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ABSTRACT

In this study we find that, independent of English proficiency, Mexican Americans speaking English with an accent tend to earn significantly lower wages than their non-accented peers. This result is of interest to social scientists and policy makers for at least two reasons. First, anti-discrimination laws prevent employers from discriminating against workers on the basis of accent or manner of speaking. Second, immigration reform may have the unintended effect of depressing the wages of Mexican Americans and other Hispanics because the risk-averse employer may incorrectly assume that these workers are undocumented. Additional findings presented here, which suggest that Hispanic groups are uniquely penalized for speaking with an accent, lend support to the latter explanation for the inverse relationship between accent and the earnings of Mexican American men.

ACCENT PENALTIES AND THE EARNINGS OF MEXICAN AMERICAN MEN

Many people in the U.S. speak English with a non-English accent. In recent times, social scientists have begun to explore the potential importance of verbal communication on labor outcomes. Economists and sociologists over the last decade or so, have examined the relationship between English proficiency and earnings. Such scholars have found evidence indicating that English proficiency enhances earnings (Garcia, 1984; Lopez, 1976; McManus, et al., 1983; McManus, 1990; Tienda and Neidert, 1984; Veltman, 1981). These findings suggest that speaking English with proper grammar and reading English fluently (Chiswick, 1991) increases one's value in the labor market. Unfortunately, extant studies have failed to address other significant issues related to the influence of communication ability on earnings. Past studies by default have assumed that individuals with similar levels of English proficiency have the same degree of an accent. However, a person's proficiency may be independent of his accent; that is, a person who is proficient in English may or may not speak with an accent.

The accent-earnings relationship has interesting implications for the study of Mexican American labor markets. The current labor market penalizes employers for hiring undocumented immigrants. An explicit penalty was created by the Immigration Reform and Control Act of 1986 (IRCA). However, an indirect penalty has existed since the end of the Bracero Program in the form of firm production losses and additional rehiring costs deriving from the deportation of undocumented workers. Because of the proliferation of counterfeit citizenship documents, we argue below that the linguistically achieved characteristic of accentedness may provide employers with more relevant information for attributing undocumented status to the potential employee.[1] Because Mexicans represent the largest undocumented group in this

country, Mexican Americans with an accent are more likely to be misidentified as undocumented workers. To what extent, then, are the wages of Mexican Americans with accents affected by these erroneous employer perceptions?

The accent of Hispanics may also be seen as a signaling device used by discriminating employers to identify and distinguish among Hispanics. The "distaste" of employing Hispanics could be positively correlated with accent. Alternatively, employers might "statistically" discriminate against heavy-accent speakers if accent is perceived to be associated with low productivity. Studies investigating the Mexican American-non-Hispanic wage gaps suggest little wage discrimination at the national level (Reimers, 1983; Verdugo and Verdugo, 1984; Cotton, 1985); yet these investigations have failed to take account of the possible heterogeneity of the Mexican American population.[2]

This study examines the extent to which accentedness influences earnings among Mexican Americans. Data for this part of the analysis are taken from the 1979 National Chicano Survey. In addition, this study also examines the magnitude of the relationship between accentedness and earnings across ethnic groups with different types of accents (e.g., Spanish, German, Japanese, etc.). Data from the 1980 Public Use Microdata Sample (PUMS) are used to conduct this part of the study. Finally, the PUMS analysis is used to evaluate the theoretically-derived alternative explanations for the inverse relationship between accent and earnings.

CONCEPTUAL ISSUES

The theory developed to explain the relationship between wages and labor turnover can be used to conceptualize the relationship between accent and earnings. To use this theory, however, we must first establish the link between the accentedness of workers and the perception that employers have

about their immigration status. We start with the notion that, under current immigration laws, hiring undocumented workers increases potential labor costs to employers. Most of these costs result from quasi-fixed labor costs that cannot be recovered when these workers are deported, rather than through IRCA-established fines. Furthermore, we assume that INS officials identify and deport undocumented workers with counterfeit immigration documents. Because the rational employer is well aware of the proliferation of counterfeit immigration documents, he has an incentive to find a relatively more reliable method of determining the legal status of potential workers. We argue that the rational employer will recognize a heavy accent as a more reliable indicator of the national origin of an individual than the person's immigration documentation. Specifically, a Mexican American with a heavy accent may have legal immigration documents, yet the risk-averse employer has the incentive to assume the worker is undocumented.

But why would employers pay Mexican Americans with heavy accents less? The answer to this question has two parts. First, according to the labor-turnover theory, workers with low-attachment levels are paid less, *ceteris paribus*. This follows from the fact that the optimizing firm will receive a lower expected return on its specific training investments from those workers with lower levels of job attachment. Of course, the question is why firms will provide any specific training to workers with low attachments, especially to undocumented workers. One could argue, however, employers would pay these workers less to recover the transaction costs (hiring, rehiring, etc.) resulting from their high probability of deportation.

Second, the job-detachment level of undocumented workers is likely to be higher than that of natives because many of these workers are deported while

working.[3] Because employers misidentify the immigration status of some Mexican Americans with heavy accents as undocumented workers, they assume these workers have the same labor-detachment probability as undocumented workers, leading to the inverse relationship between accent and earnings.

Viscusi (1980) puts forth another reason why the degree of job attachment is associated with wages, a reason which could potentially explain the wage differential between documented and undocumented workers. Consider the case where both undocumented workers and natives have the same absolute level of job attachment. This could result from undocumented workers offsetting the higher probability of their involuntary detachment by being more reliable and motivated. Assume that turnover is costly to firms and that labor-detachment rates are an inverse continuous function of the wage level. The continuity of this function could exist if workers have different costs of changing jobs and different rates of learning about job characteristics. Further assume that the marginal wage cost of reducing labor detachment is the same for both documented and undocumented workers. A firm's incentive to reduce turnover through wage increases will, at the margin, depend on how responsive the worker is to these wage incentives.

The lower earnings of undocumented workers can be explained by the fact that they are less likely to be responsive to wage inducements. Two factors leading to this lower responsiveness come to mind. First, the reactions of undocumented workers to wage incentives are lower, partly because of their exogenously-determined probability of deportation. Second, the high cost of labor-market information arising from poorly established ethnic networks could make undocumented workers less responsive to wage enticements. Interestingly, even though Mexican Americans with heavy accents would favorably respond to

wage incentives, the risk-averse employer would avoid offering higher wages to workers he believes have a chance of being undocumented.

The relationship between accent and earnings also finds friendly theoretical grounds within the human-capital framework. This model is general enough to encompass both the role that accent has as a productivity-augmenting variable and the role of a "taste" for discrimination variable. Accent then becomes very much like other human-capital variables that can be studied using the familiar Mincer-type earnings function (Mincer, 1974) which uses the human-capital model as its theoretical basis.

Intuitively one could argue that majority-language employers, fellow workers, and customers are more likely to understand someone who speaks without an accent than an individual who speaks with a heavy accent, regardless of the individual's fluency in English. As such, those individuals who invest in reducing their accent will reap a positive earnings return. An implication of this argument is that employers will statistically discriminate against heavily accented workers in view of their perception these workers are, on average, less productive. However, this productivity argument is theoretically unappealing because accented workers would, over the long run, be sorted into occupations where accent would be a minimal productivity hinderance. See Cain (1986) for the theoretical objections raised against customer discrimination.

Alternatively, accent could be seen as a proxy for the discrimination taste that employers have for workers who speak with an accent. The relevance of the Becker-type analysis is that accent serves to discount the earnings of workers below their value of marginal product to the extent to which the employer can identify the minority worker. Moreover, the heavier the accent

of Mexican Americans, the lower their wages relative to those of other Mexican Americans, due to greater employer distaste for these workers.

Clearly, both the turnover model and the human-capital model predict an inverse relationship between the accent of workers and their earnings. One important difference between the models is that in the human-capital model, the accent penalty should not differ across ethnic groups, if employers consider all accents equally distasteful. The labor turnover model, however, predicts a differential accent penalty depending on the type of accent. In particular, Spanish accents are more likely to be linked with an undocumented worker status than non-Spanish accents. This follows from the fact that, in the United States, the bulk of the undocumented population comes from Spanish-speaking countries.

THE DATA

To test the above-mentioned hypotheses, this study uses two complementary data sets which provide a representative sample of the Mexican American population for the common year of 1979: the National Chicano Survey (NCS) and the Public Use Microdata Sample (PUMS) of the 1980 census. Along with accent proxies, these surveys contain a host of socioeconomic characteristics that are used to estimate earnings functions. To avoid problems with selectivity bias, the samples from the two surveys include only adult civilian males who earned wages or salaries in 1979.

The NCS represents the richest and most comprehensive data source on Mexican Americans that is currently available. The survey was conducted by Carlos Arce under the auspices of the Institute for Social Research at the University of Michigan. The major purpose of the survey was to collect a

statistically representative and comprehensive data set concerning the social, economic, political, and psychological status of Mexican Americans.

The NCS is a sample of Mexican ancestry households in five Southwestern states (Arizona, California, Colorado, New Mexico, Texas) and the Chicago metropolitan area. This coverage included nearly 90 percent of the Mexican ancestry population living in the U.S. in 1979 (Arce, 1985). Mexican ancestry households were defined as those in which the primary provider, the provider's spouse, or both, were at least of half Mexican ancestry (i.e., at least two of the four grandparents were of Mexican ancestry). Nearly 11,000 households were screened to examine ancestry; of these, almost 1,300 were of Mexican ancestry and 991 interviews were completed. For a detailed description of the sampling design, see Arce and Santos (1982). The interviews were conducted in Spanish or English, depending on the respondent's preference.

Our independent variable of primary interest is accent. Interviewers were asked to evaluate the respondents' accents when speaking English on a scale from zero to one, ranging from "no accent" to "heavy accent". We constructed a dichotomous variable consisting of persons speaking English with "some Spanish accent", a "moderate Spanish accent", and a "heavy" accent (note that non-English speakers were included with those possessing a "heavy" accent" and were assigned a value of one on the accent variable, while those speaking English without an accent were assigned a value of zero).

We also explore the issue of accent and earnings using the rich data source from the well-known 1980 Census PUMS. The major advantage of the PUMS over the NCS is that it contains information from a wide variety of ethnic groups in addition to Mexican Americans and it includes a continuous earnings variable for sampled individuals. The PUMS has the major disadvantage of not

including the accent variable. As a proxy for this measure, however, we use the "Speaks English at Home" variable available in the PUMS. Our rationale is straightforward: those individuals who speak a language other than English at home are more likely to speak English with an accent.

EMPIRICAL RESULTS

We first start with our findings using the NCS. The earnings data from the NCS requires the use of the ordered-probit technique. In the NCS, the dependent variable earnings is only categorized within intervals (e.g., 1-$1999, 2-$2999, . . ., > $30000), with the actual value remaining unobserved and the end interval is open-ended. The application of the OLS method to such cases where the dependent variable is discrete produces inconsistent estimates (Stewart, 1983). We therefore, consider the latent structure of the model as:

$$Y^* = \beta' X + e,$$

$$Y = j$$

where $a_j < \text{income} < a_{j+1}$, $j = 1, 2, 3, \ldots, M$, Y^* is an index function, M is the number of income categories, X is a set of individual characteristics used in a standard earnings function, and for consistency, we define $a_1 = -\infty$ and $a_{j+1} = +\infty$. The index function Y^* is unknown; instead we observed the ranking of the individual's income as given by Y, where a value of one is assigned to the lowest income category. The log-likelihood function to be maximized is:

$$LnL = \sum_{j=1}^{M} \ln\{\phi((a_{j+1} - \beta' X)/\sigma) - \phi((a_j - \beta' X)/\sigma)\},$$

where ϕ is the normal distribution function, and the expression inside {} is the probability for an observation whose dependent variable takes the value j, $P\{Y_t = J\}$. Our sample consists of 182 observations. The data are grouped in 14 intervals (< \$6999, 7-\$7999, 8-\$8999, . . ., 18-\$18999, > \$19000).

Appendix 2 presents the maximum likelihood estimates of two models. The model has the typical concave earnings-experience profile with significant relationships between earnings and experience, experienced squared, education, and cost of living.

Two interesting points emerge from Appendix 2. First, the accent variable (**DACC**) has a significant negative impact on earnings. Thus, Mexican Americans speaking English with an accent tend to have lower earnings than their counterparts speaking English without an accent. Second, the variables of skin color (**DCOLOR**) and English proficiency (**DPRENG**) are not significantly related to earnings, although the relationships are negative.[4] As a robustness check, the models were re-estimated with the combined sample of male and female (N=324), but the results did not change. In addition, re-estimation of the models with only seven income groups (M=7) did not alter this basic conclusion. Appendix 3 presents the likelihood ratio test statistics which show that the accent variable, but not the variables of skin color and English proficiency, is significant.

Further insight concerning the manner in which accent affects earnings may be obtained from Appendix 4. The statistical patterns show that people with accents have lower chances of being in higher income groups. That is, if a person has an accent, his probability of being in the higher income group falls, and the probability of being in the lower income group increases.

Next, we use the PUMS data to determine the extent by which the earnings

of Mexican Americans are affected by their accent. The standard human-capital controls (see Appendix 5) are included in a semi-log earnings function. The natural log of wages is the dependent variable. We control for English proficiency and we recall that a dummy variable distinguishing language spoken at home is included as the accent proxy (does not speak English at home = 1; 0 otherwise). Among Mexican Americans, the accent proxy is negatively and significantly related to earnings. Other things equal, regardless of English proficiency, those who do not speak English at home earn less compared to those speaking English at home. This evidence is consistent with our accent results using the National Chicano Survey. Moreover, it gives our accent proxy a higher degree of reliability.

So far, we have provided strong support for the hypothesized relationship between accent and earnings. It remains to be seen, however, whether this accent penalty is unique to Mexican Americans. Recall that the human-capital model does not necessarily predict an uneven impact across ethnic groups, yet the labor-turnover model suggests that Spanish-speaking groups would have the strongest accent penalties.

Consequently, we compare the earnings of various ethnic groups against a white base group. The base group includes all of the non-Hispanic whites who reported that they do not speak English at home, except for those of German and Italian descent. We delete these two European ethnic groups because we wish to determine if these groups are also penalized for speaking with an accent. The two groups, along with the Chinese ethnic group, contain the largest ethnic populations from non-English-speaking countries in the United States. Appendix 6 contains results from earnings functions using the two standard discrimination techniques: (a) the dummy variable approach that

simply distinguishes between the base and ethnic groups in question, and (b) the decomposition technique which does not accept the possibility that the human-capital returns of the base and the comparison group are equal.[5] The results are fairly uniform for both techniques. The Hispanic groups pay more for speaking with an accent than the two large European groups of Italians and Germans, as well as the Chinese ethnic group.

This interesting finding leads us to speculate on the following. If the accent variable represents a Becker-type "taste" for discrimination variable, then individuals of Hispanic origin who are readily identified through their accent face relatively more labor-market discrimination. However, an alternative explanation is provided by the labor-turnover model. Employers pay less to workers who they believe are undocumented workers. According to this view, the accent penalty does not necessarily reflect discrimination; it could reflect the risk-averse nature of the optimizing employer, who must receive a higher return from undocumented workers to compensate for their labor-turnover risk.

The accent proxy does not provide information on the degree to which the accents of the different ethnic groups differ. The results could also reflect the fact that Hispanic groups have stronger (less understandable) accents than the non-Hispanic groups. Similarly, a Spanish accent may invoke employers' perceptions of lower productivity than other accents. Future research should explore this issue.

CONCLUDING REMARKS

Our results represent a significant addition to the literature on ethnic wage differences that has developed over the last several decades. Previous studies which have concentrated on language-related factors have tended to

focus almost exclusively on English proficiency. The underlying assumption has been that employees could reap economic benefits once they became proficient in the majority-group language. Our findings question such an assumption. We find that, independent of English proficiency, Mexican Americans speaking English with an accent tend to earn significantly lower wages than their non-accented peers. Thus, Mexican Americans are penalized economically for speaking with an accent. Furthermore, in our expanded analysis utilizing PUMS data for various ethnic groups, we find that Hispanics are more likely to be penalized for speaking with an accent (as proxied by speaking a non-English language at home) than the German, Italian, and Chinese ethnic groups.

Our findings point to some clear policy implications. First, under anti-discrimination regulations employers must show a legitimate reason for denial of employment opportunity because of an individual's accent or manner of speaking. Our results suggest, at least for Hispanic ethnic groups, that either: (1) such law is not fully enforced, or (2) some Hispanics are not fully aware of their rights under this law. Second, one of the primary economic intents of immigration reform is to protect those U.S. resident groups, such as Hispanics, who are believed to be adversely affected by unchecked immigration. The findings from this study, however, ironically suggest that such efforts are partly the cause of the depressed earnings of Hispanic groups! Clearly, then, future research which attempts to gauge the benefits of immigration reform should consider its potentially perverse effects on the earnings of legal U.S. workers.[6]

Appendix 1: DEFINITIONS OF VARIABLES

EXP	Work experience (Age-Schooling-6)
EXP^2	Experience squared/1000
ED	Years of schooling
WEEKS	Number of weeks worked per year
COSTL	Cost of living[a]
DCAL	1 = Residing in California, 0 = otherwise
DTEX	1 = Residing in Texas, 0 = otherwise
DNW	1 = Residing in Northwest, 0 = otherwise
DSW	1 = Residing in Southwest, 0 = otherwise (base category)
DCNST	1 = Construction (industry), 0 = otherwise
DDURGD	1 = Durable goods, 0 = otherwise
DMAN	1 = Manufacturing, 0 = otherwise
DTRAN	1 = Transportation, 0 = otherwise
DPER	1 = Personal Service, 0 = otherwise
DPROF	1 = Professional Services, 0 = otherwise
DPUB	1 = Public Administration, 0 = otherwise
DAGFOR	1 = Agriculture and Forestry, 0 = otherwise
DWHOLS	1 = Wholesale and Retail, 0 = otherwise (base category)
DMAR	1 = Currently married, 0 = otherwise
DPRENG	1 = Poor English (spoke none, little, and some English), 0 = Otherwise (base category is well and very well)
DACC	1 = Spoke English with accent (some, more, and heavy), 0 = Otherwise (base category is no accent)
DCOLOR	1 = Skin color (dark, and very dark), 0 = Otherwise (base category is medium, light, and very light)

a This variable comes from the raw price data published by the American Chamber of Commerce Researchers Association ("Inter-City Cost of Living Indicators"). The data were merged with the PUMS and NCS with location data contained in these two data sets. Other researchers have used BLS data for their COL proxy. We use the American Chamber of Commerce data because the BLS data employs a different market basket of goods for western states (Mattila, 1984).

APPENDIX 2: THE MAXIMUM LIKELIHOOD ESTIMATES OF EQUATION (1)

VARIABLES/MODELS	1
CONST	6.469***
	(1.073)
EXP	.026***
	(.008)
EXP^2	-.038**
	(.017)
ED	.029***
	(.010)
WEEKS	.003*
	(.002)
COSTL	.020**
	(.010)
DCAL	.038
	(.091)
DTEX	-.121
	(.075)
DNW	.041
	(.127)
DCNST	.350***
	(.133)
DDURGD	.271**
	(.108)
DMAN	.279**
	(.130)
DTRAN	.257**
	(.124)
DPERS	.167
	(.127)
DPROF	.055
	(.125)
DPUB	.206*
	(.112)
DAGFOR	.113
	(.124)
DMAR	.060
	(.084)
DPRENG	-.122
	(.080)
DACC	-.145**
	(.060)

Appendix 2 continued on next page

Appendix 2 Continued

VARIABLES/MODELS	1
DCOLOR	-.017 (.055)
σ	.106*** (.022)
N	182
Log-likelihood	-33106.71
R^2	.19

Note: *, **, and *** indicate the significance levels at the 10, 5, and 1 percent respectively. The standard errors presented in parentheses are calculated from the heteroscedastic-consistent covariance matrix. The R^2 is calculated in terms of correct predictions.

APPENDIX 3: LIKELIHOOD RATIO TEST FOR THE SIGNIFICANCE TEST OF DPRENG, DACCC, AND DCOLOR

NULL HYPOTHESIS (H_0)	X^2	DECISIONS
βDPRENG = 0	2.184	H_0 NOT REJECTED
βDACC = 0	5.460**	H_0 REJECTED
βDCOLOR = 0	0.000	H_0 NOT REJECTED

Note: ** Significant at the 2.5% level. Similar test results were found for the model with seven income categories.

APPENDIX 4: EFFECTS OF ACCENT ON PROBABILITIES OF BEING IN VARIOUS INCOME CATEGORIES

	P_1	P_2	P_3	P_4	P_5	P_6	P_7	P_8	P_9	P_{10}	P_{11}	P_{12}	P_{13}	P_{14}
No accent (DACC = 0)	.00	.00	.00	.00	.02	.09	.20	.27	.22	.13	.05	.02	.00	.00
Accent (DACC = 1)	.00	.00	.00	.05	.19	.31	.26	.13	.04	.01	.00	.00	.00	.00
Change	.00	.00	.00	.05	.17	.22	.06	-.14	-.18	-.11	-.05	-.02	.00	.00

Note: $P_j = P[y = j]$, $j = 1, 2, \ldots, 14$
= Probability that the individual falls in the J^{th} income group.

APPENDIX 5: RELATIONSHIP BETWEEN ACCENT AND EARNINGS:

PUMS 1980 CENSUS DATA OF MEXICAN AMERICAN EARNINGS

(Dependent variable = Ln Hourly Earnings)

VARIABLE	HOW DEFINED	COEFFICIENT	t-STATISTIC
CONSTANT	———	.837	21.36
EDUCATION	(YEARS OF SCHOOLING)	.038	18.81
EXP	(AGE-EDUCATION-5)	.031	17.63
EXP^2	EXPERIENCE SQUARED	-.0004	-11.99
OCCUPATION:			
PROFESSIONAL	(= 1, 0 = OTHERWISE)	.16	6.21
TECHNICAL	(= 1, 0 = OTHERWISE)	.004	.20
CRAFT	(= 1, 0 = OTHERWISE)	.14	9.44
PERSONAL:			
DISABLE	(= 1, 0 = OTHERWISE)	-.12	-3.87
AMERICAN	(= 1, 0 = OTHERWISE)	.13	7.77
MARRIED	(= 1, 0 = OTHERWISE)	.10	5.84
POOR ENGLISH	(ENGLISH FLUENCY IS "NOT WELL", OR "NOT AT ALL" = 1; 0 = OTHERWISE)	-.17	-10.10
ACCENT	(SPEAKS LANGUAGE OTHER THAN ENGLISH AT HOME)	-.08	-4.14
Adj. R^2 = .12			
N = 14,454			

Note: The base group is Mexican Americans who speak English at home.

APPENDIX 6: COMPARING ACCENT "PENALTY" ACROSS ETHNIC GROUPS (1980 PUMS)

ETHNIC GROUP	DUMMY VARIABLE[a]	DECOMPOSITION[b]
SPANISH GROUPS:		
MEXICAN AMERICAN	-.11**	-.12
PUERTO RICAN	-.16**	-.16
CUBAN	-.13**	-.12
OTHER	-.09**	-.10
EUROPEAN GROUPS:		
GERMAN	-.01	.00
ITALIAN	.03*	.02
OTHER GROUP:		
CHINESE	-.04**	-.04

a Estimated in a Mincer-type earnings function using a base = white group that excludes Italians and Germans.

b Estimated using Oaxaca's decomposition technique. Let m and n stand for Mexican American and non-Hispanic white, respectively. Let the vector of regression coefficients of the standard human capital variables be denoted by **B**, and the vector of means of standard human capital variables be denoted by **X**. Then, the wage differential between the two groups in logarithmic form can be expressed as

$$L_nW_n - L_mW_m = B_nX_n - B_mX_m \quad (1)$$

Rearranging we can decompose the above expression as follows:

$$L_nW_n - L_mW_m = B_n(X_n - X_m) + X_m(B_n - B_m) \quad (2)$$

The first expression on the right side of Equation(2) measures the observed real wage differential component which is explained by the standard human capital variables. The second expression on the right side of Equation (2) measures the "discrimination" component of the wage differential.

NOTES

1. The use of counterfeit documents by illegal aliens was first discovered in 1958. By 1972, the INS had added 17 "Gimmicks" to the documents, each to offset ineffective previous ones which had been falsified as fast as they could be added (Senate Hearings, 1978). According to James J. O'Keefe, Regional Director of the INS in 1977, the ID cards were counterfeited at 140 major sources, all of varying workmanship. These phony cards usually were sold for $250 to $350 each, and in the mid 1970's, about 7,700 counterfeit cards were seized annually (Washington Post, 18 March 1977).

The main provisions of the Immigration Reform and Control Act of 1986 required employers to ask all job applicants for documents to confirm that they were authorized to work in the U.S. The employer is not required to check the authenticity of the documents (Cordosco, 1990).

2. Recent literature suggests that Mexican Americans who are dark and have Indian features earn relatively less (Telles and Murguia, 1990). This type of "phenotypic" discrimination has been found misleading (Bohara and Davila, 1991). Nevertheless, phenotypic discrimination is a legitimate issue.

3. In 1975, 596,796 deportable aliens were located by the INS. 24 percent, or 140,663 of these aliens were Mexican aliens working in agricultural, trades, crafts, and industrial sectors. In 1979, the INS located 133,696 deportable Mexican aliens working in the same sectors.

The widespread availability of fraudulent documents has undermined IRCA 1986. Document fraud provisions were included in the 1990 Immigration Act that allow the INS to seek civil penalties before administrative low judges against those making, using, possessing, or knowingly receiving falsified documents.

4. The reduction of the significance level of DPRENG when DACC and DCOLOR are added may give the impression of a multicollinearity problem. Although it is not entirely unrealistic to suspect a correlation between DPRENG, DACC, and possibly DCOLOR, we do not find such evidence in our analysis. First, the simple correlations among the estimated coefficients of DPRENG, DACC, and DCOLOR are rather low (e.g., $r_{DPRENG,\ DCOLOR} = -.086$, $r_{DPRENG,\ DACC} = -.205$, and $r_{DCOLOR,\ DACC} = -.273$). Second, one of the variables involved (DACC) is still significant. Third, we also adopted the strategy of increasing the sample size (324 including female in the sample) to mitigate the possibility of multicollinearity problem. The basic results did not change.

5. Our decomposition technique assumes that non-Hispanic white males would receive the same wage in the absence of discrimination. This assumption allows us to compare our results with those of other scholars. See Reimers (1983) and Cotton (1985) for a discussion of alternative discrimination assumptions.

6. Several revisions to IRCA 1986 were made by the Immigration Act of 1990 that directly target some of these concerns. This Act requires various anti-discrimination branches of the Federal government to intensify their efforts to disseminate the anti-discrimination provisions of IRCA. The Act also adds various provisions to IRCA to protect workers against potential employer retaliation and treats employer refusal to accept genuine-appearing documents as discrimination. Finally, the Act established civil money penalties for document fraud. It remains to be seen, however, if such revisions to IRCA will have the desired impact of reducing the apparent penalties that some Hispanics pay for speaking with an accent.

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