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## Are enclaves amenities? An empirical investigation in the Southwest United States.

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### *Abstract*

The role of linguistic enclaves in wage determination is investigated for immigrants and non-immigrants. It is hypothesized that enclaves could affect wages positively as an aid to immigrant adjustment, or negatively as an amenity that minority language speakers are willing to pay for, or both. The results suggest that enclaves in the Southwest U.S. primarily operate as an aid to immigrant adjustment.

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The author thanks Melissa Binder and Robert Berrens for their helpful comments

**Citation:** Hand, Michael, (2006) "Are enclaves amenities? An empirical investigation in the Southwest United States.." *Economics Bulletin*, Vol. 10, No. 8 pp. 1-7

**Submitted:** August 29, 2006. **Accepted:** August 30, 2006.

**URL:** <http://economicsbulletin.vanderbilt.edu/2006/volume10/EB-06J00002A.pdf>

## 1 Introduction

Linguistic enclaves – geographic areas where a high proportion of the population speaks a minority language – have long been recognized as an important factor in determining labor market outcomes for immigrants. Enclaves may offer cultural goods, network benefits, and lower communication costs for minority language speakers that can impact employment and wage rates. These impacts may be interpreted as a human capital mechanism (e.g. Chiswick and Miller 1995) or compensating differentials for amenities (Gonzalez 1998; Chiswick and Miller 2005). In short, enclaves could positively or negatively affect labor market outcomes. But it is not clear whether these effects exist for both immigrants and non-immigrants; the focus has historically been placed on immigrant minority language speakers.

The Southwest United States, with its large Hispanic and Spanish-speaking population, provides a unique opportunity to address this gap in the literature. Many Hispanics in the region are Mexican, Central American, and South American immigrants or of immigrant descent. But others are descended from Spanish colonialists that settled the region more than 500 years ago. Some of these communities, where Spanish is the predominant language spoken in the home, are still largely intact in rural Arizona and New Mexico. This heterogeneity provides additional variation in the comparison of immigrants and non-immigrants.

By examining immigrant and non-immigrant wage differentials, this paper investigates the degree to which enclaves operate primarily as an aid to immigrant labor market adjustment as opposed to an amenity that creates a compensating wage differential. A side-by-side estimation of immigrant and non-immigrant wage determination is used to compare the effect of minority concentration directly on wages and on any English-deficiency wage penalty.

## 2 Background

The theory of how enclaves affect wages was formalized in the context of the Spanish-speaking Hispanic population by McManus (1990). His model has two implications. First, deficiencies in English language skills should reduce wages. The intuition here is straightforward since most economic activity in the U.S. is conducted in English. Second, this English-deficiency penalty should decrease as the relative size of the Spanish-speaking enclave increases. That is, as more people in an area speak and conduct economic activity in the minority language, the less important are deficiencies in the majority language.

Independent of the human capital explanation of enclave effects in McManus (1990), enclaves may have amenity characteristics that people value. More recent empirical studies have hypothesized that areas with a high minority concentration provide non-tradable goods, such as ease of communication in the native tongue or access to minority cultural traditions (Gonzalez 1998; Dávila and Mora 2000; Chiswick and Miller 2002; Chiswick and Miller 2005).

Following the intuition of Roback (1982), workers will bid down wages in an enclave until an equilibrium point where utility in the enclave at lower wages is equal to utility outside the enclave at higher wages. The amenity value of the enclave compensates residents for the lower wage.

Most empirical work has focused on immigrant labor market outcomes and immigrant enclaves, likely due to the salience of such areas throughout U.S. history. Immigrants living in enclaves have been shown to acquire fewer English language skills in enclaves, and wages are lower for those not fluent in the dominant language (Chiswick and Miller 1995). Further, the English-deficient wage penalty has been shown to be significantly smaller for those living in an area with a higher minority concentration (Chiswick and Miller 2002). A direct negative effect of enclave residence on wages, supportive of the compensating differential hypothesis, has also been demonstrated for immigrants (Gonzalez 1998; Chiswick and Miller 2005). Taken together, these results provide evidence consistent with McManus' hypotheses, and support the notion of a compensating differential for non-marketed enclave goods. In contrast, Dávila and Mora (2000) found no difference in the English deficiency penalty for immigrants between metropolitan areas along the U.S.-Mexico border, which presumably have higher immigrant concentrations, and other large cities. The authors also demonstrate that wages are lower in border cities as compared to the other large cities.

Non-immigrant enclave effects are less commonly studied. In McManus' (1990) empirical analysis, a population of Hispanic men, regardless of immigrant status, was used to confirm his two main hypotheses discussed above. English deficiency results in a wage penalty that is smaller in areas with a higher concentration of Hispanics. Dávila and Mora (2000) looked at U.S.-born Mexican-Americans separately from immigrants and found a slightly larger English deficiency penalty in borderland cities than other cities. They cited this as evidence of a "mobility trap" created by a compensating differential. The larger deficiency penalty in border cities contrasts McManus' hypotheses and findings; it is not clear in Dávila and Mora why English deficiency should be rewarded with higher wages in areas with smaller Spanish-speaking populations.

Comparisons of immigrant and non-immigrant wage differentials allow for tests of two possible enclave effects on wages. The first hypothesis is that enclaves, through their increased incidence of minority language usage, operate primarily as an aid in immigrant adjustment. Under this hypothesis enclave residence should reduce the English-deficient wage penalty for immigrants but not non-immigrants. That is, immigrants' ability to access job and social networks would improve their labor market performance in enclaves as compared to non-enclaves, but non-immigrants would face relatively similar opportunities in enclaves versus non-enclaves.

The second hypothesis is that minority language speakers value the non-marketed goods and services available in linguistic enclaves; wages are lower, *ceteris paribus*, to compensate

for these amenities. This hypothesis implies that wages are lower in enclaves for all minority language speakers, but it is also possible that the size of this effect varies by immigrant status. A strong immigrant adjustment mechanism may imply that the amenity effect of enclaves is smaller for immigrants than for non-immigrants. On the other hand, it is possible that non-immigrants value enclave amenities less than immigrants. Contemporary models of assimilation suggest that native-born workers are less connected with the minority culture than are immigrants (Alba and Nee 1997; Alba et al. 2002; South et al. 2005), which implies a smaller willingness-to-pay for enclave amenities for non-immigrants than immigrants.

Finally, there is no reason to believe that the two hypotheses are mutually exclusive; enclaves may offer valuable non-marketed goods and services while simultaneously sheltering English-deficient immigrants from a harsh wage penalty outside of the enclave. This is consistent with the findings mentioned above in Chiswick and Miller (1995; 2005) and Gonzalez (1998), but whether both effects exist remains an empirical question. The advantage of comparing immigrants and non-immigrants is that each hypothesis can be evaluated independently and simultaneously.

### 3 Empirical framework and data

The hypothesized effects of enclaves on wages are investigated within the context of a Mincer-type human capital wage equation. The natural log of wages is a function of years of education, years of labor market experience, and experience squared. This empirical model is extended by adding independent variables that control for differences in English language proficiency, concentration of the minority enclave, and the interaction between language proficiency and enclave concentration. The fully-specified model is,

$$\begin{aligned} \ln W_i = & \alpha + \beta_1 EDUC_i + \beta_2 EXP_i + \beta_3 EXP_i^2 + \beta_4 LANG_i + \beta_5 CONC_i \\ & + \beta_6 (LANG_i \times CONC_i) + \gamma' X_i + v_i, \end{aligned} \quad (1)$$

where  $W_i$  is person  $i$ 's hourly wage,  $EDUC_i$  is years of schooling,  $EXP_i$  is years of potential labor market experience,  $LANG_i$  is a binary indicator of language proficiency,  $CONC_i$  is a measure of the minority enclave concentration,  $X_i$  is a vector of other geographic and individual characteristics, and  $v_i$  is the assumed randomly distributed error.

The hypotheses from the previous section can now be formalized using the coefficients from equation (1) for immigrants (I) and non-immigrants (N):

$$\beta_{6I} < 0, \beta_{6N} = 0 \quad (2)$$

$$\beta_{5I} < 0, \beta_{5N} < 0 \quad (3)$$

$$\beta_{5I} \neq \beta_{5N} \quad (4)$$

The first hypothesis implies that the immigrant English-deficient wage penalty is smaller in higher minority concentration enclaves, but that the non-immigrant wage penalty is invariant to concentration. Under the second hypothesis, higher minority concentration enclaves reduce wages for both immigrants and non-immigrants (independent of any language proficiency effect on wages) through a compensating differential for non-marketed goods and services. The last equation tests against the null hypothesis that this differential is the same for both immigrants and non-immigrants.

Equation (1) is estimated using data from the 2000 Public Use Microdata Series (PUMS) for Arizona and New Mexico, 5% sample (Ruggles et al. 2004).<sup>1</sup> PUMS data gives individual responses to the long form of the decennial census and contains a wide variety of personal and household characteristics. The sample was restricted to wage-earning men and women between the ages of 18 and 64 who indicated that Spanish is spoken in their home. Respondents who did not earn wage income, worked fewer than four weeks in 1999, and usually worked fewer than ten hours per week were eliminated from the sample. This sample was created to capture only those workers who are closely tied to the wage-earning labor market. Observations with imputed data were dropped.

The dependent variable in equation (1), natural log of hourly wages, is constructed from reported income and work behavior. That is,

$$W_i = \text{wageinc}_i / (\text{uhrs}_i \times \text{wkswrk}_i) \quad (5)$$

where  $\text{wageinc}_i$  is reported yearly wage income,  $\text{uhrs}_i$  is usual hours worked per week, and  $\text{wkswrk}_i$  is number of weeks worked in 1999.

Brief descriptions of all of the variables appears in table I. The independent variables of interest are language proficiency, minority concentration, and their interaction. Language proficiency is measured by creating a binary variable based on self-reported English proficiency.  $LANG_i$  is equal to one if the respondent reported the ability to speak English “well” or “very well” and equals zero if the respondent speaks English “not well” or not at all.

Enclave concentration is measured by the density of the adult-age population that speaks Spanish at home.<sup>2</sup> The PUMS data, in order to maintain respondent confidentiality, identifies respondents within geographic areas (called Public Use Microdata Areas, or PUMAs) with a population of at least 100,000.  $CONC_i$  is calculated from the full PUMS sample for each PUMA and attached to each individual that resides in a given PUMA. Person weights provided in the PUMS data are used to calculate the density of Spanish speakers in each area.

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<sup>1</sup>Data was accessed from the IPUMS website: [www.ipums.org](http://www.ipums.org), last accessed 6/1/2006

<sup>2</sup>An alternative enclave definition is density of Hispanic population. Using this measure instead of the linguistic enclave measure does not change the empirical results in any important way. Complete results are available upon request.

Other geographic and individual characteristics used as controls are urban residence, race, marital status, and self-reported transit time to work.<sup>3</sup> The human capital variables, education and potential experience, have standard definitions from the literature (see Chiswick and Miller 2005, for example).

The full sample consists of 18,663 observations, of which 7,240 are immigrants and 11,423 are native-born. Approximately 63% of the population lives in Arizona and 35% lives in the greater Phoenix metropolitan area; overall about 56% of the population live in the three urban centers. Summary statistics for immigrants and non-immigrants are presented in table II.

## 4 Empirical results

The purpose of this paper is to determine whether enclaves impact immigrant adjustment in labor markets, are valued for their amenity characteristics, or both. The first step in answering these questions is to determine if the wage equations are different for immigrants and non-immigrants. That is, can the statistical model be estimated on pooled immigrant and non-immigrant data, or must separate models be estimated for each group? This is accomplished by testing the joint null hypothesis that none of the parameters in (1) are affected by immigrant status. The null hypothesis is rejected in all model specifications, meaning that the wage determination parameters are different for immigrants and non-immigrants.<sup>4</sup> All of the results presented below are estimated separately for immigrants and non-immigrants.

The empirical results for immigrants and non-immigrants are presented in tables III and IV, respectively. Equation (1) is estimated separately for men and women, with the results presented in separate panels of the tables. An unexpected result arises with respect to the first McManus hypothesis, that English deficiency should decrease wages. Native-born Spanish speakers, whether men or women, do not appear to suffer a wage penalty for English language deficiency; the coefficient on the LANG variable is never statistically significant for non-immigrants and is sometimes negative. The LANG coefficient for immigrants, however, is always statistically significant and of the expected sign.<sup>5</sup>

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<sup>3</sup>Urban residence is defined as living in one of the three urban counties in the Southwest, Bernalillo County (Albuquerque, NM), Maricopa County (Phoenix, AZ), and Pima County (Tucson, AZ).

<sup>4</sup>See Griffiths et al. (1993, 419) for the formulation of the relevant F-test statistic. Estimation and test results are available upon request.

<sup>5</sup>Note that a positive coefficient for LANG implies an English-deficiency penalty, since LANG equals one if the individual is fluent in English. The alternative interpretation is that there exists an English-proficiency premium. For the sake of consistency, this paper will present the results in terms of the deficiency penalty rather than the proficiency premium.

The hypothesis that the English deficiency penalty decreases as minority concentration increases cannot be rejected for immigrants but is rejected for non-immigrants. The coefficient on the interaction between English proficiency and minority concentration is negative and significant for immigrants but not for non-immigrants. Immigrants in enclaves appear to be insulated from some of the negative wage effects of English deficiency, whereas non-immigrants face relatively similar wages regardless of enclave concentration.

There is little evidence that enclaves have any value as an amenity, at least in a way that is observable in the Southwest labor market. In the fully specified model, neither immigrants or non-immigrants show a statistically significant coefficient on the CONC variable. The coefficient is negative and significant when only CONC is included, but this significance disappears when the LANGxCONC interaction is included in the model.

## 5 Discussion and conclusion

Overall the results tend to support the hypothesis that the labor market effects of enclaves operate as an aid to immigrant adjustment. The only statistically significant effect of minority concentration is the reduced English deficiency penalty for immigrants. Non-immigrants do not seem to bid down wages for access to enclave amenities and do not appear to benefit from the increased access to job or social networks that enclaves may provide to immigrants.

These results reject the idea of a native-born “mobility trap” suggested by Dávila and Mora (2000, 150), where native-born Spanish speakers are “willing to accept lower wages to reside near fellow ethnics and Mexico” and immigrants have a low attachment to any given region. A possible reason for this discrepancy is that it is not clear that Dávila and Mora’s observed reduced non-immigrant returns to English in borderland cities are due to enclave effects. No attempt was made to define borderland cities as enclaves aside from the fact that these cities (e.g. El Paso and San Diego) are traditional immigrant destinations. Enclaves may exist as small pockets of Mexican-American concentration within cities, and aggregating geographically to compare Metropolitan Statistical Areas may mask or alter any true enclave effect on wages.

The results here also contradict, to some degree, Gonzalez’s (1998) observed “price of culture” for Mexican immigrants. Instead of an amenity effect, wage differentials may actually reflect reductions in the language deficiency penalty. The enclave effect cannot be unambiguously identified since the wage regressions in Gonzalez (1998) do not contain any interactions between language proficiency and Mexican immigrant density.

The question now becomes why non-immigrants do not show the same interaction effect between minority concentration and the English premium. The answer to this question likely relates to the fact that there is no observed English premium for non-immigrants. Approximately 96% of non-immigrants in the sample are considered proficient English speakers;

there may not be enough variation in English proficiency among the native-born to identify any English premium that may exist (at least in the available PUMS data). If there is no English premium, then there is no premium for enclave size to have any effect on.

Non-immigrants' English skills may allow them to operate in any type of labor market, whether dominated by English or Spanish speakers. The majority of non-immigrants in the sample have the dual advantages of English proficiency and having been raised in the dominant (i.e. English-speaking) labor markets. This would allow non-immigrants to know of both English- and Spanish-language job networks and have the ability to access either type of network. Thus, the relative labor market opportunities as enclave size varies would be the same since non-immigrants could rely on either language to operate in the labor market; no advantage would exist for residing in a larger Spanish language enclave.

This idea appears to be consistent with the theoretical framework presented in McManus (1990). An English deficiency penalty will exist only "if Spanish speakers have lower per capita capital endowments than English speakers. . ." (McManus 1990, 232). But if the supply of English- and Spanish-speaking non-immigrants is mostly identical in the distribution of skills, as it appears to be in this sample for the Southwest, then the capital endowments will be identical. With respect to McManus' enclave effects on the deficiency penalty, an increase in the relative size of the Spanish-speaking sector where English and Spanish speakers are perfect substitutes implies that the English and Spanish wages are identical.

A topic for future research would be to investigate the role that non-immigrant heterogeneity plays in determining the results. The PUMS data allows respondents to be identified by a binary immigrant status variable, but no further information about a non-immigrant's history is known. Some native-born Hispanics in the Southwest are descended from Spanish colonialists, while others are second or third generation immigrants. It may be that the true heterogeneity of enclave effects is not between immigrants and non-immigrants, but between immigrant-descended Hispanics and Spanish-descended Hispanics. Empirical investigation of this idea could ideally occur with more detailed microdata about family immigration history. At a minimum, some information about the relative densities of immigrant- and Spanish-descended Hispanics by geography would be required; to this author's knowledge, no such data is currently available for large samples suitable for economics research.

To conclude, the estimates of immigrant and non-immigrant wages in the Southwest support the hypothesis that linguistic enclaves aid in immigrant labor market adjustment, but do not exhibit any amenity value that is capitalized in wages. Previous research has focused mainly on immigrant wage outcomes; the results here are based on comparisons of immigrant and non-immigrant wages. While this research confirms the importance of enclave economies for immigrants in the Southwest, it calls into question the existence of a compensating differential for enclave amenities in Southwest labor markets.



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Table I: Descriptions of Variables

| Variable  | Description  | Measured units |
|-----------|--|----------------|
| LnW       | Nat. log of hourly wage (dep. var.)                  |                |
| EDUC      | Yrs. of education                                    | Years          |
| EXP       | Yrs. of potential experience (=age-EDUC-6)           | Years          |
| EXPSQ     | EXP squared  |                |
| MARRIED   | Marital status (=1 if married)                       | binary         |
| URBAN     | Urban residence (=1 if resides in urban county)      | binary         |
| BLACK     | Race category (=1 if Black)                          | binary         |
| NATIVE    | Race category (=1 if Native American, Alaska Native) | binary         |
| ASIAN     | Race category (=1 if Asian, Pacific Islander)        | binary         |
| RACE2     | Race category (=1 if indicated 2 or more races)      | binary         |
| TRAN      | Transit time to work                                 | minutes        |
| LANG      | Language (=1 if speaks English well or very well)    | binary         |
| CONC      | Density of Spanish speakers                          | percent        |
| LANGxCONC | Interaction between LANG and CONC                    |                |

Table II: Summary Statistics

| Variable  | Mean   | Std. Dev. |
|---|--------|-----------|
| <i>a. Non-immigrant men and women (obs.=11,423)</i> |        |           |
| LnWage  | 2.38   | .66       |
| EDUC  | 13.05  | 2.24      |
| EXP   | 19.72  | 12.09     |
| EXPSQ   | 534.89 | 536.82    |
| MARRIED   | .55    | .50       |
| URBAN   | .50    | .50       |
| BLACK   | .007   | .084      |
| NATIVE  | .029   | .17       |
| ASIAN   | .002   | .04       |
| RACE2   | .45    | .50       |
| TRAN  | 18.68  | 18.9      |
| LANG  | .97    | .17       |
| CONC  | 31.3   | 16.11     |
| LANGxCONC   | 30.43  | 16.77     |
| <i>b. Immigrant men and women (obs.=7,240)</i>      |        |           |
| LnWage  | 2.14   | .61       |
| EDUC  | 9.96   | 3.77      |
| EXP   | 20.82  | 11.87     |
| EXPSQ   | 574.44 | 588.66    |
| MARRIED   | .66    | .47       |
| URBAN   | .66    | .47       |
| BLACK   | .005   | .07       |
| NATIVE  | .007   | .08       |
| ASIAN   | .001   | .03       |
| RACE2   | .55    | .50       |
| TRAN  | 18.51  | 19.11     |
| LANG  | .54    | .50       |
| CONC  | 32.9   | 15.9      |
| LANGxCONC   | 16.75  | 19.25     |

Table III: Immigrant wage equation estimates

| <i>a. Men (obs.=4786)</i>   |        |         |        |         |        |         |        |         |
|-----------------------------|--------|---------|--------|---------|--------|---------|--------|---------|
| Variable                    | (1)    |         | (2)    |         | (3)    |         | (4)    |         |
| EDUC                        | .053   | (22.22) | .042   | (16.31) | .041   | (16.15) | .041   | (16.01) |
| EXP                         | .030   | (11.73) | .030   | (11.7)  | .030   | (11.74) | .029   | (11.66) |
| EXPSQ                       | -.0004 | (7.61)  | -.0004 | (7.76)  | -.0004 | (7.82)  | -.0004 | (7.77)  |
| LANG                        |        |         | .191   | (11.1)  | .185   | (10.67) | .304   | (8.2)   |
| CONC                        |        |         |        |         | -.002  | (3.59)  | 0.0    | (.12)   |
| LANGxCONC                   |        |         |        |         |        |         | -.004  | (3.64)  |
| MARRIED                     | .094   | (5.13)  | .094   | (5.15)  | .094   | (5.2)   | .093   | (5.16)  |
| URBAN                       | .097   | (5.56)  | .106   | (6.19)  | .105   | (6.1)   | .103   | (6.02)  |
| BLACK                       | -.154  | (1.28)  | -.158  | (1.33)  | -.165  | (1.39)  | -.164  | (1.38)  |
| NATIVE                      | -.126  | (1.31)  | -.124  | (1.31)  | -.129  | (1.36)  | -.134  | (1.41)  |
| ASIAN                       | -.232  | (.60)   | -.298  | (.78)   | -.335  | (.88)   | -.372  | (.97)   |
| RACE2                       | .015   | (.96)   | .009   | (.54)   | .010   | (.60)   | .011   | (.67)   |
| TRAN                        | .0005  | (1.33)  | .0006  | (1.47)  | .0006  | (1.48)  | .0005  | (1.39)  |
| constant                    | 1.15   | (26.06) | 1.16   | (26.75) | 1.23   | (26.06) | 1.17   | (23.63) |
| R <sup>2</sup>              | .1318  |         | .1536  |         | .1559  |         | .1582  |         |
| <i>b. Women (obs.=2454)</i> |        |         |        |         |        |         |        |         |
| Variable                    | (5)    |         | (6)    |         | (7)    |         | (8)    |         |
| EDUC                        | .057   | (15.35) | .043   | (10.43) | .041   | (9.8)   | .04    | (9.68)  |
| EXP                         | .023   | (6.62)  | .025   | (7.06)  | .025   | (7.17)  | .025   | (7.13)  |
| EXPSQ                       | -.0003 | (3.94)  | -.0003 | (4.37)  | -.0003 | (4.54)  | -.0003 | (4.56)  |
| LANG                        |        |         | .197   | (7.06)  | .188   | (6.72)  | .368   | (6.23)  |
| CONC                        |        |         |        |         | -.004  | (4.67)  | -.0004 | (.36)   |
| LANGxCONC                   |        |         |        |         |        |         | -.005  | (3.47)  |
| MARRIED                     | -.025  | (1.01)  | -.017  | (.68)   | -.017  | (.70)   | -.017  | (.71)   |
| URBAN                       | .119   | (4.81)  | .125   | (5.11)  | .111   | (4.53)  | .105   | (4.28)  |
| BLACK                       | .028   | (.18)   | .008   | (.05)   | -.007  | (.05)   | -.015  | (.92)   |
| NATIVE                      | -.172  | (1.2)   | -.161  | (1.14)  | -.145  | (1.03)  | -.141  | (1.0)   |
| ASIAN                       | -.125  | (.47)   | -.139  | (.53)   | -.179  | (.69)   | -.176  | (.68)   |
| RACE2                       | -.011  | (.45)   | -.022  | (.92)   | -.024  | (1.0)   | -.023  | (.97)   |
| TRAN                        | .002   | (3.07)  | .002   | (2.91)  | .002   | (2.79)  | .002   | (2.87)  |
| constant                    | 1.01   | (15.1)  | 1.02   | (15.48) | 1.18   | (15.94) | 1.08   | (13.62) |
| R <sup>2</sup>              | .1124  |         | .1301  |         | .1378  |         | .1421  |         |

Absolute t-ratios in parentheses.

Table IV: Non-immigrant wage equation estimates

| <i>a. Men (obs.=6073)</i>   |        |         |        |         |        |         |        |         |
|-----------------------------|--------|---------|--------|---------|--------|---------|--------|---------|
| Variable                    | (1)    |         | (2)    |         | (3)    |         | (4)    |         |
| EDUC                        | .081   | (23.52) | .081   | (23.57) | .079   | (23.03) | .079   | (23.04) |
| EXP                         | .034   | (15.02) | .034   | (15.06) | .034   | (15.08) | .034   | (15.09) |
| EXPSQ                       | -.0005 | (9.84)  | -.0005 | (9.86)  | -.0005 | (9.89)  | -.0005 | (9.90)  |
| LANG                        |        |         | -.063  | (1.52)  | -.055  | (1.33)  | .006   | (.08)   |
| CONC                        |        |         |        |         | -.003  | (.557)  | -.0005 | (.21)   |
| LANGxCONC                   |        |         |        |         |        |         | -.002  | (.84)   |
| MARRIED                     | .211   | (12.97) | .211   | (13.0)  | .207   | (12.77) | .207   | (12.75) |
| URBAN                       | .121   | (8.08)  | .120   | (8.01)  | .095   | (6.10)  | .095   | (6.08)  |
| BLACK                       | .112   | (1.40)  | .108   | (1.35)  | .104   | (1.31)  | .103   | (1.29)  |
| NATIVE                      | -.192  | (4.23)  | -.190  | (4.18)  | -.196  | (4.33)  | -.196  | (4.34)  |
| ASIAN                       | -.351  | (2.10)  | -.358  | (2.15)  | -.366  | (2.20)  | -.36   | (2.16)  |
| RACE2                       | .001   | (.07)   | .0004  | (.02)   | .004   | (.29)   | .004   | (.28)   |
| TRAN                        | .002   | (6.02)  | .002   | (5.99)  | .002   | (6.04)  | .002   | (6.03)  |
| constant                    | .815   | (16.48) | .871   | (14.17) | .983   | (15.23) | .923   | (9.51)  |
| R <sup>2</sup>              | .2300  |         | .2303  |         | .2342  |         | .2343  |         |
| <i>b. Women (obs.=5350)</i> |        |         |        |         |        |         |        |         |
| Variable                    | (5)    |         | (6)    |         | (7)    |         | (8)    |         |
| EDUC                        | .106   | (28.96) | .106   | (29.0)  | .106   | (28.81) | .106   | (28.83) |
| EXP                         | .030   | (12.97) | .030   | (13.01) | .030   | (13.03) | .030   | (13.02) |
| EXPSQ                       | -.0004 | (7.95)  | -.0004 | (7.97)  | -.0004 | (7.99)  | -.0004 | (7.99)  |
| LANG                        |        |         | -.087  | (1.85)  | -.086  | (1.82)  | .003   | (.03)   |
| CONC                        |        |         |        |         | -.0005 | (.92)   | .002   | (.86)   |
| LANGxCONC                   |        |         |        |         |        |         | -.003  | (1.03)  |
| MARRIED                     | .055   | (3.43)  | .055   | (3.46)  | .054   | (3.4)   | .055   | (3.42)  |
| URBAN                       | .169   | (10.83) | .170   | (10.87) | .165   | (10.19) | .165   | (10.20) |
| BLACK                       | -.022  | (.20)   | -.025  | (.23)   | -.024  | (.23)   | -.028  | (.26)   |
| NATIVE                      | -.093  | (1.97)  | -.094  | (2.0)   | -.094  | (2.0)   | -.093  | (1.99)  |
| ASIAN                       | -.035  | (.15)   | -.032  | (.14)   | -.029  | (.13)   | -.029  | (.13)   |
| RACE2                       | -.045  | (2.84)  | -.044  | (2.78)  | -.044  | (2.75)  | -.044  | (2.77)  |
| TRAN                        | .004   | (8.68)  | .004   | (8.63)  | .004   | (8.61)  | .004   | (8.63)  |
| constant                    | .343   | (6.34)  | .423   | (6.10)  | .442   | (6.10)  | .354   | (3.14)  |
| R <sup>2</sup>              | .2358  |         | .2362  |         | .2364  |         | .2365  |         |

Absolute t-ratios in parentheses.