

Hispanics in the Michigan Labor Market

Leonidas Murembya, Rene Rosenbaum, Eric Guthrie

American Economic Association Annual Conference, Atlanta, January 04, 2019

<u>Disclaimer</u>: 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).

> Leonidas Murembya is an Assistant Professor with the Department of Economics at Michigan State University. He is also an Economic Specialist for the Michigan's Bureau of Labor Market Information and Strategic Initiatives. E-mail: murembya@msu.edu • Phone: 517-202-5924







- 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. highpaying industries or occupation, self-employment) are Hispanics more likely to be employed?







- 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)).





- 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:
 - Altonji and Blank (1999); Antecol and Bedard (2002, 2004); Bean and Stevens (2003); Bean and Tienda (1987); Bean, Trejo, Capps, and Tyler (2001); Carlson and Swartz (1988); Carnoy, Daley, and Hinojosa-Ojeda 1993); Chavez (1991); Chapa (1990).Cotton (1985); Darity, Guilkey, and Winfrey (1995); DeFreitas (1991); Duncan, Hotz, and Trejo (2006); Grogger and Trejo (2002); Gwartney and Long (1978); Mason (2016); McManus, Gould, and Welch (1983); Reimers (1983, 1994); Smith (1991, 2001); Trejo (1996, 1997, 2003).







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).

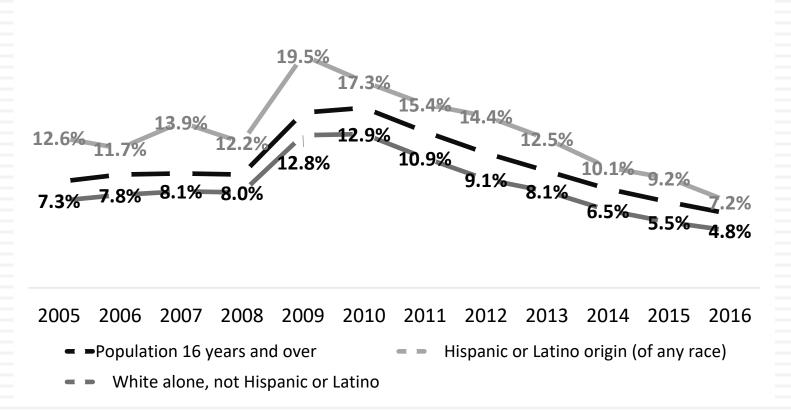


Descriptive Statistics: Unemployment Rate



Figure 1-1: Unemployment Rate Trend (2005 - 2016)

- The unemployment rate of Hispanics in Michigan <u>three</u> to <u>five</u> percentage points above the overall-population jobless rate.
- The unemployment rate of Hispanics in Michigan rose faster than average during the 2009 recession but has displayed a faster recovery since then.



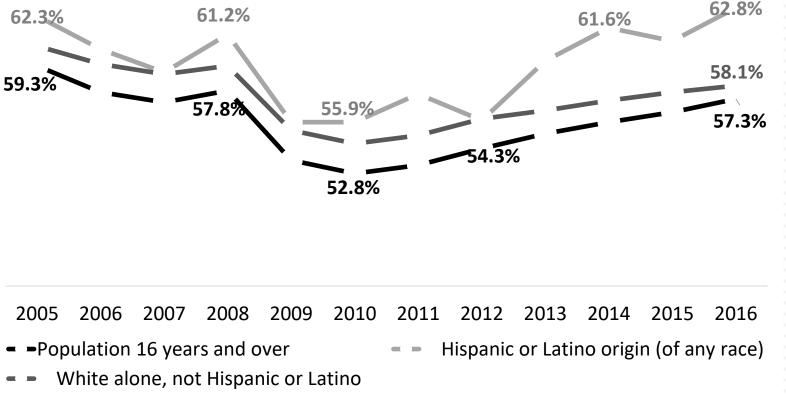
Source: U.S. Census Bureau, American Community Surveys 1-Year Estimates, 2005 – 2016



Descriptive Statistics: Employment Rate



- 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).



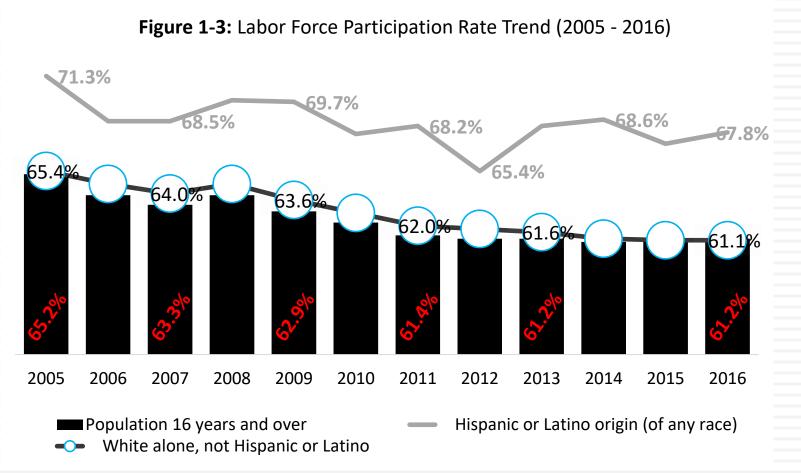
Source: U.S. Census Bureau, American Community Surveys 1-Year Estimates, 2005 – 2016



Descriptive Statistics: Labor Participation Rate



- 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



Source: U.S. Census Bureau, American Community Surveys 1-Year Estimates, 2005 – 2016



Descriptive Statistics: Industry Jobs



Figure 1-4: Hispanic Household and Industry Employment Trend in Michigan (2005 - 2016) 230,000 Household 200,000 Employment 170,000 140,000 110,000 Industry Employment 80,000 50,000

2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016

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)

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.



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) Women, by Men, by Nativity Nativity Forei Forei U.S.-U.S.-All All gngn-Born Born Ethnicity Born Born 13.0 Whites 13.5 13.6 12.9 13.8 13.9 Blacks 12.5 14.4 13.3 13.2 14.3 12.6 15.9 15.1 16.2 14.9 15.6 14.7 Asians 12.3 12.3 12.6 All Hispanics 12.8 12.6 12.4 12.6 Mexicans 11.6 10.2 11.9 12.9 10.0 All Other Hispanic/Latino 11.7 12.9 12.7 13.3 13.4 11.9

Source: U.S. Census Bureau, American Community Survey 1-Year Estimates 2015, 1% Public Use Microdata Samples (PUMS)

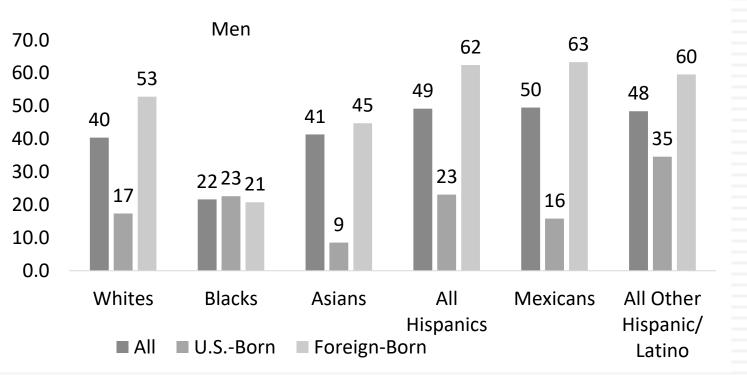


English Proficiency



- 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 <u>10</u> percentage points <u>higher</u> than that of <u>Whites</u> in the same category, over <u>40</u> percentage points over <u>Blacks</u>, and about <u>18</u> points over <u>Asians</u>.

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)









- 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 foreignborn 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)

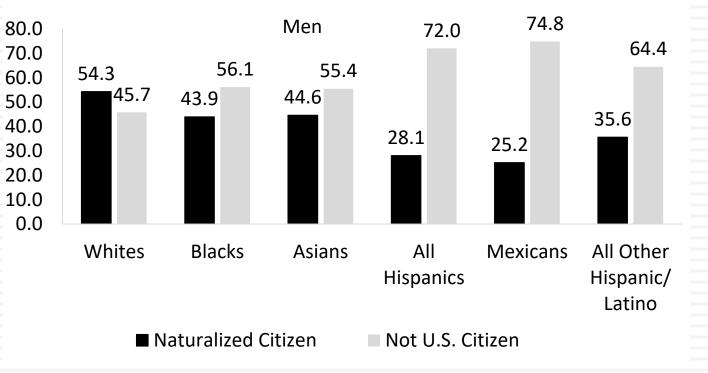




Table 2-3 Employment Rates by Gender, Detailed Ethnicity and Race, and Nativity(Universe: Population 25 - 64 Years Old)

	N	1en, by Nativ	vitv	Women, by Nativity			
		· · ·	Foreign-		•	Foreign-	
Ethnicity	All	U.SBorn	Born	All	U.SBorn	Born	
Whites	77%	77%	83%	68%	68%	53%	
Blacks	56%	55%	86%	61%	61%	74%	
Asians	82%	67%	85%	63%	77%	61%	
All Hispanics	78%	71%	88%	61%	68%	48%	
Mexicans	80%	73%	90%	60%	67%	46%	
All Other Hispanic/ Latino	73%	67%	82%	65%	71%	54%	

Effects of Human Capital and Demographics on Employment Michigan State

Estimation Equation:

$$Y_i = \beta_0 + \sum_{1}^{k} \beta_k H C_{ik} + \sum_{1}^{j} \gamma_j Demo_{ij} + \mu_i$$
(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.

Effects of Human Capital and Demographics on Employment MICHIGAN STATE

 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 π_i and 0, with a probability 1 - π_i. The random variable Y follows a Bernouilli 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 MICHIGAN STATE

Male											
							Duration of				
Controlled Variables	Age		Educa	tion	English Proficient		Stay	Citizen			
Nativity		Foreign-		Foreign-		Foreign-	Foreign-	Foreign-			
Race-Ethnicity	U.Sborn	born	U.Sborn	born	U.Sborn	born	born	born			
Hispanics -All	-6.4%	5.8%	-3.4%	10.0%	-6.0%	6.3%	9.6%	11.4%			
Mexicans	-5.5%	8.0%	-1.7%	12.4%	-5.0%	8.4%	12.0%	13.9%			
Other Hispanics	-8.1%	-2.0%	-7.2%	-0.7%	-7.5%	-1.5%	-0.9%	-0.2%			
Blacks	-23.0%	3.5%	-18.8%	2.2%	-23.0%	2.3%	2.0%	2.7%			
Asians	-14.0%	3.3%	-20.2%	0.1%	-13.5%	2.9%	0.5%	0.8%			

Female											
							Duration of				
Controlled Variables	Age	2	Educa	tion	English Proficient		Stay	Citizen			
Nativity		Foreign-		Foreign-		Foreign-	Foreign-	Foreign-			
Race-Ethnicity	U.Sborn	born	U.Sborn	born	U.Sborn	born	born	born			
Hispanics -All	-3.2%	-7.7%	0.3%	-0.9%	-2.4%	-6.0%	-1.4%	1.5%			
Mexicans	-4.5%	-9.4%	-0.5%	-1.9%	-3.8%	-7.3%	-1.7%	1.3%			
Other Hispanics	-0.2%	-0.8%	1.9%	1.4%	1.2%	-0.8%	-0.3%	1.1%			
Blacks	-9.4%	19.0%	-6.8%	17.2%	-9.5%	19.7%	17.8%	18.8%			
Asians	2.6%	4.9%	-3.7%	2.3%	3.3%	4.5%	2.6%	2.9%			



Employment Odd Ratios* Relative to Whites, by Gender, Detailed Ethnicity, and Nativity (Universe: Population 25 - 64 Years Old)



Male											
							Duration of				
Controlled Variables	Age		Educa	tion	English Pro	oficient	Stay	Citizen			
Nativity		Foreign-		Foreign-		Foreign-	Foreign-	Foreign-			
Race-Ethnicity	U.Sborn	born	U.Sborn	born	U.Sborn	born	born	born			
Hispanics -All	0.7	1.6	0.8	2.2	0.7	1.7	2.1	2.5			
Mexicans	0.7	2.0	0.9	2.7	0.8	2.1	2.7	3.1			
Other Hispanics	0.7	0.9	0.7	0.9	0.7	0.9	0.9	1.0			
Blacks	0.3	1.3	0.4	1.2	0.3	1.2	1.1	1.2			
Asians	0.5	1.3	0.3	1.0	0.5	1.2	1.1	1.1			

Female										
							Duration of			
Controlled Variables	Age		Educa	tion	English Proficient		Stay	Citizen		
Nativity		Foreign-		Foreign-		Foreign-	Foreign-	Foreign-		
Race-Ethnicity	U.Sborn	born	U.Sborn	born	U.Sborn	born	born	born		
Hispanics -All	0.9	0.7	1.0	1.0	0.9	0.8	1.0	1.1		
Mexicans	0.8	0.7	1.0	0.9	0.8	0.7	0.9	1.1		
Other Hispanics	1.0	1.0	1.1	1.1	1.1	1.0	1.0	1.0		
Blacks	0.6	2.3	0.7	2.2	0.6	2.4	2.3	2.4		
Asians	1.2	1.2	0.8	1.1	1.2	1.2	1.1	1.1		



Self-employment



- Hispanics' display selfemployment rates that are about half of the rates for Whites and Asians and similar to those of Blacks.
- Also, overall, selfemployment is higher for males, regardless of race/ethnicity and nativity.

Race, and Nativity												
	(Universe: Po	Years Old										
	Men,	by Nativ	vity	Wome	n, by Na	ativity						
	All	U.S	Foreign	All	U.S	Foreign						
Ethnicity	All	Born	-Born	All	Born	-Born						
Whites	12%	11%	15%	7%	7%	9%						
Blacks	5%	6%	3%	4%	3%	7%						
Asians	10%	12%	9%	10%	8%	10%						
All Hispanics	6%	7%	6%	3%	3%	1%						
Mexicans	6%	5%	6%	1%	2%	N/A						
All Other												
Hispanic/Latino	o 8%	11%	4%	6%	6%	4%						

Table 2-6: Self-Employment Rates by Gender, Detailed Ethnicity and



Occupational Employment Comparison by Ethnicity/Race, Gender, and Nativity

- 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)

			Ν	len		Women						
Racial	Hispanics Mexicans		Other Hispanics		Hispanics		Mexicans		Other Hispanics			
Groups	Native	Foreign	Native	Foreign	Native	Foreign	Native	Foreign	Native	Foreign	Native	Foreign
Whites	18.9	32.1	21.6	38.9	24.7	22.1	16.9	42.4	16.8	53.0	21.8	28.7
Blacks	11.9	31.3	15.9	37.3	20.8	20.0	11.1	36.0	13.7	47.3	15.5	27.2
Asians	49.3	56.3	51.5	60.6	46.0	45.4	42.2	50.4	43.0	60.4	42.6	38.8



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 foreignborn 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 2- 8: Industry Dissimilarity Index between Hispanics and Other Racial Groups by Gender,Hispanic Sub-groups, and Nativity (Universe: Population 25 - 64 Years Old)

			Ν	len			Women					
Racial	Hispanics Mexicans		Other Hispanics		Hispanics		Mexicans		Other Hispanics			
Groups	Native	Foreign	Native	Foreign	Native	Foreign	Native	Foreign	Native	Foreigr	n Native	Foreign
Whites	7.6	25.9	8.4	32.9	22.4	23.4	10.1	34.7	11.1	44.4	17.0	22.9
Blacks	10.9	27.3	14.0	32.1	16.3	24.1	9.7	33.6	11.5	43.6	19.0	29.6
Asians	25.9	35.2	24.1	42.5	33.5	25.8	15.3	28.6	19.7	36.1	17.5	21.2

Full-time versus Part-time Employment by Ethnicity/Race, Gender, and Nativity Reserve

- U.S.-born Hispanic men in Michigan displayed the highest share of individuals working fulltime, 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).

	Men	i, by Nati	ivity	Wome	en, by Na	ativity
Ethnicity/Race	All	U.S Born	Foreign -Born	All	U.S Born	Foreign -Born
Whites	82%	82%	77%	64%	65%	57%
Blacks	73%	73%	75%	67%	67%	68%
Asians	81%	80%	81%	67%	77%	65%
All Hispanics	79%	84%	74%	63%	64%	61%
Mexicans All Other Hispanic/	80%	83%	76%	67%	69%	61%
Latino	77%	86%	66%	56%	54%	61%





□ 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.