Laboring Underground:

Hispanic Immigrant Men and the Segmented Labor Market in Durham, NC

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Abstract

The dramatic increase in Hispanic immigration to the United States in recent decades has been coterminous with fundamental shifts in the labor market towards heightened flexibility, instability, and informality. As a result, the low-wage labor market is increasingly occupied by Hispanic immigrants, many of whom are undocumented. While numerous studies examine the implications for natives' employment prospects, our understanding of low-wage immigrants themselves remains underdeveloped. Drawing on original data collected in Durham, NC, we provide a holistic account of immigrant Hispanic's labor market experiences, examining not only wages but also employment instability and benefit coverage, as well as the role of subcontracting, informal employment, occupation, firm size, and segregated worksites in structuring these outcomes. Results indicate that these factors form a constellation of disadvantage that powerfully bound immigrant employment outcomes.

The prospect for the economic integration of foreign-born workers, long a central topic of inquiry in immigration research, is particularly salient for contemporary Hispanics. Recent decades have witnessed a surge in U.S. immigration from Latina America, particularly Mexico; between 1990 and 2006 the number of foreign born Hispanics more than doubled, from 8.4 to 19.3 million. Within this larger immigrant stream there has been an equally sharp rise in both the absolute and relative share of the undocumented population, currently estimated to number over 11 million, including 6 million Mexicans (Passel, 2006).

Size alone is not the only factor that compels attention to Hispanic immigrant employment; they are also an important and growing segment of the low-wage labor market. The proportion of the low-skill labor force that was foreign-born grew from a mere 12% in 1980 (Enchautegui, 1998) to 45% in 2005, when the undocumented alone comprised 23% of low-skill workers (Capps et al., 2007). These trends have been coterminous with a striking deterioration in the working conditions of the low-skill labor market, such as falling real wages and greater instability and informality in employment relations. Hispanic immigrants are disproportionately exposed to these adverse employment conditions, and register some of the lowest earnings and highest rates of working poverty in the country (Catanzarite and Aguilera, 2002; Hauan et al., 2000).

While the growing share of Hispanic immigrants (particularly the undocumented) in the low-wage labor market has garnered intense interest from social scientists, more research has focused on the possible displacement impact on native workers than on the labor market experiences of the immigrants themselves (Hall and Farkas, 2008). Owing in part to data limitations, the small body of research that has directly assessed the employment patterns of undocumented immigrants largely focused on wages, to the relative neglect of other aspects of employment. Thus while nonstandard work arrangements such as subcontracting and informal, off-the-books employment are thought to be relatively common among the undocumented, actual estimates of the prevalence of these practices remains scarce. What is needed is a holistic account of the larger work experiences of immigrant (particularly undocumented) Hispanics, including how various employment practices are related both to a broader conception of economic security and to one another.

Towards that end, this paper draws on original data collected in a new immigrant receiving area, Durham, NC. Our primary objective is to uncover the myriad of employment conditions that structure the labor market position of Hispanic immigrants. First, we describe in detail the employment conditions of immigrant Hispanic men in Durham, and how they vary by documentation status. This includes not only wages, but employment stability and the provision of benefits. Incorporating these dimensions of compensation in addition to wages provides a more comprehensive gauge of economic position for workers in the low wage labor market, who are more vulnerable to involuntary joblessness and often lack benefits taken for granted by other workers. Second, we model the determinants of labor market outcomes to assess the degree and sources of heterogeneity within the immigrant population. In particular, we examine the extent to which human capital resources and immigration related characteristics affect employment conditions among the largely undocumented immigrant Hispanic population in Durham, an issue that remains unresolved in the literature. In addition, we investigate how other employment characteristics, particularly those related to non-standard work arrangements, relate to wages, employment stability, and benefit outcomes. Factors such subcontracting, informal employment, occupation, firm size, and segregated worksites are likely to have a powerful impact on economic position, and may mediate the role of human capital forces. Finally, we detail how different aspects of employment relate to one another, and form a constellation of risk factors that powerfully bound opportunities for advancement among immigrant Hispanics. Within all of these concerns we explore the unique effect of documentation status on employment outcomes.

Theoretical Background

The United States, like other high income countries, has experienced profound changes in its economy, employment structure, and labor market during the past 40 years. Now characterized as a post-industrial economy, the emphasis on free trade, reduced regulation, and greater flexibility (including a dramatic reduction in the reach and strength of labor unions) have combined to radically alter U.S. employment patterns. These trends contributed to a growing disparity between skilled and unskilled workers, in which those at the lower end of the

occupational hierarchy have seen their real wages and employment conditions decline substantially (Harrison and Bluestone, 1998; Morris et al., 1994). This deterioration, and a heightened awareness of the working poverty it engenders, has led to renewed interest in the low-wage labor market (Edin and Lein, 1997; Ehrenreich, 2001).

The dual or segmented labor market theory is often the starting point to analyze conditions in the low-wage labor market. In contrast to neoclassical economic models that view human capital attributes as the primary determinants of labor market position for individuals and social groups, dual labor market theory advocates a more structural approach, focusing on the demand for labor and challenging the view that labor markets are homogeneous with relatively uniform returns to skill. According to the classic formulation by Piore (1970), the labor market can be divided into 2 distinct sectors. The primary sector consists of segments of the economy that enjoy relatively stable demand. These industries are accordingly capital intensive and workers employed there enjoy higher wages, employment stability, working conditions (including benefits), and possibilities for advancement than other workers. In areas of the economy where demand is less stable, firms invest less in capital and instead engage in labor-intensive production. Employment in this secondary sector is inherently unstable and poorly paid, with few benefits or prospects for advancement. While human capital characteristics are argued to shape the sorting of individuals into sectors, within the secondary sector there are thought to be relatively fewer returns to education and experience (Heckman et al., 1998).

Subsequent studies and refinement of the theory have argued that the stark dichotomy between sectors may be overstated, with many workers holding jobs that combine primary and secondary attributes, and that there is more mobility across sectors than previously believed (Baron and Bielby, 1980; Baron, 1994; Hardesty et al., 1988; Hudson, 2007; Wachter, 1974). Regardless, both increased global competition and the shift of the U.S. economy from mass-production centered to service centered have led to a substantial increase in the level of dualism in the U.S. labor market since the 1980s (Boston, 1990; Griffin et al., 1981; Osterman, 1975). A large proportion of jobs that once provided good wages, stability, health insurance and pensions, and the potential for upward mobility to U.S. workers have been replaced by jobs that do not provide any of those things. As part and parcel of this trend, there has been a marked increase in the number and proportion of jobs that are informal, or

outside of the state's official regulatory framework. Once thought to be a vestige of insufficient integration into the capitalist economy, informal, off-the-books employment has enjoyed a remarkable resurgence in recent years in more and less developed countries alike (Portes and Sassen, 1987; Schneider and Enste, 2000). In a related but separate trend, nonstandard work arrangements, characterized by a lack of fixed schedule, separation of de jure and de facto employer, or no mutual expectation of continued employment, have also grown markedly. While practices such as on-call work, temporary help agencies, subcontracting, independent contracting/contingent work, part time employment in conventional jobs, and other examples of non-standard work always existed in some industries (particularly construction), in recent decades they have taken increasingly prominent roles in these industries and also spread to a vast number of other areas of the economy (Kalleberg, 2000; Kalleberg et al., 2000). This type of work is associated with both lower wages and a greater likelihood of being assigned to routine jobs, receiving little training and fewer promotions, and being laid off (Ferber et al., 1998).

These fundamental changes in employment have been coterminous with the dramatic rise in immigration described above. Scholars have emphasized, though, that structural changes in the advanced capitalist economies have encouraged the growth of employment instability and informality, rather than the presence of immigrants per se. For instance, in cross-national analyses the presence of immigrants is neither necessary nor sufficient to explain outcroppings of informal work in more developed economies (Sassen, 1994). Indeed, the deterioration of employment conditions in the low-wage sector is as likely to be a cause of increased immigration as a consequence. Regardless, it is impossible to ignore the coincidence of rising international migration and deteriorating employment conditions in the low-wage labor market.

The rise in undocumented immigration, in particular, is implicated in the growing informality of the low-wage labor market. While documentation status is not always explicitly incorporated into discussions of immigrant informal employment, the undocumented are by definition at least partially informal workers; even if their incomes are reported their labor is unauthorized. Moreover, recent immigration policies have had a significant impact marginalizing undocumented labor. The 1986 Immigration Reform and Control Act (IRCA) instituted for the first time employer sanctions for the hiring of undocumented labor. And, while the widespread

availability of falsified documented undermined some of the deterrent of the law, the 1996 Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA) further heightened employer sanctions and devoted more resources to enforcement. In tandem with heightened security measures enacted after the September 11, 2001 terrorist attacks, it has become considerably more difficult and dangerous to falsify employment eligibility documents.[1] These policies have had a powerful impact on the segments of the labor market that rely on immigrant labor. Rather than having the intended effect of reducing the size of the undocumented population, they have encouraged employers in immigrant-intensive areas to switch to subcontracting and other practices that insulate them from the risk of sanctions. As entire occupational niches and fields increasingly move to subcontracting, this trend affects both legal and undocumented immigrants alike (Massey and Bartley, 1985).

Again, whether the presence of immigrants encourages the shift to subcontracting or whether the shift to subcontracting increases demand for immigrant labor is difficult to discern. Regardless, the end result is that labor markets are increasingly stratified on basis of citizenship and documentation status. The secondary sector once relied heavily on blacks and women to meet labor demand. As these groups have gradually made incremental progress towards equity with white males, it is increasingly citizenship that channels workers into "bad" jobs (Hudson, 2007; Massey, 1995; Phillips and Massey, 1999). The result of these interrelated trends is a large number of workers who both lack legal protections and labor under increasingly adverse, unstable conditions. Understanding the factors that structure labor market outcomes for immigrant Hispanics is thus essential both for understanding the low-wage labor market and for assessing the prospects for economic incorporation of the nation's largest minority group.

Prior studies of Hispanic immigrant labor market incorporation

A number of previous studies have highlighted the challenges faced by the immigrant Hispanic workforce. These studies document that while foreign born Hispanics have high rates of labor force participation, they also have difficulty maintaining stable, full time employment and are dramatically more likely than non-Hispanic

[1] For instance, there has been a marked increase in the criminal prosecution of immigrants using other people's Social Security numbers in order to obtain employment. These crimes are treated as cases of identity theft and fraud, as opposed to immigration infractions.

whites to be among the working poor even when working full time (Hauan et al., 2000). These disparities attenuate but are far from eliminated when differences across groups in human capital endowments are taken into consideration. While immigrants of all origins have a difficult time translating human capital acquired abroad into higher wages in the United States, Hispanics seem particularly disadvantaged. At least two related factors contribute to the wage gap that remains after accounting for human capital: concentration in the secondary sector and lack of legal authorization to work.

Hispanic immigrants are overwhelmingly concentrated in the secondary labor market, where the returns to human capital are arguably lower than in other labor market segments. Indeed, there is considerable debate as to whether factors such as education and U.S. labor market experience continue to pay off in the contemporary low-wage labor market (Zucker and Rosenstein, 1981). While studies conducted prior to IRCA found a positive return to human capital even among undocumented immigrants (Chiswick, 1984), more recent work suggests deterioration in the returns to skill among Hispanic immigrants (Catanzarite, 2000). A recent examination of wages among natives and immigrants with less than a high school degree, for instance, showed that immigrants overall show positive wage returns to education. An important exception, however, was immigrant Hispanics, for whom the returns to education were essentially absent (Hall and Farkas, 2008). Lack of documentation was strongly implicated in these findings, though the authors were not able to test for its effects.

Indeed, it seems obvious that the disproportionate concentration of undocumented workers in the Hispanic immigrant population would be a critical challenge to their economic incorporation, as the employer sanctions instituted under IRCA were specifically designed to block unauthorized employment. While immigration policies have heretofore failed to staunch the entry and employment of undocumented workers, there is ample reason to expect that unauthorized status is directly related to low wages and other adverse employment outcomes. Because many employers are not willing to hire undocumented workers, at least not directly, their bargaining power in employment relations is severely curtailed. Along with the threat of being reported to immigration authorities, this makes the undocumented particularly vulnerable to exploitation. Indeed, a number of previous studies found a direct negative effect of undocumented status on wages, net of differences among immigrants in human capital

considerations such as educational attainment, U.S. labor market experience, and English language ability (Phillips and Massey, 1999; Rivera-Batiz, 1999).[2] Studies also suggest that the wage penalty for being undocumented increased after the implementation of IRCA and IIRIRA (Donato et al., 2008).

Previous studies of Hispanic immigrant labor market incorporation largely focused on the impact of human capital, acculturation, and, more recently, social networks on wages, with relatively little information available about other aspects of employment. This is problematic because standard wage measures are less likely to provide an adequate assessment of economic position for Hispanics than for other groups. In particular, Hispanic immigrants' chronic employment instability renders it difficult to estimate annual earnings. Lack of benefit coverage likewise undermines well-being in a way not easily captured by wage data alone. Indeed, for low-wage immigrants basic provisions such as paid sick leave and vacation are often not available, lowering their effective wage in a way not often considered by studies of wage inequality and working poverty. Our understanding of how various elements of nonstandard employment relate to one another, and how documentation status shapes outcomes, also remains weak. Basic figures, such as the share of immigrant Hispanic workers employed informally or via subcontractors and the extent of employment instability and involuntary joblessness, are often unavailable.

Moreover, there is much to be learned by examining variation in employment outcomes within the low-wage immigrant population. It is particularly important to assess the impact of human capital on both wages and other employment outcomes, to ascertain the potential for job training and other capital-enhancing programs to improve immigrant Hispanics' economic position. It is also essential to determine which elements of nonstandard employment are most detrimental to Hispanic immigrants' earnings and employment stability, and how different facets of employment interact to produce the disadvantage highlighted by previous studies. And finally, it is necessary to assess whether there a uniquely negative effect on employment outcomes of being undocumented, or

[2] An exception is Massey (1987) who found that reports that undocumented migrants earn the same as their documented counterparts once time in the U.S. labor market is held constant.

whether the poor economic performance of unauthorized workers is a function of their recent arrival and lower human capital.

Data and setting

Data limitations have long constrained a better understanding of the immigrant Hispanic workforce, particularly the undocumented. Large scale nationally representative data sources such as the U.S. Census tend to under-count immigrants and do not collect information on documentation status. As such, more detailed research on Hispanic immigrant employment patterns has largely drawn either from the Mexican Migration Project (MMP) or the Legalized Population Survey (LPS). The MMP is an invaluable source of information on the determinants of migration, remittances, and a wide breadth of topics regarding immigration. However, it is a largely Mexican sample and was not specifically designed to measure nonstandard work arrangements in the United States. Thus it contains no measure of U.S. employment stability and only an indirect measure of subcontracting.[3] The LPS contains a number of indicators of employment among applicants for amnesty under IRCA, including data on informal employment, benefit receipt, firm size, and segregated worksites. However, by definition it omits the most recent wave of immigrants. This is problematic both because more than 10 million Hispanic immigrants have entered the U.S. after this timeframe, and also because the conditions faced by undocumented workers have worsened considerably in recent years. In addition to the intensification of employment eligibility verification described above, workplace raids and deportations have risen dramatically in recent years, the legal rights of immigrants have been curtailed, and the former "catch and release" border policy has been increasingly replaced by the imposition of prison terms for unauthorized entry into the country.

Setting

[3] For instance, Phillips and Massey (1999) measured subcontracting indirectly, by asking how respondents obtained their current job. They distinguish between those who found a job through family or friends and those who used a labor contractor. For those who were referred to a subcontractor via a friend or relative, subcontracting was presumably not identified.

To overcome some of the limitations of extant data sources, our analysis draws on original and locally representative data collected among Hispanic immigrants in the Durham, NC metropolitan area. Durham represents a valuable vantage point to study Hispanic immigrant incorporation for a number of reasons. The overall area has been growing rapidly, as part of the national shift in population from Rustbelt to Sunbelt states. The influx of highly educated workers attracted to growing job opportunities in the nearby Research Triangle Park, universities, and other large employers generated an intense demand for low-skill service and construction labor. In response, the Hispanic population grew rapidly from a mere 1% of the total population of Durham in 1990 to nearly 9% by 2000 and 11.9% by 2007.

This rapid growth presents both opportunities and challenges to immigrant incorporation, rendering Durham a particularly fruitful setting to examine the myriad of factors affecting Hispanic immigrants' labor market position. On the one hand, the rapid expansion of employment demand in the area could enhance the economic opportunities of Hispanic immigrants. On the other hand, a far higher share of Hispanic immigrants is undocumented in new destinations such as Durham than in more traditional immigrant receiving areas (Passel, 2005). In fact, our data indicate that roughly 90% of Durham Hispanic immigrants are undocumented, which contributes to a context very likely to undermine economic advancement.

Data

Data for the analysis are drawn from 355 face-to-face interviews with Hispanic immigrant men aged 18-49 in Durham, NC. While interviews were also conducted with women, the working patterns of female migrants are considered in a separate analysis.[4] The highly marginalized position of immigrants in contemporary U.S. society presents unique challenges to collecting a representative sample. We relied on a combination of

[4] While there are no doubt important commonalities between Hispanic men and women, a number of differences in the supply and demand for immigrant labor vary by sex. The demand for immigrant female labor, concentrated in domestic and other services, is often more stable than that for immigrant men, who are concentrated in construction. However, immigrant women are disproportionately of childbearing age and access to formal daycare and informal networks of support in Durham are limited. Therefore, women's work is less stable than men's overall and they are far more likely to cite family reasons for leaving a job or being without work. Women are also less subject to subcontracting, but are more likely than men to be employed informally and to receive extremely low-wages. All of these considerations warrant separate analysis.

Community Based Participatory Research (CBPR) and targeted random sampling to overcome these difficulties. CBPR is a participatory approach to research that incorporates members of the target community in all phases of the research process (Israel et al., 2005). In our case, a group of 14 community members assisted in the planning phase of the study, survey construction and revision, and devising strategies to boost response rates and data quality. In addition, CBPR members were trained in research methods and conducted all surveys. Finally, through ongoing collaborative meetings, they were also influential in the interpretation of survey results and giving culturally grounded meaning to the findings.

At the same time, the relatively recent nature of the Hispanic community in Durham rendered simple random sampling prohibitively expensive. We therefore employed targeted random sampling techniques (Waters and Bernacki, 1989). Based on our knowledge of the community, we identified 49 apartment complexes and blocks that house large numbers of immigrant Hispanics. We then collected a census of all the apartments in these areas and randomly selected individual units to be visited by interviewers. Although our survey may have been less likely to capture established immigrants, this method was far superior to nonrandom methods of recruitment such as snowball or convenience sampling. To evaluate potential bias arising from targeted random sampling, we compared our sample with data from the 2000 Census. The results show no statistically significant differences in main socio-demographic characteristics such as age, education, employment status, wages, and time in the United States (self-identifying reference). Only 16 (4%) immigrant Hispanic men were not working at the time of the survey. Given our focus on employment conditions we restrict our analysis to the 339 men working at the time of interview.

Conceptual framework and model specification

The main objectives of the analysis are to provide a multi-faceted account of the labor market position of Hispanic immigrant men in Durham, NC, and to assess the determinants of variation across individuals in compensation and vulnerability to non-standard work arrangements. Figure 1 illustrates our conceptual

framework and model operationalization. Three main employment outcomes describe the economic position of Hispanic immigrant workers: hourly wages, employment instability, and benefit receipt.

FIGURE 1 ABOUT HERE

Wages have traditionally been considered a summary indicator of the returns to employment and are measured as self-reported hourly wages. However, as described above, the returns to work are also shaped by the level of employment stability and benefit provision, two issues that are particularly precarious in the secondary sector. Hourly wages may overstate income among immigrant workers if periods of involuntary inactivity are common. Moreover, there is also substantial variation in the provision of employment benefits, which also exacerbate inequality across individuals and economic sectors. We thus also collected data on involuntary joblessness and receipt of benefits. Our measure of employment stability is the self-reported number of weeks that respondents did not work during the previous year. To aid in recollection, the survey collected retrospective information separating the prior year into 4 seasons and asked separately for each season whether there was a period of time that respondents were involuntarily without work, and if so for how long. This strategy was specifically designed to capture the seasonal variability in employment in the construction and landscaping industries, where immigrant men in Durham are concentrated. Responses for the 4 seasons were summed to produce the yearly estimate. Lack of benefits is measured as a dummy variable indicating whether respondents currently receive any of 4 employer sponsored benefits: paid vacation, sick leave, overtime compensation, or health insurance. Those who reported none of the above were deemed lacking in benefits. Together the three employment outcomes more precisely reflect the overall economic standing of Hispanic immigrants.

Our explanatory variables fall under 3 broad categories: personal human capital endowments, immigration characteristics, and employment conditions. In our conceptual framework, employment conditions mediate some of the effect of individual characteristics on compensation outcomes. Human capital characteristics have long been shown to affect economic outcomes. Our model includes 3 indicators: age, educational attainment, and rural origins. Age is expected to have a curvilinear impact on the economic returns to employment as worker productivity is believed to start low in the teenage years, rise rapidly through the early adult years, and fall

approaching old age. This diminishing of productivity gains with older age could be particularly pronounced in physically demanding jobs that are common in the low-wage labor market. We therefore include variables for both immigrants' age and age squared to capture this nonlinear effect.

Educational attainment is another critical aspect of human capital that relates to economic position, though its relevance in the secondary labor market is often debated. Our model distinguishes between those with 6 or fewer, between 7 and 9 years, and 10 or more years of completed schooling. These distinctions, which correspond to primary, secondary, and above secondary education in Mexico, reflect varying levels of basic skills such as literacy and offer a useful barometer of the returns to education among the low-skill Hispanic immigrant population.[5] Finally, we also inclue a dummy variable indicating whether respondents originated from a rural area in Latin America, which may signal a background that is less conducive to the transition to U.S. employment.

A wide body of literature also affirms the importance of immigration characteristics to employment outcomes. The first variable we consider, marital status, blurs the lines between human capital and immigration characteristics. On the one hand, marital status generally signals a stage in the life-course connected with employment outcomes, with married men typically exhibiting higher employment rates and wages than single men. On the other hand, marital status also reflects immigration experience. While female migration from Latin America has increased dramatically in recent years (Donato et al., 2008), the migrant stream, particularly in new destinations, remains male dominated and many married men immigrate alone while their wives continue to reside in their countries of origin. Men who are married and living with their families may be more connected to wider social networks and institutions than unaccompanied men (Parrado and Flippen, 2010), and could potentially translate these enhanced networks into better employment outcomes. In our specification we therefore distinguish between 3 categories of men: unmarried (single or divorced), unaccompanied married, and

[5] Models were also run with alternative specifications of education, including a linear specification, a dummy variable indicating 12 or more years relative to all others, and 3 dummy variables indicating less than 12, 12 years, and 13 and more. The specification reported above provided the best overall fit. Alternative specifications were less often statistically significant, but otherwise did not change the substantive findings of the paper.

accompanied married men. Similarly, we also include a dummy variable indicating whether men have family residing in the Durham area, since family networks can serve as a resource connecting men to employment opportunities.

In addition, the model includes 4 more direct immigration characteristics: years in Durham, whether the respondent migrated directly to Durham or via another U.S. location, English language ability, and legal status. We expect economic gains to increase with Durham experience as immigrants learn more about the local labor market and acquire the skills in demand in the area. The measure of direct migration provides an indication of whether respondents have additional U.S. experience from another location, and thus may have additional domestic credentials to draw upon. Similarly, ability to communicate in English likely provides access to better employment opportunities. Finally, while the vast majority of recently arrived Hispanic immigrants are undocumented there are some who have obtained legal status either through IRCA, family reunification, or other means, such as the Temporary Protected Status (TPS) available to some Central American immigrants. We therefore include a dummy indicator of whether respondents are legal residents to capture the unique effect of documentation on employment outcomes.

As illustrated in Figure 1, we expect employment conditions to at least partially mediate the impact of human capital and immigration characteristics on wages and other aspects of compensation. These dimensions are also central to our comprehensive account of the labor market experience of Hispanic immigrants. We consider 5 dimensions of employment: occupation/industry, firm size, ethnic concentration, subcontracting, and informal employment. Hispanic immigrants are highly concentrated in a handful of niche industries and occupations, and these patterns are likely to shape other employment outcomes. In particular, fields with a high degree of seasonality such as construction and yard work could be particularly vulnerable to unfavorable outcomes. We therefore distinguish between those employed in construction, yard work, food preparation, and other occupations.

A vast body of literature has also documented the negative impact of small firm size on wages, employment stability, and benefit provision. Accordingly, the model includes a dummy variable indexing whether

a person is working in a firm with less than 10 workers. Previous research has also shown that working in fields and job sites where other Hispanics predominate is also negatively associated with wages and other employment outcomes (Catanzarite, 2000; Catanzarite and Aguilera, 2002). At the same time, studies have posited that in some situations ethnic concentration might improve employment outcomes by diminishing discrimination or the penalties associated with other personal disadvantages, such as lack of English ability. Accordingly, we include a dummy indicator measuring whether the work site is majority Hispanic to assess its impact on employment outcomes.

Exposure to nonstandard work arrangements, particularly subcontracting and informal employment, is also likely to be strongly related to wages and other aspects of compensation. In immigrant labor markets subcontracting is a common way for employers to hire undocumented labor without the risk of sanctions. The subcontractor, in return for assuming this risk, then appropriates a share of the worker's wages as compensation. Lack of precise information on subcontracting has prevented a quantitative understanding of its effect. Our survey explicitly asked workers if they were employed directly or were working for a subcontractor. A dummy indicator of working for a subcontractor captures its expected negative effects on employment outcomes. [6] Similarly, another way for employers to lower the risk of sanctions and reduce tax and administrative costs is to pay their workers off-the-books. For workers, informal employment is highly precarious, and is likely to negatively impact compensation. Our survey thus collected data on how respondents were paid, with those paid in cash considered informally employed.

Analytic strategy and statistical methods

In order to provide a comprehensive account of the constellation of factors shaping the Hispanic immigrant experience in Durham, and their interrelation and variation, we separate the analysis into two parts. We first describe and model our three employment outcomes, namely wages, employment stability, and benefit provision.

[6] Respondents were asked if they were paid directly by their employer, though a subcontractor, as a day laborer, or some other way. Only 4 respondents reported being currently engaged in day labor. For the multivariate analyses these respondents were included as working for a subcontractor. Substantive results were not different if these 4 cases were included with the directly employed, or if they were excluded from the analysis entirely.

For each dependent variable we estimate two models, the first including only human capital and immigration characteristics and a second adding the mediating employment characteristics. Because employment characteristics such as subcontracting, informal employment, occupation, working in a segregated Hispanic worksite, and employment in small firms are central determinants of compensation, the second part of the analysis models them as dependent variables as well. We are primarily concerned with which, if any, human capital and immigration characteristics structure employment characteristics, and how they relate to one another.

The statistical specification varies depending on the dependent variable under consideration. For hourly wages, which is continuous, we apply standard ordinary least squared regression. For dichotomous outcomes such as lack of benefits, majority Hispanic work site, and working for a subcontractor we apply logistic regression techniques. For occupation, which consists of 4 mutually exclusive categories, we employ multi-nomial logistic regression. Finally, the distribution of number of weeks of involuntary job separation in the past year more closely conforms to a negative binomial discrete probability distribution. Accordingly, parameter estimates were obtained using negative binomial regression techniques.

Descriptive Results

Table 1 presents descriptive results for the variables in our analysis for all respondents and separately by legal status, in order to get a preliminary sense for the salience of documentation to employment outcomes. Results show that on average Hispanic workers earn just over $11 an hour. Assuming a full work year at 40 hours per week, this wage rate would translate into an annual income of $22,968 which is just above the poverty threshold for a family of four. There is nearly a $2 deficit in hourly wages associated with undocumented status which given full time, full year employment yields nearly $4,000 (18%) less in annual income for those lacking legal status. Results also show considerable employment instability. Nearly 62% of workers reported being without work at some point during the previous year. The average time out of work (including all respondents, even those who were never without work) was 3.8 weeks. Applying similar assumptions, this implies that employment stability reduces workers' annual income by over $1,700 (8%). If we divide the sample between

those who did and did not experience joblessness during the previous year, those with a spell of instability experienced an average of 6 full weeks of job separation, reducing their yearly income by over $2,600 (12%). As with wages, employment stability is somewhat higher among documented workers.

The low rate of benefit coverage among immigrant workers evident in Table 1 is another serious impediment to security. In the larger labor market, 'benefit coverage' usually refers to employer subsidized health care or retirement contributions. For Hispanic immigrants, however, basic provisions such as paid sick leave and vacation time are often lacking. In fact, just under 37% of immigrant Hispanic men received paid overtime, less than 18% paid sick leave, less than 27% paid vacation, and less than 20% employer-sponsored health insurance. Just over half (52.2%) of all men report having no benefits whatsoever. Once again there were sizeable differences in benefit coverage according to legal status, with the undocumented more than twice as likely as those with legal papers to report having no benefits (55.1% relative to 25.0%).

TABLE 1 ABOUT HERE

The human capital and demographic characteristics of the sample are typical of Hispanic immigrant populations:[7] the men are relatively young, with an average age of only 30.9 years, and poorly educated. With an average of just over 8 years of completed schooling, 40.1% of immigrant men in Durham did not complete more than a primary education, an additional 28.0% finished between 7 and 9 years of schooling, and just under one-third (31.9%) completed 10 or more years of education. Additional tabulations reveal that immigrants with the equivalent of a high school degree or more are a relative rarity, with 14.2% finishing 12 years of schooling and 9.9% reporting some college level education. The fact that 27.5% of immigrant Hispanic men herald from rural areas no doubt contributes to their limited educational attainment.

Immigration characteristics reported in Table 1 also reflect disadvantage. A mere 45.4% of men are married and currently residing with their spouse. An additional 20.4% of men are married but unaccompanied by

[7] The national origins are also typical, with 68.3% originating in Mexico, 18.7% in Honduras, 5.4% from El Salvador, 6.5% from Guatemala, and 1.1% from other Latin American countries. Differences in compensation outcomes across national origin groups were not statistically significant, net of other human capital and immigration characteristics, and were thus not included in the analysis.

their wives, who continue to reside in their countries of origin. Over 1/3 of the immigrant men in our sample are either single or divorced. Consistent with the importance of family networks in migration flows close to 62% of men report having family in the Durham area. Most Hispanic immigrant men in Durham are recently arrived, averaging a scant 4.9 years in the area. Over half (50.1%) of the sample moved to Durham directly from their countries of origin. These characteristics help explain why English language proficiency is low (only 8.2% of men report speaking English well), and why the overwhelming majority, 90.6%, of the men are undocumented. As with compensation outcomes, human capital and immigration characteristics also very markedly by documentation status. The undocumented tend to be younger, have lower levels of educational attainment, are less likely to be married and accompanied by their wives, and average far less time in Durham and lower English fluency than their peers with legal status. They are also more likely to have migrated directly to Durham from their countries of origin, and thus to lack additional U.S. experience.

Table 1 also documents a very high degree of occupational concentration among Durham Hispanic men. Nearly 89% of all immigrant men are employed in only 3 areas: construction, where a staggering 68.1% of immigrant men labor; yard work, where an additional 7.4% of men work; and food preparation (which includes restaurant work), where an additional 13.0% of men are employed. Only 11.5% of men work outside of these areas, in a diverse array of fields including retail, the military, entertainment, and mechanics of various types.[8]

The fact that over one-third (35.4%) of all men work in small firms, and over three-quarters (77.3%) in predominantly Hispanic worksites is additional cause for concern, along with the incidence of non-standard work arrangements. Fully 27.1% of immigrant men are paid via a subcontractor rather than directly by their de jure employer,[9] and an additional 18% report being paid in cash.

[8] These figures are starkly at odds with employment patterns prior to immigration. Just under 14% of immigrant men in Durham had never worked before migrating to the United States, either due to high rates of unemployment or their young age. Only 18.4% had worked in construction prior to migrating, and yard work and food services were relatively rare, accounting for only 0.6% and 4.3% of prior work experience, respectively. Just under 1/3 of men worked in agriculture prior to migrating, and the range of jobs held was far more broad, with nearly 1/3 falling into the 'other' category.

[9] While a very small share of men were working as day laborers at the time of interview (less than 1%), the practice was not uncommon as more than 17% reported having worked as a day laborer at some point after arriving in Durham.

Once again, documented immigrants show considerable advantage relative to the undocumented with respect to employment characteristics. Documented workers are less likely than their undocumented peers to work in small firms (25.0 vs. 35.2%), Hispanic worksites (50.0 vs. 80.1%), for a subcontractor (15.6 vs. 27.0), or informally (3.1 vs. 19.5%).

Multivariate Results

While the overall pattern described above highlights many elements of disadvantage associated with the secondary labor market, there is considerable variation in employment outcomes and work conditions among the Hispanic immigrant population in Durham. It remains unclear, though, which factors undergird this variation and how the different employment conditions relate to one another. The next set of analyses investigates the dimensions affecting the labor market position of Hispanic immigrant men. Following our conceptual framework we first investigate the factors associated with our three main aspects of compensation and then investigate the factors related to mediating employment conditions.

Compensation outcomes

Table 2 reports results from models predicting hourly wages, employment instability, and benefit coverage. For each variable we report two models, one that controls only for personal human capital and immigration characteristics and a second that adds the role of mediating employment conditions. Results indicate that even in the low-wage, secondary sector in which immigrants concentrate there is still a clear wage return to human capital. OLS estimates in columns 1 and 2 show that older workers earn more, on average, than their younger counterparts, though negative age squared term indicates this return diminishes at older ages. More importantly, better educated workers earn significantly more than their less educated peers. Those with 10 or more years of education earn $1.57 more per hour more than those with only a primary education, and $1.22 an hour more than those with 7 to 9 years of education.

There is also a significant positive return to years in the Durham area, indicating that as immigrants build labor market experience their wages rise. Specifically, each additional year of Durham residence translates into

roughly 19.6 cents per hour in additional wages. Other dimensions of the migration experience, however, such as residing with a spouse, having family in the area, English language ability, or internal migration experience do not significantly translate into wage gains. Consistent with our descriptive results, though, estimates show that even after controlling for other personal characteristics lack of documentation significantly reduces the hourly wage of Hispanic immigrant male workers by nearly $1 (-.998 in column1).

Estimates in column 2 show that while mediating employment characteristics significantly correlate with hourly wages they do not modify the impact of human capital and immigration characteristics. In particular, even after controlling for other employment effects, lack of documentation significantly diminishes hourly wages and the effect remains close to $1.00. Estimates for our mediating employment factors show that occupation is clearly related to wages, with construction workers earning significantly more per hour than all other categories. Specifically, on average those in yard, food, and other occupations earn $2.13, $2.80, and $1.66 less per hour, respectively, than those employed in construction. Of the other constellation of employment conditions affecting Hispanic immigrant labor only subcontracting has a direct negative effect on hourly wages. Net of human capital, immigration, and occupational characteristics, those paid via a subcontractor earn 76 cents an hour less than those paid directly by their employer. Given that average wages are only $11 an hour, this represents a nearly 7% reduction in wages associated with subcontracting. There does not seem to be any independent earnings penalty associated with off-the-books employment, over and above its association with subcontracting.

Columns 3 and 4 report estimates from negative binomial regression models predicting number of weeks of job separation in the previous year. Contrary to the findings for hourly wages, results show that for the most part human capital resources and immigration characteristics do not protect immigrant Hispanic workers against employment instability. This is consistent with dual labor market theory and highlights the high degree of homogeneity in Hispanic immigrants' vulnerability to periods of inactivity. Only residing with a spouse decreases the number of weeks with no work, but the direction of causality is unclear. On the one hand, marriage is associated with greater labor force attachment in the general population. It could be that married men living with their wives have stronger intentions to remain in the United States and are more motivated to seek stable

employment, and that marriage expands the networks connecting immigrants to jobs. On the other hand, it is also likely that men with more stable employment patterns are better able to afford to send for their wives or form a union in Durham.

Rather than human capital and immigration considerations, the primary determinants of employment instability relate to other employment characteristics (column 4). Those employed in food services, mainly restaurants, enjoy far greater employment stability than their counterparts in construction, at least partially offsetting some of the lower hourly wages common in those jobs. To illustrate, compared to the average worker that experiences 3.8 weeks of job separation, those in food services would see the number of weeks without work reduced to 1.04, an incidence rate ratio of .274 (exp(-1.293)). Contrary to employment in food services, workers in small firms are significantly more likely to experience involuntary joblessness than those in larger firms (.524). Again, taking the average of 3.8 weeks, workers in small firm would see their time without work almost double to 6.4 weeks, an incidence rate ratio of 1.68. In addition, subcontracting also increases workers vulnerability to involuntary job separation above and beyond work in small firms (.355). Again, relative to 3.8 weeks of job separation experienced by the average worker those in subcontracting can expect 5.4 of non-work, an incidence rate ratio of 1.425.

Just as it is important to consider employment instability in addition to wages when assessing the economic security of Hispanic immigrants, it is also critical to consider benefit provision. Columns 5 and 6 in Table 2 reports results from logit models predicting lack of benefit receipt. Once again human capital and immigration characteristics have little effect on this aspect of employment compensation. Results in column 5 show that those with very low levels of education are more likely than those completing 10 or more years of schooling to be excluded from benefits. At the same time, workers residing with a spouse and with longer stays in Durham are less likely to lack benefits. However, in all these cases, the effects disappear once we control for mediating employment conditions in column 6.

TABLE 2 ABOUT HERE

As with wages, results show a consistent detrimental effect of lack of documentation on benefit receipt, even net of differences across groups in human capital and immigration characterisitics. Estimates in column 5 show that undocumented workers are 4.5 times (exp(1.454)) more likely to lack benefits than their documented counterparts. Moreover, the detrimental effect remains even after accounting for mediating employment conditions.

Column 6 shows that of all the mediating employment conditions considered, only occupation does not significantly predict benefit provision. Working in majority Hispanic worksites increases the likelihood of not receiving benefits 1.98 times (exp(.688)), working in a small firm by 3.3 times (exp(1.196)), subcontracting by a dramatic 7.2 times (exp(1.971)), and being paid in cash by 1.93 times (exp(.658)). It is worth noting that these effects remain significant even controlling for one another, so that immigrants with multiple adverse employment conditions (such as an employee of a small subcontracting firm at a predominant Hispanic worksite) are extremely unlikely to have even the most basic benefit provisions.

Thus overall, our results confirm our expectation that Hispanic workers are subject to a constellation of factors that diminish their employment compensation and heighten their vulnerability in the U.S. labor market. The next set of analyses take these mediating conditions as dependent variables to assess the factors affecting their variation as well as how they relate to one another.

Mediating employment conditions

Table 3 reports estimates from a multinomial logit model predicting occupation (construction, yard, food services, or other) according to human capital and immigration characteristics. The reference category is construction. Despite the salience of occupation for compensation outcomes documented above, results show very little systematic allocation of Hispanic workers across occupational types. In fact, the process appears to be nearly random with little connection to human capital endowments or immigration characteristics. Part of the reason stems from the high degree of concentration of Hispanic workers in construction, which appears to be a huge magnet for Hispanic immigrants of all backgrounds. There is some evidence though that employment in "other" occupations outside of traditional Hispanic niches attracts more educated workers with a good command of

English. The lack of systematic variation is consistent with segmented labor market descriptions of Hispanic immigrants' employment position and highlights that Hispanic immigrants work within a relatively narrow set of employment options not easily overcome by higher human capital endowments.

TABLE 3 ABOUT HERE

Table 4 reports estimates from logit models predicting the likelihood of working for a subcontractor, being paid in cash, working at a small firm, and working at a majority Hispanic worksite. Results for the model predicting subcontracting, reported in the first column of Table 4, show that human capital characteristics are far less important predictors of entry into subcontracting than they were of wages. Factors such as age and education have little impact; compared to those with 10 or more years of education, those with only a primary education are only marginally more likely to work for a subcontractor. Likewise, neither documentation nor ability to speak English predict subcontracting. Only time in Durham helps move immigrants toward direct employment, with each additional year decreasing the likelihood of working for a subcontractor by 0.89 (exp(-.114)). Once again it is other employment conditions that are the primary predictors of this form of contingent labor. First, subcontracting is heavily concentrated in construction employment; those employed in food and other industries, and to a lesser extent yard work, are significantly less likely than construction workers to engage in subcontracting. Predicted probabilities at the mean show that the likelihood of working for a subcontractor among construction workers is 36%, compared to 16% among yard workers, and only 2 and 7% among food and other workers, respectively. The practice is also significantly more common among employees of small firms and those who are paid in cash.

TABLE 4 ABOUT HERE

Informal employment, in addition to being associated with subcontracting, is also a negative employment outcome in its own right. Accordingly, the second column of Table 4 reports results from a logit model predicting being paid in cash. As was the case for subcontracting, few human capital or immigration characteristics predict cash payment. Older workers are marginally more likely to be paid in cash, though the effect diminishes with age. Neither education nor Durham experience shield workers from informal employment. Surprisingly, neither

does legal status. Similar to the models for employment instability, benefit provision, and subcontracting, other employment characteristics are central determinants of informal employment. In particular, working in small firms and majority Hispanic worksites is strongly related to cash payment, as is working for a subcontractor.

Likewise, working in predominantly Hispanic worksites and small firms are implicated in a number of adverse employment outcomes, including subcontracting, being paid in cash, employment instability, and lack of benefit coverage. With respect to firm size (coumn 3), we once again see relatively few returns to human capital. Those who report good English skills and herald from rural areas of Latin America are less likely than others to work for a small firm. However, factors such as education, time in Durham, and documentation are unrelated to firm size. Once again it is other employment characteristics that most strongly predict firm size. Specifically, construction workers are less likely than their peers in yard work, food preparation, and other occupations to work for a small firm. There is also a strong association between small firms and majority Hispanic worksites, subcontracting, and being paid in cash.

And finally, in the fourth column of Table 4 we see that few human capital considerations help immigrant men escape predominantly Hispanic worksites. While the least educated are more likely than the most educated to work in a segregated work setting, factors such as age, education, time in Durham, and English ability do not relate to the ethnic composition at work. Unaccompanied married men are more likely than their single counterparts to work in Hispanic jobs, perhaps a reflection of their greater likelihood of being target earners who view their stay as temporary and thus do not work as hard to escape segregated employment settings. Those employed in food preparation also work in more diverse settings than their counterparts in construction. Once again, we see a strong association between Hispanic worksites and being paid in cash. And finally, working at a predominantly Hispanic worksite is the only mediating employment outcome to be significantly related to documentation. Compared to their peers with legal authorization to work, the undocumented are 3.7 times (exp(1.305)) more likely to work in Hispanic worksites, even net of other immigration and employment characteristics.

Conclusions

Drawing on original data collected in Durham, NC, this paper provides a comprehensive view of the labor market position of recent Hispanic immigrant men. The primary objective was to consider a multi-faceted conception of compensation, including wages, employment stability, and benefit provision, and to assess how they were related to human capital, documentation, and other employment characteristics. We were particularly concerned with the incidence and impact of non-standard work arrangements and how different employment characteristics related to one another.

One critical question guiding the analysis was whether human capital characteristics such as education and Durham work experience pay off in the low-wage labor market where immigrants concentrate. Results in this regard are mixed. Human capital considerations, including age, education, and time in Durham, all predicted wages in the expected direction. However, human capital considerations played virtually no role in structuring employment stability or benefit provision, other critical aspects of total compensation. Moreover, other employment outcomes were also surprisingly impervious to variation in human capital. Thus while increased time in Durham helped immigrant men avoid subcontracting, it had no effect on employment stability, benefit coverage, occupation, firm size, working in segregated Hispanic worksites, or informal employment. Likewise, better educated men were less likely to work in segregated jobsites and marginally less likely to work for a subcontractor (in addition to higher wages), but did not differ from their less educated peers with respect to employment stability, occupation, firm size, or informal employment. Moreover, aside from helping Hispanic men move out of small firms and immigrant niches in construction, food preparation, and yard work into other occupations, English language ability did not affect any of the employment outcomes considered, over and above its association with educational attainment and length of Durham residence. Thus overall, while human capital does help explain wage variation among migrants, it does a very poor job of explaining other aspects of compensation or non-standard work arrangements.

The impact of documentation status on labor market incorporation also shows mixed effects. There is a clear negative effect of unauthorized status on wages, and at roughly $1 per hour in lost wages the impact is

substantively large. Most other employment outcomes, however, do not vary systematically according to documentation status. The two exceptions are benefit coverage and segregated worksites, with unauthorized workers far more likely than their documented counterparts to lack all forms of employment benefits and to work overwhelmingly with other Hispanics. While our small sample size (particularly of legal workers) prevents drawing definitive conclusions from these findings, they suggest that while undocumented status confers a unique penalty in some realms, its lack of consistent effect is also broadly consistent with Massey and Bartley's (1985) assertion that both legal and unauthorized workers are penalized in fields with large numbers of undocumented workers.

It is not difficult to understand why so many immigrant Hispanic men are employed in construction. The educational and other human capital requirements are no higher there than in other fields but the pay is significantly higher than even jobs outside of traditional Hispanic niches. However, construction work has its disadvantages as well, particularly greater employment instability and use of labor subcontractors. To illustrate, if men worked full time all year, those in construction would earn roughly $5,845 more per year than their statistically equivalent counterparts in food preparation (using the coefficients in Table 2). Yet when we account for differential exposure to involuntary joblessness, this annual pay gap is reduced by $915, or nearly 16%. If we consider that food workers are dramatically less likely to be paid via a subcontractor, which itself is associated with instability, this differential would be reduced further still.

Results also highlight the deleterious impact of nonstandard work arrangements on Hispanic immigrant's economic well-being. The roughly 27% of immigrant Hispanic men employed via a subcontractor lose 76 cents an hour in wages and, along with those paid in cash, are significantly less likely to receive benefits. Moreover, subcontracting and informal work are closely associated with one another and with small firms and predominantly Hispanic worksites. These often-overlapping disadvantages have a serious deleterious impact on compensation. To illustrate, the modal Hispanic male worker in Durham is employed in construction. If he did not experience any of the conditions that adversely affected wages in Table 2, namely lack of documentation and working for a subcontractor, his predicted hourly wage would be $13.60. Assuming a full year of full-time work this would

yield an annual income of $28,500. Lacking documentation reduces hourly wages by just over one dollar, decreasing annual income by 7% to $26,500. If he were both undocumented and working for a subcontractor, his predicted wage would be reduced by almost $2, and his annual wage of $24,700 would be 13% lower.

However, the employment conditions of Hispanic workers affect not only their pay but also the amount of time they work. The seasonality of construction employment translates into an average of 3.3 weeks without work annually for Hispanic immigrant men. Without experiencing any additional disadvantage this would reduce the annual income of the average construction worker by $300, to $28,200. However, if he were also employed in a small firm and via a subcontractor, the number of predicted weeks without work would increase to 7.7, reducing annual income to $27,900. Further, if he were to experience all of the above disadvantages both in terms of wages and employment instability (i.e., an undocumented man working for a subcontractor in a majority Hispanic worksite) his annual income would decline to $24,300, a 15% reduction from what workers with no disadvantage would be earning. This is not an unlikely scenario among Hispanic immigrant workers in Durham; as many as 22% of the Hispanic labor force of Durham is jointly undocumented and working in a small subcontracting construction firm. Moreover, 90% of the workers among this group are predicted to lack all employment benefits compared to only 13% among construction workers not suffering those disadvantaged conditions.

While these findings obtained from a case study of Durham, NC there is reason to believe that they are generalizable to other new destinations, particularly in the Southeastern United States. Many metropolitan areas in the region have experienced similar rates of Hispanic immigrant growth, and have economies that are similarly driven by population-growth induced demand in construction and other services. Hispanic immigrants in metropolitan areas like Atlanta, GA, Charlotte, NC, and other rapidly growing cities are likely to face similar employment dynamics.

Together, these findings suggest serious impediments to the labor market incorporation of low-skill immigrant Hispanic men emanating from processes that extent far beyond their human capital characteristics. The current anti-immigrant atmosphere and emphasis on employer sanctions has resulted in an extremely precarious labor market position for both legal and undocumented Hispanic immigrants, who suffer from

multiple, overlapping elements of disadvantage. The meager impact of time in the U.S. on employment outcomes suggests that without policy changes contemporary immigrants laboring in the low wage labor market face the prospect of a life-time of reduced wages, heightened insecurity, and lack of benefits. To the extent that these penalties undermine savings they diminish immigrants' ability to contribute to their children's education and compromise old-age security, seriously affecting chances for inter-generational social mobility.

It is worth emphasizing that the data presented above were collected in 2006 and early 2007, at the height of the construction boom associated with the housing bubble. The subsequent recession that began in late 2007 resulted in a steep rise in unemployment, but particularly rapid job loss in construction. According to the Bureau of Labor Statistics, between 2007 and 2009 North Carolina lost close to 60,000 jobs in construction, a decline of nearly 30%, and the overall unemployment rate increased from 5 to 11%. Thus serious vulnerability of immigrant Hispanic men, already evident even under peak economic conditions, undoubtedly worsened further still with the recession.

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Table 1. Descriptive results by documenation status

		Documented	
		Yes	No
Compensation outcomes			
Hourly Wages (mean)	$ 11.07	$ 12.75	$ 10.89
s.d.	(3.1)	(4.0)	(2.9)
Employment Instability/Involuntary Job Separation			
Number of weeks in the past year (mean)	3.8	3.7	3.9
s.d.	(6.0)	(6.2)	(6.0)
No employment benefits (%)	52.2	25.0	55.1
No paid overtime	*63.4*	*34.4*	*66.4*
No sick leave	*82.6*	*68.7*	*84.0*
No paid vacation	*73.4*	*46.9*	*76.2*
No health insurance	*80.5*	*71.9*	*81.4*
Personal human capital charactersitics			
Age (mean)	30.9	37.2	30.3
Educational attainment (%)			
6 years or less	40.1	34.4	40.7
7-9 years	28.0	25.0	28.3
10 or more years	31.9	40.6	30.9
Rural origin (%)	28.6	25.0	29.0
Immigration characteristics			
Marital Status (%)			
Accompanied married	45.4	59.4	44.0
Unaccompanied married	20.4	18.8	20.5
Single	34.2	21.9	35.5
Family in Durham (%)	61.7	59.4	61.9
Years in Durham (mean)	4.9	7.5	4.6
Direct migrant to Durham	50.1	34.4	51.7
English proficiency (%)	8.2	25.0	5.9
Undocumented (%)	90.6	0.0	100.0
Mediating work conditions			
Occupation/Industry (%)			
Construction	68.1	53.1	69.7
Yard work	7.4	12.5	6.8
Restaurant/food preparation	13.0	12.5	13.0
Other	11.5	21.9	10.4
Small firm (%)	35.4	25.0	36.5
Majority Hispanic worksite (%)	77.3	50.0	80.1
Paid by subcontractor (%)	27.1	15.6	27.0
Paid in cash (%)	18.0	3.1	19.5
N	339	32	307

Table 2: Coefficients from Models Predicting Hourly Wages, Employment Instability, and Work Benefits (standard errors in parenthesis)

	Hourly Wages[1]				Weeks of Job Separation[2]				Lack of Benefits[3]			
	(1)		(2)		(3)		(4)		(5)		(6)	
Human capital characteristics												
age	0.549 **	(0.133)	0.458 **	(0.127)	0.067	(0.071)	0.039	(0.069)	-0.076	(0.101)	-0.106	(0.116)
age2	-0.008 **	(0.002)	-0.006 **	(0.002)	-0.001	(0.001)	0.000	(0.001)	0.002	(0.001)	0.002	(0.002)
Education (ref = 10 years or more)												
6 years or less	-1.566 **	(0.386)	-1.539 **	(0.375)	-0.017	(0.211)	-0.146	(0.204)	0.658 **	(0.289)	0.482	(0.343)
7-9 years	-1.218 **	(0.404)	-1.214 **	(0.383)	0.174	(0.224)	0.137	(0.216)	0.393	(0.299)	0.351	(0.347)
Rural origin	-0.108	(0.348)	-0.016	(0.329)	0.057	(0.191)	0.109	(0.185)	-0.076	(0.260)	-0.017	(0.302)
Immigration characteristics												
Marital status (ref=single or divorced)												
Accompanied	0.326	(0.376)	0.245	(0.359)	-0.457 **	(0.210)	-0.458 **	(0.205)	-0.457 *	(0.281)	-0.316	(0.331)
Unacc. married	-0.278	(0.472)	-0.450	(0.448)	0.038	(0.264)	0.296	(0.257)	-0.108	(0.356)	0.161	(0.415)
Have family in Durham	0.009	(0.323)	-0.110	(0.307)	0.248	(0.183)	0.227	(0.181)	-0.109	(0.242)	-0.066	(0.280)
Time in Durham	0.196 **	(0.048)	0.177 **	(0.046)	-0.029	(0.028)	-0.020	(0.027)	-0.060 *	(0.037)	-0.036	(0.042)
Direct migrant to Durham	-0.223	(0.327)	-0.287	(0.309)	-0.012	(0.182)	-0.073	(0.176)	-0.077	(0.245)	-0.156	(0.282)
Good English	0.331	(0.619)	0.746	(0.599)	0.250	(0.345)	0.387	(0.342)	0.381	(0.472)	0.864	(0.541)
Undocumented	-0.998 *	(0.560)	-1.042 **	(0.537)	-0.085	(0.315)	0.141	(0.317)	1.454 **	(0.479)	1.472 **	(0.566)
Mediating employment characteristics												
Occupation (ref = construction)												
yard			-2.127 **	(0.569)			-0.275	(0.328)			-0.241	(0.499)
food			-2.808 **	(0.489)			-1.293 **	(0.309)			0.311	(0.429)
other			-1.662 **	(0.484)			0.198	(0.266)			-0.055	(0.432)
Majority Hispanic			-0.032	(0.398)			-0.386	(0.236)			0.688 **	(0.360)
Small Firm			0.431	(0.322)			0.524 **	(0.188)			1.196 **	(0.301)
Subcontractor			-0.761 **	(0.368)			0.355 *	(0.203)			1.971 **	(0.373)
Paid cash			-0.518	(0.416)			-0.057	(0.234)			0.658 *	(0.410)
Intercept	3.219	(2.219)	5.612 **	(2.152)	0.205	(1.253)	0.534	(1.235)	-0.289	(1.665)	-1.751	(1.937)

* p< 0.10 ** p<0.05

[1] OLS estimates

[2] Negative Binomial Regression estimates

[3] Logistic regression estimates

Table 3. Coefficients from Multinomial Logit model predicting of Occupation type (ref=construction)

	Yard		Food		Other	
Human capital characteristics						
age	-0.249	(0.185)	-0.312 **	(0.137)	0.017	(0.159)
age2	0.004	(0.003)	0.005 **	(0.002)	0.001	(0.002)
Education (ref = 10 years or more)						
6 years or less	0.473	(0.597)	-0.329	(0.433)	-0.820 *	(0.454)
7-9 years	0.440	(0.615)	-0.190	(0.439)	-0.649	(0.481)
Rural origin	0.282	(0.467)	0.047	(0.387)	-0.010	(0.441)
Immigration characteristics						
Marital status (ref=single or divorced)						
Accompanied	0.493	(0.544)	-0.027	(0.406)	0.207	(0.463)
Unacc. married	0.164	(0.729)	-0.599	(0.567)	0.103	(0.552)
Have family in Durham	-0.585	(0.448)	-0.332	(0.356)	-0.144	(0.389)
Time in Durham	0.060	(0.062)	-0.026	(0.055)	-0.054	(0.055)
Direct migrant to Durham	-0.361	(0.470)	-0.323	(0.364)	0.413	(0.394)
Good English	0.196	(0.867)	0.541	(0.666)	1.714 **	(0.594)
Undocumented	-0.617	(0.660)	0.224	(0.656)	-0.340	(0.568)
Constant	1.871	(3.036)	3.248	(2.284)	-2.471	(2.737)

* p< 0.10 ** p<0.05

Table 4: Coefficients from Logit Models Predicting Subcontracting, Informal Employment, Small Firm, and Hispanic Worksite (standard errors in parenthesis)

	Subcontracting (1)		Paid in Cash (2)		Small Firm (3)		Hispanic Worksite (4)	
Human capital characteristics								
age	-0.026	(0.128)	0.300 *	(0.181)	-0.048	(0.108)	-0.205	(0.141)
age2	0.001	(0.002)	-0.005 *	(0.003)	0.001	(0.002)	0.003	(0.002)
Education (ref = 10 years or more)								
6 years or less	0.626 *	(0.375)	0.053	(0.435)	-0.513	(0.322)	1.497 **	(0.423)
7-9 years	0.296	(0.396)	0.098	(0.447)	-0.287	(0.327)	0.532	(0.392)
Rural origin	0.184	(0.322)	0.165	(0.371)	-0.644 **	(0.292)	0.108	(0.371)
Immigration characteristics								
Marital status (ref=single or divorced)								
Accompanied	-0.514	(0.359)	-0.619	(0.403)	0.048	(0.309)	0.551	(0.382)
Unacc. married	-0.514	(0.430)	-0.064	(0.488)	-0.297	(0.388)	0.926 *	(0.518)
Have family in Durham	0.499	(0.322)	-0.488	(0.346)	-0.359	(0.262)	0.011	(0.334)
Time in Durham	-0.114 **	(0.052)	-0.008	(0.062)	0.012	(0.040)	-0.037	(0.046)
Direct migrant to Durham	0.174	(0.315)	-0.326	(0.356)	-0.040	(0.266)	0.130	(0.332)
Good English	0.963	(0.646)	-1.502	(1.169)	-1.490 **	(0.640)	0.467	(0.575)
Undocumented	-0.168	(0.600)	0.821	(1.137)	0.171	(0.511)	1.305 **	(0.472)
Mediating employment characteristics								
Occupation (ref = construction)								
yard	-1.102 *	(0.606)	-0.268	(0.727)	1.204 **	(0.470)	0.332	(0.700)
food	-3.363 **	(1.063)	0.909	(0.626)	0.888 **	(0.434)	-2.394 **	(0.448)
other	-1.942 **	(0.612)	0.591	(0.588)	0.772 *	(0.413)	-0.489	(0.479)
Majority Hispanic	0.492	(0.462)	2.251 **	(0.817)	0.996 **	(0.383)		
Small Firm	0.964 **	(0.313)	0.871 **	(0.343)		(0.307)	0.875 **	(0.370)
Subcontracting			1.492 **	(0.366)	0.949 **	(0.333)	0.433	(0.477)
Paid cash	1.484 **	(0.363)			0.797 **		2.245 **	(0.840)
Intercept	-1.379	(2.207)	-8.593 **	(3.017)	-0.891	(1.829)	2.377	(2.315)

* p< 0.10 ** p<0.05

Figure 1. Conceptual Framework