Hispanics in the Michigan Labor Market

Leonidas Murembya, Rene Rosenbaum, Eric Guthrie

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Disclaimer: The opinions expressed in this article are those of the authors only and do not engage the institutions they work for, namely Michigan State University and the State of Michigan (Bureau of Labor Market Information and Strategic Initiatives).

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Research Questions

- How do the unemployment, employment, and labor force participation of Hispanics in Michigan look like?
- What factors contribute to labor market participation of Hispanics in Michigan?
  - Do the usual factors of demographics (age, citizenship, gender, nativity), and of human capital (educational attainment, English proficiency, years of stay) affect this group’s chances of being employed relative to Whites non-Hispanic?
- In what type of employment (e.g., part-time vs. full-time, low vs. high-paying industries or occupation, self-employment) are Hispanics more likely to be employed?
Theories

- The classical theory - individuals supplying labor services for pay must choose between work and leisure, based on three things:
  - the opportunity cost of leisure,
  - one’s level of wealth (including government transfers), and
  - one’s preference between leisure and work.

- Job search models - a jobseeker maximizes a discounted sum of future utility flows, subject to a budget constraint and a random job offer process. Under several assumptions, there exists a unique reservation wage such that only wage rates above it are accepted (Bloemen, Hans G. (1997); Devine, Theresa J. and Nicholas M. Kiefer (1993); Van Den Berg, Gerard J. (1990)).
Empirical Studies

- Most of the gap in labor market outcomes between Hispanics and Whites is attributable to differences in human capital measurements, namely the educational attainment, English proficiency, and work experience:

Empirical Studies

- There is a positive link between earnings, employment and labor force participation of migrants with time spent in the place of destination and citizenship status (Hovne 1961; Hanoch 1961, Gronau 1974, Mason 2016, Chiswick 1978, Tandon 1977, Zhen Y. 2012).
The unemployment rate of Hispanics in Michigan rose faster than average during the 2009 recession but has displayed a faster recovery since then.
The employment rate of Hispanics in Michigan has been above average over the 2005-2016 period. The gap widened from two to over five percentage points recently (2012-2016).

Over the 2005-2016 period, Latinos in Michigan displayed an above-average labor force participation rate at a range of between five and seven percentage points.

The participation rate of the overall population has steadily declined over this period;

The Par rate for Hispanics has been flat for the most part and has been rising since 2012. This period also coincides with a substantial increase in the Hispanic population in the state.

Since the end of the 2009 recession, industry employment of Michigan’s Hispanics has grown over three times faster than the rate of payroll employment expansion for non-Hispanic population.

**Source:** 1) U.S. Census Bureau, American Community Surveys 1-Year Estimates, 2005 – 2016; 2) U.S. Census Bureau, Longitudinal Employer-Household Dynamics, Quarterly Workforce Indicators, 2005 – 2016 (Third Quarter)
Microeconomic Analysis of Hispanics Labor Market Status in Michigan

- How do the different human capital variables and Hispanics demographics affect Hispanics’ employment and labor force status?

**Human Capital**
- Educational attainment (years of schooling);
- English proficiency;
- Duration of stay since immigration;
- Citizenship.

**Demographics**
- Foreign-born vs. U.S.-born;
- Country of origin: Mexican and Other Central and South American (Cuban, Puerto Rican, etc.);
- Generational differences (1st and 2nd+);
- Gender;
- Race.
The mean average years of schooling for Hispanics as an aggregate group is lower than for any other groups in comparison (Whites, Blacks, and Asians) and across all categories considered of nativity (U.S. or foreign-born) and gender (male and female).

Mexicans have the lowest average years of schooling across the board.

- Mexican men born outside the U.S. have an educational attainment equivalent to a little over 10th grade.

Table 2-1: Average Years of Schooling, by Gender, Detailed Ethnicity, and Nativity (Universe: Population 25 - 64 Years Old)

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Men, by Nativity</th>
<th>Women, by Nativity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All U.S.-Born</td>
<td>Foreign-Born</td>
</tr>
<tr>
<td>Whites</td>
<td>13.5 13.6 12.9</td>
<td></td>
</tr>
<tr>
<td>Blacks</td>
<td>12.6 12.5 14.4</td>
<td></td>
</tr>
<tr>
<td>Asians</td>
<td>15.9 15.1 16.2</td>
<td></td>
</tr>
<tr>
<td>All Hispanics</td>
<td>12.3 12.3 12.8</td>
<td></td>
</tr>
<tr>
<td>Mexicans</td>
<td>11.6 12.6 10.2</td>
<td></td>
</tr>
<tr>
<td>All Other</td>
<td>12.7 13.3 11.7</td>
<td></td>
</tr>
<tr>
<td>Hispanic/ Latino</td>
<td>12.7 13.3 11.7</td>
<td></td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, American Community Survey 1-Year Estimates 2015, 1% Public Use Microdata Samples (PUMS)
Overall, Hispanics display much higher proportions of individuals that speak English less than very well than any other group being considered, for both men and women. This is even more pronounced for Mexicans.

The share of foreign-born Hispanic men that speak English less than very well is about 10 percentage points higher than that of Whites in the same category, over 40 percentage points over Blacks, and about 18 points over Asians.

Figure 2 - 1 Percentage of Men and Women Speaking English Less than Very Well, by Race, Ethnicity, and Nativity (Universe: Population 25 - 64 Years Old that Speak Another Language besides English)
Duration of Stay and Naturalized Citizenship

• Hispanics have the lowest share of foreign-born individuals who are naturalized U.S. citizens (28 percent for men and 33 percent for women).

• Within this group, Mexicans display the highest proportion of 75 percent for both men and women who migrated to America but are not naturalized citizens. This is in contrast with foreign-born Whites (non-Hispanics) whose majority is naturalized citizens.

Figure 2-2 Percentage Foreign-born Naturalized Citizens by Gender, Detailed Ethnicity, and Race (Universe: Population 25 - 64 Years Old)
### Employment Rates by Ethnicity and Race, and Nativity

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>All U.S.-Born</th>
<th>Foreign-Born</th>
<th>All U.S.-Born</th>
<th>Foreign-Born</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whites</td>
<td>77%</td>
<td>77%</td>
<td>83%</td>
<td>68%</td>
</tr>
<tr>
<td>Blacks</td>
<td>56%</td>
<td>55%</td>
<td>86%</td>
<td>61%</td>
</tr>
<tr>
<td>Asians</td>
<td>82%</td>
<td>67%</td>
<td>85%</td>
<td>63%</td>
</tr>
<tr>
<td>All Hispanics</td>
<td>78%</td>
<td>71%</td>
<td>88%</td>
<td>61%</td>
</tr>
<tr>
<td>Mexicans</td>
<td>80%</td>
<td>73%</td>
<td>90%</td>
<td>60%</td>
</tr>
<tr>
<td>All Other Hispanic/ Latino</td>
<td>73%</td>
<td>67%</td>
<td>82%</td>
<td>65%</td>
</tr>
</tbody>
</table>
Effects of Human Capital and Demographics on Employment

Estimation Equation:

\[ Y_i = \beta_0 + \sum_{k=1}^{k} \beta_k HC_{ik} + \sum_{j=1}^{j} \gamma_j Demo_{ij} + \mu_i \]  \quad (1)

- \( Y_i \) is binary expressed as 1 if the individual is employed and 0 if not employed. It is assumed that \( Y \) is not the product of data censoring.
- \( HC \) is a vector of Human Capital covariates, including educational attainment, age (to capture work experience), number of years since migration, and English proficiency.
- \( Demo \) represent a series of dummy variables representing demographic characteristics such as gender, race/ethnicity (white being the control group), nativity, and citizenship status. Ethnicity can further be divided into Mexican and other Hispanics.
Denote $y_i$ as a realization of a random variable $Y$ (participation in the labor force) such that $y_i$ takes the value 1, with a probability $\pi_i$ and 0, with a probability $1 - \pi_i$. The random variable $Y$ follows a Bernoulli distribution of the form:

$$P\{Y = y_i\} = \pi_i^{y_i} (1 - \pi_i)^{1-y_i}$$

(2)
## Effects of Human Capital and Demographics on Employment

### Controlled Variables

#### Age
- Male: Controlled Variables
  - Nativity
    - Race-Ethnicity: U.S.-born, Foreign-born
  - Hispanic-All: -6.4%, 5.8%
  - Mexicans: -5.5%, 8.0%
  - Other Hispanics: -8.1%, -2.0%
  - Blacks: -23.0%, 3.5%
  - Asians: -14.0%, 3.3%

#### Education
- Male: Controlled Variables
  - Nativity
    - Race-Ethnicity: U.S.-born, Foreign-born
  - Hispanic-All: -3.4%, 10.0%
  - Mexicans: -1.7%, 12.4%
  - Other Hispanics: -7.2%, -0.7%
  - Blacks: -18.8%, 2.2%
  - Asians: -20.2%, 0.1%

#### English Proficient
- Male: Controlled Variables
  - Nativity
    - Race-Ethnicity: U.S.-born, Foreign-born
  - Hispanic-All: -6.0%, 6.3%
  - Mexicans: -5.0%, 8.4%
  - Other Hispanics: -7.5%, -1.5%
  - Blacks: -23.0%, 2.3%
  - Asians: -13.5%, 2.9%

#### Duration of Stay
- Male: Controlled Variables
  - Nativity
    - Race-Ethnicity: U.S.-born, Foreign-born
  - Hispanic-All: 1.4%, 1.7%
  - Mexicans: -3.8%, -7.3%
  - Other Hispanics: -1.2%, -0.8%
  - Blacks: -9.5%, 19.7%
  - Asians: 3.3%, 4.5%

#### Citizen
- Male: Controlled Variables
  - Nativity
    - Race-Ethnicity: U.S.-born, Foreign-born
  - Hispanic-All: 1.5%
  - Mexicans: 1.3%
  - Other Hispanics: 1.1%
  - Blacks: 18.8%
  - Asians: 2.9%

### Female

#### Age
- Female: Controlled Variables
  - Nativity
    - Race-Ethnicity: U.S.-born, Foreign-born
  - Hispanic-All: -3.2%, -7.7%
  - Mexicans: -4.5%, -9.4%
  - Other Hispanics: -0.2%, -0.8%
  - Blacks: -9.4%, 19.0%
  - Asians: 2.6%, 4.9%

#### Education
- Female: Controlled Variables
  - Nativity
    - Race-Ethnicity: U.S.-born, Foreign-born
  - Hispanic-All: 0.3%, -0.9%
  - Mexicans: -0.5%, -1.9%
  - Other Hispanics: 1.9%, 1.4%
  - Blacks: -6.8%, 17.2%
  - Asians: -3.7%, 2.3%

#### English Proficient
- Female: Controlled Variables
  - Nativity
    - Race-Ethnicity: U.S.-born, Foreign-born
  - Hispanic-All: -2.4%, -6.0%
  - Mexicans: -3.8%, -7.3%
  - Other Hispanics: 1.2%, -0.8%
  - Blacks: -9.5%, 19.7%
  - Asians: 3.3%, 4.5%

#### Duration of Stay
- Female: Controlled Variables
  - Nativity
    - Race-Ethnicity: U.S.-born, Foreign-born
  - Hispanic-All: -1.4%
  - Mexicans: -1.7%
  - Other Hispanics: -0.3%
  - Blacks: 17.8%
  - Asians: 2.6%

#### Citizen
- Female: Controlled Variables
  - Nativity
    - Race-Ethnicity: U.S.-born, Foreign-born
  - Hispanic-All: 1.5%
  - Mexicans: 1.3%
  - Other Hispanics: 1.1%
  - Blacks: 18.8%
  - Asians: 2.9%
Employment Odd Ratios* Relative to Whites, by Gender, Detailed Ethnicity, and Nativity (Universe: Population 25 - 64 Years Old)

<table>
<thead>
<tr>
<th>Controlled Variables</th>
<th>Age</th>
<th>Education</th>
<th>English Proficient</th>
<th>Duration of Stay</th>
<th>Citizen</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Race-Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanics -All</td>
<td></td>
<td>0.7</td>
<td>1.6</td>
<td>0.8</td>
<td>2.2</td>
</tr>
<tr>
<td>Mexicans</td>
<td></td>
<td>0.7</td>
<td>2.0</td>
<td>0.9</td>
<td>2.7</td>
</tr>
<tr>
<td>Other Hispanics</td>
<td></td>
<td>0.7</td>
<td>0.9</td>
<td>0.7</td>
<td>0.9</td>
</tr>
<tr>
<td>Blacks</td>
<td></td>
<td>0.3</td>
<td>1.3</td>
<td>0.4</td>
<td>1.2</td>
</tr>
<tr>
<td>Asians</td>
<td></td>
<td>0.5</td>
<td>1.3</td>
<td>0.3</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Odd Ratios represent the ratio of the probability of employment for a group relative to the probability for Whites.
Self-employment

- Hispanics’ display self-employment rates that are about half of the rates for Whites and Asians and similar to those of Blacks.

- Also, overall, self-employment is higher for males, regardless of race/ethnicity and nativity.

Table 2-6: Self-Employment Rates by Gender, Detailed Ethnicity and Race, and Nativity
(Universe: Population 25 - 64 Years Old)

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Men, by Nativity</th>
<th>Women, by Nativity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All U.S.-Born Foreign All U.S.-Born Foreign</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Born -Born</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Born -Born</td>
</tr>
<tr>
<td>Whites</td>
<td>12% 11% 15%</td>
<td>7% 7% 9%</td>
</tr>
<tr>
<td>Blacks</td>
<td>5%  6%  3%</td>
<td>4%  3%  7%</td>
</tr>
<tr>
<td>Asians</td>
<td>10% 12% 9%</td>
<td>10% 8% 10%</td>
</tr>
<tr>
<td>All Hispanics</td>
<td>6%  7%  6%</td>
<td>3%  3%  1%</td>
</tr>
<tr>
<td>Mexicans</td>
<td>6%  5%  6%</td>
<td>1%  2%  N/A</td>
</tr>
<tr>
<td>All Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic/ Latino</td>
<td>8% 11% 4%</td>
<td>6% 6% 4%</td>
</tr>
</tbody>
</table>
While the occupational employment distribution of Native Hispanics is somewhat similar to that of Whites and Blacks (below 25 percent), the reverse is observed when compared to Asians across both genders and nativities (between 39 and 60 percent).

Also, the occupational employment distribution of foreign-born Hispanics and sub-groups is quite different from that of Whites, Blacks, or Asians (between 22 and 60 percent).

Table 2-7: Occupational Dissimilarity Index between Hispanics and Other Racial Groups by Gender, Hispanic Sub-groups, and Nativity (Universe: Population 25 - 64 Years Old)

<table>
<thead>
<tr>
<th>Racial Groups</th>
<th>Men</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Women</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Native</td>
<td>Foreign</td>
<td>Native</td>
<td>Foreign</td>
<td>Native</td>
<td>Foreign</td>
<td>Native</td>
<td>Foreign</td>
<td>Native</td>
<td>Foreign</td>
</tr>
<tr>
<td>Hispanics</td>
<td>18.9</td>
<td>32.1</td>
<td>21.6</td>
<td>38.9</td>
<td>24.7</td>
<td>22.1</td>
<td>16.9</td>
<td>42.4</td>
<td>16.8</td>
<td>53.0</td>
</tr>
<tr>
<td>Mexicans</td>
<td>11.9</td>
<td>31.3</td>
<td>15.9</td>
<td>37.3</td>
<td>20.8</td>
<td>20.0</td>
<td>11.1</td>
<td>36.0</td>
<td>13.7</td>
<td>47.3</td>
</tr>
<tr>
<td>Other Hispanics</td>
<td>49.3</td>
<td>56.3</td>
<td>51.5</td>
<td>60.6</td>
<td>46.0</td>
<td>45.4</td>
<td>42.2</td>
<td>50.4</td>
<td>43.0</td>
<td>60.4</td>
</tr>
</tbody>
</table>
Distribution of Industry Jobs by Ethnicity/Race, Gender, and Nativity

- It is known that Hispanics display higher shares of employment in Agriculture, fishing and forestry. This is particularly true for foreign-born Hispanics.

- What is lesser known is how Hispanics in Michigan are represented in other industry sectors:
  - Construction: 21.9% of foreign-born Hispanic males vs. 11.0% for Whites.
  - Manufacturing: 24.5% for Hispanics vs. 25.8% for Whites.

<table>
<thead>
<tr>
<th>Racial Groups</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hispanics</td>
<td>Mexicans</td>
</tr>
<tr>
<td>Whites</td>
<td>7.6</td>
<td>25.9</td>
</tr>
<tr>
<td>Blacks</td>
<td>10.9</td>
<td>27.3</td>
</tr>
<tr>
<td>Asians</td>
<td>25.9</td>
<td>35.2</td>
</tr>
</tbody>
</table>

Table 2-8: Industry Dissimilarity Index between Hispanics and Other Racial Groups by Gender, Hispanic Sub-groups, and Nativity (Universe: Population 25 - 64 Years Old)
Full-time versus Part-time Employment by Ethnicity/Race, Gender, and Nativity

- U.S.-born Hispanic men in Michigan displayed the highest share of individuals working full-time, year-round in 2015 (particularly true for Hispanic men other than Mexicans).

- A much greater portion of women work part-time, year-round than men for all ethnic, racial, and nativity categories considered. This is even more true for Hispanics. Michigan’s Latinas are over eight times more likely to work part-time, year-round than Latinos do (17 vs. 2 percent).

<table>
<thead>
<tr>
<th>Ethnicity/Race</th>
<th>Men, by Nativity</th>
<th>Women, by Nativity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All U.S.-Born Foreign U.S.-Born Foreign U.S.-Born</td>
<td></td>
</tr>
<tr>
<td>Whites</td>
<td>82% 82% 77%</td>
<td>64% 65% 57%</td>
</tr>
<tr>
<td>Blacks</td>
<td>73% 73% 75%</td>
<td>67% 67% 68%</td>
</tr>
<tr>
<td>Asians</td>
<td>81% 80% 81%</td>
<td>67% 77% 65%</td>
</tr>
<tr>
<td>All Hispanics</td>
<td>79% 84% 74%</td>
<td>63% 64% 61%</td>
</tr>
<tr>
<td>Mexicans</td>
<td>80% 83% 76%</td>
<td>67% 69% 61%</td>
</tr>
<tr>
<td>All Other Hispanic/Latino</td>
<td>77% 86% 66%</td>
<td>56% 54% 61%</td>
</tr>
</tbody>
</table>
Concluding Remarks and Study Extension

- Only 25% of Michigan’s Hispanics are foreign-born.
- Hispanic population and labor force displayed significant growth the turn of the Millennium in 2000.
- Michigan’s Latinos show higher rates of employment and labor force participation. However, because of lower levels of human capital investment and other unobserved factors (i.e., employment discrimination, ability, etc.), Michigan’s Latinos tend to be employed in low-paying industries and occupations. They are also over-represented in part-time employment.
- Possible extensions:
  - Effects of human capital, ethnicity/race, gender, and nativity of Michigan Hispanics’ wage earnings.
  - Effects of the 2009 recession and the economic recovery that followed on Hispanics labor market status in Michigan.