**ABSTRACT** 

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AREA DIFFERENCES IN THE WAGES AND GAINS TO HUMAN CAPITAL FOR MALE HISPANIC IMMIGRANTS IN THE U.S.

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The unprecedented movement of Hispanic immigrants to new growth areas raises important questions about the opportunity for immigrants to succeed in labor markets that have little history of incorporating immigrants. I analyze Census 2000 data to compare wages of male Hispanic immigrants across 28 metropolitan areas grouped into "immigrant gateway types" derived from Singer (2004). I examine the role of human capital factors and metropolitan area characteristics in shaping the wage profiles of male Hispanic immigrants. Workers in the sample earn higher wages and gain more from human capital investments in traditional gateway areas than in newer growth areas with more service sector jobs and less historical presence of Hispanics. Human capital and immigrant-specific characteristics explain much of the wage advantage for male Hispanic immigrants in the traditional gateway areas; however, metropolitan area characteristics benefit workers in newer growth areas, pointing to booms in new economy sectors in these areas.

# DOES PLACE MATTER? METROPOLITAN AREA DIFFERENCES IN THE WAGES AND GAINS TO HUMAN CAPITAL FOR MALE HISPANIC IMMIGRANTS IN THE U.S.

by

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#### **Chapter 1. Introduction**

An immigrant worker's pay is a function of a multitude of factors—some related to his or her own personal attributes, and some related to the context of the job. Pay varies according to characteristics of the individual worker such as education, English language ability, and length of time in the U.S., while it also varies according to macrolevel characteristics such as the local labor market, composition of the population, and history of immigrant integration. Much has been written about the value of human capital investments for immigrant workers in the U.S.; however, little is known about how the relationship between human capital and wages actually differs by place in the U.S. For example, if three immigrant workers are identical in several important ways (same country of origin, same education, same occupation, same year of arrival to the U.S., etc.), but one works in Los Angeles, one in Salt Lake City, and one in Nashville, do they each earn the same pay? If there is a difference in pay, what explains it?

The majority of immigrants living in the United States are Hispanic, and since 1990, Hispanic immigrants in the U.S. are more widely dispersed across the country than in the past. Areas that have little experience with immigrant populations are attracting unprecedented domestic and international migration of Hispanic immigrants (Fischer and Tienda 2006; Suro and Singer 2002). Research is needed to understand whether and how the opportunities for Hispanic immigrants differ by place in the U.S. This thesis compares wages for male Hispanic immigrant workers across 28 metropolitan areas grouped into three "immigrant gateway types." I address two research questions: 1) How do wages for male Hispanic immigrant workers vary by place? and 2) How does place

(gateway type) impact the gains to human capital investments for male Hispanic immigrant workers?

This paper examines not only the differential experiences of Hispanic immigrants across gateway types, but also informs issues of immigrant integration that cities themselves confront. In other words, if the data reveal that place matters for Hispanic immigrants, what can metropolitan areas learn from each other's relative successes and failures integrating Hispanic immigrants? These are especially important issues when considering immigrant economic incorporation, because in addition to encompassing the largest share of the foreign-born population in the U.S., the Hispanic immigrant population is also one of the most economically and socially vulnerable groups in the U.S. (Pew Hispanic Center 2005; Ramirez 2004).

## Chapter 2. Background

### Individual-Level Characteristics: Human Capital and Immigrant Experience

The number of foreign-born people living in the U.S. increased by more than half between 1990 and 2000; 11.1 percent of the U.S. population, or 31.1 million people, were foreign-born in 2000, up from 7.9 percent or 19.8 million in 1990 (Malone et al. 2003). In 2000, just over half of the burgeoning immigrant population were born in Latin America, including 9.2 million from Mexico, 2 million from Central America, 3 million from the Caribbean, and 1.9 million from South America (Malone et al. 2003). Over 40 percent of Hispanic immigrants living in the U.S. in 2000 arrived after 1990 (Ramirez 2004).

The average Hispanic immigrant is less educated (Ramirez and de la Cruz, 2003; Lowell and Suro 2002), less skilled professionally, and earns less pay than U.S.-born workers as well as the average immigrants from Asia or Europe (Pew Hispanic Center 2005; Stolzenberg and Tienda 1997; McManus et al. 1983). In 2000, 33.7 percent of Hispanic immigrants age 16-19 were high school dropouts compared to just 14.0 percent of U.S.-born Hispanics, 11.7 percent of non-Hispanic blacks, 8.2 percent of non-Hispanic whites, and 4.3 percent of Asians (Fry 2003). Also in 2000, the average education level for male Hispanic immigrants over age 25 was 9.5 years compared to 12.2 years for U.S.-born Hispanic males, 12.4 years for black men, and 13.6 years for white males (Duncan et al. 2006). In addition, a disproportionately large segment of the Hispanic immigrant

<sup>&</sup>lt;sup>1</sup> In this paper, the terms "foreign born" and "immigrant" are used interchangeably to characterize people who were themselves born outside the U.S. to parents who were also born outside the U.S.

<sup>&</sup>lt;sup>2</sup> The U.S. government defines "Hispanic" as a person of any race whose origin is Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture (Ramirez 2004). In this paper, "Hispanic immigrants" refers to people of Hispanic origin born in Latin America or the Caribbean. Although U.S. citizens, individuals born in Puerto Rico are included in this sample based on the shared experience as Hispanic newcomers to mainland U.S.

population has limited English-language ability. The number of Spanish-speakers in 2000 who did not speak English at home increased by almost 60 percent to 28 million between 1990 and 2000, 28 percent of whom reported speaking English poorly or not at all, compared to 23 percent for all non-English speakers combined (Shin and Bruno 2003).

Low levels of education among the Hispanic immigrant population typically lead to low-skill and low-wage jobs which leave little protection against poverty. In 2002, the proportion of Hispanic immigrants employed in white collar high-pay managerial and professional jobs was half that of U.S.-born workers (12.7 percent versus 26.9) and the proportion of Hispanic immigrant workers earning more than \$50,000 annually was just one-third that of U.S.-born workers (10.8 percent versus 30.2 percent) (Larsen 2004). Disproportionate employment in lower-skilled jobs and lower earnings translate to higher rates of poverty among Hispanic immigrants: 21.6 percent of Hispanic immigrants were living below the poverty level in 2002 while only 11.5 percent of the entire U.S.-born population, 11.1 percent of Asian immigrants, and 8.7 percent of European immigrants were living in poverty (Larsen 2004).

Economic and sociological research has demonstrated a strong association between individual human capital characteristics with immigrants' economic incorporation and financial well-being (Hum 2001; Spener and Bean 1999; Borjas 1994; Chiswick and Miller 1992). Chiswick (1974) offers a useful definition of "human capital." He writes,

Capital may be defined as anything produced at a cost and providing useful services over time in either production or consumption... Capital (productive power) embodied in a person is referred to as *human* capital... Human capital can be acquired in several different ways. Schooling, vocational training, formal on-the-job training, learning by doing, medical care, acquiring information, and migration are means by which individuals can increase their productivity (Chiswick 1974:17).

Chiswick examined immigrant participation in the American labor force since the 1970s through the lens that aspects of human capital including level of education and job skill, as well as immigrant-specific attributes such as English-language proficiency and length of time in the U.S. are the primary determinants of the economic well-being of immigrants (Chiswick 1979). For immigrants, level of education, job skill, length of time in the U.S., citizenship status, and English language ability are all human capital characteristics that have shown to be positively associated with higher earnings for immigrants such that immigrants on the whole earn more money with more years of education, more job skill and experience, longer histories living in the U.S., more permanent immigration status or citizenship, and better English-language skills (Singer 2004; Chiswick and Miller 1992; Espenshade and Fu 1997; Kossoudji 1988; McManus et al. 1983). Waters and Eschbach (1995) explain, "The classic economic approach to understanding the incorporation of immigrants has been to measure individual level data on human capital endowments such as education, language ability, and the like, and then assess the return of wages and earnings to those human capital characteristics" (Waters and Eschbach 1995, 436).

Human capital theory does not account for all variation in wages, however, as the market does not respond perfectly to individual improvements in human capital. Portes and Zhou explain that the implications of human capital theory and immigration is that, "The inferior economic performance of groups like Blacks, Puerto Ricans, and Mexican-Americans is a consequence of their limited skill, and hence, that any attempt to improve their situation must start at the individual level" (Portes and Zhou 1992, 495). Wage disparities also result from macro-level differences such as local labor market

characteristics, employment opportunities, availability of specialized social services, and receptivity/integration of minority populations (Singer 2004; Hum 2001; Gurak and Kritz 2000; Spener and Bean 1999; Stolzenberg and Tienda 1997; Portes and Zhou 1992).

# Metropolitan Area-Level Characteristics: Local Labor Market and Immigrant Integration

The role of local labor market features and of place more broadly in outcomes for immigrants has been raised in recent literature as requiring closer examination (Singer 2004; Ellis 2001; Greenwood et al. 1989). Ellis writes, "National-level comparisons are of unquestionable significance for the overall picture they provide, but they implicitly assume that the geography of immigration matters little" (Ellis 2001,118). National-level data have limited usefulness at the local level where labor market and contextual factors differ, as well as composition of the community itself. Singer writes, "The immigration context varies tremendously between metropolitan areas. Therefore, it behooves every local government, community based organization, and advocate to understand the characteristics of its local immigrant community" (Singer 2004, 16).

The geography of where Hispanic immigrants live in the U.S. is different in 2000 than 1990, signifying a wider spread of both long-term and new Hispanic immigrants outside of traditional gateway cities where the link between individual characteristics and earnings could look very different. The Urban Institute reports, "The dispersal of our newest arrivals to regions that historically have attracted relatively few immigrants means that the integration issues previously confined to only a handful of states—issues such as language classes, health care, welfare benefits, and jobs—are now central concerns for most states" (Urban Institute 2002,1). In addition to the rapid growth in the number of

Hispanic immigrants living in the U.S., Census data show a trend of wider dispersion of the foreign born across the country into areas that are receiving large inflows of both domestic and international migrants (Frey 2002; Singer 2004). In 2000, 57.4% of the foreign-born population reported having moved somewhere new since 1995, compared to 44.3% of U.S.-born residents (Perry and Schacter 2003). Of the foreign-born movers between 1995 and 2000, 56.8% had been in the U.S. less than 10 years and 54.3% were immigrants from Latin America who had either just entered the U.S. or moved domestically.

While the majority of new and long-term Hispanic immigrants remain concentrated in states with traditional gateway metropolitan areas such as Los Angeles, New York City and Chicago, several metropolitan areas like Salt Lake City, Atlanta, and Raleigh-Durham are experiencing dramatic and unprecedented growth in the Hispanic immigrant population (Fischer and Tienda 2006; Malone et al. 2003; Frey 2002; Suro and Singer 2002). Between 1995 and 2000, the West and Northeast regions of the country experienced net outmigration of Hispanics, while the South and Midwest regions experienced net gains in the Hispanic U.S.-born and foreign-born population (Schacter 2003). California and New York experienced the largest net loss of Hispanics between 1995 and 2000 while Florida gained the most Hispanics from domestic migration and Nevada gained the most Hispanics from international migration (Schacter 2003). The largest American gateway areas have long histories working to integrate the interests of the Hispanic immigrant community within local policy and program priorities. However, many newer growth areas are facing these challenges and opportunities for the first time.

Much of the attraction to new growth areas for Hispanic immigrants is related to shifts in the U.S. labor market away from manufacturing jobs and towards service-sector employment (Durand et al. 2006; Suro and Singer 2002; Gurak and Kritz 2000). The economic restructuring of recent decades affects many Hispanic immigrant workers as blue collar manufacturing jobs were relatively abundant and high-paying, whereas now the manufacturing sector has declined and most service-sector jobs are relatively lowpaying with little potential for advancement (Duncan et al. 2006). Traditional gateways like New York City have experienced a decline in manufacturing jobs; meanwhile, new growth areas have seen vast expansions in industries that are particularly appealing to unskilled and semi-skilled workers such as tourism service and construction in Las Vegas or meat processing across many Southern cities (Duncan et al. 2006; Gurak and Kritz 2000). This new economy shift in local labor markets in the emerging immigrant magnet areas suggests much of the influx to these cities would be immigrants with little human capital seeking entry level jobs. Fischer and Tienda (2006) write, "Expansion of unskilled construction and in personal and repair services... is largely responsible for luring Hispanics, and particularly the foreign-born, to the New Hispanic Destinations.... Changes in the industrial composition of employment in the New Hispanic destinations favored the absorption of unskilled immigrant workers" (Fischer and Tienda 2006, 123).

Although the literature supports the notion that the economic experiences of Hispanic immigrants will differ by place (Singer 2004; Urban Institute 2001; Ellis 2001; Card 2001; Dávila and Mora 2000; Stolzenberg and Tienda 1997; Greenwood et al. 1989), predictions differ—or are not offered at all—as to where in the U.S. Hispanic immigrants fare best in terms of economic incorporation. Differences that emerge across

gateway types could be compositional ones reflecting overall differences in the characteristics and human capital investments of the Hispanic immigrants themselves, or these differences could be attributable to place-specific dynamics or local labor market factors. One macro-level aspect of the Hispanic immigrant experience that has been widely studied and debated is the ethnic enclave.

Evidence is mixed as to whether ethnic enclaves ultimately help or hurt Hispanic immigrant wages. Tienda and Lii state, "The potential benefits from participation in an enclave economy are ambiguous" (Tienda and Lii 1987, 144). A large concentration of Hispanics in a metropolitan area can, on the one hand, provide social and professional contacts, and employment in ethnic businesses which may not require strong English skills; on the other hand, enclaves may hinder integration of Hispanic immigrants into the larger metropolitan area community and labor market, thus limiting long-term opportunities for professional advancement (Bauer et al. 2005; Hum 2001; McManus 1989; Tienda and Lii 1987). Hum writes, "Ethnic economies create avenues to stake out one's livelihood; however, it is also highly exploitative and reinforces racial/ethnic isolation and segregation" (Hum 2001, 98).

Traditional gateway cities have larger and better-established Hispanic enclaves than established destinations or new magnets because of their longer history of Hispanic immigration. Some scholars argue that the long-term clustering of large numbers of Spanish-speakers in the traditional gateways actually prevents immigrants from attaining better jobs than if they moved away from Spanish-speakers and had access to a wider array of jobs in the broader American society (Borjas 2004). Bauer et al. write, "Large enclaves are a potential source for a 'language trap' that attract poor proficiency English

speakers and sustain their poor abilities" (Bauer et al. 2005, 660). The challenge in determining the impact of enclaves on earnings lies in determining movement into and out of enclave employment. McManus (1989) found evidence of a short-term advantage to ethnic enclaves that waned over time suggesting "a dynamic role for enclaves as temporary way stations for new immigrants who are eventually going to become more fully assimilated. The enclaves could lower the cost of adjusting to a new culture and economy" (McManus 1989, 251).

Outside of traditional gateway areas, factors such as limited English proficiency and lack of U.S. experience could be more of a hindrance for immigrants in the new growth areas because of the lower concentration of Hispanics in the population, lack of ethnic enclave employment opportunities, and fewer community resources for Spanish speakers. Frey (2002) found evidence that Hispanics in new growth areas were less integrated with the U.S.-born population socially than in other U.S. metropolitan areas with longer histories with large Hispanic immigrant populations. The Urban Institute warns that although new growth states attract domestic and international migrants with employment, "These new growth states have less experience settling immigrants and many have a less developed service infrastructure" (Urban Institute 2002, 2).

#### Conceptual Framework and Hypotheses

This thesis explores the geography of immigration and wage differences based on individual and metropolitan-area factors. Discovering whether and how Hispanic immigrant wages differ across gateway types in the U.S. is an initial step in addressing the role of place in the Hispanic immigrant experience. Figure 1 illustrates my conceptual framework; it depicts the range of individual-level and metro-area level variables

included in the analysis that converge to impact wages for Hispanic immigrant workers in the U.S. As Figure 1 shows, I view wage rate as a function of both person and place. Human capital variables like age and education combine with immigration-specific human capital variables such as length of time in the U.S., country of origin, and citizenship status to comprise the individual-level factors that influence earnings. On the macro-level level, metropolitan area features such as the rate of unemployment, percent of total jobs that are in the manufacturing sector, gateway type and concentration of the Hispanic population can change the earnings opportunities and integration dynamics for Hispanic immigrants (Ellis 2001; Sassen 1995). In addition, the individual and metro area level factors influence each other. Based on individual-level characteristics, an immigrant may choose to live and work in one place over another, or one may be limited in opportunities because of the characteristics of a place. Conversely, features of a job market and level of immigrant integration are also influenced by the individual characteristics of the Hispanic immigrants that populate a place.

I have two main hypotheses for this study. As to my first research question asking whether wages of Hispanic immigrant workers would vary by gateway type, I predict that despite macro-level advantages related to the strength of local labor markets in the established destinations and new magnets, wages will be higher for male Hispanic immigrants in traditional gateways. I expect the advantage for Hispanics in traditional gateways over those in established destinations and new magnets would be due in large part to lower average quality of human capital and immigrant-specific characteristics related to the low-skill demands of the booming service sector outside of traditional gateway areas. In addition there may be better reception and integration of Hispanics and

immigrants in traditional gateways even with large and exclusive enclaves that would benefit workers in traditional gateway areas.

The second hypothesis is derived from my second research question addressing whether the gains to human capital would vary by gateway type. I predict that human capital enhancements such as higher education or naturalization will pay off more in established destinations than in traditional gateways. I presume that the attractiveness of improved human capital will be stronger outside of traditional gateways in places where rapidly expanding local labor markets may provide better employment opportunities, and ethnic enclaves may not be pervasive enough to act as disincentives to human capital investments.

#### **Chapter 3. Data and Methods**

#### Gateway Types

In order to examine how wages for male Hispanic immigrant workers differ across gateway types, I have categorized metropolitan areas based on the work of Singer (2004), who defined six gateway types based on the settlement patterns of all immigrants:

1) "Former" immigrant gateways which have seen very low levels of immigration since the 1930s; 2) "Continuous" gateways that have had high percentages foreign-born since 1900; 3) "Post-World War II" gateways that had high proportions foreign-born after 1950; 4) "Emerging" gateways experiencing increases in the proportion foreign-born after 1980; 5) "Re-Emerging" gateways experiencing fast growth in proportion foreign-born after 1980 after having had low percentages since 1940; and 6) "Pre-Emerging" which show a rapid spike in percentage foreign-born in 2000 after previously low levels.

For this thesis, I have collapsed Singer's six immigrant gateway types into three broader categories to better reflect the experiences of late twentieth century Hispanic immigration: 1) <u>Traditional Gateways</u> (corresponding to Singer's "Continuous" and "Post World War II" categories, 2) <u>Established Destinations</u> (corresponding to Singer's "Re-Emerging," and "Emerging" categories), and, 5) <u>New Magnets</u> (corresponding to Singer's "Pre-Emerging" category).

Table 1 lists the 28 metropolitan areas and the corresponding immigrant gateway categories used in this study. Presented in the table is the total population change and change in the Hispanic population across the selected traditional gateways, established destinations, and new magnets between 1990 and 2000. While each metropolitan area in Table 1 experienced growth in both total population and in the Hispanic population, the

Hispanic population comprised a greater percentage of the total population in most of the traditional and established gateway areas than in the new magnets, but grew much more substantially since 1990 in most of most of the new magnets. Given my interest in metropolitan areas which have large numbers of Hispanic residents and/or have experienced rapid growth since 1990 in the Hispanic population (moving domestically as well as from abroad), I have not examined any metro areas that Singer classifies as "former" immigrant gateways<sup>3</sup>.

The Traditional Gateway metropolitan areas are: Boston, Chicago, Los Angeles, Miami/Fort Lauderdale, New York, San Diego and San Francisco. The Established

Destinations are: Austin, Dallas, Denver, Houston, Phoenix, Portland (Oregon),

Sacramento, Salt Lake City, Seattle, Tampa, Washington/Baltimore, and West Palm

Beach. New Magnets are: Atlanta, Charlotte, Greensboro, Indianapolis, Las Vegas,

Minneapolis/St. Paul, Nashville, Orlando, and Raleigh/Durham. Most of the established destinations as well as the new magnets have been cited as having the most recent and substantial growth in their Hispanic immigrant populations (Frey 2002; Suro and Singer 2002; U.S. Census Bureau 2001).

Table 1 reveals that the Hispanic immigrant populations in many of the new magnet areas more than doubled in size between 1990 and 2000 (Urban Institute 2002; Frey 2002; Suro and Singer 2002). I added two metropolitan areas to this category that were not discussed by Singer (2004): Indianapolis, and Nashville. Suro and Singer (2002) identified these two metropolitan areas (and many of the other new magnets) as part of a

<sup>&</sup>lt;sup>3</sup> "Former" gateways include Buffalo, Cleveland, Detroit, Milwaukee, Philadelphia, Pittsburgh, and St. Louis. The total Hispanic population in these areas did not exceed 6 percent of the total population in 2000, and the growth in the Hispanic population did not exceed a change higher than 96 percent between 1990 and 2000.

"fast-growing" group of metropolitan areas experiencing "hyper-growth" in their Latino populations.

#### Analysis Plan

The data source for this study is the 5% sample of public use microdata from the 2000 Decennial Census, downloaded via the Integrated Public Use Microdata Series (IPUMS) (Ruggles et al. 2004). Census data provides detailed demographic and employment information, and is large enough to provide sufficient samples of male Hispanic immigrant workers even within smaller metropolitan areas. IPUMS—created and maintained at the University of Minnesota—provides access to the complete person, household, and geographic records from the U.S. Census microdata, and provides a straightforward process by which researchers can create sub-samples combining record types and selected variables at specific levels of geography.

There are four stages to my analysis. I begin with an examination of descriptive information about the sample, and a bivariate analysis of wages by gateway type and individual-level characteristics. The second stage of my analysis is a stepwise ordinary least squares (OLS) multivariate regression to predict the natural log of wages of male Hispanic immigrant workers as a function of gateway type, as well as individual-level and metro area-level characteristics. I regress wages on gateway type, and then expand the model to control for human capital and immigrant-specific variables, and finally to control for metropolitan area-level variables. The immigrants in the traditional gateway cities are the reference group in the regressions, compared with those living in the established destinations and new magnets. Third, I examine the interaction of gateway type and aspects of human capital on wages to ascertain the role of gateway type in the

relationship between human capital investments and wages. The fourth stage of the analysis examines each of the metro areas within the "established destination" and "new magnet" categories in order to reveal more detailed information. I repeat the full OLS multivariate regression, but with dichotomies for each of the twelve established destinations and nine new magnets with the traditional gateways omitted as the reference group.

The 28 metropolitan areas in the study each had at least one million total population in 2000, and were selected based on the classification of immigrant gateway types from Singer (2004)<sup>4</sup>. A metropolitan area is a set of counties or combinations of counties centering on a substantial urban area (Ruggles et al. 2004). The Census Bureau includes counties surrounding an urban core as part of a larger metropolitan area if at least 25% of the county's labor force is employed in the urban core.

My sample includes male Hispanic immigrants between ages 18 and 64 living in one of the 28 study metropolitan areas as reported on the 2000 Census. I exclude females from this analysis due to the complexities of gender wage inequalities and differences in labor force participation between immigrant males and females. As noted in footnote 2 above, Hispanic adults born in Puerto Rico are included in the sample. Although those born in Puerto Rico are U.S. citizens, there are many commonalities shared by Hispanic immigrants and Puerto Rican migrants to U.S. metropolitan areas such as relocation in an

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<sup>&</sup>lt;sup>4</sup> Singer (2004) divided some larger metropolitan areas into their smaller component cities; whereas in my analysis, metropolitan areas such as New York City and its surroundings are evaluated as one area due to my focus on the earnings of Hispanic immigrants within their specific local labor market context. This decision is also an operational one as much of the data I rely on for the metro area-level characteristics come from published Census 2000 data with these same geographic specifications.

English-dominant environment, and having to transfer job skills and level of education to the norms and requirements of the mainland American economy.

While it is likely that race is highly correlated with both country of origin and wage differences among Hispanic immigrants in the U.S., poor data quality on race of the respondents prevents me from including this variable in my analysis. Question order and wording problems on the 2000 Census survey resulted in 42% of Hispanic respondents reporting "Other" as their answer to the race question instead of identifying one or more race category<sup>5</sup>. In my sample, 48% of respondents replied "Other" to the race question, therefore, I did not analyze this variable.

I analyze person-level data in order to examine the link between wages, human capital attributes, and place for individual immigrant workers. I exclude children under age 18 and adults older than 64 because of my focus on adults whose major source of income is work. In addition, following the example of Card (2001), I include only those individuals who reported positive earning values (greater than \$0), and who reported having worked at least 10 hours per week for at least 25 weeks of the year. The exclusion of infrequent workers allows me to concentrate on regular workers, as well as eliminate extreme outliers who reported either negative earnings even with substantial time invested in work, or very high earnings from little time invested in work.

Table 2 lists and describes the study variables. The dependent variable is the natural log of hourly wages, derived from the reported total time worked and total amount earned in the previous 12 months in wages, salary, commissions, bonuses, or tips from all jobs as well as self-employment income from a farm or business. Annual

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<sup>&</sup>lt;sup>5</sup> For a thorough discussion of race differences among Hispanics, and measurement challenges of the 2000 Census, see Tafoya, Sonya. 2004. "Shades of Belonging." Washington, DC: Pew Hispanic Center.

earnings are converted to hourly wage based on the reported number of weeks worked in the previous year, and the usual numbers of hours worked per week. Income received from other sources such as social security or public assistance is not included in my analysis since these are not sources of pay for work. I use the natural log of wages in order to minimize the impact of extreme outliers at high earning levels.

As listed in Table 2, I include age, education, and occupation as indicators of human capital attributes (Chiswick and Miller 1992). I recoded education into four categories based on the achievement of milestones such as high school graduation. I collapsed the highest education category to include any level of college attendance because the proportion having graduated from college or higher in the sample was small. To capture immigrant-specific human capital attributes, I analyze country/region of origin<sup>6</sup>, age at migration, citizenship status, and English-speaking ability (Kochhar 2005; Ellis 2001; Kossoudji 1988).

Occupations are categorized into three skill-level groups to approximate social class<sup>7</sup>. Medium and high-skilled occupations include predominantly "white collar" jobs in the following Census-defined categories: management; business operations; finance; computer and mathematics; architecture and engineering; life, physical, and social science; community and social service; legal; education, training, and library; arts design, entertainment, sports, and media; healthcare practitioners and technical; healthcare support; office and administrative support; and sales. Skilled and semi-skilled

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<sup>&</sup>lt;sup>6</sup> Countries of birth are collapsed to region for Central America, South America, and the Caribbean due to the small size of specific country groups in these regions. The country-specific groups are Mexico, Cuba, and Puerto Rico.

<sup>&</sup>lt;sup>7</sup> I omitted any workers employed in U.S. military occupations due to the unique nature of employment in the military that is not responsive to the same economic forces as the civilian labor market. This omission resulted in the loss of 148 cases from the sample which comprised less than .001 percent of the original sample. The revised sample includes 182,714 cases.

occupations include those in mainly higher-level "blue collar" professions within: construction; extraction; installation, maintenance, and repair; production (manufacturing); protective service; and transportation and material moving. The unskilled occupations are predominantly entry-level "blue collar" positions in: food preparation and serving; building and grounds cleaning and maintenance; personal care and service; and farming, fishing, and forestry.

I employ gateway type as well as four other metropolitan area characteristics to approximate the influence on wages of the local social and economic context. The unemployment rate serves as a measure of job competition and strength of the local economy (Gurak and Kritz 2000). The proportion of employment within the manufacturing sector suggests the extent to which a local economy is comprised of old economy industry as opposed to new economy industries like service (Grieco 2004; Ellis 2001; Gordon 1999; Sassen 1995). In order to approximate measures of the overall environment for Hispanic immigrant workers within a metropolitan area, I include the concentration of all immigrants within the total population, and the concentration of U.S.born Hispanics. These variables serve as markers of integration and receptivity of immigrants and Hispanics, the presence of ethnic enclaves, and/or competition for jobs (Bauer et al. 2005; Gurak and Kritz 2000; McManus 1989). Table 3 provides the unemployment rates, percent working in the manufacturing sector, percent U.S.-born Hispanic, and percent foreign-born for the 28 study metropolitan areas. The data in Table 3 do not reflect well the categorization of metropolitan areas into gateway types; however, they show that some of the traditional gateways have the highest rates of

unemployment and percentage foreign-born, while some of the new magnet areas have the lowest percentage foreign-born and U.S.-born Hispanic.

My final point on the analysis plan regards the issue of variation in the cost of living by region or metropolitan area in the U.S. Variation in the cost of living may yield differences in wages, and would certainly yield differences in how far wages can go in terms of purchasing power since the costs of housing, utilities, groceries, medical care, entertainment, and a host of other goods and services vary widely across U.S. regions and cities. While real estate companies, employment search firms, and trade associations offer various measures to compare costs of living in the current year across cities in the U.S., there is no peer-reviewed or government-sponsored measure available for reliable use in this way (Koo et al. 2000; Boskin et al. 1996). For example, one widely cited measure constructed and available for purchase from the American Chamber of Commerce Research Association has been found to include substantial error, bias, and misleading information (Koo et al. 2000).

The Consumer Price Index (CPI) constructed by the U.S. Bureau of Labor Statistics (BLS) is commonly thought of as a measure of the cost of living. However, the CPI is designed to show changes in costs over time of a set basket of goods, and is not intended for comparison of costs across places. BLS reports, "An individual area [CPI] measures how much prices have changed over a specific period in that particular area; it does not show whether prices or living costs are higher or lower in that area relative to another" (U.S. BLS 2004, 8). The main analysis presented here does not include any control for cost of living. Without a suitable measure, I employed the available regional and metropolitan area CPI measures from 2000 to determine if controlling for differences

in changes in costs over time made a significant impact on the regression of wages by human capital and place factors. As shown in Appendix A, the inclusion of the CPI measures did not change the results in any substantial way.

#### Chapter 4. Results

#### Male Hispanic Immigrant Workers by Gateway Type

The sample includes 182,712 male Hispanic immigrant workers living in the 28 metropolitan areas. Table 4 displays descriptive information about the human capital background of the immigrants in the sample by gateway type. The seven traditional gateway areas accounted for 69% of the sample, while the twelve established destinations and nine new magnets comprised 24% and 7% respectively.

The majority of the male Hispanic immigrant workers in the sample were born in Mexico. The second largest region of birth in the sample across all gateway types is Central America where most were born in El Salvador. The subsequent places of birth are South America (more than half from Colombia), followed by Cuba, Puerto Rico, and the Caribbean (predominantly from Dominican Republic). The concentration of Mexicanborn immigrants in the sample is considerably higher in the established destinations (72%) and new magnets (65%) than in the traditional gateways (55%). Puerto Ricans comprise a higher proportion of the sample in the new magnet areas than the other gateway types, while the traditional gateways have higher concentrations of Cubans (mostly in Miami) and South Americans.

The demographic characteristics of the male Hispanic immigrant workers in the sample vary in important ways by gateway type. The immigrants in the new magnets are on average younger, have been in the U.S. for less time, migrated to the U.S. at older ages, and are less likely to have U.S. citizenship in comparison to those from the traditional gateway cities, and also—to a lesser extent—in comparison to those from the established destinations. Immigrants from both the new magnets and the established

destinations are less likely to speak English well than those in the traditional gateways, and they are more often employed in unskilled and skilled work as opposed to in white-collar professions than their traditional gateway counterparts. In addition, immigrants in the traditional gateways have a higher proportion of high school graduates and college attendants/graduates than immigrants living in the established destinations and new magnet areas.

From the information displayed in Table 4, key compositional differences by gateway type are clear. Human capital attributes are stronger among the male Hispanic immigrant workers in the traditional gateway areas compared to the established destinations and new magnets. Of the three gateway types, a higher proportion of immigrants in the new magnets are young so they most likely have less work experience, and came to the U.S. as adults and therefore were not able to integrate in American society or attend U.S. schools as children. Also, a higher proportion of immigrants in the new magnets are very new to the U.S. and work in low-skill jobs. Interestingly, immigrants in the established destinations have a higher proportion within the lowest levels of education. This may be explained by the higher proportion of immigrants born in Mexico in the established destinations, as research indicates Mexican-born immigrants have lower education levels on average than other Latin American immigrants (Duncan et al. 2006; Portes and Zhou 1992).

The male Hispanic immigrant workers vary by gateway type not only in terms of background characteristics, but also by the distribution of occupations. The distribution of occupations gives some perspective on the features of the local labor market, some of which are addressed in the regression analysis. The Census collapses all reported

occupations into 24 broad categories. Table 5 displays the ranking of the 24 occupational categories in the three skill groups (high-skilled, semi-skilled and skilled, and unskilled) among the Hispanic immigrant workers in the sample, by gateway type. The table shows that while over half of all workers in each gateway type are employed in semi-skilled and unskilled occupations, there is a higher concentration of workers in the traditional gateways employed in more white collar occupations such as office/ and administrative support, sales, management, and protective services. There is also a higher proportion of workers in the traditional gateways employed in production jobs which comprise the bulk of manufacturing jobs. By contrast, there are much higher concentrations of workers in construction occupations in the established destinations and new magnets. In fact, the proportion of construction workers in the traditional gateways is less than half that of the other gateway types. Also, a higher proportion of workers in the new magnets are employed in food preparation and serving occupations than in the other gateway types.

The mean and median hourly wages of the Hispanic immigrant workers in the sample are displayed in Table 6 by metropolitan area and gateway type. Not surprisingly given the pattern of human capital attributes across the three gateway types, immigrants in the traditional gateway areas earn higher mean and median wages on average than immigrants in the other gateway groupings. The mean hourly wage among immigrants in traditional gateway areas are \$1.88 higher than the mean in established destinations, and \$2.38 higher than the mean in new magnet areas, while the median hourly wage is \$.80 higher than that of the established destinations, and \$.88 higher than that of the new magnets. Immigrants living in traditional gateway Miami had the highest mean hourly wage (\$17.89), while immigrants in traditional gateway San Francisco had the highest

median wage (\$12.02); the lowest mean and median wages were among the immigrants living in new magnet area Raleigh-Durham (\$10.70 and \$8.00 respectively). Table 6 depicts a high level of heterogeneity within the gateway types; however, as the median wage in Las Vegas (a new magnet) at \$10.77 was higher than the median wages in San Diego, Los Angeles, and several established destinations. Also, Washington/Baltimore (an established destination) had the second highest median wage level of all the metropolitan areas at \$11.25.

Table 7 illustrates how mean hourly wages differ within the sample of male Hispanic immigrant workers by gateway type and by human capital attributes. As to be expected, mean wages are higher at older ages, higher education levels, higher skilled occupations, higher English speaking ability, with citizenship status, and at younger ages of migration. In addition, immigrants born in Mexico earn less than all other origin groups, while immigrants from Cuba earn the highest wages. Immigrants in the new magnets earn less than immigrants in the other gateway types across most of the categories, while immigrants in the traditional gateways earn higher wages across every category. Even among the well-educated and highly-skilled groups, immigrants in new magnets earn less than immigrants elsewhere. For example, at the highest level of education (some college or more), immigrants in the new magnets earn \$1.20 and \$2.32 less per hour than their counterparts in the established destinations and traditional gateway areas, respectively. In addition, those who are U.S. citizens in the new magnets earn \$2.36 and \$3.15 less per hour than U.S. citizens in the established destinations and traditional gateway areas. These gaps suggest that there are variations in the local context by gateway type that yield different gains to human capital investments. I explore these differences further in the analysis.

#### Stepwise Regression Results: Gateway Type Effects on Wages

Table 8 provides stepwise regression results comparing wages for male Hispanic immigrant workers in established destinations and new magnets with the wages in traditional gateways. In Model 1, gateway type is the only independent variable predicting the log of wages, and wages are statistically significantly lower in both established destinations and new magnets than in traditional gateways. Interestingly, the coefficients are virtually identical for both established destinations (-0.083) and new magnets (-0.086) suggesting that the wages for male Hispanic immigrants in these two gateway types differ to the same degree from traditional gateways.

Model 2 regresses wages on gateway type, and basic human capital factors including current age, education, and occupation skill group, while Model 3 adds immigrant-specific human capital factors: country of origin, age at migration, citizenship status, and English language ability. The coefficients for both established destinations and new magnets in Models 2 and 3 approach zero and are not significant, indicating that human capital and immigrant-specific characteristics explain much of the wage advantage in the traditional gateway areas. The coefficients for each of the additional variables in Models 2 and 3—with the exception of country/region of origin—are positive and significant, confirming the positive influence of basic and immigrant-specific human capital investments on wages. Occupation skill group was the variable most responsible for diminishing the effect of gateway type on wages in Model 2, while citizenship and English-language ability each contributed to the further drop in the effect

of gateway type on wages in Model 3. Regarding country/region of origin, Model 3 suggests that workers from South America have significantly higher wages than workers from Mexico net of the human capital and immigrant-specific controls, while workers from Puerto Rico have significantly lower wages than those from Mexico net of the controls. Wages net of the controls for workers from Central America, Cuba, and the Caribbean are not significantly different that the wages for workers from Mexico.

Metropolitan area controls are added in Model 4. With the addition of the percent unemployed, percent U.S.-born Hispanic, percent foreign-born, and percent employed in manufacturing, the significant wage advantage in traditional gateways reappears, with larger negative coefficients for established destinations and new magnets. The coefficients for the human capital and immigrant-specific variables remain positive and significant. For country/region of origin, workers from Puerto Rico and now the Caribbean have significantly lower wages than those from Mexico net of the controls, while workers from South America and now Cuba have significantly higher wages. As in Model 3, the wages for workers born in Central America are not significantly different that wages for workers born in Mexico.

The reappearance in Model 4 of the wage advantage for immigrants in traditional gateways suggests that the metropolitan area factors benefit wages in the established destinations and new magnets, net of individual-level characteristics. Not surprisingly, the percent in manufacturing has a significant negative effect on wages indicating a decline in old economy opportunities and wages. The percent U.S.-born Hispanic has a modest positive relationship with wages, but does not provide conclusive evidence as to whether large Hispanic communities may protect or hinder the wage opportunities for

Hispanic immigrants. The percent foreign-born, however, has a significant negative correlation with wages suggesting that job competition from a larger pool of immigrant labor drives wages down for male Hispanic immigrants. Taken together, the results for percent foreign-born and percent employed in manufacturing suggest that wages are penalized for immigrants in cities where many immigrants reside and where the declining manufacturing industry is a prominent feature of the local economy. The unemployment rate has a curious relationship with wages in Model 4: the coefficient for percent unemployed is positive and significant indicating that net of the other controls, an increase in the unemployment rate is correlated with an increase in wages. This is a surprising result and is most likely indicative of influence from a factor that I have not captured in this analysis.

#### Conditional Effects of Human Capital Investments by Gateway Type

The next part of the analysis examines how gateway type might condition the relationship between aspects of human capital and wages. I added interaction terms to Model 4 multiplying gateway type by each of the human capital and immigrant-specific control variables included in Model 3. The variables that resulted in significant interaction terms were education, occupation skill group, citizenship status, and Englishlanguage ability. While the main effects for the controls in Models 2, 3, and 4 remain virtually unchanged with the addition of interaction terms, the interaction term coefficients yield interesting findings. Table 9 provides the full model including these interaction terms while Table 10 summarizes the conditional effects of those human capital investments that varied by gateway type when added to Model 4.

As shown in Tables 9 and 10, the effects of completing some high school or graduating from high school on wages compared to having completed only up to grade eight are not significantly different in the established destinations and new magnets than in the traditional gateways. There is a difference, however, in the wage gains correlated with college education and gateway type. The effects on wages of achieving a college education are greatest for Hispanic immigrant workers in traditional gateway; workers in new magnets receive the lowest gains to college education. The differences in mean wages by gateway type for those with college education further illustrate the point that workers in traditional gateway areas benefit more from this achievement: workers with college education in traditional gateways earn a mean wage of \$20.34 compared to \$19.22 in the established destinations and \$18.02 in the new magnets.

While the benefits to college education are higher in traditional gateways, the benefits of high-skilled employment are higher in established destinations and new magnets. This ostensible contradiction suggests that high-skilled employment for Hispanic immigrant males is such a rarity, that acquisition of these positions does pay off substantially. This may not be surprising given that only 16.9% of the workers in the established destinations and 16.0% of those in the new magnets were working in high-skilled occupations compared to 25.4% in the traditional gateways. Furthermore, the effects of occupation skill group on wages indicate that the wage gap between high-skilled and unskilled occupations is greater in established destinations and new magnets than in traditional gateways. The effect of working in semi-skilled and skilled occupations as opposed to unskilled occupations is higher in established destinations than

in traditional gateways, while the effect for new magnets is not statistically different than the effect in traditional gateways.

Acquiring citizenship benefits male Hispanic immigrant wages more in the traditional gateway areas than in the established destinations and new magnets. The same is suggested for English language ability; however, this interaction is only statistically significant for established destinations. As with college education, the labor markets in established destinations and new magnets do not appear to pay the same premium for citizenship or English-skills as traditional gateways, net of individual and macro-level controls, suggesting that the demands for citizenship are low in the job markets outside of traditional gateways.

#### Metropolitan Area Effects on Wages

The last stage of my analysis is the examination of individual established destinations and new magnets, contrasted with the category of traditional gateways. In this regression, I cannot include the metropolitan area variables as these are constant within each individual metropolitan area. This analysis allows us to see beyond the gateway types to understand the impact of human capital and immigrant-specific characteristics on the wages of workers in the cities that comprise the "established destination" and "new magnet" categories.

As displayed in Table 11, the wages of workers in most of the established destinations and new magnets were significantly lower than those in traditional gateways. However, workers in Washington/Baltimore had significantly higher wages and wages of workers in Sacramento, Seattle, Tampa, West Palm Beach, Indianapolis, Las Vegas, and Orlando had wages that were not statistically different than wages for workers in the

traditional gateway areas. Controlling for human capital and immigrant-specific attributes causes coefficients for all established destinations and new magnets to improve relative to those in the traditional gateways, with the exception of Orlando whose wage levels relative to wages in traditional gateways actually decrease significantly with the controls. Net of the individual-level controls included in Models 2 and 3, the wages for the workers in most of the remaining established destinations and new magnets are not statistically different than those in the traditional gateways indicating that differences in male Hispanic immigrant wages across many of these cities are largely compositional ones. However, wages for workers in Dallas, Tampa, and Orlando remain statistically lower than wages for workers in the traditional gateways, while wages for workers in Denver, Sacramento, Washington/Baltimore, and Las Vegas become significantly higher than those for workers in the traditional gateways net of the individual-level controls. Significant differences in wages for immigrants in six non-traditional gateways compared to the traditional gateways once human capital and immigrant-specific factors are controlled indicates that place-specific factors influence the wage profile for male Hispanic immigrants even when individual-level factors are controlled.

### **Chapter 5. Discussion**

I asked a hypothetical question in the introduction: If three immigrant workers are identical in terms of basic human capital and immigrant-specific attributes, but one works in Los Angeles, one in Salt Lake City, and one in Nashville, do they each earn the same pay? If there is a difference in pay, what explains it? My results suggest that the wages for the workers in Salt Lake City and Nashville would be slightly lower or just about the same as the wages for the worker in Los Angeles. These findings are consistent with my first hypothesis that wages for workers in traditional gateways are highest, primarily due to aggregate differences in the human capital attributes of workers across gateway types.

The elimination of the wage advantage for workers in traditional gateways that occurs when basic human capital and immigrant-specific factors are controlled suggests that Hispanic immigrant workers in gateway types have compositional differences that drive differences in wages. Specifically, male Hispanic immigrant workers in the established destinations and new magnets have weaker human capital on average than their counterparts in the traditional gateways. However, once these variables are controlled in the analysis, the difference in wages is not significant. It is interesting that the gateway typology did not yield significant differences between established destinations and new magnets. As the geographic dispersal of Hispanic immigrants progresses, these categorizations may prove more or less meaningful depending on the evolution of local labor markets and immigrant integration.

My second hypothesis was that the gains to human capital investments would be greater outside of traditional gateway areas, but my findings did not support this proposition. According to my analysis, if the three workers are each employed in

unskilled occupations, the worker in Los Angeles would be less disadvantaged in comparison to local higher-skilled workers than his counterparts in Salt Lake City or Nashville. The higher rewards to acquiring a high-skilled job relative to an unskilled position in an established destination or new magnet may be a reflection of the rarity of high-skilled positions open to Hispanic immigrants compared to unskilled positions, or how disadvantaged unskilled workers are relative to higher-skilled workers outside of traditional gateways.

In addition, if the three hypothetical Hispanic immigrants each decide to invest in college education, obtain citizenship, or improve their English skills, the workers in Salt Lake City and Nashville would likely see lower returns to these investments than their counterpart in Los Angeles. These dynamics stemming from the conditional effects of human capital by gateway type could be related to the greater likelihood of ethnic enclave employment in traditional gateways and the theory that human capital investments pay off for immigrants leaving ethnic enclave employment to join the broader local labor market. Disparities in the gains to human capital by gateway type could also be linked to differences in occupational mix by metropolitan area that would yield discrepancies in the demands for human capital investments such that human capital investments would match the job demand for Hispanic immigrants better in traditional gateways. These findings could also be indicative of differences in receptivity of Hispanic immigrants, or in racial/ethnic discrimination by employers or in the larger community.

That metropolitan area factors in the regression analysis appear to benefit workers outside of traditional gateway areas suggests that immigrants with the same human capital and immigrant-specific characteristics would fare better in places with fewer

immigrants competing for jobs and resources, and fewer manufacturing indicative of a slowing local economy. These correlations could be indicative of the strength of rapidly expanding new economy service sectors in the established destinations and new magnet areas; however, given the rapidity of change in these areas, it would be important to follow these trends over time as the majority of service sector jobs are low-paying and may not provide much advancement potential. The correlation of percent U.S.-born Hispanic with wages was not significant, and the negative relationship with the rate of unemployment was puzzling, as noted above. The mix of findings on the effects of percent foreign-born and percent U.S.-born Hispanic do little to support or dispute a wage advantage within areas with large ethnic enclaves. A more detailed analysis of the nature of ethnic enclaves and specific country of origin groupings could better approach this important aspect of Hispanic labor force outcomes.

My findings support the use of the gateway typology as an operational variable. There is a clear pattern that distinguishes the experience of workers in the traditional gateways from those in the established destinations and new magnets. Although I found exceptions to the broader findings once individual established destinations and new magnets were evaluated, the gateway typology is useful for understanding general patterns related to local labor markets and history of immigrant integration that can then be examined more closely within specific metropolitan areas. Because of the recency and rapidity of change in the Hispanic immigrant populations in established destinations and new magnets, it would be very useful to examine these trends over time to see if the value of the gateway typology endures.

#### Study Limitations

This thesis is an initial effort to explore place-specific differences in the Hispanic immigrant experience. As noted above, I did not control for variations in cost of living across the metropolitan areas. In addition, I was unable with Census data to determine the true nature of ethnic enclaves, but used size of the Hispanic and immigrant populations as proxy measures. Another limitation to this study is my inability to measure many premarket factors that impact the work and wages of Hispanic immigrants such as racial/ethnic discrimination in the workplace or social networks. In addition, my use of cross-sectional data prohibits any comparison of trends over time; as the Hispanic immigrant communities in established destinations and new magnets become more established, it would be important to revisit this analysis to determine whether gateway type differences persist.

### **Conclusion**

Analysis of wages among male Hispanic immigrant workers across gateway types highlights the value of examining sub-national data towards a better understanding of the determinants of economic incorporation of immigrants in the U.S. As Suro and Singer write, "Across the country, one-size fits all problem solving will not suffice" (Suro and Singer 2002, 10). In short, individual attributes of the workers play a strong role in determining wages; however, place matters too. This thesis contributes to the effort to approach more of the macro-level dynamics that influence wages for Hispanic immigrant workers in the U.S. beyond individual-level attributes. For the metropolitan areas that are new to the challenges and opportunities of integrating Hispanic immigrants, my findings that human capital and immigrant-specific factors cannot fully explain the wage profile

for male Hispanic immigrants suggest that there are factors unique to local labor markets and communities that can influence the overall success of Hispanic immigrants in a metropolitan area. As Fischer and Tienda write, "The consequences of Hispanics' changing spatial imprints will shape their futures in myriad ways, still to be played out and tallied even as they reshape the U.S. urban landscape" (Fischer and Tienda 2006, 129). As the Hispanic immigrant population continues to spread more widely outside of traditional gateways and even into rural areas, researchers and policy-makers should pay close attention to the role of place in determining the Hispanic immigrant experience.

Figure 1. Conceptual Framework: Combination of Individual-Level and Metro Area-Level Characteristics to Predict Male Hispanic Immigrant Wages

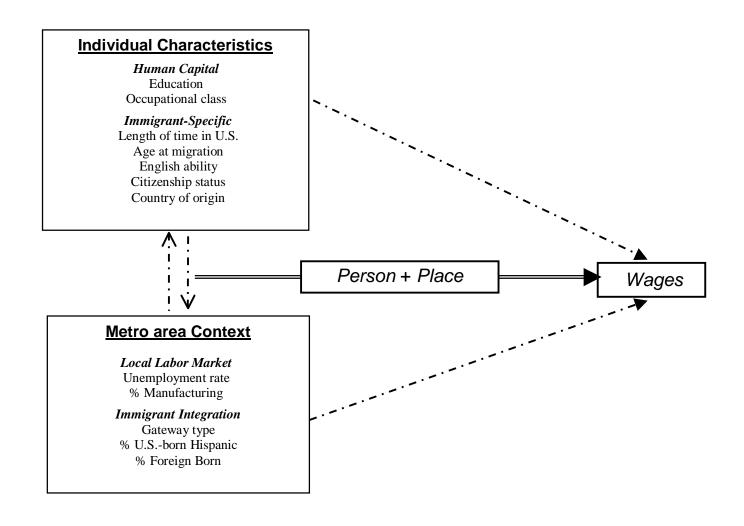


Table 1. 28 Study Metropolitan Areas: Total Population and Hispanic Population, 1990-2000\* (in thousands)

Metropolitan Area	•	tal Popula	•			Hispanic Population				
	1990	2000	 Change		199			000 Chan		nge
Traditional Gateways			#	%	#	%	#	%	#	%
BostonWorcester-Lawrence, MA-NH-ME-CT	5,258	5,819	561	11%	232	4%	358	6%	126	54%
Chicago-Gary-Kenosha, IL-IN-WI	8,162	9,158	996	12%	895	11%	1,499	16%	603	67%
Los Angeles-Riverside-Orange County, CA	14,532	16,374	1,842	13%	4,779	33%	6,598	40%	1,819	38%
MiamiFort Lauderdale, FL	3,193	3,876	684	21%	1,062	33%	1,563	40%	502	47%
New YorkNorthern NJ-Long Island, NY-NJ-CT-PA	19,550	21,200	1,650	8%	2,845	15%	3,852	18%	1,007	35%
San Diego, CA	2,498	2,814	316	13%	499	20%	751	27%	252	51%
San Francisco-Oakland-San Jose, CA	6,253	7,039	786	13%	970	16%	1,384	20%	413	43%
Established Destinations										
AustinSan Marcos, TX	846	1,250	404	48%	174	21%	328	26%	153	88%
DallasFort Worth, TX	4,037	5,222	1,185	29%	512	13%	1,120	21%	609	119%
Denver-Boulder-Greeley, CO	1,980	2,582	601	30%	234	12%	477	18%	243	104%
Houston-Galveston-Brazoria, TX	3,711	4,670	959	26%	772	21%	1,349	29%	576	75%
Phoenix-Mesa, AZ	2,238	3,252	1,013	45%	374	17%	817	25%	443	118%
Portland-Salem, OR-WA	1,756	2,265	509	29%	71	4%	197	9%	126	177%
Sacramento-Yolo, CA	1,481	1,797	316	21%	172	12%	278	15%	106	61%
Salt Lake City-Ogden, UT	1,072	1,334	262	24%	61	6%	145	11%	83	136%
Seattle-Tacoma-Bremerton, WA	2,970	3,555	584	20%	82	3%	184	5%	103	126%
Tampa-St. Petersburg-Clearwater, FL	2,068	2,396	328	16%	136	7%	249	10%	113	83%
WashingtonBaltimore, DC-MD-VA-WV	6,427	7,608	1,181	18%	256	4%	485	6%	229	90%
West Palm Beach-Boca Raton, FL	864	1,131	268	31%	65	8%	141	12%	76	116%

Table 1. continued

Metropolitan Area

Metropolitan Area	Total Population				<b>Hispanic Population</b>					
	1990	2000	Chai	nge	199	0 20		00 Cha		nge
New Magnets										
Atlanta, GA	2,960	4,112	1,152	39%	55	2%	269	7%	214	388%
Charlotte-Gastonia-Rock Hill, NC-SC	1,162	1,499	337	29%	10	1%	77	5%	67	685%
Greensboro-Winston-Salem-High Point, NC	1,050	1,252	201	19%	7	1%	62	5%	55	809%
Indianapolis, IN	1,380	1,607	227	16%	12	1%	43	3%	31	261%
Las Vegas, NV-AZ	853	1,563	711	83%	87	10%	322	21%	235	272%
Minneapolis-St. Paul, MN-WI	2,539	2,969	430	17%	34	1%	99	3%	65	189%
Nashville, TN	985	1,231	246	25%	7	1%	40	3%	33	454%
Orlando, FL	1,225	1,645	420	34%	99	8%	272	17%	173	175%
Raleigh-Durham-Chapel Hill, NC	856	1,188	332	39%	10	1%	73	6%	63	631%

\*While I made every effort to present comparable counts for the metropolitan areas in 1990 and 2000, geographic boundaries change from one census to the next. In some cases, the 1990 geographies may not exactly match the boundaries of the 2000 data. Sources: a) Census 2000 Table PHC-T-3. Ranking Tables for Metropolitan Areas:1990 and 2000. b) 2000 P4. Hispanic or Latino, and not Hispanic or Latino by Race. c) Census 1990 Table P008. Persons of Hispanic Origin. d) Suro, Roberto and Audrey Singer. 2002. "Latino Growth in Metropolitan America: Changing Patterns, New Locations." Washington, DC: The Brookings Institution and Pew Hispanic Center. e) Singer, Audrey. 2004. "The Rise of New Immigrant Gateways." The Living Cities Census Series. Washington, DC: The Brookings Institution Center on Urban and Metropolitan Policy.

**Table 2. Study Variables** 

Variables	Description	Measurement Scale
DEPENDENT VARIABLE Log hourly wages	Hourly wages from work, derived from reported annual income and number of hours worked in previous year	Natural log implemented to limit variance
HUMAN CAPITAL INDEPEN Current Age	<b>DENT VARIABLES</b> Age 18-64	Years
Education	Years of formal education completed and milestones achieved	4 dummy variables for: No formal education through Grade 8 (omitted), Grade 9-11, High school graduate, and Some college or more
Occupation Skill Group	Categorization of occupations based on skill level.	3 dummy variables: Unskilled (omitted), Semi-Skilled/Skilled, and High-skilled
IMMIGRANT-SPECIFIC INDE	PENDENT VARIABLES	
Country/Region of Origin	Country of birth	6 dummy variables: Mexico (omitted), Central America, South America, Cuba, Puerto Rico, and Caribbean
Age at Migration	Age at migration to the U.S. determined from current age and year of arrival	3 dummy variable: Younger than 10 years old, 10-21 years old, and Over age 21 (omitted)
Citizenship Status	United States citizenship status (not detailed)	0 = Not a citizen 1 = Naturalized citizen/Puerto Rican
English Speaking Ability	Ability to speak English if not primary language spoken at home	0 = Not Well, Not at all 1 = Well, Very Well
METRO AREA-LEVEL INDE		
Gateway type	Categorization of metro areas based on Singer (2004) as well as size historical presence, and recent growth of Hispanic immigrant population	3 dummy variables: Traditional gateway (omitted), Established destination, and New magnet
Unemployment rate	% unemployed working age adults, from U.S. Bureau of Labor Statistics	Percent
U.Sborn Hispanic concentration	% of total population who are U.Sborn Hispanics, based on Census 2000 data	Percent
Foreign-born concentration	% of total population who are foreign- born, based on Census 2000 data	Percent
Manufacturing concentration	% of all workers employed within manufacturing sector, based on 2000 Census data.	Percent

Table 3. Metropolitan Area Characteristics Included in Analysis

Table 3. Metropolitan Area Characteristics included in Analysis									
	ъ.	Percent Percent			<u>Percent</u>				
BB 4 P4 A		rcent		<u>yed in</u>		<u>-born</u> ·	Foreign-		
Metropolitan Area		ployed		cturing		<u>panic</u>		orn .	
T 1111 1.0.1	%	Rank	%	Rank	%	Rank	%	Rank	
Traditional Gateways									
BostonWorcester-Lawrence,			40 =				400		
MA-NH-ME-CT	4.2	24	13.5	11	2.7	20	13.6	13	
Chicago-Gary-Kenosha, IL-									
IN-WI	6.2	5	15.9	3	8.2	12	16.7	9	
Los Angeles-Riverside-									
Orange County, CA	7.4	1	14.8	7	21.4	1	31.1	2	
MiamiFt. Lauderdale, FL	7.2	2	6.9	24	10.8	8	42.1	1	
New YorkNorthern NJ-Long									
Island, NY-NJ-CT-PA	6.7	3	9.6	20	7.9	13	26.9	3	
San Diego, CA	5.6	9	11.0	19	15.4	4	21.7	4	
San Francisco-Oakland-San									
Jose, CA	4.5	20	14.6	8	10.7	9	11.3	17	
<b>Established Destinations</b>									
AustinSan Marcos, TX	4.0	27	14.0	9	18.5	2	12.4	15	
DallasFort Worth, TX	4.8	16	13.1	12	11.3	7	15.2	10	
Denver-Boulder-Greeley, CO	4.1	26	9.3	21	12.4	6	10.8	20	
Houston-Galv-Braz, TX	6.2	6	12.1	15	15.9	3	19.4	5	
Phoenix-Mesa, AZ	4.9	15	11.6	17	15.2	5	14.2	12	
Portland-Salem, OR-WA	5.9	8	15.3	6	4.3	18	11.0	19	
Sacramento-Yolo, CA	6.2	7	7.5	23	10.7	10	14.6	11	
Salt Lake City-Ogden, UT	4.7	18	12.1	15	6.3	15	8.7	23	
Seattle-Tac-Brem, WA	5.0	12	13.0	13	3.3	19	11.8	16	
Tampa-St. Pete-Clrwtr, FL	4.9	14	8.3	22	5.3	16	11.3	17	
WashingtonBaltimore, DC-	7.0	1-7	0.0		0.0	10	11.0	.,	
MD-VA-WV	4.5	22	5.8	27	2.4	21	13.1	14	
West Palm Beach-Boca	4.0	22	0.0	21	۷.٦	21	10.1	14	
Raton, FL	5.0	13	6.3	26	4.5	17	18.6	6	
	5.0	13	0.5	20	4.5	17	10.0	O	
New Magnets									
Atlanta, GA	5.0	11	11.1	18	2.1	22	10.5	21	
Charlotte-Gastonia-Rock Hill,									
NC-SC	5.2	10	17.6	2	1.5	26	6.8	25	
Greensboro-Winston-Salem-									
High Point, NC	4.7	17	23.3	1	1.6	25	5.8	26	
Indianapolis, IN	4.4	23	15.8	5	1.3	28	3.5	28	
Las Vegas, NV-AZ	6.5	4	4.0	28	10.5	11	16.7	8	
MinneapSt. Paul, MN-WI	3.5	28	15.9	3	1.8	23	7.2	24	
Nashville, TN	4.5	21	13.5	10	1.3	27	4.8	27	
Orlando, FL	4.6	19	6.7	25	6.9	14	17.0	7	
Raleigh-Dur-Chap Hill, NC	4.1	25	12.5	14	1.8	24	9.3	22	

Sources: a) U.S. Bureau of Labor Statistics. 2004. "Unemployment Rates for Metropolitan Areas." Accessed online, www.bls.gov/lau/lamtrk00.htm. b) U.S. Census Bureau. 2001. Census 2000 SF-3 Detailed tables: Hispanic origin population by metropolitan area; Percent U.S.-born Hispanic by metropolitan area; Percent foreign-born by metropolitan area; Percent employed in manufacturing industry. Accessed online, factfinder.census.gov/home/saff/main.html.

**Table 4. Descriptive Characteristics: Male Hispanic Immigrant Workers** 

Mean/Percentage	Total Sample	<u>Traditional</u>	<b>Established</b>	New
Sample size % of sample	182,714 100.0	126,428 69.2	43,532 23.8	12,902 7.1
<u>Age</u> Mean Age, years	35.7	36.6	33.9	33.0
% Age 18-24 % Age 25-34 % Age 35-49 % Age 50+	16.8 33.9 36.2 13.2	14.6 32.6 38.0 14.9	21.1 36.5 33.1 9.4	24.3 37.8 28.9 9.1
<u>Time in U.S</u> . Mean Years in U.S.	14.9	16.1	12.8	10.9
% in U.S. < 5 years % in U.S. 5-9 years % in U.S. 10-19 years % in U.S. 20+ years	16.7 17.5 34.6 31.2	13.0 16.0 36.1 34.9	22.8 20.7 32.2 24.3	32.6 22.2 27.3 17.9
Mean Age at Migration, years	20.8	20.5	21.1	22.1
% Migrated before age 10 % Migrated ages 10-21 % Migrated age 22 or older	10.8 48.9 40.3	11.9 48.4 39.7	8.7 50.5 40.8	7.2 48.6 44.2
Country/Region of Origin-%				
Mexico Central America South America Cuba Puerto Rico Caribbean	59.4 15.4 9.9 5.9 5.3 4.1	54.6 15.6 11.5 7.3 5.6 5.6	71.7 16.0 6.0 2.4 3.1 0.7	65.4 12.0 7.4 3.7 10.1 1.4
<u>Citizenship</u> % Naturalized or from Puerto Rico	30.2	32.7	24.0	26.4
English Ability -% Well/Very Well	57.2	59.9	51.5	51.0
Education-% None – Grade 8 Grade 9-11 High School Graduate Some college or higher	33.6 15.9 28.5 22.1	31.5 15.0 29.8 23.8	39.9 18.1 24.4 17.6	33.5 16.8 29.0 20.7
Occupation Group Unskilled Semi-skilled, Skilled High-skilled	21.2 26.1 22.7	20.5 54.2 25.4	22.2 60.9 16.9	24.8 59.2 16.0

Table 5. Occupation Categories for Male Hispanic Immigrant Workers by Gateway Type

Traditional Gateway	Traditional Gateway Established Destinations New Mag			New Magnets	
	%		%	_	%
High-Skilled Categories	25.39		16.93		16.04
Office & Administrative Support	7.17	Office & Administrative Support	4.22	Office & Administrative Support	3.79
Sales	6.81	Sales	3.95	Sales	3.72
Management	4.39	Management	3.26	Management	3.35
Arts, Design, Ent., Sports, & Media	1.02	Architecture & Engineering	0.96	Architecture & Engineering	0.85
Architecture & Engineering	0.95	Computer & Mathematical	0.82	Computer & Mathematical	0.81
Business Operations Specialist	0.79	Arts, Design, Ent., Sports, & Media	0.63	Healthcare Practitioners & Technical	0.67
Computer & Mathematical	0.79	Healthcare Practitioners & Technical	0.60	Arts, Design, Ent., Sports, & Media	0.64
Education, Training, & Library	0.77	<b>Business Operations Specialist</b>	0.55	<b>Business Operations Specialist</b>	0.46
Healthcare Practitioners & Technical	0.76	Education, Training, & Library	0.52	Education, Training, & Library	0.44
Financial Specialist	0.60	Financial Specialist	0.36	Financial Specialist	0.43
Healthcare Support	0.46	Community & Social Service	0.32	Community & Social Service	0.33
Community & Social Service	0.43	Life, Physical, & Social Science	0.26	Life, Physical, & Social Science	0.22
Life, Physical, & Social Science	0.23	Healthcare Support	0.20	Healthcare Support	0.16
Legal	0.19	Legal	0.19	Legal	0.13
Extraction	0.03	Extraction	0.09	Extraction	0.04
Semi-skilled and Skilled Categories	54.13		60.83		59.13
Production (Manufacturing)	18.75	Construction	30.75	Construction	32.78
Construction	13.67	Production (Manufacturing)	12.98	Production (Manufacturing)	12.75
Transportation & Material Moving	13.46	Transportation & Material Moving	10.16	Transportation & Material Moving	8.44
Installation, Maintenance, & Repair	6.90	Installation, Maintenance, & Repair	6.33	Installation, Maintenance, & Repair	4.43
Protective Service	1.35	Protective Service	0.61	Protective Service	0.73
Unskilled Categories	20.48		22.22		24.81
Bldg & Grnds, Cleaning, Maintenance	9.54	Bldg & Grnds, Cleaning, Maintenance	10.35	Bldg & Grnds, Cleaning, Maintenance	10.43
Food Preparation & Serving	8.73	Food Preparation & Serving	9.00	Farming, Fishing, & Forestry	1.63
Farming, Fishing, & Forestry	1.27	Farming, Fishing, & Forestry	2.38	Food Preparation & Serving	11.65
Personal Care & Service	0.94	Personal Care & Service	0.49	Personal Care & Service	1.10

Table 6. Median and Mean Hourly Wages for Male Hispanic Immigrant Workers by Gateway Type

	Median Hourly Wages		Mean Hour	ly Wages
Metropolitan Area	Median	Rank	Mean	Rank
Total Sample	10.03		15.85	
Traditional Gateways	10.42		16.47	
BostonWorcester-Lawrence, MA-NH-ME-CT	11.06	6	15.74	9
Chicago-Gary-Kenosha, IL-IN-WI	11.11	4	16.69	6
Los Angeles-Riverside-Orange County, CA	9.62	13	15.34	12
MiamiFort Lauderdale, FL	11.22	3	17.89	1
New YorkNorthern NJ-Long Island, NY-NJ-CT-PA	11.10	5	17.65	3
San Diego, CA	9.55	16	15.31	13
San Francisco-Oakland-San Jose, CA	12.02	1	17.74	2
Established Destinations	9.62		14.59	
AustinSan Marcos, TX	9.52	17	17.31	4
DallasFort Worth, TX	9.00	21	13.26	22
Denver-Boulder-Greeley, CO	9.62	13	15.51	11
Houston-Galveston-Brazoria, TX	9.62	13	14.62	17
Phoenix-Mesa, AZ	8.99	23	13.29	21
Portland-Salem, OR-WA	8.52	25	11.31	26
Sacramento-Yolo, CA	10.71	8	15.80	8
Salt Lake City-Ogden, UT	9.23	20	12.53	23
Seattle-Tacoma-Bremerton, WA	10.00	10	14.77	15
Tampa-St. Petersburg-Clearwater, FL	10.00	12	14.60	18
WashingtonBaltimore, DC-MD-VA-WV	11.25	2	16.88	5
West Palm Beach-Boca Raton, FL	10.00	12	15.55	10
New Magnets	9.54		14.09	
Atlanta, GA	9.00	21	14.05	19
Charlotte-Gastonia-Rock Hill, NC-SC	8.75	24	11.90	25
Greensboro-Winston-Salem-High Point, NC	8.05	27	10.91	27
Indianapolis, IN	9.25	19	14.74	16
Las Vegas, NV-AZ	10.77	7	16.41	7
Minneapolis-St. Paul, MN-WI	9.38	18	13.77	20
Nashville, TN	8.33	26	12.11	24
Orlando, FL	10.26	9	15.03	14
Raleigh-Durham-Chapel Hill, NC	8.00	28	10.70	28

Table 7. Mean Hourly Wages for Male Hispanic Immigrant Workers by Selected Characteristics and Gateway Type

	Total	<u>Gateway Type</u>				
	Sample	<u>Traditional</u>	<b>Established</b>	<u>New</u>		
Hourly Wages	15.86	16.48	14.59	14.09		
<u>Age</u>						
18-24	10.97	11.40	10.27	10.53		
25-34	14.80	15.42	13.47	13.81		
35-49	18.03	18.32	17.45	16.48		
50+	18.88	19.05	18.56	17.15		
Education						
Up to Grade 8	14.17	14.62	13.53	12.68		
Grade 9-11	14.31	15.10	12.92	12.39		
High School Graduate	15.52	16.05	14.20	13.89		
Some college or higher	19.97	20.34	19.22	18.02		
Occupation Group						
Unskilled	12.69	13.17	11.59	12.18		
Semi-skilled, Skilled	15.14	15.67	14.25	13.47		
High-skilled	20.60	20.87	19.78	19.33		
<b>English Ability</b>						
No Eng./Not well	13.58	14.18	12.58	12.11		
Well, Very Well	17.56	18.01	16.49	15.99		
Citizenship Status						
Non-Citizen	14.08	14.61	13.04	12.99		
Citizen	19.96	20.30	19.51	17.15		
Country/Region of						
<u>Origin</u> Mayisa	14.58	45.00	40.50	40.00		
Mexico	15.51	15.23	13.58	12.99		
Central America		15.83	14.94	13.98		
South America	18.46 20.28	18.17	20.24	17.98		
Cuba Puerto Rico	18.52	20.01	22.48	20.67		
Caribbean		19.23	17.68	15.52		
Caribbean	19.64	19.63	20.74	18.17		
Age at Migration	47.00	47.50	16.9	45.54		
Migrated before age 10	17.29	17.52	16.8	15.51		
Migrated ages 10-21	15.79	16.65	14.0	13.64		
Migrated age 22 or older	15.56	15.95	14.85	14.35		

Table 8. Stepwise OLS Coefficients of a Model Predicting Male Hispanic Immigrant Hourly Wages (Natural log) by Gateway Type

Model 1: Model 2: Model 3:

5 , 5	` <u>Model</u>	<u>1:</u> `	Model	Model 2:		<u>Model 3:</u>		
	Gatew		+Huma			+Immigrant		<u>4:</u>
	Type	<u> </u>	<u>Capita</u>	<u>al</u>	<u>Specif</u>	<u>ic</u>	+Metro A	<del>\rea</del>
GATEWAY TYPE	Coeff.	Sig.	Coeff.	Sig.	Coeff.	Sig.	Coeff.	Sig.
Gateway type (traditional ga	-	-						
Established destination	-0.083	***	-0.011	**	0.004		-0.114	***
New Magnet	-0.086	***	-0.007		0.017	**	-0.133	***
HUMAN CAPITAL								
Current Age (18-24 omitted)								
Age 25 - 34			0.260	***	0.275	***	0.277	***
Age 35 - 49			0.415	***	0.427	***	0.430	***
Age 50 and over			0.457	***	0.473	***	0.476	***
Education (8th grade or low	er omitted	1)						
Some high school		-	0.057	***	0.018	***	0.019	***
High school graduate			0.116	***	0.059	***	0.056	***
Some college and higher			0.312	***	0.224	***	0.223	***
Occupation Group (Unskille	d group o	mitted	1)					
Semi-skilled and skilled			0.182	***	0.170	***	0.181	***
High-skilled			0.301	***	0.253	***	0.268	***
IMMIGRANT-SPECIFIC								
Country of Origin (Mexico o	mitted)							
Central America					0.002		0.006	
South America					0.050	***	0.052	***
Cuba					0.007		0.073	***
Puerto Rico					-0.053	***	-0.064	***
Caribbean					-0.015		-0.035	***
Age at migration (Age 22 an	d older on	nitted)	)					
10-21 years					0.119	***	0.119	***
Younger than 10 years					0.120	***	0.122	***
Citizenship					0.151	***	0.149	***
Strong English ability					0.109	***	0.106	***
METRO AREA-LEVEL								
% Pop. Unemployed							0.026	***
% Pop. U.Sborn Hispanic							0.001	**
% Pop. Foreign Born							-0.012	***
% Manufacturing Industry							-0.010	***
Constant	2.396	***	1.794	***	1.655	***	1.902	***
Sample Size (unweighted)	182,714		182,714		182,714		182,714	
Degrees of freedom	2		10		19		23	
Adjusted r <sup>2</sup>	0.003		0.112		0.137		0.142	
*** ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	3.300		J		3.10.		V. 1 -12	

<sup>\*\*\* =</sup> significant at p<.001

<sup>\*\* =</sup> significant at p<.01

<sup>\* =</sup> significant at p<.05

## Table 9. OLS Coefficients of a Model with Interaction Terms Predicting Male Hispanic Immigrant Hourly Wages (Natural log) by Gateway Type

	Full Model + Gateway Type Interaction Terms				
GATEWAY TYPE (traditional gateway omitted)	Coeff.	Sia.			
Established destination	-0.013	***			
New Magnet	-0.015	***			
	-0.003				
HUMAN CAPITAL					
Current Age (18-24 omitted)	0.070	***			
Age 25 - 34	0.278				
Age 35 - 49	0.431	***			
Age 50 and over	0.476	***			
Education (8th grade or lower omitted)					
Some high school	0.015	**			
Some high school*Established destination	0.015				
Some high school*New Magnet	-0.001				
High school graduate	0.058	***			
High school graduate*Established destination	0.001				
High school graduate*New Magnet	-0.019				
Some college and higher	0.238	***			
Some college or more*Established destination	-0.045	***			
Some college or more*New Magnet	-0.096	***			
Occupation Group (Unskilled group omitted)	0.000				
Semi-skilled and skilled occupations	0.170	***			
Semi and Skilled*Established destination		***			
	0.042				
Semi and Skilled*New Magnet	-0.011	***			
High-skilled	0.246	***			
High-skilled*Established destination	0.086	***			
High-skilled*New Magnet	0.068	***			
IMMIGRANT SPECIFIC					
Country of Origin (Mexico omitted)					
Central America	0.008				
South America	0.054	***			
Cuba	0.075	***			
Puerto Rico	-0.056	***			
Caribbean	-0.031	***			
Age at migration (Age 22 and older omitted)					
10-21 years	0.118	***			
Younger than 10 years	0.121	***			
		***			
Citizenship	0.165				
Citizenship*Established Destination	-0.056	***			
Citizenship*New Magnet	-0.087	***			
Strong English speaking ability	0.112	***			
Strong English*Established Destination	-0.018	*			
Strong English*New Magnet	-0.007	**			
	0.007				
METRO AREA-LEVEL					
% Population, Unemployed	0.026	***			
% Population, U.Sborn Hispanic	0.002	***			
% Population, Foreign Born	-0.012	***			
% Employed in Manufacturing Industry	-0.010	***			
Constant	1.904	***			
Sample Size (unweighted)	182,714				
Degrees of freedom	37				
Adjusted r <sup>2</sup>	.1429				
*** = significant at p<.001					
** = significant at p<.01					

<sup>\*\* =</sup> significant at p<.01

<sup>\* =</sup> significant at p<.05

Table 10. Effects of Human Capital on Wages Conditional on Gateway Type (based on Interaction model<sup>a</sup>)

	Traditional Gateways		Establish Destination		New Magnets		
	Main Effects <sup>b</sup>	Sig.	Interaction <sup>b</sup>	Sig.	Interaction <sup>b</sup>	Sig.	
HUMAN CAPITAL		J		Ū			
Education (8th grade or low	er omitte	d)					
Some high school	0.015	<b>★</b> , C	0.029		0.014		
High school graduate	0.058	<b>***</b> , d	0.058		0.038		
Some college and higher	0.238	***	0.193	***	0.141	***	
Occupation Group (Unskille	ed group o	omitted)					
Semi-skilled and skilled	0.170	***	0.212	***	0.159		
High-skilled	0.248	***	0.332	***	0.314	**	
IMMIGRANT-SPECIFIC							
Citizenship	0.165	***	0.109	***	0.078	***	
Strong English speaking ability	0.112	***	0.094	*	0.105		

<sup>\*\*\* =</sup> significant at p<.001

<sup>\*\* =</sup> significant at p<.01

<sup>\* =</sup> significant at p<.05

a) Full results displayed in Table 9. Interaction model includes all variables in Model 4, Table 8.

b) The coefficient and significance test for traditional gateways are the main effects. The coefficients for the established destinations and new magnets are the sum of the coefficients for the main effect and the relevant interaction term; the significance test for the interaction terms reflect the contrast with the traditional gateway effect on wages of the interaction.

c) The main effects of having some high school education were not significant for new magnets, and were significant at the p<.01 level (\*\*) for the established destinations.

d) The main effects of graduating from high school were only significant at the p<.05 level

<sup>(\*)</sup> for new magnets.

Table 11. Stepwise OLS Coefficients of a Model Predicting Male Hispanic Immigrant Hourly Wages (Natural log) by Metropolitan Area

METPOPOLITANI ADEA (T. W.O.)	Mode Metro A Coeff.		Mode +Hun Capi Coeff.	nan	Dir. of Change (+/-)	Mode +Immig Speci Coeff.	rant	Dir. Of Change (+/-)
METROPOLITAN AREA (Trad'l Gateways o	omitted)							
Established Destinations								
AustinSan Marcos, TX	-0.102	***	-0.025		+	-0.005		+
DallasFort Worth, TX	-0.146	***	-0.043	***	+	-0.025	***	+
Denver-Boulder-Greeley, CO	-0.087	***	0.023		+	0.046	***	+
Houston-Galveston-Brazoria, TX	-0.083	***	-0.021	**	+	-0.013		+
Phoenix-Mesa, AZ	-0.157	***	-0.051	***	+	-0.025	**	+
Portland-Salem, OR-WA	-0.212	***	-0.032		+	-0.018		+
Sacramento-Yolo, CA	0.012		0.073	***	+	0.061	***	+
Salt Lake City-Ogden, UT	-0.149	***	-0.058	*	+	-0.038		+
Seattle-Tacoma-Bremerton, WA	-0.031		0.032		+	0.048	*	+
Tampa-St. Petersburg-Clearwater, FL	-0.039	*	-0.076	***	-	-0.086	***	-
WashingtonBaltimore, DC-MD-VA-WV	0.065	***	0.097	***	+	0.119	***	+
West Palm Beach-Boca Raton, FL	-0.027		-0.037	*	-	-0.038	*	-
New Magnets								
Atlanta, GA	-0.122	***	-0.024	*	+	0.023		+
Charlotte-Gastonia-Rock Hill, NC-SC	-0.170	***	-0.060	**	+	-0.015		+
Greensboro-Winston-Salem-High Pt, NC	-0.243	***	-0.117	***	+	-0.074	**	+
Indianapolis, IN	-0.077		0.025		+	0.059		+
Las Vegas, NV-AZ	0.031	*	0.140	***	+	0.144	***	+
Minneapolis-St. Paul, MN-WI	-0.111	***	-0.005		+	0.027		+
Nashville, TN	-0.211	***	-0.102	**	+	-0.066	*	+
Orlando, FL	0.000		-0.059	***	-	-0.084	***	-
Raleigh-Durham-Chapel Hill, NC	-0.234	***	-0.094	***	+	-0.040		+
Constant	2.396	***	1.793	***		1.657	***	
	182,71		182,7			182,7		
Sample Size	4		14			14		
DF	21		29			38		
Adjusted r <sup>2</sup>	0.013		0.114			0.139		

<sup>\*\*\* =</sup> significant at p<.001
\*\* = significant at p<.01
\* = significant at p<.05

# Appendix A. Stepwise OLS Coefficients of a Model Predicting Male Hispanic Immigrant Hourly Wages (Natural log) by Gateway Type, Including Regional and Metro Area CPI Controls

Metro Area CPI Controls									
	<u>Model</u>	<u> Model 1:</u>		<u> Model 2:</u>		<u>Model 3</u> :			
	<u>Gateway</u>		<u>+Hum</u>	<u>+Human</u>		+Immigrant		<u>Model 4</u> :	
	Type	<u> </u>	<u>Capit</u>	<u>al</u>	Specif	<u>ic</u>	Full Mo	<u>del</u>	
Gateway type (traditional gateway omitted)	Coeff.	Sig.	Coeff.	Sig.	Coeff.	Sig.	Coeff.	Sig.	
Established destination	-0.113	***	-0.048	***	-0.221	***	-0.149	***	
New Magnet	-0.091	***	0.042	**	0.065	***	-0.091	***	
CONSUMER PRICE INDEX	-0.002	***	0.000	*	0.000	***	-0.001	***	
HUMAN CAPITAL									
Current Age (18-24 omitted)									
Age 25 - 34			0.260	***	0.277	***	0.277	***	
Age 35 - 49			0.415	***	0.428	***	0.431	***	
Age 50 and over			0.458	***	0.473	***	0.476	***	
Education (8th grade or lower omitted)			0.430		0.473		0.470		
			0.055	***	0.012	*	0.015	***	
Some high school					0.013		0.015	***	
Some high school*Established destination			0.007		0.017		0.014	***	
Some high school*New Magnet			-0.010	4.4.4.	0.001		-0.002	***	
High school graduate			0.123	***	0.059	***	0.059		
High school graduate*Established destination	1		-0.014		0.007		-0.002	***	
High school graduate*New Magnet			-0.046	**	-0.020		-0.021	***	
Some college and higher			0.333	***	0.236	***	0.239	***	
Some college or more*Established destination	n		-0.065	***	-0.031	**	-0.052	***	
Some college or more*New Magnet			-0.135	***	-0.100	***	-0.099	***	
Occupation Group (Unskilled group omitted)	1								
Semi-skilled and skilled occupations			0.172	***	0.159	***	0.169	***	
Semi and Skilled*Established destination			0.045	***	0.045	***	0.042	***	
Semi and Skilled*New Magnet			-0.030		-0.013		-0.011	***	
High-skilled occupations			0.276	***	0.228	***	0.246	***	
High-skilled*Established destination			0.103	***	0.101	***	0.083	***	
High-skilled*New Magnet			0.060	**	0.073	***	0.067	**	
IMMIGRANT SPECIFIC			0.000		0.075		0.007		
Country of Origin (Mexico omitted)									
Central America					0.000		0.002	***	
						***		***	
South America					0.050		0.056	***	
Cuba					0.005	***	0.077	***	
Puerto Rico					-0.047	***	-0.052	***	
Caribbean					-0.012		-0.023	***	
Age at migration (Age 22 and older omitted)									
10-21 years					0.119	***	0.118	***	
Younger than 10 years					0.119	***	0.120	***	
Citizenship					0.168	***	0.165	***	
Citizenship*Established Destination					-0.057	***	-0.059	***	
Citizenship*New Magnet					-0.098	***	-0.089	***	
Strong English speaking ability					0.114	***	0.112	***	
Strong English*Established Destination					-0.019	*	-0.019	***	
Strong English*New Magnet					-0.004		-0.007	***	
METRO AREA-LEVEL							-		
% Population, Unemployed							0.026	***	
% Population, U.Sborn Hispanic							0.002	***	
% Population, Foreign Born							-0.012	*	
% Fobulation, Foreign Born % Employed in Manufacturing Industry							-0.012		
Constant	2 676	***	1.857	***	1.726	***		***	
	2.676						2.126		
Sample Size (unweighted)	182,714		182,714		182,714		182,714		
Degrees of freedom	3		21		34		38		
Adjusted r <sup>2</sup>	0.003		0.113		0.138		0.143		
*** = significant at p<.001									
** - cignificant at n < 01									

<sup>\*\* =</sup> significant at p<.01 \* = significant at p<.05

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