

## **Minority Immigrants in the United States: Earnings Attributes and Economic Success**

**F. Nii-Amoo Dodoo**

*Tulane University*

*New Orleans, Louisiana, U.S.A.*

### *Résumé*

Le présent article utilise les données recueillies au cours du recensement de 1980 pour étudier les variances de salaires parmi les hommes qui ont immigré de la Jamaïque, du Mexique et de la Chine. Les résultats indiquent que, même si le processus d'acquisition des gains varie selon l'origine des immigrants, les variances de gains entre les divers groupes peuvent s'expliquer en large partie par des différences de talents. L'étalonnage sert à montrer comment, une fois que les attributs liés au gain sont contrôlés, les différences de gains entre ces groupes disparaissent généralement - ce qui suggère que toute hiérarchie existante est plus une fonction des talents qu'elle n'en est la récompense.

### *Abstract*

In this paper, data from the 1980 census of the population of the United States are used to explore variances in earnings attainment among male immigrants from Jamaica, Mexico and China. The results indicate that even though the earnings attainment process differs by nativity, the earnings variances between the immigrant groups can be explained to a large extent by endowment differences. Standardization methodology is used to show that once these earnings-related attributes are controlled, earnings differences between these groups generally disappear, suggesting that any existing hierarchy is more a function of endowments than it is rewards for these endowments.

**Key Words** — male immigrants, stratification, earnings

Stratification literature heavily documents the hierarchy of the various races in the economic sphere of the United States. Franklin (1981), for example, states that in the struggle for economic equality, native-born Blacks in America have been the most injured, a result of what he refers to as "a well-defined racism." Generally, the Black population in the United States has been relegated to the bottom of the socioeconomic ladder. Farley and Allen (1987) have estimated the economic "cost of being Black" to be considerable. They estimate that, controlling for labour market characteristics, Black males have earnings

that are 19 per cent lower than those of White males. Further, Kaufman (1983) attributes a substantial measure of the earnings gap between Blacks and Whites to discrimination. With increased diversification in the immigrant mix — with respect to country of origin — speculation now abounds regarding ethnic, racial and nativity inequality.

Examining stratification within the Black population, Doodoo (1991) compares earnings of native and immigrant Black males and finds that immigrants are at an 11 per cent earnings disadvantage, net of other factors, which is solely a result of their immigrant status (that is, discrimination). With Blacks in the United States being as low as they are on the economic totem pole, and immigrant Blacks at a significant disadvantage relative to their native-born counterparts, a question arises regarding the relative position of Black immigrants in relation to other immigrant groups.

Generally, immigrants fare worse in the economic sphere when compared to native-born people of the same race (Chiswick, 1978, 1979). With the existing stratification hierarchy in the United States, will Black immigrants be in a worse economic situation than other immigrants? To answer this question, this paper focuses on measuring nativity differences and the extent to which selected earnings-related attributes influence the earnings of three diverse immigrant groups: Jamaican, Chinese and Mexican immigrants in the United States. The three source countries (Jamaica, China and Mexico) are selected primarily because they represent large suppliers of Black, Asian and Hispanic immigrants to the United States.

Differences in earnings attainments among these groups are analyzed in terms of returns to their labour market characteristics. We believe that these labour market characteristics operate differently in the attainment processes of the three groups and hypothesize that the Black immigrants from Jamaica will fare worse than the Mexican and Chinese immigrants, not because Jamaicans have lower levels of earnings-related attributes but because of lower returns to these attributes.

### *Sample*

Differences in earnings among male immigrants from China, Jamaica and Mexico, aged 25 to 64 and employed in 1979, are

analyzed with data from the 1980 five per cent A-sample of the United States Census of Population. The sample includes all Chinese and Black Jamaican immigrants, as well as 70 per cent of the Mexican immigrants (a result of their larger number relative to the other two groups).

Ideally, one should consider more nativity groups, however the data file available for analysis was compiled for a different purpose and did not permit this luxury. Also, with the earnings attainment process being significantly different for males and females, the present analysis is restricted to male immigrants. The samples used in the analysis comprise 1,863 Jamaicans, 6,652 Chinese and 7,598 Mexicans.

### *Regression Framework*

Since immigrants move to enhance the net returns to their labour market characteristics, differences in earnings-related attributes and the market returns to these characteristics are compared across the groups. The market rates of return are obtained by estimating an Ordinary Least Squares (OLS) regression model for each group. The regression model has as its dependent variable the log of hourly wage. Hourly wage is estimated as the quotient of annual earnings and annual hours worked in 1979. Annual earnings are derived as a summation of wage, salary and self-employment earnings in 1979. Annual hours worked are calculated as the product of weeks worked in 1979 and the number of hours usually worked per week. The primary independent variable in the study is nativity measured as a three-category variable — Mexicans, Chinese and Jamaicans, the latter being the omitted category — since the principal focus is on differences in attainment processes between these groups.

Other independent variables include education, which is measured as the number of years of schooling attained. Experience is represented as the respondent's age minus schooling minus six; the assumption is that individuals begin continuous school attendance at age six and directly enter the labour force thereafter. This then measures years of potential labour market experience. The square of labour market experience is included in the analysis to account for the diminishing returns to experience. Acceptably, this measure will approximate labour market experience less accurately for groups that

are prone to higher bouts of unemployment, however the data provide no adequate way to control for this.

These independent variables are included in the analysis because of the roles they play in influencing earnings. To consider the true effects of nativity, it is necessary to control for the different distributions of these variables across the three immigrant groups. English speaking ability is represented as a control variable by a five-category polytomy, with those speaking only English at home being the omitted category. The other categories include people who speak English very well, that is, those who have no difficulty speaking English; people who speak English well, those with only minor speaking problems; people who do not speak English well, those with serious speaking limitations; and people who speak no English at all. Chiswick (1979) suggests that the transferability of an individual's skills to U.S. labour markets is greatly enhanced by increased English speaking proficiency. Consequently, to isolate the effects of education and experience, it is necessary to control for level of English speaking ability.

Wages are known to differ considerably across occupations, and given that these immigrant groups differ significantly along the lines of occupational segmentation, Farley and Allen's (1987) ten-category classification is employed as a control. The relevant categories are executive and managerial; professional; technical; sales; administrative support; protective service; other service; precision production; operators; and the omitted category (individuals engaged in farming, fishing, forestry; household servants; and those failing to report an occupation).

Another structural variable — area of residence — is incorporated into the analysis by controlling for geographical and metropolitan location. Regional and metropolitan differences exist across the country in terms of distribution of earnings and immigrant groups. Geographic location is identified as a four-category polytomy: South, West, North-Central and Northeast (the omitted category). A three-way polytomy is used as a proxy for urban/rural residence; the categories are the central city of the Standard Metropolitan Statistical Area (SMSA) (reference category), non-central city SMSA, and non-SMSA.

Marital status is represented as a dichotomy: ever married (=1) and never married (=0). Being married has long been associated with higher earnings in that marital status is seen as an index of personal and economic stability.

The final variable included in the analysis is time of migration. Many researchers (Borjas, 1982; Chiswick, 1979) have demonstrated the importance of increased time in the host country. Essentially, wages are expected to increase the longer immigrants have been in the United States, since they become increasingly socialized into the workings of the labour market. Year of immigration was the preferred variable for the study, however, census data presents time of migration in five-year categories. A four-way variable is used to represent time of migration, representing immigrants in the 1975-1979 period, the 1970-1974 period, the 1965-1969 period, and those entering prior to 1965 (the omitted category). This variable is used to control for differences in the arrival times of the different groups to the United States.

#### *Standardization Methodology*

In the analysis, a standardization procedure is used to examine whether wage differences are a consequence of differential endowments of labour market attributes, or of differences in the rates of returns to these attributes. Standardization methodology is generally employed in demography to purge differences in, for example, mortality of the effects of age. In such an instance, a standard age distribution is used to evaluate the effects of the different age-specific mortality rates. Consequently, it is possible to identify "pure" mortality differences, that is, those not attributable to differences in age structure.

Analogously, endowment-standardized wages are calculated for the Chinese and Mexican immigrants by multiplying the mean attribute levels of the Jamaican immigrants (the standard) by the regression coefficient (rate of return) of each respective group. In the same vein, coefficient-standardized wages are estimated for the Chinese and Mexicans using their individual mean attributes with the Jamaican coefficient distribution as the standard. The standardization procedure allows the wage differentials between groups to be partitioned into

differences due to (a) endowment differences and (b) rate of return differences.

If wage variances are primarily a result of differences in rates of return, then this suggests that a hierarchy exists based on economic rewards among the groups. On the other hand, if differences are attributable to variances in endowments, then we cannot conclude that any of the groups is worse off with respect to economic remuneration. The substantive questions of import here are (i) What would the wage of Chinese (and Mexican) immigrants be if they had the attribute levels of Jamaicans but were still rewarded at their own remuneration rates? and (ii) What would Chinese (and Mexican) wages be if they retained their attributes but were rewarded for these attributes at the levels of remuneration of Jamaicans?

### *Findings*

Table 1 presents means of labour market characteristics for the three male immigrant groups and indicates wide variances in hourly wage. Chinese immigrants have the highest wage, earning an average of \$8.92 per hour. Jamaican immigrants earn an average of \$8.33 per hour, while the Mexican immigrants earn \$6.56 per hour. However, there also appear to be substantial differences in labour market characteristics among these groups which could explain the observed wage variances. For instance, Chinese immigrants on average have twice as much schooling as Mexican immigrants, although the latter have three years more experience than the Chinese. Jamaican and Mexican immigrants are similar in terms of the amount of labour market experience.

There is substantial variability across the groups in terms of the considered variables. Over 94 per cent of the Jamaicans speak only English at home, and another four per cent have no difficulty speaking English. On the other hand, only two per cent of the Mexicans speak solely English at home, and an additional 17 per cent have no difficulty with the language. Five per cent of the Chinese immigrants speak only English at home, but another 36 per cent have no difficulty speaking English. Such disparities in linguistic ability should contribute to the observed earnings variances.

**TABLE 1. MEANS/STANDARD DEVIATIONS FOR IMMIGRANT MALES AGED 25-64, U.S.A., 1980**

Variable	Jamaicans		Chinese		Mexicans	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Hourly Wage	8.331	13.101	8.918	12.472	6.557	9.664
Education	11.614	3.716	14.004	5.201	7.013	4.324
Experience	23.607	11.990	20.194	13.013	23.859	11.675
Experience Squared	700.951	628.773	577.097	650.969	705.538	657.151
English Speaking:						
No difficulty	.038	.191	.355	.479	.171	.377
Minor problems	.012	.108	.353	.478	.265	.441
Serious limitations	.003	.052	.195	.397	.346	.476
None	.001	.023	.051	.221	.197	.398
Time of Migration:						
1975-79	.210	.407	.248	.432	.232	.422
1970-74	.308	.462	.242	.429	.279	.448
1965-69	.264	.441	.216	.412	.172	.377
Marital Status:						
Ever married	.887	.317	.855	.352	.891	.312
Metropolitan Location:						
Non-SMSA	.015	.122	.025	.155	.080	.272
SMSA (non central city)	.333	.472	.457	.498	.501	.500
Geographic Location:						
North-central	.055	.228	.111	.314	.122	.327
South	.194	.395	.128	.335	.190	.392
West	.038	.192	.439	.496	.681	.466
Occupation:						
Executive, managerial	.075	.263	.153	.360	.030	.171
Professional specialty	.076	.265	.269	.444	.018	.133
Technical	.032	.177	.067	.250	.007	.082
Sales	.045	.208	.065	.246	.022	.148
Administrative support	.097	.296	.046	.210	.028	.164
Protective service	.029	.168	.002	.047	.004	.063
Other service	.099	.299	.025	.157	.180	.385
Precision production Operators	.188	.391	.062	.241	.183	.387
Operators	.247	.432	.069	.253	.411	.492
Total	1863		6652		7598	

Source: U.S. Census of Population, 1980 Public Use Microdata Samples

Notable differences in occupation are also observed. The Chinese immigrants are concentrated at polar extremes of the occupational spectrum: 42 per cent in executive, managerial and professional occupations, and 24 per cent in the omitted category (people engaged in farming, fishing, forestry; household servants; and those failing to report occupations). Mexican and Jamaican immigrants, on the other hand, tend to be concentrated at the bottom of the occupational ladder — 89 per cent of the Mexicans and 65 per cent of the Jamaicans.

Generally, Jamaican immigrants tend to locate in the Northeast United States (71 per cent), while Mexicans concentrate in the West (68 per cent). Chinese immigrants can commonly be found either in the West (44 per cent) or Northeast (32 per cent) regions of the country. Furthermore, the Jamaicans and Chinese usually live in central cities (65 per cent and 52 per cent, respectively), while 58 per cent of the Mexicans live outside central cities. With respect to marital status and migration timing, the data indicate little variation across the three immigrant groups.

Table 2 presents OLS estimates for each of the three groups and a cursory examination of the table shows that glaring differences in rates of return to endowments are observed in English ability, geographic location and occupation. Clearly, the attainment structure is influenced to a varying extent by the model variables for the different groups. Another point worth noting is that the study variables explain a substantially larger amount of the wage variance for Chinese immigrants than they do for Jamaican and Mexican immigrants.

To examine the effects of nativity on wage variances, a nested regression model of wage determinants for a pooled sample of immigrants is presented in Table 3. Here, nativity is presented as a categorical variable, and the intent is to explore the effects of nativity on earnings, net of the model variables. The effects of some of the earnings-related variables are isolated by introducing them into the equation in a stepwise fashion.

Model 1 presents the "gross" effects of nativity and suggests that Mexican wages are 25 per cent lower than Chinese or Jamaican wages. Model 2 introduces the human capital variables — education and experience. Once these are introduced into the analysis, Chinese wages drop to eight per cent below Jamaican and Mexican wages; there is no significant difference between the latter two. This confirms the superiority of the Chinese (and inferiority of the Mexicans) with respect to schooling levels, since there is not much difference in experience across the three groups. These findings are affirmed by Models 4 and 5.

All the variables in the analysis are then included in Model 3. After controlling for labour market characteristics, there are no significant wage differences among the three immigrant groups. This implies that



**TABLE 2. DETERMINANTS OF LOG WAGE FOR IMMIGRANT MALES AGED 25-64, U.S.A., 1980**

Variable	Jamaicans		Chinese		Mexicans	
	b	t	b	t	b	t
Intercept	1.255**	9.327	1.015**	14.897	1.102**	7.694
Education	.023**	3.900	.027**	9.534	.023**	7.883
Experience	.014*	2.305	.015**	5.612	.012**	3.335
Experience Squared	-.000	-1.716	.000**	-5.458	.000**	-2.829
English Speaking:						
No difficulty	.116	1.349	.006	.137	-.026	-.404
Minor problems	.082	.540	-.107**	-2.581	.002	.034
Serious limitations	.146	.464	-.243**	-5.303	-.107	-1.676
None	-.803	-1.135	-.297**	-5.116	-.187**	-2.833
Time of Migration:						
1975-79	-.091	-1.691	-.258**	-9.995	-.251**	-8.757
1970-74	.021	.437	-.134**	-5.405	-.139**	-5.272
1965-69	.095*	1.968	-.070**	-2.830	-.057*	-2.019
Marital Status:						
Ever married	.111*	2.040	.119**	4.570	.124**	4.212
Metropolitan Location:						
Non-SMSA	-.095	-.688	.102	1.832	-.071*	-2.034
SMSA (non central city)	.057	1.466	.151**	7.981	.044*	2.322
Geographic Location:						
North-central	.200**	2.705	.036	1.200	.177	1.617
South	-.117*	-2.485	.027	-.939	-.039	-.359
West	.118	1.366	.127**	6.451	.080	.750
Occupation:						
Executive, managerial	.129	1.649	.316**	10.506	.210**	3.651
Professional specialty	.207*	2.565	.622**	20.082	.254**	3.554
Technical	.244*	2.347	.449**	11.167	.448**	4.040
Sales	-.193*	-2.106	.150**	3.923	.108	1.672
Administrative support	-.095	-1.310	.323**	7.373	.081	1.366
Protective service	-.153	-1.416	.146	.831	-.048	-.339
Other service	-.368**	-5.113	.187**	3.396	.006	.186
Precision production	.082	1.339	.436**	11.437	.235**	7.090
Operators	-.032	-.538	.194**	5.385	.171**	5.831
R-square	.100		.323		.088	
Total	1863		6652		7598	

Source: U.S. Census of Population, 1980 Public Use Microdata Samples

Notes: \*\* - significant at the .01 level

\* - significant at the .05 level

Omitted variables are: Only English speaking at home (English Speaking); Never married (Marital Status); Central city of SMSA (Metropolitan Location); Northeast (Geographic Location); Household servants, farming, fishing, or forestry employed (Occupation).

**TABLE 3. NESTED MODEL OF LOG WAGE DETERMINANTS FOR POOLED SAMPLE OF IMMIGRANTS, U.S.A., 1980**

Variables included in Model	Regression Coefficient	
	Chinese	Mexican
Model 1: None (gross effect)	.035	-.250*
Model 2: Education; Experience	-.080*	.032
Model 3: All Variables	-.067	-.073
Model 4: Education only	-.088*	-.013
Model 5: Experience only	.016	-.249*
Model 6: Migration Timing only	.034	-.253*
Model 7: English Language only	.175*	.044
Model 8: Occupation only	-.083*	-.166*
Model 9: Education, Experience, English Language and Migration Timing	.027	.095*

Source: U.S. Census of Population, 1980 Public Use Microdata Samples

Notes: \* - significant at the .01 level

the wage differentials observed earlier were entirely a consequence of differences in labour market characteristics. A series of models were run in an attempt to disentangle the varying effects of the different variables for the respective groups, and the findings are incorporated in the analysis (for example, Model 4 examines the effect of nativity net of education, and Model 5 isolates the effect net of experience).

The differential effect of migration timing is negligible; comparing the coefficients of Model 6 to those of Model 1 (the gross effects) indicates that there is essentially no difference. English language proficiency, on the other hand, once controlled, improves both the Mexican and Chinese situations relative to the Jamaicans. Essentially, Chinese and Mexican immigrants are at a relative disadvantage (compared to the Jamaicans), and the result is a depression of their wages. Occupation lowers the Chinese wage relative to that of the Jamaicans, indicating the better position of the Chinese of this variable. The Mexican wage improves a little, suggesting that

Jamaicans are slightly better off with respect to occupation than the Mexicans.

When all the variables are simultaneously included in the analysis, the effect improves the economic lot of the Mexicans significantly, bringing them to parity with the Chinese and Jamaicans (the Chinese remain at par with the Jamaicans). Two different processes appear to be operating. First, the Chinese have better labour market characteristics than the Jamaicans, but the advantage of this is offset by a strong depressant effect of the significantly worse language skills of the Chinese. The Chinese/Jamaican wage gap would be even larger was there not such a considerable variance in English speaking ability. Second, the Mexicans do not score better than the Jamaicans in any labour market characteristic measured, and this explains the large (almost two dollar) gap in hourly wage between the two groups.

To understand better how these differences influence the wage variances across the groups, the mean logged wages for the three groups are compared to standardized mean logged wages which employ the Jamaican group as the standard population. To estimate mean logged wages, the coefficients (Table 3) are multiplied by the mean attributes (Table 1), and summed across all variables for each group. The exponent of this sum then becomes the mean logged wage. Panel 1 of Table 4, presents the mean of logged wages (which differs from the mean wage presented in Table 1) for the three groups. Chinese immigrants still have the highest wages of the three groups, but the wage gap between the Chinese and the Mexicans is now a mere 33 cents.

In Panel B, mean logged wages are calculated using the Jamaican endowment levels as the standard. The substantive essence of this is to isolate differences in wages which are attributable to variances in the coefficients or rates of return. Once labour market attributes are standardized, there is a reversal in the hierarchy of wages; now, the order of wages runs from Mexicans (highest) to Chinese (lowest). This suggests that employment rewards favour Mexicans over Jamaican and Chinese immigrants.

Panel C utilizes the Jamaican regression coefficients as the standard to compute standardized mean logged wages for the other two groups. This permits an analysis of wage differentials which are

due to differences in group endowment levels. The difference between Panels 1 and 2 can be summarized as follows: the hierarchy of wages remains the same, but the magnitude of the differences is exacerbated. This emphasizes, once more, the high position of the Chinese immigrants (and low position of the Mexican immigrants) relative to the Jamaicans, as far as labour market characteristics are concerned. Wage differences due to differential endowment of attributes (Panel C) dominate differences due to rates of return (Panel B).

**TABLE 4. COMPUTATION OF MEAN LOGGED WAGES (U.S. \$) FOR THREE IMMIGRANT GROUPS, U.S.A., 1980**

	Jamaicans	Chinese	Mexicans
Panel A: Mean logged wages	6.211	6.507	6.175
Panel B: Endowment standardized mean logged wages (Jamaican attribute standard)	6.211	6.129	6.978
Panel C: Coefficient standardized mean logged wages (Jamaican coefficient standard)	6.211	7.801	5.428

Source: U.S. Census of Population, 1980 Public Use Microdata Samples

### *Conclusion*

This paper set out to identify and explain wage attainments among Chinese, Jamaican and Mexican immigrants in the United States, in an attempt to determine any existing hierarchy in economic returns. Given that (i) there are racial differences in earnings among the native-born populace, which may be ascribed to discrimination, and (ii) immigrants are disadvantaged in the workplace relative to the native born, this study aspired to examine the extent to which certain measured labour

market characteristics could be ascertained to govern wage differences across minority immigrant groups.

The findings suggest that wage variances are large across the groups, but these differentials can generally be explained in terms of differential endowments of earnings-related attributes. Chinese immigrants have far better labour market characteristics than both the Jamaicans and Mexicans, and this contributes to their better economic performance in the labour market. The Chinese are only hampered by their lower (relative to Jamaicans) English language skills. Mexicans, on the other hand, do worse than the other groups — a reflection of their lower levels of labour market characteristics. There is some evidence, however, that the Mexican immigrants are better rewarded for their attributes than are their Chinese and Jamaican counterparts.

More studies of the relative status of immigrant groups are essential to confirm these findings because post-1965 immigrants have become more non-White than before, increasing the racial/ethnic diversity of the United States. Comparative analyses between native and immigrant groups are also required to explore the progress made towards socioeconomic equality.

Particular attention must be paid to collecting data which permit the analysis of the effects of variables such as immigrant-preference categories, employer attitudes, differences in quality of education among immigrant groups, and local labour market characteristics. This should improve analyses of differences in immigrant wages. The author recognizes that the earnings-determination process across groups cannot adequately be addressed by census data alone since the process entails a complex interaction of social, psychological, cultural and economic factors.

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