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# The Effect of Americanization on the Earnings of Foreign-born Men

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The earnings of foreign-born adult white men, as reported in the 1970 *Census of Population*, are analyzed through comparisons with the native born and among the foreign born by country of origin, years in the United States, and citizenship. Differences in the effects of schooling and postschool training are explored. Although immigrants initially earn less than the native born, their earnings rise more rapidly with U.S. labor market experience, and after 10 to 15 years their earnings equal, and then exceed, that of the native born. Earnings are unrelated to whether the foreign born are U.S. citizens.

## I. Introduction

In 1970, 9.6 million persons, or 5 percent, of the population of the United States were foreign born. In spite of the increased public interest in ethnicity and discrimination, and more recently the concern with the impact of legal and illegal immigrants and hence with immigration policy, the earnings and labor market behavior of the foreign born in the United States have not been the subject of much systematic research.<sup>1</sup> This paper examines the effect of foreign birth and length of time in the United States on the earnings of foreign-born white men.<sup>2</sup>

Comments I received on earlier drafts from Gary S. Becker, George Borjas, Carmel U. Chiswick, Arlene Holen, Jacob Mincer, and Alfred Tella, and other participants in seminars at Columbia University and the University of Chicago have been most helpful and are appreciated. The research assistance of James Moser and Daphne DeRebello greatly eased the task. I alone, however, am responsible for the contents of this article.

<sup>1</sup> Although the skills and earnings of the foreign born were once a subject of lively debate among economists (see, e.g., the 1919 article by Paul H. Douglas), they are now primarily of interest to sociologists and historians (see, e.g., Thernstrom 1973, Greeley 1976, and Featherman 1978). For a longitudinal analysis of the occupational mobility of immigrants and an analysis of the earnings of the sons of immigrants, see Chiswick (1977, 1978c). For a brief history of U.S. immigration policy, see Chiswick (1978b).

<sup>2</sup> In 1970, 91 percent of the foreign born were white. Eighteen percent of the foreign born were of Spanish heritage, of whom about 93 percent are white (U.S. Bureau of the

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Although foreign-born white men aged 25–64 had approximately the same annual earnings in 1969 as the native born (\$9,700), they differ in several important characteristics that are associated with earnings (table 1). Foreign-born men have a lower level of schooling, a mean of nearly 11 years compared with a mean of nearly 12 years for the native born. The foreign born also worked one less week in 1969, an average of 47 weeks for the foreign born compared with 48 weeks for the native born. However, foreign-born men are nearly 3 years older than are the native born (46 years compared with 43 years) and are less likely to be married. There are also substantial differences in place of residence. Foreign-born men are less likely to reside in rural areas (11 percent compared with 30 percent). They are also less likely to live in the South (13 percent live in the Census Bureau's definition of the South, compared with 29 percent for the native born).

Some of these differences in earnings-related characteristics would lower the earnings of the foreign born compared with the native born, such as the schooling and marital status differences.<sup>3</sup> Others would tend to raise the relative earnings of the foreign born, such as the greater proportion living in urban areas and living outside the South, and possibly the longer labor market experience. The effect of the latter depends, in part, on how much training was acquired in the United States and on the international transferability of training acquired in the country of origin. Thus, without multivariate analysis one cannot account for the extent to which factors favorable to earnings have offset any earnings disadvantages that may arise from being of a foreign origin. For this reason, the data are applied to a multiple regression analysis using a basic human capital earnings function that includes some demographic control variables.

The statistical approach and hypotheses are developed in Section II. In Section III the earnings of foreign-born and native-born white men are compared, while in Section IV differences in earnings among the foreign born by country of origin are examined.<sup>4</sup> Section V is a summary and conclusion.

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Census 1973*a*, table 1). The analysis is restricted to whites so as to avoid a confounding of the effects of race and foreign origin on earnings, and to men because the problem of estimating labor market experience for women in the data under study requires a separate analysis.

<sup>3</sup> The difference in earnings attributable to schooling may be even greater to the extent that some aspects of schooling acquired in the country of origin provide country-specific human capital. For the same number of years of schooling, the foreign born may have less schooling relevant to U.S. labor markets. For example, a Cuban émigré lawyer may have the same number of years of schooling as a U.S.-trained lawyer but may not be able to practice his occupation in the United States.

<sup>4</sup> To economize on the number of tables, the relevant partial regression coefficients, rather than the full equations, are reported in some instances. The full regression equations are reported in Appendix A. Little is known about foreign-born persons who subsequently emigrate. Appendix B presents some indirect information on the number and characteristics of foreign-born emigrants to determine whether the self-selection in out-

## II. The Hypotheses and Statistical Approach

This section sets out several hypotheses as to how the earnings of the foreign born would differ from that of the native born, and how earnings would vary among the foreign born by country of origin, the number of years in the United States, and citizenship. The statistical framework used for analyzing the data and the data base are also described.

### *Hypotheses*

In labor markets in the United States, earnings are largely related to characteristics associated with productivity, although for some jobs certification of one form or another is important. This certification may be a union card, an occupational license, or a school degree.

Recent immigrants to the United States are likely to have less of the characteristics associated with higher earnings than the native born. Being recent arrivals, they have less knowledge of the customs and language relevant to U.S. jobs, have less information about U.S. job opportunities, and have less firm-specific training (i.e., they are likely to have been at their current U.S. job fewer years than native-born workers).<sup>5</sup> They are also less likely to have acquired the union card or occupational license relevant in the United States to apply the skills acquired in their country of origin.

As time passes, however, the immigrant gains knowledge of the United States, acquires job-specific training, and either acquires the union card or modifies his skills accordingly. Thus, because knowledge and skills are not perfectly mobile across countries, other things the same, immigrants initially would have earnings significantly lower than native-born persons, but the gap would narrow the longer they are in the United States. The initial earnings deficiency, and the steepness of the subsequent rise in earnings, would be smaller the greater the similarity between the country of origin and the United States. The number of years since migrating would be less important for explaining earnings for immigrants from Canada, for example, than for immigrants from Germany. If the foreign and native born have the same level of innate labor market ability and work motivation, the earnings of the foreign born would approach, and might equal, but would not exceed that of the native born, *ceteris paribus*.<sup>6</sup>

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migration from the United States would bias the regression coefficients estimated from cross-sectional data. It appears that because of their relatively small number and fairly similar characteristics to the foreign born in the United States in 1970, they would not substantially bias the findings reported here. I am indebted to Victor Fuchs for having raised this issue. The appendices are available from the author upon request.

<sup>5</sup> For an analysis of the effect of job change on the earnings of adult male workers, see Bartel and Borjas (1977).

<sup>6</sup> The earnings gap would not close if a relevant knowledge deficiency persisted or if there were discrimination against the foreign born in wages, employment, union membership, or occupational licensing. On the other hand, in some jobs there may be discrimination in favor of the foreign born (e.g., the French chef).

Immigrants may have a steeper experience-earnings profile after they arrive than do the native born, even if they receive the same total post-school training, if there is a difference in the nature and financing of their training. Becker (1964) has shown that for the same total investment in training, experience-earnings profiles are steeper the smaller the proportion that is firm specific and the smaller the proportion of firm-specific training financed by the employer. Having less knowledge relevant to U.S. labor markets, immigrants would gain information by "experiencing" a variety of jobs. Even if they do not intentionally change jobs as a means of gaining information, as their knowledge and skills relevant to the United States improve, there would be a tendency to move into jobs in which their productivity is now higher.<sup>7</sup> As with youths just entering the labor force, recent immigrants would tend to have high quit rates. This will discourage job-specific investment financed by the worker and the employer.

Employers are likely to have less information about the productivity of a job applicant who is a recent immigrant compared with a native-born person with similar general characteristics. It is more difficult to check school and previous employment references, and employers may be less familiar with the implications of foreign schooling for a worker's productivity. The greater risk associated with hiring a new immigrant would discourage employer investments in job-specific training.<sup>8</sup>

Economic theory suggests that migration in response to economic incentives is generally more profitable for the more able and more highly motivated.<sup>9</sup> This self-selection in migration implies that for the same

<sup>7</sup> For an analysis of the greater occupational mobility of immigrants during their first 10 years in the United States, see Chiswick (1978c).

<sup>8</sup> There is, however, an incentive for some firms to "specialize" in hiring immigrants from particular countries or ethnic groups. Such firms are likely to be small with either the owner, manager, or a few senior workers who are bilingual. These firms are effectively "halfway" houses for recent immigrants, with the workers moving on to more "American" firms as they acquire the rudimentary U.S.-specific skills (e.g., knowledge of basic English) and develop a record of job success in the United States.

<sup>9</sup> Let  $r_i$  be the rate of return from migration for the  $i$ th person and  $W_{o,i}$  and  $W_{d,i}$  be the annual earnings the  $i$ th person would receive in the place of origin and destination, respectively. Migration involves opportunity costs ( $C_o$ ), the foregone earnings while migrating and establishing one's self in the place of destination. The opportunity cost may be thought of as a proportion of the earnings in the place of origin ( $C_o = pW_o$ ). Migration also involves direct costs ( $C_d$ ), i.e., the out-of-pocket expenditures incurred in migrating and reestablishing oneself and the psychic costs of leaving family, friends, and familiar surroundings. In a simple model in which wages are constant over time and one's life after migration is very long (infinite), the  $i$ th person's rate of return from migration is  $r_i = (W_{d,i} - W_{o,i}) / (pW_{o,i} + C_d)$ . Let us assume that the  $j$ th person has greater labor market ability and motivation, which raises his earnings by 100*l* percent ( $l > 0$ ) in both the place of origin and destination, as compared with the  $i$ th person, but that this does not reduce the time involved in migration or direct costs. Then,  $r_j = (W_{d,j} - W_{o,j}) / (pW_{o,j} + C_d) = (W_{d,i} - W_{o,i}) / [pW_{o,i} + (C_d/1 + l)] > r_i$ . That is, if greater labor market ability and motivation raise earnings relatively more than they raise the cost of migration, the rate of return from migration is greater for the more able and motivated,

schooling, age, and other demographic characteristics immigrants to the United States have more innate ability or motivation relevant to the labor market than native-born persons.<sup>10</sup> If so, holding measured variables constant, as earnings rise with time in the United States, the earnings of immigrants may, but would not necessarily, exceed that of native-born persons. The earnings crossover is less likely to occur if the migration is less selected in favor of the more able or more highly motivated. The self-selection may be weaker, for example, if the migration is induced by political pressure in the country of origin, if it is the mass migration of an entire community, or if it is induced by the availability of more generous welfare benefits in the place of destination than if it is the more conventional economic migration of workers for higher real earnings. The number of years since migration at which this earnings crossover occurs, if it does occur, is a parameter of considerable interest.

The effect of citizenship *per se* on the earnings of foreign-born persons can be studied. Aliens could earn less than naturalized citizens because of the wage effects of occupational segregation, direct discrimination in wages, or a lower quality of skills not reflected in the other variables in the analysis.<sup>11</sup> As citizenship is not likely to be related to unmeasured skill characteristics and as most employers would not know the citizenship of foreign-born job applicants, holding constant the number of years in the United States, one would not expect aliens to be at a significant earnings disadvantage.

The foreign born are less rural and less southern than the native born. Among white men, reported earnings tend to be lower in rural areas and in the southern states. A variety of explanations can be offered for the lower earnings, including a lower real income due to a lower quality of schooling in rural/southern areas, self-selection in the out-migration of the most able from these areas, and a compensating differential for lower living costs (including a more pleasant environment).

By definition, the foreign born have migrated to the United States. They would tend to migrate to the area or region in which their skills would command the highest real income (see, e.g., Hansen 1940). After

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and they will have a higher propensity to migrate. For analyses suggesting higher rates of migration for those with more schooling, see Sjaastad (1962), O'Neill (1970), and Yezer and Thurston (1976).

<sup>10</sup> In his study of immigration in the century prior to World War I, Marcus Lee Hansen (1940) wrote: "Countries of origin were dismayed by their loss when they saw their ports thronged with the sturdiest of their peasantry. Efforts to stem the movement were attempted" (p. 212).

<sup>11</sup> In part because of Civil Service regulations and English language examinations, the foreign born are underrepresented in government employment, especially in the federal and local governments (U.S. Bureau of the Census 1973*a*, table 8). Smith (1976) shows that compared with the private sector, other things the same, hourly wages for men are higher in federal employment, lower in local government employment, and about the same in state government employment.

arriving in the United States the nonmoney cost of migration is likely to be less for the foreign born than the native born, as the latter has stronger ties to the area many of them have lived in since birth. That is, interarea migration is less likely to have been sufficient to equalize urban-rural or North-South differences in real incomes for the native born than for the foreign born. If the coefficient of a dichotomous variable for rural or southern residence is negative for the native born but is zero for the foreign born, it suggests that cost-of-living differences are not relevant for explaining the native-born coefficient. However, if the foreign- and native-born coefficients are the same, it suggests that cost-of-living differences, rather than quality of schooling or self-selection in migration, are the causal factors.

Married men tend to have higher labor force participation rates, invest more in human capital, and have better health than men who are not married. For the same age, schooling, and place of residence, married men have higher earnings. As a somewhat smaller proportion of the foreign-born men are currently married, marital status is included as a variable in the regression analysis.

Variables for the occupation or industry in 1970 of the foreign born are not included in the analysis. Part of the process of change associated with time in the United States is the mobility of the foreign born to occupations and industries where their productivity is higher. It is, therefore, to be expected that the foreign born experience more changes in occupation and industry than native-born persons in the same age group. The occupational mobility of immigrants, including a comparison of the "last" occupation in the country of origin with the "first" occupation in the United States, has been studied elsewhere (Chiswick 1978c).

Some testable hypotheses relevant for an analysis of the earnings of the foreign born can now be specified. (1) As there are aspects of schooling that are country specific, a year of schooling prior to immigration will have a smaller effect on earnings than a year of schooling for the native born. (2) As there are aspects of labor market experience that are country specific, a year of experience prior to immigration has a smaller effect on earnings than a year of experience for a native-born person. (3) As immigrants initially have less human capital specific to the United States than native-born persons of the same schooling and age, just after they arrive their earnings are lower than the native born. (4) After they arrive, as they make investments in postschool training and they informally acquire "experience" living in the United States, the earnings of immigrants rise at a faster rate than the earnings of the native born. (5) As immigrants have the incentive to make their largest adjustment investments just after they arrive, the absolute decline in the "knowledge gap" between immigrants and the native born is sharpest in these years. The rise in earnings with time in the United States is steepest in the first few



years. (6) The effect on earnings of time in the United States, holding total labor market experience constant, is weaker for immigrants from countries that more closely resemble the United States. Holding years in the United States constant, the earnings of immigrants would be higher the more similar the country of origin is to the United States. (7) As immigrants tend to be more able, more highly motivated workers, if not for the disadvantages of their foreign origin, they would have higher earnings than the native born. After they have acquired U.S. specific skills, the earnings of the foreign born may, but need not, equal or exceed that of the native born. (8) For the same number of years in the United States, whether a foreign-born person is an alien or a naturalized citizen has no effect on earnings.

### *Estimating Equation*

The empirical analysis of the effect of Americanization on earnings uses the human capital earnings function as the point of departure. This earnings function has been successfully applied to analyses of the determinants of earnings in a wide variety of countries. This is, however, its first application to a comparative analysis of the determinants of earnings of the foreign born in the United States.

Native-born men are assumed to have made all of their investments in human capital in the United States. If rates of return ( $r$ ) to all levels of schooling ( $S$ ) are constant, a year of schooling requires an investment of a full year's potential earnings; and, if the men are in the labor force continuously after leaving school, the earnings function for the native born can be written as

$$\ln Y_{n,i} = \ln Y_o + rS_i + b_1T_i + b_2T_i^2 + U_i, \quad (1)$$

where  $T$  is years of labor market experience, measured as age minus years of schooling minus 5;  $Y_{n,i}$  is earnings; and  $U_i$  is a residual (Mincer 1974). Among the foreign born, however, the total number of years of schooling can be decomposed into the schooling acquired before immigration ( $S_b$ ) and the schooling after immigration ( $S_a$ ). Similarly, years of labor market experience ( $T$ ) can be decomposed into years of experience before ( $T_b$ ) and after ( $T_a$ ) immigration. If there are country-specific aspects of training, the training acquired prior to migration ( $S_b$ ,  $T_b$ ) would have a weaker effect on earnings than years of training in the United States ( $S_a$ ,  $T_a$ ). Assuming that the effect of years of training in a country can be described by a quadratic experience variable, the earnings function of the foreign born can be written as

$$\begin{aligned} \ln Y_i = \ln Y_o + r_b S_{b,i} + r_a S_{a,i} + b'_1 T_{b,i} + b'_2 T_{b,i}^2 \\ + b'_3 T_{a,i} + b'_4 T_{a,i}^2 + U_i. \end{aligned} \quad (2)$$



Since  $S_i = S_{b,i} + S_{a,i}$  and  $T_i = T_{b,i} + T_{a,i}$ ,

$$\begin{aligned} \ln T_i = & \ln T_o + r_b S_i + (r_a - r_b) S_{a,i} + b'_1 T_i \\ & + b'_2 T_i^2 + (b'_3 - b'_1) T_{a,i} + (b'_2 + b'_4) T_{a,i}^2 \\ & - 2b'_2 T_i T_{a,i} + U_i. \end{aligned} \quad (3)$$

Empirically, there is little difference between  $r_a$  and  $r_b$ , and the interaction of total labor market experience with U.S. experience ( $T_i T_{a,i}$ ) is not statistically significant.<sup>12</sup> In most of the analyses that follow, the variables  $S_a$  and  $TT_a$  are deleted from the earnings function, equation (3). In addition, the variable  $T_a$ , the number of years of postschool training since migration, is replaced by YSM, the number of years since migration, a change that has no substantive effect on the conclusions. The earnings function for the foreign born is then reduced to

$$\begin{aligned} \ln T_i = & \ln T_o + r S_i + C_1 T_i + C_2 T_i^2 \\ & + C_3 (\text{YSM}_i) + C_4 (\text{YSM}_i)^2 + U_i. \end{aligned} \quad (4)$$

The basic equation used in the empirical analysis is a linear regression of the natural logarithm of annual earnings (wages, salary, and self-employment income expressed in hundreds of dollars,  $\ln E$ ) on the exogenous variables: EDUC, years of schooling completed;  $T$ , labor market experience, measured as age — schooling — 5;  $T^2$ , experience squared; LN WW, the natural logarithm of weeks worked; RURALEQ1, dichotomous variable equal to unity for a person living in a rural area—otherwise, it is zero; SOUTHEQ1, dichotomous variable equal to unity for a person living in the 17 southern states, including the District of Columbia—otherwise, it is zero; NOTMSP, marital status variable equal to zero for a person who is married, spouse present—otherwise, it is unity; FOR, dichotomous variable equal to unity for a person of foreign birth, zero for a native-born person; YSM, years since migrating to the United States; YSM2, the square of YSM; ALIEN, dichotomous variable equal to unity if the foreign-born person is an alien and equal to zero if he is a naturalized citizen; and a set of dichotomous variables for country of origin.<sup>13</sup>

<sup>12</sup> Using the functional form in eq. (3), controlling for the human capital and demographic variables and including a nonlinear effect of  $S$ , for variable  $TT_a$ , the coefficient is  $-.00003$ , and the  $t$ -ratio is  $-0.11$ ; for variable  $S_a$ , the coefficient is  $-.00534$ , and the  $t$ -ratio is  $-1.04$ .

<sup>13</sup> The percentages of foreign-born adult white men for the country-of-origin groupings used in this study, based on 1,924 observations, are: British Isles, 9.70; western Europe 16.22; southern Europe, 12.84; central Europe, 9.98; the Balkans, 6.34; Russia, 4.68; Canada, Australia, and New Zealand, 13.10; Mexico, 10.97; Cuba, 6.24; other Latin American countries, 4.94; the Middle East and Africa, 2.75; southern Asia (Indian subcontinent), 1.04; and eastern Asia, 1.20 (U.S. Bureau of the Census 1972).

*Data Base*

The foreign born are only 5 percent of the population, and the proportion from subsets of foreign countries is even smaller. An analysis of the earnings of the foreign born requires either a moderate-sized data set which substantially oversamples the foreign born or a very large simple random sample. Although some data sets include information on whether a person was born or grew up outside the United States, data are usually lacking on the specific country or continent of origin and the year of immigration to the United States. The *1970 Census of Population* 5 percent questionnaire appears to be unique in satisfying the very stringent data requirements of this study.<sup>14</sup>

The population under study is white men, aged 25–64 in 1970, residing in the 50 states and the District of Columbia, who worked in at least 1 week in 1969 and who reported earnings from wages, salary, and self-employment.<sup>15</sup> The native born are defined as those born in the 50 states and the District of Columbia. The foreign born are defined as those born in a foreign country and not of American parents.<sup>16</sup> Persons born in an outlying area of the United States (Puerto Rico, the Canal Zone, etc.), born abroad of American parents, or born at sea are excluded from the data.

### III. Analysis of Earnings for the Native and Foreign Born

Section III is primarily a comparative analysis of the earnings of the native and foreign born. Of particular interest are the effects of schooling and postschool training in the United States and abroad and the effects of citizenship. The effect of country of origin among the foreign born is the subject of Section IV.

The average earnings of the foreign-born white men, aged 25–64, who worked in 1969 was \$9,660, compared with \$9,738 for the native born, a difference of 1 percent in favor of the native born. The mean of the natural logarithm of earnings (expressed in hundreds of dollars) was 4.29 for the foreign born and 4.32 for the native born, a difference of about 1

<sup>14</sup> Although country of birth has been asked in every decennial census since 1850, year of immigration was asked from 1890 to 1930 and then not until the 1970 census 5 percent questionnaire. In the 1970 census, parents' country of birth and mother tongue (language other than or in addition to English spoken in the home when the respondent was a child) were asked only in the nonoverlapping 15 percent questionnaire (U.S. Bureau of the Census 1973*b*, p. 7).

<sup>15</sup> The question on race in the *1970 Census of Population* included the following categories: white, Negro or black, American Indian, Japanese, Chinese, Filipino, Hawaiian, Korean, other (with an identification of the race requested). Only those who indicated white, or whose response to other led the Census Bureau to classify them as white, are included in this study. Native residents of North Africa, the Middle East, or southern Asia are generally white, while white persons in eastern Asia or sub-Saharan Africa are generally descendants of Europeans, Arabs, and Indians.

<sup>16</sup> Although the findings here are for all foreign-born men, similar conclusions emerge when the data are limited to men who migrated at age 18 or later.

percent in the natural logarithm of the geometric mean of earnings (table 1).

*Pooled Sample*

Table 2 presents the regression analysis of earnings for native-born men (col. 1) and for the pooled sample of native- and foreign-born men (cols. 2-4). The coefficient of the foreign-birth variable (FOR) in column 2 implies that, *ceteris paribus*, foreign-born men have weekly earnings 3.0 percent higher than native-born men, in contrast to the simple difference of 1 percent lower earnings. However, the variable FOR is just significant at the 8 percent level, two-tailed test. Thus, on the basis of this regression, one would conclude that there is no significant difference between the earnings of native- and foreign-born men.

When the variable years since migration (YSM) is included in the regression analysis, a quite different picture emerges. The partial effect of foreign birth (FOR) on earnings, evaluated at the mean levels of years since migration and schooling for the foreign born, is still 3 percent (table 2, cols. 3 and 4). However, the sets of foreign-born variables are now highly significant.<sup>17</sup> The rise of earnings with time in the United States, holding constant schooling and total labor market experience, is important for understanding the earnings of the foreign born.<sup>18</sup>

The rise in earnings of the foreign born with time spent in the United States is at a decreasing rate. Other things the same, the earnings of the foreign born are 9.5 percent lower than the native born after 5 years in the country, equal after about 13 years, and 6.4 percent greater after 20 years.<sup>19</sup>

Since the foreign born are neither predominantly very recent immigrants or predominantly long-term residents (nearly half have been in the

<sup>17</sup> Compare the observed *F*-ratios (for the inclusion of the foreign variables) with the critical *F*-ratios at the 1 percent level of significance for 1,000 observations.

TABLE 2	ADDED VARIABLES ( <i>N</i> )	<i>F</i> -RATIOS	
		Observed	Critical
Col. 2 .....	1	3.1	6.66
Col. 3 .....	3	15.0	3.80
Col. 4 .....	4	15.3	3.34

<sup>18</sup> The rise in the earnings of migrants with time in the place of destination has been found for immigrants to Israel (for men, Hovne 1961, p. 45, and Hanoch 1961, chaps. 3-4; and, for women Gronau 1974), Canada (Tandon 1977), and U.S. blacks born in the South who moved to the North (Masters 1972). Masters also found that southern-born blacks living in the North eventually had higher earnings than blacks born in the North, both overall and when other variables are held constant.

<sup>19</sup> From table 2, col. 3, e.g.,  $\partial \ln E/\partial \text{FOR} = -0.1636 + 0.0146 (\text{YSM}) - 0.00016 (\text{YSM})^2$ , and the partial effect is a maximum at YSM equal to 44 years. The predicted percent difference in earnings between the native and foreign born ( $\partial \ln E/\partial \text{FOR}$ ) for different durations since migration are: 1 year, -14.9; 5 years, -9.5; 10 years, -3.4;

TABLE 1  
MEANS AND STANDARD DEVIATIONS, NATIVE- AND  
FOREIGN-BORN WHITE MEN, AGE 25-64, IN 1970

	ALL MEN		NATIVE BORN		FOREIGN BORN	
	Mean	SD	Mean	SD	Mean	SD
Earnings ( \$ ) .....	9,734.09	7,937.94	9,738.13	7,915.25	9,662.01	8,334.20
Log of earnings (hundreds of dollars) .....	4.32	.85	4.32	.85	4.29	.88
Education .....	11.84	3.44	11.90	3.37	10.83	4.46
Age .....	42.93	11.16	42.77	11.11	45.64	11.70
Experience (age - education - 5) ...	26.08	12.43	25.87	12.35	29.81	13.22
Weeks worked .....	48.16	7.94	48.22	7.86	47.16	9.20
Log of weeks worked .....	3.85	.29	3.85	.29	3.81	.34
Rural ( % ) .....	29.39	45.55	30.39	46.00	11.49	31.89
South ( % ) .....	28.03	44.91	28.88	45.32	12.89	33.52
Not "married, spouse present" ( % ) .....	14.76	35.47	14.66	35.37	16.53	37.15
Foreign born ( % ) ...	5.31	22.42	.0	.0	100.00	.0
Years since migration .....	N.A.	N.A.	N.A.	N.A.	21.69	17.60

SOURCE.—U.S. Bureau of the Census 1972.  
NOTE.—N of observations: all, 36,245; native born, 34,321; and foreign born, 1,924.

United States less than 15 years), a regression analysis shows a lack of statistical significance of foreign birth if no effort is made to control for years since migration. As will be shown below, however, in an analysis comparing Cuban immigrants with native-born white men when YSM is not in the equation, the coefficient of the Cuban-birth variable is negative and highly significant. This occurs because a very large proportion of the Cubans are recent arrivals—in 1970, 80 percent were in the United States less than 10 years. The Cuban refugees in the United States 10–15 years have reached earnings parity with the native born. On the other hand, a study of the predominantly long-term immigrants from Russia indicates that they have substantially higher earnings than native- and other foreign-born persons if YSM is not taken into account.

If the lower initial earnings and higher subsequent earnings were due solely to larger investments by immigrants in postschool training during their early years in the United States, the internal rate of return on the earnings difference would be competitive. The rate of return on the earnings difference is low, 5 percent.<sup>20</sup> Thus, when they arrive, immigrants have a lower permanent income (i.e., a lower present value of

13 years, -0.1; 20 years, 6.4; and 30 years, 13.0. When the native born are compared with foreign-born persons who came to the United States at age 18 or later, the earnings crossover occurs at 11 years since migration.

<sup>20</sup> Earnings were evaluated at the mean value of the explanatory variables in the pooled sample, YSM was assumed equal to  $\bar{T}$ , and the postschool earnings stream was assumed to be 40 years long.

TABLE 2  
REGRESSION ANALYSIS OF EARNINGS FOR NATIVE- AND  
FOREIGN-BORN ADULT WHITE MEN, 1970

	NATIVE BORN	NATIVE AND FOREIGN BORN			FOREIGN BORN
	(1)	(2)	(3)	(4)	(5)
EDUC .....	.07154	.07058	.07004	.07164	.05740
	(53.78)	(55.68)	(55.18)	(54.11)	(12.93)
<i>T</i> .....	.03167	.03050	.03071	.03097	.02028
	(22.99)	(22.86)	(22.99)	(23.10)	(3.47)
<i>T</i> <sup>2</sup> .....	-.00052	-.00049	-.00050	-.00051	-.00031
	(-20.77)	(-20.45)	(-20.78)	(-20.93)	(-3.18)
LN WW .....	1.10335	1.10326	1.10169	1.10111	1.07151
	(81.75)	(84.78)	(84.70)	(84.67)	(21.97)
RURALEQ1 ...	-.17222	-.16970	-.17080	-.16915	-.05821
	(-20.28)	(-20.25)	(-20.39)	(-20.18)	(-1.13)
SOUTHEQ1 ...	-.12090	-.12620	-.12530	-.12389	-.21587
	(-14.17)	(-15.01)	(-14.91)	(-14.74)	(-4.38)
NOTMSP .....	-.30647	-.31078	-.30947	-.30874	-.34498
	(-27.76)	(-28.97)	(-28.86)	(-28.79)	(-7.66)
FOR .....	*	.02951	-.16359	.00990	*
		(1.75)	(-4.32)	(0.18)	
(FOR) (YSM)	*	*	.01461	.01555	.01500
			(3.98)	(4.23)	(3.87)
(FOR) (YSM2)	*	*	-.00016	-.00018	-.00019
			(-2.47)	(-2.79)	(-2.82)
(FOR) (EDUC)	*	*	*	-.01619	*
				(-4.23)	
CONSTANT ...	-1.03646	-1.01537	-1.00016	-1.02156	-.78891
Observations					
( <i>N</i> ) .....	34,321	36,245	36,245	36,245	1,924
<i>R</i> .....	.55423	.55455	.55533	.55564	.58194
<i>R</i> <sup>2</sup> .....	.30717	.30753	.30839	.30873	.33866
Standard error	.70900	.71008	.70966	.70949	.71676

SOURCE.—U.S. Bureau of the Census 1972.

NOTE.—*t*-ratios in parentheses; dependent variable: natural logarithm of earnings in hundreds of dollars.

\* Variable not entered.

future earnings) than native-born men with similar measurable characteristics, even though they eventually have higher annual earnings.

For the earnings of the foreign born to exceed the native born eventually suggests that the greater ability, work motivation, or investments in training of the foreign born more than offset whatever earnings disadvantages persist from discrimination against them or from their initially having less knowledge and skills relevant in U.S. labor markets.<sup>21</sup> It also indicates that the total gains from migration are greater the younger the immigrant.

The interaction of the foreign born and the education variables is negative and highly significant (table 2, col. 4). For the native born, an

<sup>21</sup> If immigrants have higher earnings because they are more able or more highly motivated (or for some other unmeasured reason), and if this is, in part, transmitted from one generation to the next, the native-born sons of immigrants would be expected to have higher earnings than the native-born sons of native-born parents. Empirically, other things the same, the native-born sons of immigrants (one or both parents foreign born) have earnings that are 5 percent higher than the sons of native-born parents, and the difference is highly significant ( $t = 4.7$ ). If the mother is native born, a foreign-born father is associated with 8 percent ( $t = 4.1$ ) higher earnings (see Chiswick 1977).

extra year of schooling, other variables the same, raises earnings by 7.2 percent, but for the foreign born only by 5.5 percent.

*Comparing Native- and Foreign-born Regression Coefficients*

The explanatory power of the earnings function is somewhat greater for the foreign born (table 2, col. 5) than for the native born or the pooled sample. A Chow test indicates that for the same set of human capital and demographic variables there is a significant difference in the coefficients of the native- and foreign-born regressions.

The partial effect of a year of schooling for the foreign born is 5.7 percent when years since migration (YSM) is held constant. This is similar to the estimate for the foreign born in the pooled regression analysis. The coefficients of the experience variables ( $T$ ,  $T2$ ) are lower in absolute value for the foreign born, indicating a smaller effect on earnings in the United States of labor market experience prior to immigration. The lower coefficients for schooling and preimmigration experience would arise if the benefits from training are partly country specific.<sup>22</sup> (The lower coefficient of schooling will be discussed in more detail below.)

Among foreign-born persons earnings rise, although at a decreasing rate, the longer one has been in the country (peak at 39 years). The predicted percent increase in earnings ( $\partial \ln E$ ) at different years since migration (YSM) is 1.5 for 1 year; 7.0, 5 years; 13.1, 10 years; 22.4, 20 years; 27.9, 30 years; and 29.6, 40 years (source: table 2, col. 5). Earnings increase with time in the United States by about the same percentage for all schooling levels. Although the education–years-since-migration interaction variable is negative, the coefficient is small ( $-.00019$ ) and is not significant ( $t = -0.79$ ).

The effect on earnings of labor market experience is more complex for the foreign born than for the native born because some of their experience was acquired prior to migration and some afterward. The percent increase in earnings for an additional year of experience can be evaluated at, for example, 10 years of experience ( $T = 10$ ) and 5 years of residency in the United States ( $YSM = 5$ ). For an additional year of experience in the country of origin ( $\partial \ln E / \partial T$ ), the percent increase in earnings is 1.4 for the foreign born and 2.1 for the native born. For those arriving in the United States 1 year earlier but with the same total number of years of experience ( $\partial \ln E / \partial YSM$ ), the percent increase in earnings is 1.3. For foreign-born persons with an additional year of experience in the United States [ $(\partial \ln E / \partial T) + (\partial \ln E / \partial YSM)$ ], the percent increase is 2.7; for the native born, the percent increase is 2.1 (source: coefficients in table 2, cols. 2 and 5). Thus, once they have arrived, earnings rise faster with age for immigrants than for the native born because the effect of acquiring

<sup>22</sup> For a given level of training, however, it is presumably those whose training is the least country specific who have the highest rates of migration. Thus, lawyers have a lower rate of international migration than physicians or mathematicians.

U.S. specific knowledge, contacts, etc., outweighs the weaker effect on their earnings in the United States of experience acquired prior to immigration.

Among native-born white men, earnings are lower in rural areas by a statistically significant 17 percent, but for the foreign born there is no significant difference (table 2, col. 5). The South-non-South earnings differential appears to be larger for the foreign born than for the native born. Upon controlling for country of origin, however, the effect of living in a southern state is similar in magnitude (coefficient =  $-.141$ ,  $t$ -ratio =  $-2.71$ ) and not significantly different from that for the native born. The importance of country of origin arises from the disproportionate number of Mexican and Cuban immigrants in Texas and Florida, and, as will be shown in Section IV, the Mexican and Cuban immigrants appear to have lower earnings than other foreign-born persons.

Men who are single (never married, divorced, or widowed) tend to have lower earnings than married men. The effect is similar for the native and foreign born. Earnings are about 31 percent lower for native-born men who are not married and about 34 percent lower among the foreign born, but the difference is not significant.

#### *Decomposing the Difference in Earnings*

As already noted, the 1969 earnings of the native- and foreign-born men were approximately equal (\$9,700); the earnings of the foreign born were only 1 percent lower. Some variables tend to lower their earnings compared with the native born, while others tend to raise it.

The foreign born have 1 year less of schooling, and this by itself would lower their earnings by about 6 percent. Their lower slope coefficient of schooling would, at the mean, lower earnings by another 8 percent. The fewer number of weeks worked, an average of 47 for the foreign born and 48 for the native born ( $\Delta \ln WW = 0.04$ ), would account for another 4 percent lower earnings for the foreign born. The somewhat smaller percent married among the foreign born has a very small effect; it accounts for about 1 percent lower earnings for the foreign born.

Other variables operate in the opposite direction. The foreign born are older and less concentrated in the South and in rural areas. The effect of the 4 years additional experience is about a 1 percent increase in earnings. Assuming no effect on earnings of rural rather than urban residence for the foreign born, the depressing effect of rural residence for the native born would raise the relative earnings of the foreign born by 5 percent. The smaller proportion of immigrants living in the South raises the relative earnings of the foreign born by 2 percent.

An important difference appears in the intercept which is higher for the foreign born. Although a higher intercept and lower slope coefficients of schooling, experience, and urban/rural residence can arise from random



measurement error in the explanatory variables, this would also imply a lower  $R^2$ . However, for the same set of explanatory variables, the  $R^2$  is higher in the foreign-born analysis.<sup>23</sup>

*The Lower Coefficient of Schooling*

Recall that the partial effect on earnings of a year of schooling is lower for the foreign born than for the native born, 5.7 percent compared with 7.2 percent. One issue that this raises is whether the smaller partial effect is due to schooling acquired abroad.

Although the census reports the total number of years of schooling completed, there is no direct information on the division between schooling pre- and postimmigration. The number of years of schooling received before immigration (EDUCPRE) can be estimated indirectly, however, by assuming that an immigrant was in school continuously from age 5 to the lesser of (a) the age at immigration or (b) the age at which schooling was completed (years of schooling plus 5 years). Schooling after immigration (EDUCPOST) is estimated as a residual, EDUCPOST = EDUC – EDUCPRE. This procedure is likely to underestimate the number of years of schooling after immigration and overestimate schooling prior to immigration.

When years of schooling pre- and postimmigration are treated as separate variables, an extra year of schooling prior to immigration raises earnings by 5.8 percent, while an extra year after immigration raises earnings by 5.0 percent.<sup>24</sup> The difference of about 1 percentage point is

<sup>23</sup> Controlling for EDUC,  $T$ ,  $T^2$ , LN WW, RURALEQ1, SOUTHEQ1, and NOTMSP, the  $R^2$  is .307 for the native born and .331 for the foreign born.

<sup>24</sup> The partial effect of years of schooling in a regression analysis for foreign-born adult white men:

	REGRESSION*		
	1	2	3
EDUC .....	.05740 (12.93)	†	.03343 (2.28)
EDUCPRE .....	†	.05839 (13.01)	†
EDUCPOST .....	†	.04975 (7.34)	–.01041 (–1.78)
EDUCSQ† .....	†	†	.00118 (1.78)
$R^2$ .....	.339	.339	.341

NOTE.— $t$ -ratio in parentheses; sample size is 1,924.  
\* Controlling for  $T$ ,  $T^2$ , LN WW, RURALEQ1, SOUTHEQ1, NOTMSP, YSM, and YSM2.  
† Variable not entered.  
‡ EDUCSQ is the square of EDUC.

small, and it is on the margin of statistical significance (10 percent level, two-tailed test).<sup>25</sup>

The smaller partial effect of schooling for the foreign born may, in part, arise from being raised in a home less familiar with the language and institutions of the United States. Yet if this were an important explanation, the native-born sons of the foreign born would be expected to have a lower coefficient of schooling than the native-born sons of native-born parents. Empirically, however, compared with the sons of native-born parents, the sons of immigrants have about the same level of schooling and an insignificantly higher coefficient of schooling (Chiswick 1977).

The smaller effect of schooling could arise from labor market discrimination against immigrants increasing with the level of schooling, as is hypothesized by Greeley (1976, p. 55). The data, however, do not suggest that the effect of schooling declines with the level of schooling for the foreign born. If anything, there is a slight (barely significant) rise—from 5.6 percent at 10 years of schooling to 6.8 percent at 15 years of schooling. On the other hand, analyses for all adult white men suggest that the partial effect of schooling declines slightly with the level of schooling when weeks worked are held constant (Mincer 1974, chap. 5).

The self-selection of immigrants may be the most telling explanation for the weaker measured effect of schooling. Immigrants tend to be high-ability, highly motivated persons. This is also true of persons with higher levels of schooling. Suppose that among those with little schooling only the most able and most highly motivated migrate, while among those with high levels of schooling the immigrants are drawn more widely from the ability distribution. Then, a regression equation which did not include ability or motivation variables would show an upward-biased intercept and a downward-biased slope coefficient of schooling. Unfortunately, it is not possible to include measures of ability or motivation in the data under study, and data sets with these measures are inadequate for a study of immigrants.

### *Aliens*

About two-thirds of the foreign-born adult white men in the United States in 1970 were naturalized citizens, and the remaining one-third were aliens. Holding constant other variables—schooling, total labor market experience, weeks worked, place of residence, and marital status—aliens (ALIEN) earn 15 percent less than naturalized citizens, and the difference

<sup>25</sup> If years of postschool training in the United States is held constant, instead of the total number of years since migration, the difference between the coefficients of pre- and postimmigration schooling is even smaller and is not significant.

is highly significant.<sup>26</sup> When the number of years since migration (YSM and YSM2) is held constant, however, the ALIEN variable is still negative but is not significant. Aliens earn less than naturalized citizens because on average they have been in the United States for fewer years.

IV. Country of Origin

To analyze the effect of country of origin on earnings for the foreign born, dichotomous variables for country of birth are entered into the regression equation where the excluded group is those born in the British Isles (Great Britain and Ireland).<sup>27</sup> Except for men from the category Canada, Australia, and New Zealand (primarily Canada), all of the country-

<sup>26</sup> The partial effect of being an alien in a regression analysis for foreign-born adult white men:

	REGRESSION*		
	1	2†	3‡
ALIEN .....	.14865	-.06787	-.00278
	(-4.01)	(-1.48)	(-.04)
(ALIEN) (YSM) .....	‡	‡	-.00512
			(-1.34)
R <sup>2</sup> .....	.3364	.3394	.3400

NOTE.—*t*-ratios in parentheses; sample size, 1,924.  
\* Controlling for EDUC, *T*, *T*<sup>2</sup>, LN WW, RURALEQ1, SOUTHEQ1, and NOTMSP.  
† Also controlling for YSM and YSM2.  
‡ Variable not entered.

When ALIEN and (ALIEN) (YSM) are added to the regression equation in table 2, col. 5, the *R*<sup>2</sup> increases from .33866 to .34003, an increase which is not statistically significant.

<sup>27</sup> Partial effect on the natural logarithms of earnings of country-of-origin dichotomous variables:\*

Immigrants	All Countries†	Non-English-speaking Countries‡
Western Europe .....	-.015	§
	(-.23)	
Southern Europe .....	-.030	-.022
	(-.42)	(-.34)
Central Europe .....	-.035	-.011
	(-.47)	(-.16)
Balkans .....	-.107	-.086
	(-1.28)	(-1.08)
Russia .....	-.098	-.082
	(-1.07)	(-.92)
Canada .....	.013	§
	(.19)	

specific regression coefficients are negative but generally are not statistically significant. Earnings differ significantly from the British Isles' immigrants only for those from Mexico, Cuba, and Asia/Africa.

*Mexican, Cuban, and Asian/African Immigrants*

The significantly lower earnings of immigrants from Mexico appears to be a Mexican ethnic-group effect rather than simply a characteristic of first-generation Mexican-Americans. Other things the same, the earnings of first, second, and "third" (third and higher order) generation Mexican-Americans are lower than the earnings of other white men of the same immigrant status. The ethnic-group differential does not appear to narrow the greater the number of generations that have lived in the United States.<sup>28</sup> Otherwise, the patterns observed among men of Mexican origin by immigrant status are similar to the patterns observed among white men in general.<sup>29</sup> For example, when the earnings of Mexican immigrants are compared with those of native-born men of Mexican origin, other things the same, the immigrants initially have substantially lower earnings, their

Immigrants	All Countries <sup>†</sup>	Non-English-speaking Countries <sup>‡</sup>
Cuba .....	-.258 (-2.92)	-.195 (-2.17)
Mexico .....	-.345 (-4.46)	-.340 (-4.58)
Other Latin American countries .....	-.067 (-.73)	-.034 (-.38)
Asia, Africa .....	-.196 (-2.15)	-.172 (-1.91)
<i>R</i> <sup>2</sup> .....	.352	.336
<i>N</i> .....	1,924	1,485

NOTE.—*t*-ratios in parentheses.

\* Controlling for EDUC, *T*, *T*<sup>2</sup>, LN WW, RURALEQ1, SOUTHEQ1, NOTMSP, YSM, and YSM2.

† Excluded country group: British Isles.

‡ Men born in the English-speaking developed countries (Great Britain, Ireland, Canada, Australia, and New Zealand) were excluded from the data. Excluded country group: western Europe.

§ Variable not entered.

|| Includes Australia and New Zealand.

<sup>28</sup> The coefficient of the Mexican-origin dichotomous variable is  $-.34$  in an analysis of white male immigrants (compared with immigrants from the British Isles),  $-.18$  in an analysis of native-born sons of Mexican immigrants (compared with those from the British Isles), and  $-.27$  in an analysis of native-born, Spanish surname sons of native-born parents (compared with native parentage, non-Spanish surname white men). The first and "third" generation coefficients do not differ significantly (see Chiswick 1977).

<sup>29</sup> For a detailed analysis, compare the earnings pattern among first, second, and third generation white male Americans in this paper and Chiswick (1977) with the pattern among Mexican-origin men in Chiswick (1978a).

TABLE 3  
REGRESSION ANALYSIS OF EARNINGS FOR ADULT FOREIGN-  
BORN WHITE MEN WITHIN COUNTRY CATEGORIES, 1970

	BORN IN MEXICO OR NATIVE BORN OF SPANISH SURNAME*		BORN IN ENGLISH- SPEAKING DEVELOPED COUNTRIES†	FOREIGN BORN THAN ENGLISH-SPEAKING DEVELOPED COUNTRIES†	OTHER ENGLISH-SPEAKING DEVELOPED COUNTRIES†
	(1)	(2)	(3)	(4)	(5)
EDUC .....	.03573 (4.01)	.04324 (4.28)	.09217 (5.70)	.05211 (10.27)	.05086 (7.06)
<i>T</i> .....	.01211 (1.15)	.01373 (1.30)	.06139 (5.11)	.01147 (1.67)	.01070 (1.42)
<i>T</i> <sup>2</sup> .....	-.00028 (-1.62)	-.00030 (-1.74)	-.00095 (-4.49)	-.00018 (-1.59)	-.00017 (-1.33)
LN WW .....	1.16436 (12.47)	1.16567 (12.50)	1.06921 (11.39)	1.05887 (18.72)	1.05879 (18.71)
RURALEQ1 ...	-.14442 (-1.72)	-.14008 (-1.67)	-.10296 (-1.30)	-.05025 (-.77)	-.05122 (-.79)
SOUTHEQ1 ...	-.24159 (-3.81)	-.22760 (-3.56)	-.12351 (-1.31)	-.24956 (-4.36)	-.24896 (-4.34)
NOTMSP .....	-.45087 (-5.91)	-.45043 (-5.91)	-.41734 (-5.09)	-.32680 (-6.16)	-.32709 (-6.17)
FOR .....	-.33633 (-2.55)	-.18680 (-1.15)	‡	‡	‡
(FOR) (EDUC)	‡	-.02402 (-1.57)	‡	‡	‡
(FOR) (YSM)	.02715 (2.05)	.03027 (2.26)	.01456 (1.43)	.01877 (4.15)	.01799 (3.25)
(FOR) (YSM2)	-.00033 (-1.38)	-.00038 (-1.59)	-.00004 (-.33)	-.00024 (-3.09)	-.00024 (-3.08)
(EDUC) (YSM)	‡	‡	-.00103 (-2.06)	‡	.00007 (.24)
CONSTANT ...	-.73694	-.84163	-1.48900	-.62107	-.59879
Observations ( <i>N</i> ) .....	804	804	439	1,485	1,485
<i>R</i> .....	.55229	.55424	.63190	.56761	.56764
<i>R</i> <sup>2</sup> .....	.30503	.30718	.39930	.32218	.32221
Standard error	.80627	.80533	.61350	.74032	.74056

SOURCE.—U.S. Bureau of the Census 1972.

NOTE.—*t*-ratios in parentheses: dependent variable: natural logarithm of earnings in hundreds of dollars.

\* For the five Southwestern states Arizona, California, Colorado, New Mexico, and Texas.

† The English-speaking developed countries are Great Britain, Ireland, Canada, Australia, and New Zealand.

‡ Variable not entered.

earnings rise with time in the United States, and equal those of the native born after about 15 years, after which the immigrants have higher earnings (table 3, col. 1).

The finding of significantly lower earnings among Cuban immigrants is modified when the data are examined more closely. In an analysis comparing Cuban immigrants with native-born white men, whether limited to urban Florida, the New York area, or the rest of the country, the Cubans in the United States 10 to 15 years (i.e., who came between

1955 and 1959) have reached earnings equality.<sup>30</sup> However, the Cubans in the United States less than 5 years and more than 15 years in 1970 have low earnings.

The low earnings of the Cubans in the United States less than 5 years is partly spurious and partly real. The year-of-immigration data are for 5-year intervals, and most of the Cubans who came between 1965 and 1969 actually arrived between 1967 and 1969, while the other immigrants were more uniformly spread over the interval. Recall that the first few years in the United States have a big impact on earnings. In addition, an analysis of occupational mobility (Chiswick 1978*c*) suggests that recently arrived refugees experience an initial sharp decline in occupational status and more rapid subsequent upward mobility compared with economic migrants from non-English-speaking countries. The one puzzle in the Cuban analysis is the lower than expected earnings of the small group (10 percent) who came to the United States prior to 1955.

Foreign-born white men from Asia/Africa is a heterogeneous category, and sample sizes become very small when it is split into its regional components. Compared with men from the British Isles, there is no

<sup>30</sup> The partial effect of Cuban birth on earnings in a regression analysis for Cuban- and U.S.-born adult white men:

	REGRESSION*			
	Urban Florida		All Urban Areas†	
	(1)	(2)	(3)	(4)
CUBA .....	-.26914 (-2.50)	‡	-.27878 (-4.66)	‡
YM 1965-69 .....	‡	-.45338 (-2.30)	‡	-.37494 (-2.22)
YM 1960-64 .....	‡	-.22535 (-1.55)	‡	-.15483 (-1.14)
YM 1955-59 .....	‡	.06022 (.19)	‡	.15558 (.73)
YM PRE1955 .....	‡	-.33930 (-.90)	‡	-.54123 (-2.14)
(FL) (CUBA) .....	‡	‡	‡	-.07598 (-.48)
(NY) (CUBA) .....	‡	‡	‡	.00136 (-.00)
R <sup>2</sup> .....	.29589	.29766	.32117	.32333
Native born (N) .....	789	789	23,890	23,890
Cuban born (N) .....	57	57	117	117

NOTE.—CUBA = dichotomous variable equal to unity if born in Cuba; YM = year of immigration intervals; FL = dichotomous variable equal to unity if living in Florida; NY = dichotomous variable equal to unity if living in an SMSA in New York or New Jersey; *t*-ratios in parentheses.

\* Holding constant EDUC, *T*, *T*<sub>2</sub>, LN WW, and NOTMSP.

† Also holding constant FL and NY.

‡ Variable not entered.

difference in earnings for white men from South Asia (coefficient = .043,  $t$ -ratio = 0.26,  $N = 20$ ), but there are weakly significant lower earnings for those from the rest of the region.

*English-speaking and Non-English-speaking Country of Origin*

The regression analysis was also computed separately for immigrants from the developed English-speaking countries (British Isles, Canada, Australia, and New Zealand) and all other countries (see table 3, cols. 3–5).<sup>31</sup> The partial effect of schooling is larger for the immigrants from English-speaking countries, 6.6 percent, compared with 5.2 percent. They also have a much steeper experience-earnings profile, holding years since migration constant. That is, labor market experience acquired in the country of origin is more productive in the United States for immigrants from the English-speaking countries.

There are substantial differences in the effect of years since migration on earnings. Among immigrants from the English-speaking countries, years since migration has no significant separate effect on earnings for those in the middle schooling category (say, 10–14 years). For those who are college graduates, however, earnings tend to decline with YSM, but this may be reflecting the effects of a “job change” rather than adverse effects of Americanization.<sup>32</sup> Essentially, labor market experience in the United States and in the country of origin appears to be equally productive in U.S. labor markets for immigrants with middle and high levels of schooling from the English-speaking developed countries.

The partial effect of schooling declines the longer a cohort of immigrants from English-speaking countries is in the United States; the partial effect is 8.5 percent for YSM = 10 and 6.3 percent for YSM = 30. This occurs because holding constant total labor market experience, the earnings of those with middle levels of schooling are invariant with years in the United States, while the earnings of those with more schooling tend to be lower the longer they have been here. Among other immigrants the effect of schooling on earnings is invariant with time in the United States.

Among the white male immigrants from the non-English-speaking countries, earnings rise at a decreasing rate with years in the United

<sup>31</sup> Among immigrants from Canada, it is not possible to identify French Canadians in the sample from the 5 percent questionnaire.

<sup>32</sup> In their analysis of job mobility among white men in the United States, Bartel and Borjas (1977) found that voluntary job change resulted in an initial increase in earnings, other things the same, but that this increment decreased as time passed. If persons with high levels of schooling from English-speaking countries have no knowledge deficiency compared with native-born men, their migration may be no different than voluntary job change for native-born men in the United States. Combining the findings of Bartel and Borjas with the findings in this study suggests a very high degree of international transferability of the skills of highly educated persons from the developed English-speaking countries.



States, holding constant years of total labor market experience. Compared with the all foreign-born analysis (p. 909), evaluated at  $T = 10$  and  $YSM = 5$ , an additional year of experience in the country of origin has a weaker effect on earnings (only 0.8 percent); an additional year of experience in the United States, total labor market experience held constant, has a larger effect (1.6 percent), and an additional year of post-migration experience raises earnings by 2.4 percent (table 3, col. 4).

## V. Summary and Conclusion

This paper is an analysis of the economic progress, as measured by earnings, of foreign-born white men in the United States. The analysis involves comparisons with the native born and among the foreign born by country of origin, length of time in the United States, and citizenship. The hypotheses developed in Section II are supported by the empirical analyses in Section III and IV. The data base is the *1970 Census of Population*, 1/1,000 sample, 5 percent questionnaire.

Overall, foreign-born adult white men have annual earnings 1 percent lower than the native born. Holding other variables constant (schooling, years of total labor-market experience, area of residence, and weeks worked) the foreign born have weekly earnings that are on average 3 percent higher, but this is at the margin of statistical significance. However, when the number of years since immigration is held constant and is evaluated at the mean, the 3 percent higher earnings are *highly* significant. In an analysis of the earnings of immigrants, the number of years since migration is an important variable, and ignoring it would mask important differences between the native and the foreign born and among the foreign born.

After they arrive, immigrants gradually acquire knowledge of the language, customs, and nature of labor markets in the United States, and these factors tend to raise their earnings. In addition, immigrants make investments in postschool training that are relevant for jobs in the United States. The investments, which are more profitable if they are made without a long delay, depress earnings initially and raise them later on. Immigrants may finance a greater proportion of the investments in their postschool training. Because of the expectation of greater job mobility for immigrants than for the native born as they gravitate to their most productive (high wage) job in the United States, and because employers have less knowledge about them, immigrants would receive less firm-specific training than do the native born, and less of it is financed by the employer. Larger worker-financed investments mean a steeper post-immigration experience-earnings profile, a sharper rise of earnings with years in the United States.

Earnings rise, although at a decreasing rate, with the number of years

in the United States for immigrants from non-English-speaking countries, holding schooling and total labor market experience constant. There is, however, little differential effect of experience in the United States relative to experience in the country of origin for immigrants with middle and high levels of schooling from English-speaking developed countries.

There are aspects of preimmigration labor market experience and of schooling that appear to have country-specific effects on earnings in the United States. The effect of a year of preimmigration labor market experience is lower for the foreign born (especially those from non-English-speaking countries) than a year of experience for the native born. An additional year of schooling for the foreign born raises earnings by 5.7 percent, compared with 7.2 percent for the native born. Among the foreign born, the effect is larger for those from English-speaking countries (6.6 percent compared with 5.2 percent for other immigrants).

The smaller partial effect of schooling on earnings in the United States is an important finding. It is not due to returns from schooling declining with the level of schooling, as the foreign born have 1 year less schooling and among them there is a weak tendency for the effect of schooling to rise with its level. It is not due to a substantially smaller effect on earnings of preimmigration schooling, as the effects of schooling before and after immigration are about the same. The smaller effect of preimmigration schooling may be "explained" by country-specific aspects of the knowledge acquired in school, by a lower quality of foreign schooling, or by the poorer information it provides employers who use schooling as a screen. A more complex story would be needed to interpret the smaller effect of postimmigration schooling. The weaker partial effect of schooling may in part reflect self-selection in migration in which only the most able and most highly motivated of those with little schooling migrate, while those with (or who subsequently acquire) higher levels of schooling came from a broader ability and motivation spectrum.

Upon arrival, immigrants earn on the average substantially less than the native born with similar characteristics. As earnings rise more sharply with postimmigration experience, the earnings gap narrows. Other things the same, 5 years after immigration foreign-born white men have weekly earnings 10 percent lower than the native born, but earnings are approximately equal after 13 years and are 6 percent higher after 20 years. The earnings crossover at 10–15 years appears to be quite robust. Using native-born white men as the base, it emerges for the analysis of all foreign-born white men, foreign-born white men who came at age 18 or older, and the Cuban refugees. An earnings crossover at about 15 years is also found when the Mexican born are compared with native-born men of Mexican origin.

That the foreign born eventually have higher earnings than the native born suggests that they may have more innate ability, are more highly

motivated toward labor market success, or self-finance larger investments in postschool training. The higher earnings may therefore be a consequence of a self-selection in migration in favor of high ability, highly motivated workers, and workers with low discount rates for human capital investments. The ability-motivation hypothesis is consistent with the lower slope coefficient of schooling for immigrants. It is also consistent with the finding that, other things the same, the native-born sons of immigrants (particularly men with a foreign-born father) have higher earnings than the native-born sons of native-born parents.

Some commentators have suggested that aliens are at an earnings disadvantage compared with naturalized citizens. It appears, however, that aliens earn less than naturalized citizens because on average they have been in the United States for fewer years. When the number of years since migration is held constant, there is no significant difference in earnings between the two groups.

Immigrants from Mexico earn significantly less than other immigrants, but this appears to be a characteristic of Mexican-origin men in general, rather than only first generation (immigrants) Mexican-Americans. The Cuban refugees are experiencing an earnings history similar to that of other immigrants. Overall, the Cubans have low earnings compared with the native born because a large proportion are very recent arrivals (80 percent since 1960) and about half of them live in a low income state, Florida. Those who have been in the United States for 10 to 15 years have reached earnings parity with native-born men living in the same area.

The analysis indicates that white male immigrants are generally successful in U.S. labor markets. Although initially they have low earnings, their earnings rise rapidly, particularly during their first few years in the country. After 10–15 years their earnings equal and then exceed that of the native born.

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