

# For Hispanics, Border Wage Gap Reflects Education, English Divide

By Christina English

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**T**he Texas side of the U.S.–Mexico border is one of the nation’s poorest regions, with 30 percent of the people living in poverty, nearly double the national average. In this area, where 86 percent of the population is Hispanic, a wide gap separates the earnings of Hispanics and non-Hispanics.

Low educational attainment is the primary reason Hispanics on the border earn less, but low English fluency also matters. Adjusting for differences in English ability and education all but eliminates the border wage gap between Hispanics and non-Hispanics. This implies that lower overall skills are driving the Hispanic wage deficit along the border and that earnings can be increased by improving both English proficiency and education, particularly the high school completion rate.

## Low Education, Lower Earnings

Hispanic residents along the border are far less educated than their non-Hispanic counterparts and Texans overall. In the border region, about one-third of Hispanics did not complete high school, compared with 7 percent of non-Hispanics, according to the Census Bureau’s American Community Survey (*Chart 1*).<sup>1</sup>

The low number of Hispanics along the border pursuing higher education produces further differences. While more Hispanics than non-Hispanics have only a high school credential (25.8 percent versus 22.3 percent), far fewer have a college degree (15 percent versus 37.9 percent).

Education is highly correlated with wages. College graduates along the border make the most, with average annual earnings of \$71,000 among non-Hispanics and \$50,300 among Hispanics (*Table 1*). Among those with

less than a high school education, annual wages total \$23,300 for non-Hispanics and \$16,700 for Hispanics. In each group, those not completing high school earn only about one-third of college graduates’ wages.

## Drivers of Hispanic Earnings

While the earnings differences based on educational attainment may not be surprising, border wage gaps by ethnicity are remarkably large. The higher wages of non-Hispanics suggest that well-paying jobs exist in border cities, so what is behind the relatively low earnings for Hispanics?

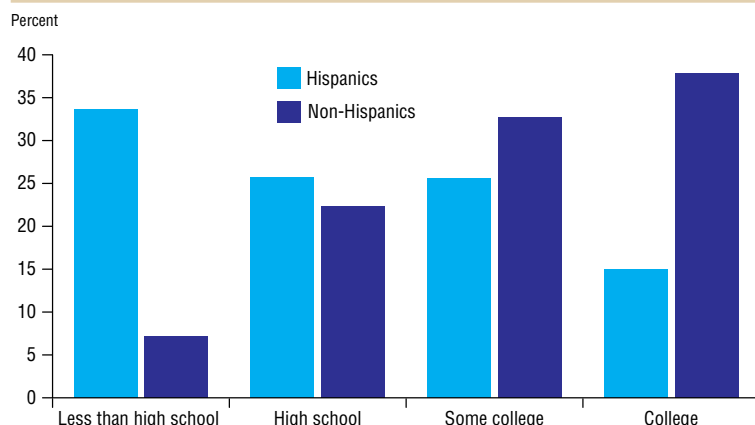
One possible explanation is that 30 percent of Hispanics along the border were born outside the United States, usually in Mexico. Some may be in the country illegally, which likely depresses their wages. Further, college-educated immigrants may have trouble getting their foreign degrees recognized and valued by U.S. employers.

Previous research has suggested Mexican migrants in Texas border cities accept lower wages to be closer to family in Mexico.<sup>2</sup> So while 70 percent of Hispanic residents along the border are U.S. born, they may also have family or relatives in Mexico.

English fluency is another factor potentially limiting Hispanic earnings that hasn’t been fully explored. The American Community Survey queries respondents on English proficiency on a scale of 1 to 5, where 1 is “speaks no English” and 5 is “speaks only English.”

Hispanic border residents rated themselves a 3.2 on average, far lower than the 4.7 reported by non-Hispanic border residents. Even college-educated Hispanic border residents rate their English comparatively low, at 3.8, nearly a full point lower than similarly educated non-Hispanics (4.7). Hispanics along

**Chart 1** On Border, Hispanics Trail Non-Hispanics in Education



NOTE: Data include both native and foreign-born Texas border residents, age 25–64.  
SOURCES: American Community Survey 2009–11; author’s calculations.

**Table 1** Hispanics Along Border Earn Less at Each Education Level

	Hispanics	Non-Hispanics
Less than high school	\$16,700	\$23,300
High school	\$24,600	\$34,900
Some college	\$31,500	\$44,800
College	\$50,300	\$71,000

NOTES: Average yearly wages of people age 25–64 on Texas border who worked full time. Wages are inflation adjusted (expressed in 2011 dollars) and rounded to the nearest 100.

SOURCES: American Community Survey 2009–11; author’s calculations.

the border also rate their English skills slightly lower than Hispanics in the rest of Texas rank theirs (3.5). The difference in English skills is consistent across all education levels and persists even for native-born Hispanics along the border, who rate their skills at 3.7 versus 4.0 in the rest of Texas.

Research has shown limited English proficiency puts certain jobs out of reach, with the least fluent working in relatively low-paying jobs requiring fewer skills.<sup>3</sup>

Poor language skills also may be a reason some Hispanics stay in the Spanish-friendly border area rather than go farther into Texas, where lesser English skills would be a greater day-to-day problem.

### Wage Gap Causes

The wage gap between Hispanics and non-Hispanics illustrates just how much lower Hispanic earnings are across Texas.<sup>4</sup> Table 2, row 1 shows Hispanic

wages along the border and statewide without accounting for worker characteristics that influence earnings power and may narrow differences.<sup>5</sup> At first glance, Hispanic border residents earn about half the wages of non-Hispanics along the border; in the rest of Texas, Hispanics take in 40 percent less than non-Hispanics.

Age and gender do not explain much of the difference in Hispanic earnings. Adjusting for these demographic characteristics leaves the wage gap with non-Hispanics largely unchanged (Table 2, row 2).

Controlling for years of education (Table 2, row 3) drastically reduces the wage gap along the border from 49 percent to 19 percent. This means over half of the observed difference in earnings is due to the lower educational attainment of Hispanic border workers. In the rest of Texas, educational attainment has an even larger

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**Table 2** Lower Education Accounts for Over Half of Hispanic Wage Gap

	Remaining wage gap with local non-Hispanics (percent)	
	Border residents	Non-border residents
<b>Unadjusted</b>	-51	-40
<b>Adjusted for:</b>		
Demographic differences	-49	-42
Add: educational attainment	-19	-6
Add: English skills	-5	-4

NOTE: Average yearly wages of people age 25–64 on Texas border who worked full time.  
SOURCES: American Community Survey 2009–11; author’s calculations.

impact, shrinking the wage gap to 6 percent from 42 percent.

Adding controls for English ability (Table 2, row 4) further shrinks the wage gap for Hispanic border workers from 19 percent to 5 percent, suggesting a lack of English proficiency plays a large part in limiting earnings. But in the rest of Texas, differences in English ability reduce the wage gap only 2 percentage points because average English skills are higher than along the border.

While educational attainment is the primary driver of the wage gap in both locations, English ability is also an important factor along the border. Since controlling for English fluency and education level nearly eliminates the wage difference, Hispanics who work full-time have lower average earnings because the skill gap is so large.

### Potential for Higher Earnings

The impact of more education on the earnings of Hispanic workers along the border can be extrapolated, based on the statistical analysis underlying the results in Table 2. By raising their educational attainment to non-Hispanic levels—holding all other characteristics the same (sex, age, experience, etc.)—full-time Hispanic workers would increase average earnings by \$9,600 a year, a 34 percent jump to \$37,800 from the current \$28,300.<sup>6</sup>

Much of the education difference reflects Hispanics’ lower college graduation rates. The typical Hispanic worker with a full-time job and some college,

but no degree, would increase annual earnings by \$12,700 by completing college—a 38 percent rise to \$46,000 from \$33,300 (see “Hispanic Women on Border Gain the Most from College Degree,” page 19).

Finishing high school also pays dividends. A full-time Hispanic worker on the border with a high school credential (diploma or General Educational Development certificate) could achieve a 72 percent earnings bump, to \$28,700 from \$16,700. This large percentage increase reflects the low earnings power of individuals with less than a high school education (who average just seven years of schooling). Improved English fluency would also raise income, although gains would not be quite as large.

This is a statistical exercise, and the scenarios are hypothetical. The full extent of projected gains won’t likely be attained; even if all Hispanics reached the education levels of non-Hispanics, some jobs would be out of reach without adequate English skills or legal status—something not captured by the data. Also, the statistical review assumes that, except for education, everyone is similar. However, education levels typically reflect other, unobserved factors that influence income, such as ability, family wealth and access to credit.

The hypothetical education increases are therefore likely to overestimate the true impact on earnings. Still, the broader impact on the wage gap is instructive. It is largely the product of education and English fluency, through which a solution also lies.

## Benefits of More Education

Hispanics along the Texas–Mexico border experience poverty rates that are more than double those of non-Hispanics. The income inequality partly results from a cycle of low English skills limiting educational attainment. When passed on to children, this can lead to reduced high school graduation rates among even U.S.-born Hispanics.<sup>7</sup>

Improving English fluency and educational attainment could help narrow the wage gap between Hispanics and non-Hispanics. Boosting Hispanic workers' self-reported English proficiency roughly 20 percent (to 4) and increasing high school attainment (to 12 years from 11.6) would increase annual average earnings 20 percent, or \$5,600.

This suggests policymakers should focus limited resources on improving English-language proficiency and raising the high school completion rate. Children can be targeted through the school system and adults via continuing-education classes.

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## Notes

This article is based on research for "Immigration and Education: Setbacks and Opportunities for Earnings Along the Texas–Mexico Border," by Christina Daly, *Journal of Borderlands Studies*, vol. 27, no. 3, pp. 287–98.

<sup>1</sup> The data are from the U.S. Census Bureau's 2009–11 American Community Survey. The survey yields data on areas with populations exceeding 20,000. The data are organized by Public Use Microdata Area and are deemed to be border if they contain a county that borders Mexico. Mentions of the border refer to the Texas–Mexico border.

<sup>2</sup> See "Mexican Migrants Stay in Border Comfort Zone," by Pia Orrenius and Madeline Zavodny, Federal Reserve Bank of Dallas *Southwest Economy*, May/June 2008, pp. 10–13.

<sup>3</sup> See "English Skills, Earnings and the Occupational Sorting of Mexican Americans Along the U.S.–Mexico Border," by Alberto Dávila and Marie T. Mora, *International Migration Review*, vol. 34, no. 1, 2000, pp. 133–57.

<sup>4</sup> See "Texas' Latino Pay Gaps: Taking a Closer Look," by Emily Kerr, Pia Orrenius and Madeline Zavodny, Federal Reserve Bank of Dallas *Southwest Economy*, First Quarter, 2010.

<sup>5</sup> The log of real yearly earnings among full-time border

workers age 25–64 is used as the dependent variable in least squares regressions on the Hispanic dummy variable (row 1), adding demographic information (row 2), education attainment (row 3) and English skills (row 4). The wage gap is the coefficient of the Hispanic dummy variable.

<sup>6</sup> To calculate the hypothetical wage, the mean of each variable is plugged into the regression equation used to generate Table 2, column 1, row 4. The education means of Hispanics are then replaced with average education for non-Hispanics. The benchmark earnings are simply the unconditional average earnings in the American Community Survey data for the relevant Hispanic population (all full-time Hispanic workers, age 25–64; those with some college; and those with less than a high school education).

<sup>7</sup> See "A Conversation with Richard Fry: Why Hispanic Education Deficits Persist," Federal Reserve Bank of Dallas *Southwest Economy*, First Quarter, 2010, pp. 8–9.

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## Hispanic Women on Border Gain the Most from College Degree

Individuals completing college in the U.S. enjoy a "college premium"—a large increase in earnings over what high school graduates earn.

The premium is particularly significant for Hispanics along the Texas border. Estimates suggest that those who work full-time earn 90 percent more than if they had not received a college degree. The result matches non-Hispanics' experience in the rest of the state.<sup>1</sup> Meanwhile, Hispanic college graduates not on the border earn only 77 percent more than high school graduates, suggesting Hispanics along the border can gain relatively more by obtaining a college education.<sup>2</sup>

Hispanic women along the border have the highest college premium in Texas, earning 105 percent more than if they had not obtained a degree. One possible explanation is the overall scarcity of highly educated workers in the region, which is likely even more pronounced among bilingual Hispanic women.

For example, bilingual teachers along the border are paid more for their ability to communicate with Spanish-speaking students and English-speaking administrators.<sup>3</sup> Farther inland, the shortage of bilingual teachers may not be as large and, therefore, the premium is lower.

## Notes

<sup>1</sup> The college premium is the coefficient on the dummy variable for completing college, compared to the omitted category of high school graduate in least squares regressions with the log of real yearly earnings among full-time border workers age 25–64 as the dependent variable with controls for experience and gender.

<sup>2</sup> Other studies have also found higher returns to education along the border where highly educated workers are more scarce. See "The Border: Is It Really a Low-Wage Area?" by Lori L. Taylor, Federal Reserve Bank of Dallas *Border Economy*, June 2001, pp. 6–8.

<sup>3</sup> See "Districts Seek Bilingual Education Teachers in Mexico," by Cynthia Garza, *Houston Chronicle*, Feb. 21, 2007, [www.chron.com/news/houston-texas/article/Districts-seek-bilingual-ed-teachers-in-Mexico-1828254.php](http://www.chron.com/news/houston-texas/article/Districts-seek-bilingual-ed-teachers-in-Mexico-1828254.php).