175.	0.828	1.028	0.458	1.336	2345.	2115
1258.	0.931	0.856	0.875	1.173	994.	2116
70.	0.897	1.534	0.542	1.056	1403.	2117
1187.	1.103	3.521	1.292	1.008	843.	2118
6258.	1.310	1.804	7.708	0.399	843.	2119
32709.	1.241	0.881	2.042	0.840	408.	2120

BRAZIL (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
24812.	0.931	1.274	0.500	0.891	331.	2122
3268.	1.103	1.218	1.208	0.798	715.	2123
806.	0.828	0.703	0.875	1.043	1795.	2124
305.	0.828	1.738	0.458	1.354	1347.	2125
7.	1.074	1.738	1.750	1.100	2603.	2201
2.	1.000	0.823	0.833	1.298	2803.	2202
19.	0.963	1.111	1.333	1.247	2974.	2203
14.	0.778	1.316	2.250	1.198	3604.	2204
61.	0.889	1.411	1.333	1.159	3752.	2205
3.	0.704	1.723	1.833	1.206	3060.	2206
22.	0.741	0.697	0.333	1.548	4173.	2207
6.	0.741	0.706	0.417	1.591	3714.	2208
37.	0.889	1.055	0.833	1.451	3763.	2209
52.	0.778	0.993	0.750	1.434	3865.	2210
20.	0.778	1.017	0.583	1.556	3635.	2211
169.	0.889	1.361	1.250	1.474	3509.	2212
21.	0.778	1.119	0.667	1.582	3275.	2213
16.	0.778	1.424	0.667	1.432	2969.	2214
182.	0.889	1.111	0.917	1.499	2687.	2215
544.	1.000	1.167	1.750	1.316	1325.	2216
83.	0.963	0.972	1.083	1.185	1734.	2217
2004.	1.185	1.742	2.583	1.131	1174.	2218
9819.	1.407	3.999	15.417	0.447	1174.	2219
15410.	1.333	2.049	4.083	0.942	739.	2220
63162.	1.074	1.136	2.000	1.122	331.	2221
26236.	1.185	1.447	2.417	0.896	525.	2223
708.	0.889	1.383	1.750	1.170	2126.	2224
149.	0.889	0.799	0.917	1.519	1678.	2225
18.	0.906	1.201	0.724	1.228	2660.	2301
33.	0.844	0.569	0.345	1.449	2808.	2302
99.	0.812	0.768	0.552	1.392	3089.	2303

BRAZIL (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
5.	0.656	0.909	0.931	1.338	3775.	2304
366.	0.750	0.975	0.552	1.294	4136.	2305
6.	0.594	1.191	0.759	1.347	3318.	2306
56.	0.625	0.482	0.138	1.728	4557.	2307
19.	0.625	0.488	0.172	1.776	4098.	2308
268.	0.750	0.729	0.345	1.620	4147.	2309
73.	0.656	0.687	0.310	1.600	4249.	2310
102.	0.656	0.703	0.241	1.737	4019.	2311
165.	0.750	0.941	0.517	1.645	3893.	2312
51.	0.656	0.773	0.276	1.767	3659.	2313
37.	0.656	0.984	0.276	1.599	3353.	2314
442.	0.750	0.768	0.379	1.673	3071.	2315
1675.	0.844	0.807	0.724	1.469	1709.	2316
177.	0.812	0.672	0.448	1.323	2118.	2317
3318.	1.000	1.204	1.069	1.263	1558.	2318
21788.	1.188	2.764	6.379	0.499	1558.	2319
13743.	1.125	1.416	1.690	1.052	1123.	2320
35701.	0.906	0.785	0.828	1.252	715.	2321
120710.	0.844	0.691	0.414	1.116	525.	2322
6051.	0.750	0.956	0.724	1.306	2510.	2324
251.	0.750	0.552	0.379	1.696	1678.	2325
6160.	1.208	1.256	1.000	0.940	1115.	2401
84.	1.125	0.595	0.476	1.110	1430.	2402
590.	1.083	0.803	0.762	1.066	1459.	2403
37.	0.875	0.951	1.286	1.024	2116.	2404
335.	1.000	1.020	0.762	0.991	3118.	2405
7.	0.792	1.245	1.048	1.031	1802.	2406
61.	0.833	0.504	0.190	1.323	4889.	2407
14.	0.833	0.510	0.238	1.360	4430.	2408
130.	1.000	0.763	0.476	1.341	4479.	2409
46.	0.875	0.718	0.429	1.226	4581.	2410

BRAZIL (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
29.	0.875	0.735	0.333	1.330	4351.	2411
579.	1.000	0.984	0.714	1.260	4225.	2412
37.	0.875	0.809	0.381	0.1353	3991.	2413
27.	0.875	1.029	0.381	1.224	3685.	2414
260.	1.000	0.804	0.524	1.281	3403.	2415
1139.	1.125	0.844	1.000	1.125	2009.	2416
54.	1.083	0.703	0.619	1.013	2507.	2417
1081.	1.333	1.260	1.476	0.967	2227.	2418
6659.	1.583	2.891	8.810	0.382	2227.	2419
13016.	1.500	1.482	2.333	0.806	408.	2420
1689.	1.208	0.821	1.143	0.959	1795.	2421
80.	1.125	0.723	0.571	0.855	2126.	2422
550.	1.333	1.046	1.381	0.766	2519.	2423
3735.	1.000	0.578	0.524	1.299	1041.	2425
26.	1.208	2.175	1.909	0.724	1773.	2501
5.	1.125	1.030	0.909	0.854	2116.	2502
18.	1.083	1.391	1.455	0.821	1916.	2503
55.	0.875	1.647	2.455	0.789	2488.	2504
3482.	1.000	1.766	1.455	0.763	2082.	2505
19.	0.792	2.156	2.000	0.794	1859.	2506
1971.	0.833	0.872	0.264	1.019	3814.	2507
326.	0.833	0.883	0.455	1.047	3355.	2508
29.	1.000	1.321	0.909	0.955	3443.	2509
12.	0.875	1.244	0.818	0.944	3506.	2510
10.	0.875	1.273	0.636	1.024	3276.	2511
156.	1.000	1.704	1.364	0.970	3150.	2512
15.	0.875	1.401	0.727	1.042	2916.	2513
6.	0.875	1.782	0.727	0.943	2610.	2514
582.	1.000	1.391	1.000	0.986	2328.	2515
10537.	1.125	1.461	1.909	0.866	962.	2516
37.	1.083	1.218	1.182	0.780	1472.	2517

BRAZIL (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
421.	1.333	2.181	2.818	0.744	1374.	2518
1715.	1.593	5.006	16.818	0.294	1374.	2519
5632.	1.500	2.565	4.455	0.620	939.	2520
539.	1.208	1.422	2.182	0.739	1347.	2521
161.	1.125	1.252	1.091	0.658	1678.	2522
98.	1.333	1.811	2.636	0.590	1678.	2523
11418.	1.000	1.731	1.909	0.770	1041.	2524

CANADA - INPUT DATA

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
53.	0.889	0.588	2.000	0.603	492.	102
1934.	1.324	1.295	3.200	0.411	574.	103
699.	1.193	0.998	2.400	0.836	656.	104
1454.	1.480	1.581	4.000	0.644	861.	105
4980.	1.720	1.719	4.800	0.384	1312.	106
313.	1.550	1.407	3.600	0.658	1968.	107
216.	1.337	0.712	2.800	0.767	2296.	108
457.	1.563	1.124	4.200	0.699	2583.	109
511.	1.714	1.058	4.600	0.548	3116.	110
55.	1.934	0.496	3.400	3.219	3157.	111
211.	1.125	1.701	0.500	1.659	492.	201
1031.	1.490	2.203	1.600	0.682	123.	203
1059.	1.342	1.697	1.200	1.386	164.	204
485.	1.665	2.689	2.000	1.068	410.	205
2410.	1.935	2.924	2.400	0.636	820.	206
118.	1.744	2.394	1.800	1.091	1558.	207
80.	1.504	1.211	1.400	1.273	1845.	208
317.	1.758	1.913	2.100	1.159	2173.	209
203.	1.928	2.821	2.300	0.909	2706.	210
52.	2.175	0.845	1.700	5.341	2870.	211
1325.	0.755	0.772	0.312	2.433	574.	301
1592.	0.671	0.454	0.625	1.467	123.	302
7452.	0.901	0.771	0.750	2.033	164.	304
4442.	1.118	1.221	1.250	1.567	410.	305
18832.	1.299	1.327	1.500	0.933	820.	306
1342.	1.170	1.087	1.125	1.600	1599.	307
373.	1.010	0.550	0.875	1.867	1886.	308
1581.	1.181	0.868	1.312	1.700	2255.	309
3241.	1.294	1.280	1.438	1.333	2747.	310
152.	1.460	0.383	1.062	7.833	2952.	311
685.	0.838	1.002	0.417	1.197	656.	401

CANADA (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
813.	0.745	0.589	0.833	0.721	164.	402
4083.	1.110	1.298	1.333	0.492	164.	403
3803.	1.240	1.586	1.667	0.770	246.	405
12399.	1.442	1.723	2.000	0.459	656.	406
508.	1.299	1.411	1.500	0.787	1435.	407
212.	1.120	0.714	1.167	0.918	1722.	408
950.	1.310	1.127	1.750	0.836	2091.	409
944.	1.437	1.662	1.017	0.656	2583.	410
140.	1.621	0.498	1.417	3.852	2788.	411
872.	0.676	0.632	0.250	1.553	861.	501
469.	0.601	0.372	0.500	0.936	410.	502
3249.	0.895	0.819	0.800	0.638	410.	503
4262.	0.806	0.631	0.600	1.298	246.	504
53941.	1.162	1.087	1.200	0.596	451.	506
2304.	1.047	0.890	0.900	1.021	1189.	507
866.	0.994	0.450	0.700	1.191	1517.	508
3418.	1.056	0.711	1.050	1.085	1886.	509
4500.	1.158	1.049	1.150	0.851	2378.	510
384.	1.307	0.314	0.850	5.000	2626.	511
2093.	0.581	0.582	0.208	2.607	1312.	601
1273.	0.517	0.342	0.417	1.571	820.	602
10118.	0.770	0.753	0.667	1.071	820.	603
7572.	0.694	0.580	0.500	2.178	656.	604
40629.	0.860	0.920	0.833	1.678	451.	605
15117.	0.901	0.819	0.750	1.714	943.	607
5964.	0.777	0.414	0.583	2.000	1271.	608
14494.	0.909	0.654	0.875	1.821	1681.	609
17542.	0.997	0.964	0.958	1.428	2091.	610
1159.	1.124	0.290	0.708	8.393	2501.	611
258.	0.645	0.710	0.278	1.521	1968.	701
168.	0.584	0.419	0.556	0.917	1558.	702

CANADA (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
1262.	0.856	0.920	0.888	0.625	1599.	703
1221.	0.770	0.709	0.750	1.271	1435.	704
3416.	0.955	1.123	1.111	0.979	1189.	705
19356.	1.110	1.221	1.333	0.583	943.	706
8671.	0.862	0.506	0.778	1.167	328.	708
10091.	1.009	0.799	1.167	1.062	738.	709
12336.	1.106	1.178	1.278	0.833	1148.	710
429.	1.248	0.953	0.944	4.896	1599.	711
77.	0.748	1.405	0.357	1.304	2296	801
137.	0.665	0.826	0.714	0.786	1845.	802
447.	0.990	1.819	1.143	0.536	1886.	803
206.	0.892	1.401	0.857	1.089	1722.	804
925.	1.107	2.220	1.428	0.829	1517.	805
8968.	1.286	2.414	1.714	0.500	1271.	806
10620.	1.159	1.977	1.286	0.857	328.	807
26039.	1.169	1.579	1.500	0.911	451.	809
17974.	1.232	2.329	1.643	0.714	861.	810
570.	1.468	0.697	1.214	4.196	1353.	811
239.	0.640	0.890	0.238	1.431	2583.	901
185.	0.569	0.523	0.476	0.863	2173.	902
806.	0.847	1.152	0.762	0.888	2255.	903
444.	0.783	0.888	0.571	0.436	2091.	904
2928.	0.947	1.406	0.952	0.922	1886.	905
12666.	1.100	1.529	1.143	0.549	1681.	906
5503.	0.991	1.252	0.857	0.941	738.	907
9653.	0.855	0.633	0.667	1.098	451.	908
28225.	1.096	1.475	1.095	0.784	738.	910
1862.	1.237	0.442	0.810	4.608	943.	911
179.	0.583	0.683	0.217	1.825	3116.	1001
145.	0.519	0.354	0.435	1.100	2706.	1002
2010.	0.772	0.781	0.696	0.750	2747.	1003

CANADA (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
994.	0.696	0.602	0.522	1.525	2583.	1004
3009.	0.863	0.953	0.087	1.175	2378.	1005
15154.	1.003	1.037	1.043	0.700	2091.	1006
5047.	0.904	0.849	0.783	1.200	1148.	1007
5835.	0.780	0.429	0.609	1.400	861.	1008
20344.	0.912	0.678	0.913	1.275	738.	1009
1411.	1.128	0.299	0.739	5.875	943.	1011
50.	0.517	2.014	0.294	0.311	3157.	1101
62.	0.460	1.184	0.588	0.187	2870.	1102
160.	0.685	2.608	0.941	0.128	2952.	1103
98.	0.617	2.009	0.706	0.260	2788.	1104
413.	0.765	3.184	1.176	0.200	2624.	1105
1529.	0.889	3.462	1.412	0.119	2501.	1106
379.	0.802	2.835	1.059	0.204	1599.	1107
516.	0.691	1.434	0.824	0.238	1353.	1108
1807.	0.808	2.264	1.235	0.217	943.	1109
1882.	0.886	3.340	1.353	0.170	943.	1110

GHANA - INPUT DATA

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
22850.	1.055	3.019	2.600	0.746	115.	102
22850.	1.040	0.758	1.000	0.930	132.	103
3140.	1.103	0.494	1.200	0.947	193.	104
31860.	1.002	0.940	1.000	0.972	122.	105
8900.	1.051	0.589	0.400	1.092	171.	106
3840.	1.035	0.298	0.400	1.286	318.	107
6940.	0.948	0.331	0.385	1.341	115.	201
15960.	0.985	0.251	0.385	1.247	38.	203
2890.	1.046	0.164	0.462	1.269	87.	204
6430.	0.949	0.311	0.385	1.303	94.	205
1660.	0.996	0.195	0.154	1.464	188.	206
1810.	0.980	0.099	0.154	1.724	271.	207
29160.	0.962	1.318	1.000	1.075	132.	301
44550.	1.015	3.980	2.600	0.802	38.	302
13650.	1.061	0.652	1.200	1.017	64.	304
36480.	0.964	1.239	1.000	1.045	75.	305
8920.	1.011	0.776	0.400	1.174	165.	306
3350.	0.995	0.393	0.400	1.382	229.	307
13720.	0.906	2.023	0.833	1.056	193.	401
21410.	0.956	6.107	2.167	0.788	87.	402
30650.	0.942	1.534	0.833	0.983	64.	403
12210.	0.908	1.901	0.833	1.027	118.	405
4180.	0.952	1.191	0.333	1.154	200.	406
7130.	0.938	0.603	0.333	1.359	212.	407
18430.	0.998	1.064	1.000	1.029	122.	501
9110.	1.053	3.213	2.600	0.768	94.	502
12170.	1.038	0.807	1.000	0.957	75.	503
2050.	1.101	0.526	1.200	0.974	118.	504
24350.	1.049	0.627	0.400	1.124	94.	506
4910.	1.033	0.317	0.400	1.323	194.	507
1680.	0.952	1.699	2.500	0.916	171.	601
1200.	1.004	5.128	6.500	0.683	188.	602

GHANA (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
1380.	0.989	1.288	2.500	0.852	165.	603
410.	1.050	0.840	3.000	0.867	200.	604
13540.	0.953	1.596	2.500	0.890	94.	605
2380.	0.985	0.506	1.000	1.177	176.	607
30970.	0.967.	3.354	2.500	0.778	318.	701
10320.	1.020	10.127	6.500	0.580	271.	702
11810.	1.005	2.544	2.500	0.723	229.	703
14310.	1.066	1.658	3.000	0.736	212.	704
13250.	0.968	3.152	0.500	0.756	194.	705
980.	1.016	1.973	0.500	0.849	176.	706

JAMAICA - INPUT DATA

THE PARISHES OF KINGSTON AND ST. ANDREWS, NOS. 01 AND 02 RESPECTIVELY, HAVE BEEN COMBINED, SO AS TO REPRESENT THE KINGSTON METROPOLITAN AREA. THESE HAVE BEEN COMBINED UNDER THE CODE NUMBER 01. THUS, NO CODE 02 APPEARS IN THE LISTING BELOW.

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
2954.	0.411	0.126	0.191	2.377	32.	103
2020.	0.376	0.194	0.255	1.962	63.	104
3551.	0.374	0.094	0.213	2.613	47.	105
2246.	0.435	0.140	0.255	2.755	63.	106
794.	0.377	0.077	0.234	3.104	100.	107
1543.	0.440	0.333	0.362	2.415	123.	108
452.	0.282	0.061	0.213	2.717	151.	109
1047.	0.389	0.069	0.234	3.028	137.	110
1346.	0.297	0.031	0.191	3.264	110.	111
2791.	0.369	0.135	0.340	2.575	64.	112
3269.	0.437	0.151	0.191	3.104	38.	113
5822.	0.504	0.174	0.213	2.877	14.	114
10078.	2.431	7.963	5.222	0.421	32.	301
1661.	0.915	1.542	1.333	0.825	46.	304
500.	0.909	0.748	1.111	1.099	79.	305
177.	1.057	1.112	1.333	1.159	95.	306
88.	0.916	0.617	1.222	1.306	132.	307
173.	1.071	2.654	1.888	1.016	155.	308
40.	0.685	0.486	1.111	1.142	183.	309
130.	0.947	0.832	1.222	1.274	169.	310
210.	0.722	0.243	1.000	1.373	142.	311
207.	0.898	1.075	1.777	1.083	111.	312
710.	1.064	1.206	1.000	1.306	95.	313
1013.	1.226	1.383	1.111	1.210	71.	314
11145.	2.658	5.164	3.917	0.510	63.	401
3351.	1.093	0.648	0.750	1.212	46.	403
2031.	0.994	0.485	0.833	1.332	46.	405
293.	1.155	0.721	1.000	1.404	74.	406

JAMAICA (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
101.	1.001	0.400	0.917	1.582	111.	407
277.	1.171	1.721	1.417	1.231	134.	408
91.	0.749	0.315	0.833	1.385	162.	409
149.	1.035	0.539	0.917	1.543	165.	410
158.	0.789	0.158	0.750	1.663	157.	411
251.	0.982	0.697	1.333	1.312	111.	412
664.	1.163	0.782	0.750	1.582	95.	413
1157.	1.340	0.897	0.833	1.466	71.	414
23668.	2.676	10.650	4.700	0.383	47.	501
1688.	1.100	1.338	0.900	0.910	79.	503
2494.	1.007	2.062	1.200	0.751	46.	504
2209.	1.163	1.488	1.200	1.054	28.	506
340	1.008	0.825	1.100	1.188	65.	507
507.	1.178	3.550	1.700	0.924	88.	508
113.	0.754	0.650	1.000	1.040	116.	509
205.	1.042	1.112	1.100	1.159	119.	510
208.	0.794	0.325	0.900	1.249	115.	511
455.	0.988	1.438	1.600	0.986	87.	512
1466.	1.171	1.612	0.900	1.188	67.	513
4599.	1.349	1.850	1.000	1.101	43.	514
19486.	2.301	7.160	3.917	0.363	63.	601
792.	0.946	0.899	0.750	0.863	95.	603
846.	0.866	1.387	1.000	0.712	74.	604
3970.	0.860	0.672	0.833	0.949	28.	605
1933.	0.867	0.555	0.917	1.127	37.	607
684.	1.013	2.387	1.417	0.877	60.	608
139.	0.648	0.437	0.833	0.986	88.	609
238.	0.896	0.748	0.917	1.099	91.	610
251.	0.683	0.218	0.750	1.185	87.	611
1043.	0.850	0.966	1.333	0.935	59.	612
3490.	1.007	1.084	0.750	1.127	60.	613

JAMAICA (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
3584.	1.160	1.244	0.833	1.044	51.	614
8299.	2.655	12.909	4.273	0.322	100.	701
402.	1.092	1.621	0.818	0.766	132.	703
332.	0.999	2.500	1.091	0.632	111.	704
583.	0.992	1.212	0.909	0.842	65.	705
1127.	1.154	1.803	1.091	0.888	37.	706
1902.	1.169	4.303	1.545	0.778	23.	708
185.	0.748	0.788	0.909	0.875	51.	709
351.	1.034	1.348	1.000	0.976	54.	710
367.	0.788	0.394	0.818	1.052	62.	711
1631.	0.981	1.742	1.454	0.830	53.	712
834.	1.161	1.955	0.818	1.000	71.	713
950.	1.339	2.242	0.909	0.927	86.	714
8934.	2.271	3.000	2.765	0.414	123.	801
404.	0.934.	0.377	0.529	0.984	155.	803
422.	0.523	0.581	0.706	0.812	134.	804
591.	0.849	0.282	0.588	1.082	88.	805
466.	0.987	0.419	0.706	1.141	60.	806
1656.	0.855	0.232	0.647	1.285	23.	807
1346.	0.540	0.183	0.588	1.125	28.	809
1921.	0.884	0.313	0.647	1.254	31.	810
827.	0.674	0.092	0.529	1.352	46.	811
574.	0.839	0.405	0.941	1.066	72.	812
1039.	0.993	0.454	0.529	1.285	98.	813
1154.	1.145	0.521	0.588	1.191	109.	814
5456.	3.549	16.385	4.700	0.368	151.	901
279.	1.459	2.058	0.900	0.885	183.	903
330.	1.335	3.173	1.200	0.722	162.	904
308.	1.326	1.538	1.000	0.962	116.	905
277.	1.542	2.288	1.200	1.014	88.	906
440.	1.337	1.269	1.100	1.142	51.	907

JAMAICA (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
4233.	1.563	5.462	1.700	0.889	28.	908
3911.	1.382	1.712	1.100	1.114	22.	910
270.	1.054	0.500	0.900	1.201	52.	911
243.	1.311	2.212	1.600	0.948	90.	912
766.	1.553	2.481	0.900	1.142	116.	913
619.	1.789	2.846	1.000	1.059	137.	914
12459.	2.569	9.573	4.273	0.330	137.	1001
637.	1.056	1.202	0.818	0.785	169.	1003
481.	0.966	1.854	1.091	0.648	165.	1004
480.	0.960	0.899	0.909	0.863	119.	1005
475.	1.116	1.337	1.091	0.910	91.	1006
629.	0.968	0.742	1.000	1.025	54.	1007
5219.	1.131	3.191	1.545	0.798	31.	1008
2236.	0.724	0.584	0.909	0.897	22.	1009
1444.	0.762	0.292	0.818	1.078	32.	1011
886.	0.949	1.292	1.454	0.850	73.	1012
1800.	1.124	1.449	0.818	1.025	99.	1013
1526.	1.295	1.663	0.909	0.950	123.	1014
18850.	3.369	32.769	5.222	0.306	110.	1101
1344.	1.385	4.115	1.000	0.728	142.	1103
755.	1.267	6.346	1.333	0.601	157.	1104
893.	1.259	3.077	1.111	0.800	115.	1105
446.	1.464	4.577	1.333	0.844	87.	1106
1140.	1.269	2.538	1.222	0.951	62.	1107
3191.	1.484	10.923	1.888	0.740	46.	1108
491.	0.949	2.000	1.111	0.832	52.	1109
2995.	1.311	3.423	1.222	0.928	32.	1110
5354.	1.244	4.423	1.777	0.789	46.	1112
3303.	1.474	4.962	1.000	0.951	72.	1113
3182.	1.698	5.692	7.111	0.882	96.	1114
18337.	2.708	7.409	2.938	0.388	64.	1201

JAMAICA (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
995.	1.113	0.930	0.562	0.923	96.	1203
549.	1.018	1.435	0.756	0.762	111.	1204
710.	1.012	0.696	0.625	1.015	87.	1205
858.	1.177	1.035	0.750	1.070	59.	1206
1651.	1.020	0.574	0.688	1.205	53.	1207
628.	1.192	2.470	1.062	0.938	72.	1208
133.	0.763	0.453	0.625	1.055	90.	1209
342.	1.054	0.774	0.688	1.176	73.	1210
1807.	0.804	0.226	0.562	1.267	46.	1211
7166.	1.184	1.122	0.562	1.205	24.	1213
2998.	1.365	1.287	0.625	1.117	50.	1214
16785.	2.286	6.605	5.222	0.322	38.	1301
1231.	0.940	0.829	1.000	0.766	70.	1303
709.	0.860	1.279	1.333	0.632	95.	1304
1053.	0.854	0.620	1.111	0.842	67.	1305
1537.	0.993	0.922	1.333	0.888	60.	1306
303.	0.861	0.512	1.222	1.000	71.	1307
439.	1.007	1.891	1.888	0.778	98.	1308
140.	0.644	0.403	1.111	0.875	116.	1309
288.	0.890	0.690	1.222	0.976	99.	1310
495.	0.679	0.202	1.000	1.052	72.	1311
3069.	0.844	0.891	1.777	0.830	24.	1312
5789.	1.152	1.147	1.111	0.927	24.	1314
21570.	1.984	5.757	4.700	0.348	14.	1401
1516.	0.816	0.723	0.900	0.826	46.	1403
1004.	0.746	1.115	1.200	0.682	71.	1404
3557.	0.741	0.541	1.000	0.908	43.	1405
1212.	0.862	0.804	1.200	0.957	51.	1406
205.	0.747	0.446	1.100	1.079	86.	1407
335.	0.874	1.919	1.700	0.839	109.	1408
97.	0.559	0.351	1.000	0.944	137.	1409

JAMAICA (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.H.ED.	REL.ILLIT.	DISTANCE	(IJ)
284.	0.772	0.601	1.100	1.052	123.	1410
323.	0.569	0.176	0.900	1.134	96.	1411
730.	0.733	0.777	1.600	0.895	50.	1412
4130.	0.858	0.872	0.900	1.079	24.	1413

MEXICO - INPUT DATA

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
3324.	2.424	1.173	0.607	1455.	102
122.	1.005	0.598	0.734	2265.	103
374.	0.908	1.044	1.224	1126.	104
224.	0.937	1.093	1.052	325.	105
779.	0.582	0.418	2.071	92.	106
8669.	1.178	0.802	0.870	601.	107
21743.	1.333	1.362	0.591	317.	108
2940.	0.882	0.520	1.006	261.	109
9805.	0.858	0.756	1.763	115.	110
389.	0.665	0.395	2.159	490.	111
676.	0.722	0.385	1.883	326.	112
6154.	0.796	0.871	1.237	160.	113
2158.	0.727	0.480	1.649	306.	114
771.	1.007	0.582	1.721	201.	115
348.	0.909	0.789	1.312	370.	116
323.	0.800	0.620	1.208	301.	117
2898.	0.767	1.016	0.692	364.	118
156.	0.532	0.376	1.987	632.	119
2325.	1.091	0.604	1.753	850.	120
175.	0.691	0.440	2.006	186.	121
71.	1.394	0.489	1.201	1204.	122
2091.	0.608	0.553	1.646	105.	123
575.	0.941	0.507	1.351	598.	124
876.	1.550	0.824	0.873	1027.	125
40.	0.920	0.398	1.360	850.	126
3272.	0.912	0.964	0.831	399.	127
25.	0.758	0.705	1.429	388.	128
841.	1.086	0.605	1.640	506.	129
1045.	0.976	1.004	1.143	1245.	130
4330.	0.768	0.455	1.315	81.	131
265.	0.412	0.853	1.647	1455.	201

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
1858.	0.414	0.510	1.209	810.	203
137.	0.374	0.890	2.016	2484.	204
306.	0.386	0.932	1.733	1484.	205
592.	0.240	0.357	3.412	2332.	206
1417.	0.486	0.684	1.433	1633.	207
6494.	0.550	1.161	0.973	1676.	208
350.	0.364	0.443	1.658	1194.	209
515.	0.354	0.645	2.904	1507.	210
1480.	0.274	0.336	3.556	1849.	211
70.	0.298	0.329	3.102	1685.	212
2214.	0.328	0.743	2.037	1320.	213
418.	0.300	0.409	2.717	1664.	214
553.	0.415	0.496	2.834	1544.	215
152.	0.375	0.673	2.160	1728.	216
579.	0.330	0.529	1.989	1179.	217
474.	0.316	0.867	1.139	1578.	218
255.	0.219	0.321	3.273	1991.	219
596.	0.450	0.515	2.888	1754.	220
312.	0.285	0.375	3.305	1544.	221
16.	0.575	0.417	1.979	2562.	222
227.	0.251	0.471	2.711	1491.	223
1826.	0.388	0.433	2.225	858.	224
8597.	0.639.	0.702	1.439	428.	225
71.	0.379	0.340	2.241	2208.	226
779.	0.376	0.822	1.369	1757.	227
88.	0.313	0.602	2.353	1746.	228
447.	0.448	0.516	2.701	1863.	229
22.	0.402	0.856	1.882	2603.	230
1403.	0.317	0.388	2.166	1374.	231
230.	0.995	1.672	1.363	2265.	301
12747.	2.413	1.960	0.827	810.	302

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
203.	0.903	1.745	1.668	3294.	304
322.	0.932	1.827	1.434	2294	305
1679.	0.579	0.699	2.823	3142.	306
1007.	1.172	1.340	1.186	2443.	307
4358.	1.327	2.277	0.805	2686.	308
141.	0.878	0.869	1.372	2004.	309
286.	0.854	1.264	2.403	2317.	310
39.	0.662	0.660	2.942	2659.	311
1198.	0.719	0.644	2.566	2495.	312
273.	0.793	1.456	1.686	2130.	313
324.	0.724	0.802	2.248	2474.	314
116.	1.002	0.973	2.345	2354.	315
24.	0.905	1.319	1.788	2538.	316
55.	0.796	1.036	1.646	1989.	317
83.	0.764	1.699	0.942	2388.	318
49.	0.530	0.629	2.708	2801.	319
75.	1.086	1.009	2.389	2564.	320
7.	0.688	0.736	2.735	2354.	321
23.	0.656	0.445	2.698	2364.	322
36.	0.606	0.924	2.243	2301.	323
104.	0.936	0.848	1.841	1668.	324
916.	1.543	1.377	1.190	1238.	325
31.	0.916	0.666	1.854	3018.	326
107.	0.907	1.611	1.133	2567.	327
8.	0.754	1.179	1.947	2556.	328
897.	1.081	1.012	2.235	2673.	329
115.	0.971	1.678	1.558	3413.	330
332.	0.765	0.760	1.792	2184.	331
196.	1.101	0.958	0.817	1126.	401
411.	2.670	1.124	0.496	2484.	402
33.	1.107	0.573	0.599	3294.	403

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
703.	1.032	1.047	0.859	861.	405
1695.	0.641	0.401	1.692	686.	406
597.	1.298	0.768	0.711	1704.	407
7709.	1.469	1.305	0.483	808.	408
64.	0.972	0.498	0.822	1363.	409
371.	0.945	0.725	1.440	1034.	410
66.	0.733	0.378	1.764	982.	411
108.	0.796	0.369	1.538	823.	412
6188.	0.877	0.834	1.011	1164.	413
242.	0.801	0.460	1.347	848.	414
106.	1.109	0.557	1.406	1002.	415
54.	1.001	0.756	1.072	1632.	416
101.	0.881	0.594	0.987	1305.	417
451.	0.845	0.974	0.565	1158.	418
400.	0.586	0.361	1.623	712.	419
159.	1.202	0.578	1.432	729.	420
15.	0.761	0.422	1.639	940.	421
498.	1.535	0.469	0.981	262.	422
985.	0.670	0.530	1.345	1066.	423
147.	1.036	0.486	1.103	1632.	424
344.	1.708	0.789	0.714	2056.	425
1523.	1.013	0.382	1.111	276.	426
571.	1.004	0.923	0.679	1080.	427
43.	0.834	0.676	1.167	747.	428
2733.	1.196	0.580	1.340	639.	429
2650.	1.075	0.962	0.934	119.	430
124.	0.846	0.436	1.074	183.	431
68.	1.067	0.915	0.951	325.	501
3988.	2.587	1.073	0.577	1484.	502
125.	1.072	0.547	0.698	2294.	503
77.	0.969	0.955	1.164	861.	504

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
322.	0.621	0.383	1.969	616.	506
793.	1.257	0.734	0.827	689.	507
10479.	1.423	1.246	0.562	434.	508
87.	0.942	0.476	0.957	536.	509
182.	0.916	0.692	1.676	290.	510
261.	0.710	0.361	2.052	597.	511
71.	0.771	0.353	1.790	495.	512
6263.	0.850	0.797	1.176	165.	513
454.	0.776	0.439	1.568	419.	514
3165.	1.075	0.532	1.636	265.	515
136.	0.970	0.722	1.247	511.	516
298.	0.854	0.567	1.148	306.	517
321.	0.819	0.930	0.657	636.	518
141.	0.568	0.344	1.889	774.	519
184.	1.164	0.552	1.667	537.	520
57.	0.737	0.403	1.907	386.	521
25.	1.488	0.448	1.142	1346.	522
92.	0.649	0.506	1.565	283.	523
616.	1.004	0.464	1.284	627.	524
1547.	1.655	0.754	0.830	1056.	525
37.	0.982	0.364	1.293	995.	526
605.	0.973	0.882	0.790	677.	527
14.	0.809	0.646	1.358	529.	528
641.	1.159	0.554	1.559	646.	529
46.	1.041	0.918	1.086	1387.	530
52.	0.820	0.416	1.250	362	531
225.	1.719	2.391	0.483	92.	601
1718.	4.167	2.804	0.293	2332.	602
100.	1.727	1.430	0.354	3142.	603
1639.	1.560	2.496	0.591	686.	604
224.	1.610	2.613	0.508	616.	605

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
1828.	2.025	1.917	0.420	736.	607
35062.	2.292	3.257	0.285	657.	608
441.	1.517	1.243	0.486	1552.	609
604.	1.475	1.809	0.851	883.	610
662.	1.144	0.943	1.042	764.	611
1207.	1.242	0.922	0.909	715.	612
1056.	1.369	2.083	0.597	1012.	613
8769.	1.250	1.148	0.796	697.	614
540.	1.731	1.391	0.831	850.	615
1292.	1.563	1.887	0.633	616.	616
61.	1.375	1.483	0.585	1154.	617
289.	1.319	2.430	0.334	1107.	618
2370.	0.915	0.900	0.959	337.	619
845.	1.875	1.443	0.846	590.	620
52.	1.188	1.052	0.969	788.	621
73.	2.296	1.170	0.580	764.	622
167.	1.046	1.322	0.795	915.	623
210.	1.617	1.213	0.652	1425.	624
355.	2.665	1.970	0.422	1904.	625
5587.	1.581	0.952	0.657	410.	626
637.	1.567	2.304	0.401	429.	627
79.	1.302	1.687	0.690	607.	628
5976.	1.867	1.448	0.792	458.	629
148.	1.677	2.400	0.552	805.	630
27.	1.321	1.087	0.635	1031.	631
557.	0.849	1.247	1.149	601.	701
6278.	2.058	1.463	0.698	1633.	702
241.	0.853	0.746	0.843	2443.	703
34.	0.771	1.302	1.407	1704.	704
614.	0.795	1.363	1.209	689.	705
1715.	0.494	0.522	2.381	736.	706

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
18940.	1.132	1.698	0.679	803.	708
6332.	0.749	0.649	1.157	439.	709
738.	0.728	0.943	2.026	716.	710
229.	0.565	0.492	2.481	1068.	711
318.	0.613	0.481	2.164	905.	712
762.	0.676	1.086	1.422	711.	713
829.	0.617	0.599	1.896	884.	714
272.	0.855	0.726	1.978	803.	715
300.	0.772	0.984	1.507	948.	716
726.	0.679	0.773	1.388	789.	717
2926.	0.651	1.268	0.795	511.	718
220.	0.452	0.469	2.284	1210.	719
544.	0.926	0.753	2.015	974	720
129.	0.586	0.549	2.306	764.	721
10.	1.183	0.610	1.381	1782.	722
609.	0.516	0.689	1.892	638.	723
6609.	0.798	0.633	1.552	775.	724
13504.	1.316	1.027	1.004	1205.	725
90.	0.781	0.497	1.563	1476.	726
3453.	0.774	1.202	0.955	689.	727
50.	0.643	0.880	1.642	966.	728
831	0.922	0.755	1.884	1083.	729
43.	0.828	1.252	1.313	1823.	730
822.	0.652	0.567	1.511	521.	731
646.	0.750	0.534	1.692	317.	801
9438.	1.818	0.861	1.027	1676.	802
513.	0.754	0.439	1.242	2686.	803
331.	0.681	0.766	2.071	808.	804
547.	0.703	0.802	1.780	434.	805
1595.	0.436	0.307	3.505	657.	806
6931.	0.884	0.589	1.473	808.	807

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
1661.	0.662	0.382	1.703	554.	809
7482.	0.644	0.555	2.984	226.	810
3876.	0.499	0.290	3.654	173.	811
7842.	0.542	0.283	3.187	58.	812
1655.	0.597	0.640	2.093	355.	813
73682.	0.545	0.352	2.791	40.	814
4347.	0.755	0.427	2.912	193.	815
6929.	0.682	0.579	2.220	53.	816
671.	0.600	0.455	2.044	497.	817
8392.	01575	0.746	1.170	590.	818
1832.	0.399	0.276	3.363	315.	819
7374.	0.818	0.443	2.967	79.	820
1739.	0.518	0.323	3.396	131.	821
309.	1.045	0.359	2.033	887.	822
2098.	0.456	0.406	2.786	258.	823
2040.	0.705	0.372	2.286	918.	824
3219.	1.163	0.605	1.478	1247.	825
535.	0.690	0.292	2.302	573.	826
7066.	0.684	0.708	1.407	434.	827
1718.	0.568	0.518	2.418	71.	828
12913.	0.815	0.445	2.775	188.	829
613.	0.732	0.737	1.934	928.	830
628.	0.576	0.334	2.225	574.	831
895.	1.133	1.923	0.994	261.	901
12796.	2.747	2.255	0.603	1194.	902
424.	1.139	1.150	0.729	2004.	903
41.	1.029	2.007	1.216	1363.	904
216.	1.062	2.101	1.045	536.	905
343.	0.654	0.804	2.058	1552.	906
61005.	1.335	1.542	0.865	439.	907
19738.	1.511	2.619	0.587	554.	908

MEXICO (CON'T)

M(IJ)	REL WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
6762.	0 .973	1.455	1.752	376.	910
3200.	0.754	0.759	2.145	728.	911
2680.	0.819	0.741	1.871	564.	912
4319.	0.902	1.675	1.229	372.	913
4235.	0.824	0.923	1.630	544.	914
2863.	1.141	1.119	1.710	462.	915
835.	1.030	1.517	1.303	607.	916
2058.	0.907	1.192	1.200	350.	917
11722.	0.870	1.995	0.687	385.	918
709.	0.603	0.724	1 .974	869.	919
1031.	1.236	1.161	1.742	633.	920
178.	0.783	0.846	1.994	494.	921
25.	1.580	0.941	1.194	1441.	922
839.	0.690	1.063	1.635	297.	923
17278.	1.006	0.976	1.342	337.	924
6464.	1.757	1.584	0.868	766.	925
75.	1.043	0.766	1.352	1087.	926
8611.	1.003	1.853	0.826	562.	927
71.	0.589	1.357	1.419	625.	928
1909.	1.231	1.164	1.629	742.	929
257.	1.106	1.940	1.135	1482.	930
3881.	0.871	0.874	1.306	180.	931
2452.	1.165	1.322	0.507	115.	1001
21786.	2.825	1.550	0.344	1570.	1002
827.	1.171	0.791	0.416	2317.	1 003
152.	1.058	1.380	0.694	1034.	1004
455.	1.092	1.445	0.597	290.	1005
534.	0.768	0.553	1.175	883.	1006
9625.	1.373	1.060	0.494	716.	1007
239224.	1.554	1.800	0.335	226.	1008
2777.	1.028	0.687	0.571	376.	1 009
2473	0.775	0.522	1.225	399.	1 011

MEXICO (CONT'D)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
4151.	0.842	0.510	1.068	235.	1012
15147.	0.928	1.151	0.702	188.	1013
28176.	0.847	0.635	0.936	214.	1014
15952.	1.174	0.769	0.976	109.	1015
4349.	1.059	1.043	0.744	278.	1016
1322.	0.932	0.820	0.685	329.	1017
11514.	0.894	1.344	0.392	494.	1018
1170.	0.620	0.498	1.127	541.	1019
4148.	1.271	0.798	0.994	305.	1020
8138.	0.805	0.582	1.138	94.	1021
320.	1.624	0.647	0.681	1112.	1022
9895.	0.709	0.731	0.934	132.	1023
3139.	1.096	0.671	0.766	650.	1024
5352.	1.806	1.089	0.495	1079.	1025
156.	1.072	0.526	0.772	758.	1026
321.	1.062	1.274	0.471	426.	1027
24530.	0.883	0.933	0.810	296.	1028
6201.	1.266	0.800	0.930	413.	1029
1072.	1.137	1.327	0.648	1154.	1030
1171.	0.895	0.601	0.746	196.	1031
160.	1.503	2.535	0.463	490.	1101
1365.	3.643	2.972	0.281	1849.	1102
54.	1.510	1.516	0.340	2659.	1103
48.	1.364	2.645	0.567	982.	1104
402.	1.408	2.770	0.487	597.	1105
392.	0.874	1.060	0.953	764.	1106
966.	1.770	2.332	0.403	1068.	1107
46552.	2.004	3.452	0.274	173.	1108
1051.	1.326	1.318	0.466	728.	1109
2076.	1.290	1.917	0.817	399.	1110
1570.	1.086	0.977	0.872	232.	1112

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
2052.	1.197	2.207	0.573	529.	1113
4540.	1.093	1.217	0.764	178.	1114
3537.	1.514	1.475	0.797	332.	1115
34052.	1.366	2.000	0.608	121.	1116
233.	1.202	1.571	0.559	670.	1117
789.	1.153	2.576	0.320	763.	1118
1812.	0.800	0.954	0.920	404.	1119
3796.	1.639	1.530	0.812	252.	1120
291.	1.038	1.115	0.929	298.	1121
53.	2.095	1.240	0.556	1062.	1122
472.	0.914	1.401	0.762	431.	1123
491.	1.413	1.286	0.626	991.	1124
855.	2.330	2.088	0.405	1421.	1125
217.	1.393	1.009	0.630	706.	1126
1211.	1.370	2.442	0.385	608.	1127
219.	1.138	1.788	0.662	244.	1128
4615.	1.632	1.535	0.759	361.	1129
78.	1.466	2.544	0.529	1101.	1130
299.	1.155	1.152	0.609	548.	1131
328.	1.384	2.594	0.531	326.	1201
1172.	3.356	3.042	0.322	1685.	1202
68.	1.391	1.552	0.390	2495.	1203
60.	1.257	2.708	0.650	823.	1204
126.	1.297	2.835	0.559	495.	1205
265.	0.805	1.085	1.100	715.	1206
910.	1.631	2.080	0.462	905.	1207
169850.	1.846	3.533	0.314	58.	1208
685.	1.221	1.349	0.534	564.	1209
3513.	1.188	1.962	0.936	235.	1210
1285.	0.921	1.024	1.147	232.	1211
2437.	1.102	2.259	0.657	365.	1213

MEXICO (CON'T)

M(IJ)	REL WAGES	REL URBAN	REL.ILLIT.	DISTANCE	(IJ)
20173.	1.007	1.245	0.876	98.	1214
1636.	1.394	1.509	0.914	230.	1215
2515.	1.258	2.047	0.697	111.	1216
432.	1.107	1.608	0.641	506.	1217
1449.	1.062	2.637	0.367	562.	1218
631.	0.737	0.976	1.055	373.	1219
6620.	1.510	1.566	0.931	99.	1220
1087.	0.957	1.142	1.066	140.	1221
59.	1.930	1.269	0.638	901.	1222
5605.	0.842	1.434	0.874	267.	1223
377.	1.302	1.316	0.717	827.	1224
548.	2.146	2.137	0.464	1257.	1225
192.	1.273	1.033	0.722	547.	1226
3656.	1.262	2.500	0.441	383.	1227
1976.	1.049	1.830	0.759	82.	1228
17984.	1.503	1.571	0.871	183.	1229
127.	1.351	2.604	0.607	942.	1230
200.	1.064	1.179	0.698	384.	1231
14200.	1.256	1.148	0.808	160.	1301
66846.	3.044	1.347	0.491	1320.	1302
1290.	1.262	0.687	0.593	2130.	1303
222.	1.140	1.198	0.990	1164.	1304
25567.	1.177	1.255	0.850	165.	1305
525.	0.731	0.480	1.675	1012.	1306
12765.	1.479	0.921	0.703	711.	1307
124865.	1.674	1.564	0.478	355.	1308
4988.	1.108	0.597	0.814	372.	1309
26904.	1.078	0.868	1.425	188.	1310
1698.	0.836	0.453	1.745	529.	1311
1791.	0.907	0.443	1.522	365.	1312
10676.	0.913	0.551	1.333	344.	1314

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
19716.	1.205	0.668	1.391	224.	1315
3054.	1.142	0.906	1.060	408.	1316
35243.	1.005	0.712	0.976	141.	1317
8259.	0.963	1.167	0.559	471.	1318
1103.	0.668	0.432	1.606	671.	1319
2393.	1.370	0.693	1.417	434.	1320
991.	0.868	0.505	1.622	224.	1321
123.	1.750	0.562	0.971	1242.	1322
4989.	0.764	0.635	1.331	467.	1323
8949.	1.181	0.582	1.092	462.	1324
16422.	1.947	0.946	0.706	892.	1325
419.	1.555	0.457	1.100	888.	1326
16141.	1.145	1.106	0.672	512.	1327
312.	0.951	0.810	1.155	426.	1328
7992.	1.364	0.695	1.325	543.	1329
299.	1.225	1.152	0.924	1283.	1330
10429.	0.965	0.522	1.063	198.	1331
976.	1.375	2.083	0.605	306.	1401
4366.	3.333	2.443	0.368	1664.	1402
208.	1.382	1.246	0.445	2474.	1403
301.	1.248	2.174	0.742	848.	1404
627.	1.288	2.277	0.638	419.	1405
712.	0.800	0.871	1.256	697.	1406
2628.	1.620	1.670	0.528	884.	1407
326455.	1.833	2.837	0.358	40.	1408
1547.	1.213	1.083	0.610	544.	1409
4259.	1.180	1.576	1.069	214.	1410
5529.	0.915	0.822	1.309	178.	1411
8259.	0.993	0.803	1.142	98.	1412
7994.	1.095	1.814	0.750	344.	1413
7744.	1.385	1.212	1.043	153.	1415

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
20528.	1.250	1.644	0.795	93.	1416
759.	1.100	1.292	0.732	485.	1417
3869.	1.055	2.117	0.419	579.	1418
2053.	0.732	0.784	1.205	355.	1419
7537.	1.500	1.258	1.063	119.	1420
1922.	0.950	0.917	1.217	120.	1421
119.	1.917	1.019	0.728	927.	1422
1863.	0.837	1.152	0.998	247.	1423
2634.	1.293	1.057	0.819	807.	1424
1126.	2.132	1.716	0.530	1236.	1425
341.	1.265	0.830	0.825	326.	1426
4099.	1.253	2.008	0.504	474.	1427
1848.	1.042	1.470	0.866	111.	1428
10133.	1.493	1.261	0.994	227.	1429
273.	1.342	2.091	0.693	968.	1430
525.	1.057	0.947	0.797	364.	1431
525.	0.993	1.719	0.581	201.	1501
29769.	2.407	2.016	0.353	1544.	1502
1203.	0.998	1.028	0.426	2354.	1503
167.	0.901	1.794	0.711	1002.	1504
9085.	0.930	1.878	0.611	265.	1505
1038.	0.578	0.719	1.204	850.	1506
3176.	1.170	1.378	0.506	803.	1507
204649.	1.324	2.341	0.343	193.	1508
1080.	0.876	0.894	0.585	462.	1509
13791.	0.852	1.300	1.025	109.	1510
5393.	0.661	0.678	1.255	332.	1511
1980.	0.717	0.662	1.094	230.	1512
37527.	0.791	1.497	0.719	224.	1513
25106.	3.722	0.825	0.958	153.	1514
6694.	0.903	1.356	0.762	246.	1516

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
2421.	0.794	1.066	0.702	365.	1517
5452.	0.762	1.747	0.402	573.	1518
1945.	0.528	0.647	1.155	508.	1519
2574.	1.083	1.037	1.019	272.	1520
1129.	0.686	0.756	1.166	121.	1521
119.	1.384	0.841	0.698	1080.	1522
1435.	0.604	0.950	0.957	241.	1523
3726.	0.934	0.872	0.785	687.	1524
6627.	1.539	1.416	0.508	1116.	1525
260.	0.913	0.684	0.791	726.	1526
9283.	0.905	1.656	0.483	480.	1527
214.	0.752	1.212	0.830	264.	1528
6972.	1.078	1.041	0.953	381.	1529
198.	0.969	1.725	0.664	121.	1530
609.	0.763	0.781	0.764	282.	1531
55.	1.100	1.267	0.762	370.	1601
544.	2.667	1.486	0.463	1728.	1602
26.	1.105	0.758	0.559	2538.	1603
23.	0.999	1.323	0.933	1632.	1604
76.	1.031	1.385	0.802	511.	1605
235.	0.640	0.530	1.579	616.	1606
292.	1.296	1.016	0.663	948.	1607
23031.	1.467	1.726	0.450	53.	1608
169.	0.971	0.659	0.767	607.	1609
702.	0.944	0.959	1.344	278.	1610
1598.	0.732	0.500	1.646	121.	1611
449.	0.795	0.488	1.436	111.	1612
1460.	0.876	1.104	0.943	408.	1613
2439.	0.800	0.608	1.257	93.	1614
666.	1.108	0.737	1.312	246.	1615
210.	0.880	0.786	0.921	549.	1617

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
418.	0.844	1.288	0.527	643.	1618
301.	0.585	0.477	1.515	1283.	1619
2742.	1.200	0.765	1.337	132.	1620
111.	0.760	0.558	1.530	184.	1621
82.	1.533	0.620	0.916	940.	1622
188.	0.669	0.700	1.255	311.	1623
153.	1.035	0.643	1.030	871.	1624
302.	1.705	1.044	0.666	1300.	1625
316.	1.012	0.505	1.037	482.	1626
1228.	1.003	1.221	0.634	487.	1627
107.	0.833	0.894	1.089	124.	1628
2161.	1.105	0.767	1.250	240.	1629
52.	1.073	1.272	0.871	981.	1630
105.	0.845	0.576	1.002	427.	1631
81.	1.250	1.613	0.828	301.	1701
10907.	3.030	1.891	0.503	1179.	1702
167.	1.256	0.965	0.608	1989.	1703
15.	1.135	1.693	1.013	1305.	1704
273.	1.171	1.762	0.871	306.	1705
64.	0.727	0.674	1.715	1154.	1706
821.	1.473	1.293	0.720	789.	1707
5941.	1.607	2.196	0.489	497.	1708
379.	1.103	0.839	0.833	350.	1709
462.	1.073	1.220	1.460	329.	1710
211.	0.832	0.636	1.788	670.	1711
114.	0.903	0.622	1.559	506.	1712
10799.	0.995	1.405	1.024	141.	1713
906.	0.909	0.774	1.366	485.	1714
374.	1.259	0.938	1.425	365.	1715
578.	1.136	1.273	1.086	549.	1716
840.	0.959	1.639	0.573	612.	1718

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
74.	0.665	0.607	1.645	812.	1719
176.	1.364	0.974	1.452	576.	1720
50.	0.864	0.710	1.661	365.	1721
10.	1.742	0.789	0.995	825.	1722
138.	0.761	0.891	1.363	359.	1723
8196.	1.176	0.818	1.118	889.	1724
7969.	1.938	1.328	0.723	1318.	1725
46.	1.150	0.642	1.126	1029.	1726
895.	1.139	1.554	0.688	465.	1727
50.	0.947	1.138	1.183	567.	1728
461.	1.358	0.977	1.358	117.	1729
32.	1.220	1.619	0.946	866.	1730
195.	0.961	0.733	1.089	339.	1731
293.	1.303	0.984	1.446	364.	1801
1235.	3.160	1.154	0.878	1578.	1802
119.	1.310	0.589	1.061	2388.	1803
27.	1.183	1.027	1.770	1158.	1804
181.	1.221	1.075	1.521	636.	1805
103.	0.758	0.411	2.995	1107.	1806
1956.	1.536	0.789	1.258	511.	1807
22935.	1.738	1.340	0.854	590.	1808
1080.	1.150	0.512	1.455	384.	1809
1001.	1.118	0.744	2.549	464.	1910
404.	0.867	0.388	3.122	763.	1811
583.	0.942	0.379	2.723	562.	1812
2277.	1.038	0.857	1.789	471.	1813
2876.	0.948	0.472	2.385	579.	1814
1337.	1.313	0.572	2.488	573.	1815
413.	1.195	0.776	1.897	643.	1816
504.	1.043	0.610	1.746	612.	1817
486.	0.694	0.370	2.873	905.	1819

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
749.	1.422	0.594	2.535	669.	1820
115.	0.900	0.433	2.901	459.	1821
90.	1.817	0.481	1.737	1336.	1822
3356.	0.793	0.544	2.380	332.	1823
670.	1.226	0.499	1.953	771.	1824
644.	2.021	0.810	1.263	1150.	1825
71.	1.199	0.392	1.967	982.	1826
67852.	1.188	0.948	1.202	178.	1827
201.	0.987	0.694	2.066	644.	1828
1909.	1.415	0.596	2.371	693.	1829
55.	1.272	0.987	1.653	1377.	1830
641.	1.002	0.447	1.901	283.	1831
166.	1.879	2.657	0.503	632.	1901
1824.	4.556	3.116	0.306	1991.	1902
140.	1.888	1.589	0.369	2801.	1903
234.	1.706	2.773	0.616	712.	1904
310.	1.761	2.903	0.529	774.	1905
6442.	1.093	1.111	1.042	337.	1906
1050.	2.214	2.130	0.438	1210.	1907
98508.	2.506	3.618	0.297	315.	1908
799.	1.658	1.382	0.507	869.	1909
604.	1.613	2.010	0.887	541.	1910
4256.	1.251	1.048	1.087	404.	1911
884.	1.358	1.024	0.948	373.	1912
1454.	1.497	2.314	0.623	671.	1913
6396.	1.367	1.275	0.830	355.	1914
627.	1.893	1.546	0.866	508.	1915
3078.	1.708	2.097	0.660	283.	1916
207.	1.503	1.647	0.608	812.	1917
1095.	1.442	2.700	0.348	905.	1918
17552.	2.050	1.604	0.882	253.	1920

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
335.	1.298	1.169	1.010	446.	1921
172.	2.620	1.300	0.605	791.	1922
1486.	1.144	1.469	0.828	573.	1923
1318.	1.768	1.348	0.680	1733.	1924
2164.	2.913	2.188	0.440	1562.	1925
1284.	1.729	1.058	0.685	486.	1926
3386.	1.713	2.560	0.418	749.	1927
955.	1.424	1.874	0.719	270.	1928
52927.	2.041	1.509	0.825	337.	1929
325.	1.834	2.667	0.575	832.	1930
335.	1.444	1.208	0.662	682.	1931
214.	0.917	1.657	0.570	850.	2001
1375.	2.222	1.943	0.346	1754.	2002
65.	0.921	0.991	0.419	2564.	2003
102.	0.832	1.729	0.698	729.	2004
163.	0.859	1.810	0.600	537.	2005
586.	0.533	0.693	1.181	590.	2006
1065.	1.080	1.328	0.496	974.	2007
136507.	1.222	2.256	0.337	79.	2008
349.	0.809	0.861	0.574	633.	2009
1880.	0.787	1.253	1.006	305.	2010
1273.	0.610	0.654	1.231	252.	2011
7128.	0.662	0.639	1.074	99.	2012
4075.	0.730	1.443	0.706	434.	2013
13025.	0.667	0.795	0.941	119.	2014
784.	0.923	0.964	0.981	272.	2015
8472.	0.833	1.307	0.748	132.	2016
289.	0.733	1.207	0.689.	576.	2017
1621.	0.703	1.684	0.394	669.	2018
5562.	0.488	0.623	1.133	253.	2019
712.	0.033	0.729	1.144	210.	2021
149.	1.278	0.810	0.685	808.	2022

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
1149.	0.558	0.916	0.939	337.	2023
545.	0.862	0.840	0.770	897.	2024
1232.	1.421	1.364	0.498	1326.	2025
352.	0.843	0.660	0.776	454.	2026
1988.	0.836	1.596	0.474	483.	2027
7461.	0.694	1.169	0.815	17.	2028
66230.	0.996	1.003	0.935	115.	2029
485.	0.894	1.663	0.652	849.	2030
314.	0.704	0.753	0.750	384.	2031
178.	1.447	2.273	0.498	186.	2101
790.	3.509	2.665	0.303	1544.	2102
121.	1.454	1.360	0.366	2354.	2103
59.	1.314	2.372	0.610	940.	2104
87.	1.356	2.483	0.524	386.	2105
94.	0.842	0.950	1.032	788.	2106
457.	1.705	1.822	0.434	764.	2107
63963.	1.930	3.095	0.294	131.	2108
337.	1.277	1.182	0.502	494.	2109
3852.	1.242	1.719	0.879	94.	2110
2577.	0.963	0.897	1.076	298.	2111
4533.	1.046	0.876	0.939	140.	2112
1606.	1.153	1.979	0.617	224.	2113
10883.	1.053	1.091	0.882	120.	2114
679.	1.453	1.322	0.858	121.	2115
746.	1.316	1.793	0.654	184.	2116
113.	1.158	1.409	0.602	365.	2117
1389.	1.111	2.310	0.345	459.	2118
832.	0.770	0.855	0.990	446.	2119
4218.	1.579	1.372	0.874	219.	2120
79.	2.018	1.112	0.599	1018.	2122
9495.	0.881	1.256	0.820	127.	2123

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
717.	1.361	1.153	0.673	687.	2124
685.	2.244	1.872	0.435	1116.	2125
300.	1.332	0.905	0.678	664.	2126
4432.	1.319	2.190	0.414	421.	2127
658.	1.096	1.603	0.712	202.	2128
1775.	1.572	1.376	0.817	319.	2129
226.	1.412	2.281	0.570	1059.	2130
1314.	1.112	1.033	0.655	244.	2131
4.	0.717	2.045	0.832	1204.	2201
161.	1.739	2.398	0.505	2562.	2202
26.	0.721	1.223	0.611	3372.	2203
586.	0.651	2.134	1.019	262.	2204
11.	0.672	2.234	0.876	1346.	2205
34.	0.417	0.855	1.724	764.	2206
50.	0.845	1.639	0.724	1782.	2207
1618.	0.957	2.784	0.492	887.	2208
36.	0.633	1.063	0.838	1441.	2209
105.	0.616	1.546	1.468	1112.	2210
60.	0.477	0.807	1.797	1062.	2211
652.	0.518	0.788	1.568	901.	2212
124.	0.571	1.781	1.030	1242.	2213
55.	0.522	0.981	1.373	927.	2214
31.	0.723	1.190	1.432	1080.	2215
19.	0.652	1.613	1.092	940.	2216
29.	0.574	1.268	1.005	825.	2217
85.	0.550	2.078	0.576	1336.	2218
1161.	0.382	0.770	1.654	791.	2219
975.	0.783	1.234	1.459	808.	2220
157.	0.496	0.900	1.670	1018.	2221
290.	0.437	1.130	1.370	1145.	2223
334.	0.675	1.037	1.124	1705.	2224

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
487.	1.112	1.684	0.727	354.	2225
137.	0.660	0.814	1.132	354.	2226
290.	0.654	1.970	0.692	1158.	2227
137.	0.543	1.442	1.189	825.	2228
559.	0.779	1.238	1.365	718.	2229
576.	0.700	2.052	0.951	277.	2230
103.	0.551	0.929	1.095	1261.	2231
1849.	1.643	1.809	0.607	105.	2301
1813.	3.984	2.122	0.369	1491.	2302
74.	1.651	1.082	0.446	2301.	2303
95.	1.492	1.888	0.744	1066.	2304
186.	1.540	1.977	0.639	283.	2305
165.	0.956	0.757	1.258	915.	2306
3835.	0.936	1.451	0.529	638.	2307
37805.	2.191	2.464	0.359	258.	2308
1549.	1.450	0.941	0.611	297.	2309
4813.	1.410	1.368	1.071	132.	2310
432.	1.094	0.714	1.312	431.	2311
116.	1.187	0.697	1.144	267.	2312
5788.	1.309	1.576	0.751	467.	2313
3645.	1.195	0.868	1.002	247.	2314
848.	1.655	1.053	1.045	241.	2315
534.	1.494	1.428	0.797	311.	2316
303.	1.315	1.122	0.734	359.	2317
67088.	1.261	1.839	0.420	332.	2318
690.	0.875	0.681	1.207	573.	2319
1424.	1.793	1.092	1.065	337.	2320
989.	1.135	0.796	1.219	127.	2321
110.	2.291	0.885	0.730	1145.	2322
1395.	1.546	0.918	0.821	634.	2324
1290.	2.548	1.490	0.531	1063.	2325

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
612.	1.512	0.720	0.826	791.	2326
54820.	1.498	1.743	0.505	294.	2327
326.	1.245	1.276	0.868	329.	2328
10819.	1.785	1.095	0.996	333.	2329
127.	1.604	1.816	0.694	1186.	2330
3963.	1.263	0.822	0.799	117.	2331.
1831.	1.063	1.971	0.740	598.	2401
36665.	2.577	2.312	0.450	858.	2402
788.	1.068	1.179	0.543	1668.	2403
18.	0.965	2.057	0.906	1632.	2404
296.	0.996	2.154	0.779	627.	2405
131.	0.619	0.824	1.534	1425.	2406
1607.	1.253	1.581	0.644	775.	2407
10383.	1.418	2.685	0.438	918.	2408
1548.	0.938	1.025	0.745	337.	2409
334.	0.912	1.491	1.305	650.	2410
425.	0.707	0.778	1.599	991.	2411
260.	0.768	0.760	1.394	827.	2412
5482.	0.847	1.717	0.916	462.	2413
1268.	0.773	0.946	1.221	807.	2414
264.	1.071	1.147	1.274	687.	2415
205.	0.966	1.556	0.971	871.	2416
6053.	0.851	1.222	0.894	889.	2417
1016.	0.816	2.004	0.512	771.	2418
382.	0.566	0.742	1.471	1733.	2419
723.	1.160	1.190	1.298	897.	2420
129.	0.735	0.867	1.486	687.	2421
33.	1.482	0.964	0.889	1705.	2422
466.	0.647	1.090	1.219	634.	2423
46454.	1.648	1.624	0.647	429.	2425
92.	0.978	0.785	1.007	1853.	2426
346.	0.969	1.900	0.615	899.	2427

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
51.	0.805	1.391	1.058	889.	2428
1211.	1.155	1.194	1.214	1006.	2429
68.	1.037	1.978	0.846	1746.	2430
158.	0.817	0.896	0.974	517.	2431
132.	0.645	1.214	1.145	1027.	2501
30686.	1.564	1.424	0.695	428.	2502
661.	0.648	0.726	0.840	1238.	2503
27.	0.586	1.267	1.401	2056.	2504
142.	0.604	1.327	1.204	1056.	2505
88.	0.375	0.508	2.372	1904.	2506
3593.	0.760	0.974	0.996	1205.	2507
8826.	0.860	1.653	0.677	1247.	2508
358.	0.569	0.631	1.152	766.	2509
354.	0.554	0.918	2.019	1079.	2510
184.	0.429	0.479	2.472	1421.	2511
142.	0.466	0.468	2.156	1257.	2512
2887.	0.514	1.057	1.416	892.	2513
1007.	0.469	0.583	1.888	1236.	2514
1427.	0.650	0.706	1.970	1116.	2515
235.	0.586	0.958	1.502	1300.	2516
792.	0.516	0.753	1.383	1318.	2517
78.	0.495	1.234	0.792	1150.	2518
356.	0.343	0.457	2.275	1562.	2519
559.	0.704	0.733	2.007	1326.	2520
98.	0.446	0.534	2.297	1116.	2521
42.	0.899	0.594	1.375	354.	2522
217.	0.392	0.671	1.885	1063.	2523
5912.	0.607	0.616	1.546	429.	2524
139.	0.593	0.483	1.558	1780.	2526
849.	0.588	1.170	0.952	1329.	2527
679.	0.489	0.857	1.636	1318.	2528

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
951.	0.701	0.735	1.877	1435.	2529
567.	0.629	1.219	1.309	2175.	2530
247.	0.496	0.552	1.506	946.	2531
58.	1.087	2.511	0.735	810.	2601
228.	2.635	2.945	0.446	2208.	2602
13.	1.092	1.502	0.529	2018.	2603
5922.	0.987	2.621	0.900	276.	2604
46.	1.018	2.744	0.773	995.	2605
6851.	0.632	1.050	1.523	410.	2606
167.	1.281	2.014	0.640	1476.	2607
10987.	1.449	3.420	0.434	573.	2608
21.	0.959	1.360	0.740	1087.	2609
206.	0.933	1.900	1.296	758.	2610
88.	0.723	0.991	1.587	706.	2611
121.	0.785	0.968	1.384	547.	2612
496.	0.866	2.187	0.909	888.	2613
358.	0.791	1.205	1.212	326.	2614
101.	1.095	1.461	1.265	726.	2615
330.	0.988	1.982	0.964	482.	2616
81.	0.870	1.557	0.888	1029.	2617
366.	0.834	2.553	0.508	982.	2618
520.	0.578	0.945	1.461	486.	2619
573.	1.186	1.516	1.289	454.	2620
44.	0.751	1.105	1.475	664.	2621
254.	1.515	1.228	0.883	354.	2622
274.	0.661	1.388	1.210	791.	2623
202.	1.022	1.274	0.993	1853.	2624
223.	1.685	2.068	0.642	1780.	2625
977.	0.991	2.420	0.611	804.	2627
1882.	0.823	1.772	1.050	471.	2628
19553.	1.181	1.521	1.205	364.	2629

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
466.	1.061	2.521	0.840	395.	2630
54.	0.835	1.142	0.967	907.	2631
300.	1.097	1.038	1.203	399.	2701
1427.	2.660	1.217	0.730	1757.	2702
117.	1.102	0.621	0.883	2567.	2703
100.	0.996	1.083	1.473	1080.	2704
111.	1.028	1.134	1.266	677.	2705
265.	0.638	0.434	2.492	929.	2706
1728.	1.293	0.832	1 047	689.	2707
22370.	1.463	1.413	0.711	434.	2708
548.	0.968	0.540	1.211	562.	2709
3660.	0.941	0.785	2.121	426.	2710
231.	0.730	0.409	2.598	608.	2711
399.	0.793	0.400	2.266	383.	2712
2148.	0.874	0.904	1.488	512.	2713
1226.	0.798	0.498	1.984	474.	2714
471.	1.105	0.604	2.070	480.	2715
409.	0.997	0.819	1.578	487.	2716
451.	0.878	0.643	1.453	464.	2717
28322.	0.842	1.055	0.832	178.	2718
361.	0.584	0.391	2.391	749.	2719
1140.	1.197	0.626	2.109	483.	2720
240.	0.758	0.457	2.414	421.	2721
43.	1.529	0.508	1.445	1158.	2722
7047.	0.668	0.574	1.980	294.	2723
1303.	1.032	0.526	1.625	899.	2724
1199.	1.701	0.855	1.051	1329.	2725
368.	1.009	0.413	1.637	804.	2726
214.	0.831	0.732	1.719	465.	2728
14387.	1.191	0.628	1.973	575.	2729
64.	1.070	1.042	1.375	866.	2730

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
388.	0.843	0.472	1.582	445.	2731
22.	1.320	1.418	0.700	388.	2801
203.	3.200	1.662	0.425	1746.	2802
18.	1.326	0.848	0.514	2556.	2803
13.	1.198	1.479	0.857	747.	2804
24.	1.237	1.549	0.736	529.	2805
116.	0.768	0.593	1.450	607.	2806
174.	1.555	1.137	0.609	966.	2807
47229.	1.760	1.930	0.414	71.	2808
52.	1.165	0.737	0.705	625.	2809
218.	1.133	1.072	1.234	296.	2810
126.	0.878	0.559	1.511	244.	2811
355.	0.954	0.546	1.318	82.	2812
434.	1.015	1.235	0.866	426.	2813
4787.	0.960	0.680	1.155	111.	2814
128.	1.330	0.825	1.205	264.	2815
368.	1.200	1.119	0.918	124.	2816
32.	1.056	0.879	0.845	567.	2817
1206.	1.013	1.441	0.484	644.	2818
363.	0.702	0.534	1.391	270.	2819
16783.	1.440	0.856	1.227	17.	2820
132.	0.912	0.624	1.405	202.	2821
54.	1.840	0.693	0.841	825.	2822
325.	0.803	0.784	1.152	329.	2823
159.	1.242	0.719	0.945	889.	2824
527.	2.046	1.168	0.611	1318.	2825
190.	1.214	0.564	0.952	471.	2826
671.	1.203	1.366	0.582	465.	2827
3802.	1.434	0.858	1.148	117.	2829
15.	1.288	1.423	0.800	866.	2830
44.	1.014	0.644	0.920	364.	2831

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
350.	0.921	1.652	0.610	506.	2901
2118.	2.232	1.937	0.370	1863.	2902
194.	0.925	0.988	0.448	2673.	2903
1240.	0.836	1.724	0.747	639.	2904
505.	0.863	1.805	0.642	646.	2905
2115.	0.536	0.691	1.263	458.	2906
1609.	1.085	1.324	0.531	1083.	2907
109581.	1.228	2.249	0.360	188.	2908
837.	0.813	0.850	0.614	742.	2909
1832.	0.790	1.249	1.075	413.	2910
1246.	0.613	0.652	1.317	361.	2911
3999.	0.665	0.637	1.149	183.	2912
3068.	0.733	1.438	0.754	543.	2913
5609.	0.670	0.793	1.006	227.	2914
1212.	0.927	0.961	1.050	381.	2915
2188.	0.837	1.303	0.800	240.	2916
307.	0.737	1.024	0.737	117.	2917
3614.	0.706	1.679	0.422	693.	2918
22822.	0.490	0.622	1.212	337.	2919
22957.	1.004	0.997	1.069	115.	2920
369.	0.636	0.727	1.224	319.	2921
538.	1.283	0.808	0.733	718.	2922
5673.	0.560	0.913	1.004	333.	2923
706.	0.866	0.838	0.824	1006.	2924
1233.	1.427	1.360	0.533	1435.	2925
3804.	0.847	0.658	0.830	364.	2926
24537.	0.839	1.592	0.507	575.	2927
1024.	0.698	1.165	0.871	117.	2928
1103.	0.898	1.658	0.697	759.	2930
592.	0.708	0.751	0.802	562.	2931
73.	1.025	0.996	0.875	1245.	3001

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
674.	2.484	1.168	0.531	2603.	3002
46.	1.030	0.596	0.642	3413.	2003
8290.	0.930	1.040	1.071	119.	3004
54.	0.960	1.089	0.920	1387.	3005
800.	0.596	0.417	1.812	805.	3006
408.	1.207	0.799	0.761	1823.	3007
23657.	1.366	1.357	0.517	928.	3008
163.	0.904	0.518	0.881	1482.	3009
1153.	0.880	0.754	1.543	1154.	3010
235.	0.682	0.393	1.889	1101.	3011
411.	0.740	0.394	1.648	942.	3012
682.	0.816	0.868	1.082	1283.	3013
617.	0.745	0.478	1.443	968.	3014
437.	1.032	0.580	1.506	121.	3015
185.	0.932	0.786	1.148	981.	3016
48.	0.820	0.618	1.057	866.	3017
584.	0.786	1.013	0.605	1377.	3018
411.	0.545	0.375	1.739	832.	3019
1609.	1.118	0.601	1.534	849.	3020
59.	0.708	0.438	1.756	1059.	3021
15873.	1.429	0.487	1.051	277.	3022
170.	0.624	0.551	1.440	1186.	3023
146.	0.964	0.505	1.182	1746.	3024
1034.	1.589	0.821	0.764	2175.	3025
1298.	0.943	0.397	1.190	395.	3026
1102.	0.934	0.960	0.727	866.	3027
39.	0.776	0.703	1.250	866.	3028
1477.	1.113	0.603	1.435	759.	3029
327.	0.788	0.453	1.151	1302.	3031
13646.	1.301	2.200	0.760	81.	3101
18705.	3.155	2.580	0.462	1374.	3102

MEXICO (CON'T)

M(IJ)	REL.WAGES	REL.URBAN	REL.ILLIT.	DISTANCE	(IJ)
209.	1.308	1.316	0.558	2184.	3103
116.	1.181	2.296	0.931	183.	3104
336.	1.219	2.404	0.800	362.	3105
240.	0.757	0.920	1.575	1031.	3106
34241.	1.533	1.764	0.662	521.	3107
29985.	1.735	2.996	0.449	574.	3108
23138.	1.148	1.144	0.765	180.	3109
2789.	1.117	1.664	1.341	196.	3110
579.	0.866	0.868	1.642	548.	3111
560.	0.940	0.848	1.432	384.	3112
34295.	1.036	1.916	0.941	198.	3113
3044.	0.946	1.056	1.254	364.	3114
759.	1.311	1.280	1.309	282.	3115
499.	1.183	1.736	0.998	427.	3116
5984.	1.041	1.364	0.919	339.	3117
22959.	0.998	2.236	0.526	283.	3118
302.	0.692	0.828	1.511	682.	3119
1540.	1.420	1.328	1.333	384.	3120
430.	0.899	0.968	1.526	244.	3121
44.	1.814	1.076	0.914	1261.	3122
8026.	0.712	1.216	1.252	117.	3123
1956.	1.224	1.116	1.027	517.	3124
4908.	2.017	1.812	0.664	946.	3125
186.	1.197	0.876	1.035	907.	3126
60.	1.186	2.120	0.632	445.	3127
11514.	0.986	1.552	1.086	364.	3128
2278.	1.413	1.332	1.247	562.	3129
526.	1.270	2.208	0.869	1302.	3130

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