

Admission Categories and Differences in Annual Earnings and Job Quality of
New Permanent Resident Immigrants

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Abstract

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This study uses longitudinal data from *The New Immigrant Survey* to examine the role of immigration admission categories in stratifying new immigrants in the U.S. labor market. More specifically, I explore differences in employment outcomes among family reunification immigrants, employment-based immigrants, diversity program immigrants, refugees, and legalized immigrants who are currently employed. To this end, the following research questions motivate this study: 1) Do point of entry categorizations, as defined by broad admission class or visa categories, influence the annual earnings of new immigrants to the United States?; 2) Are there quantitative differences in the quality of jobs between different categories of immigrants?; and 3) How are these categorizations consequential for stratification processes?

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INTRODUCTION

The roots of the current U.S. immigration system can be traced back to the 1965 Immigration and Nationality Act which abolished a quota system based on national origins. Also known as the Hart Cellar Act, this landmark legislation brought in a new system oriented towards family reunification and attracting highly-skilled workers. Today, family reunification and employment-based immigrants continue to make up the majority of new immigrants with lawful permanent resident status in the United States. To a lesser extent, U.S. immigration is also committed to humanitarian efforts through its refugee resettlement program, and increasing migrant flows from underrepresented countries through the diversity program introduced in the 1990s. Legalization initiatives such as the 1986 Immigration Reform and Control Act, have also played an important role in incorporating unauthorized or undocumented residents into the growing population of permanent residents in the United States.

Governed by the Department of Homeland Security, the U.S. immigration system is a key institution in determining who gets into the country, and under what conditions. Approximately one million persons are granted lawful permanent resident (LPR) status annually. Altogether, excluding naturalized citizens, estimates in 2012 indicate there were currently 13.3 million LPRs living in the United States (Department of Homeland Security 2014). My work builds on the current literature on immigration integration and stratification by directing attention to aspects of the U.S. immigration system that potentially advantage or disadvantage the employment trajectories of lawful permanent residents to the United States. In particular, I focus on factors related to the application process, and eligibility criteria, which require prospective immigrants to apply under a designated set of admission categories.

Context

This study examines the role of immigration admission categories in stratifying new immigrants¹ in the U.S. labor market. More specifically, I explore the labor market outcomes among family reunification immigrants, employment-based immigrants, diversity program immigrants, refugees, and legalized immigrants who are currently employed. To this end, the following research questions motivate this study: 1) Do point of entry categorizations, as defined by broad admission class or visa categories, influence the annual earnings of new immigrants to the United States?; 2) Are there quantitative differences in the quality of jobs between different categories of immigrants?; and 3) How are these categorizations consequential for stratification processes?

Research on immigrant integration and assimilation, especially as they relate to employment outcomes, often converges on human capital theory and discrimination. While there is plenty of evidence supporting these two explanatory axes, less attention has been placed on understanding the U.S. immigration system itself and the selection policies that determine who is eligible for a green card, and under what conditions. Admissibility into the United States for permanent residency usually entails meeting the criteria specified in one of the four primary categories of immigration: family reunification, employment-based, humanitarian, and diversity. These criteria are often based on or associated with characteristics that are directly and indirectly tied to one's ability to access and participate in the labor market. For example, non-employment based immigrants may experience more hurdles seeking employment compared to employment-based immigrants, who are usually required to have a job offer prior to being lawfully admitted

¹ The terms immigrant, intending immigrant, applicant, permanent resident, and green-card holder are used interchangeably. Green-card and LPR status are also used interchangeably throughout the paper

or granted status. Insofar as there are stringent conditions that must be met in order to apply and be considered for permanent resident status through any of these four primary channels of immigration, we should expect that this process of selection may also foreshadow the labor market trajectories of new immigrants.

Immigration research related to stratification has not sufficiently accounted for one of the most important steps in the migration process. Admission categories provide a good starting point for analyzing stratification processes that may arise from the structure of the immigration system itself, and more specifically, the application and selection process. For prospective immigrants to the United States, admissibility and receipt of a green card depend on having the right set of resources prior to arriving. Examples of resources include having a strong social network that is able to provide financial support, having the skills necessary to participate in the labor market, or having the ability to access federal resources.

For the most part, these resources reflect the intentions of why immigrants are moving to the United States in the first place. For example, family immigrants are typically known to have strong social networks and are able to rely on them for social and financial assistance (Roth et al 2012; Waldinger 1996). Employment immigrants on the other hand usually have more human capital and professional networks, which make them more competitive in the labor market (Somerville and Walsworth 2009). Because of circumstances forcing migration, refugees typically don't have many resources upon arrival, but they can usually access federally-funded resources to assist with the resettlement process. The variability in resources that immigrants have upon arrival, and have access to post-arrival, arguably matter for employment outcomes.

In practice, a green card, regardless of its designation by class or category of admission, serves as proof that the holder is a lawful permanent resident that is entitled to reside and seek

employment in the United States. Employers do not ask for information on what kind of immigrant you are, as long as you have a green card indicating LPR status. What I argue in this study, however, is that these categorical distinctions are consequential for employment outcomes. Even if all green card holders are eligible to seek employment without restrictions, the application process inevitably, leads new immigrants to different positions in the labor market. In other words, the admission category through which respondents apply for LPR status matters for employment outcomes.

Different admission categories require different combinations of resources and capital during the application process. For examples, diversity immigrants must be able to demonstrate evidence of previous work experience or education, while family immigrants must be able to demonstrate they have existing family in the United States who are able to provide financial support. Once LPR status is granted, immigrants also differ in their ability to access other crucial resources that may facilitate labor market integration. For instance, refugees are the only group of immigrants who are eligible to utilize federally funded social services. Since 1996, under the *Personal Responsibility and Work Opportunity Reconciliation Act*, the majority of new immigrants with the exception of refugees, were barred from accessing federal welfare benefits for at least the first five years as new immigrants. These pre and post immigration circumstances are arguably consequential for immigrant integration, including participation in labor markets. The variability in resources that immigrants have or have access to may play a role in influencing where immigrants end up in the labor market.

LITERATURE REVIEW

A number of migration theories suggest that decisions to immigrate to a new country are often rooted in an economic rationale. According to Ravenstein's (1889) laws of migration,

economic opportunities form the basis of most migration decisions. The general push-pull framework also highlights economic considerations as being relevant to understanding why people migrate. The basic assumption of this theoretical approach states that unfavorable or negative conditions push individuals out of a region while attractive and favorable conditions pull individuals to a region (Massey; 1993; Lee 1966; Ravenstein 1889). Similarly, neoclassical models also give attention to wage differentials and employment conditions between the origin and destination as they factor into the costs of migration (Massey 1993; Lucas 1987). In the macro version of this framework, international migration is understood as labor migration spurred by geographical differences in the supply and demand of labor (Massey 1993; Harris & Todaro 1970). These theoretical frameworks assume that economic motivations are the primary driving force of migration and that their salience in migration decisions cannot be understated.

These assumptions elevating the importance of economics are fundamentally at odds with the legal framework and structure of the U.S. immigration system. Statistics from the Department of Homeland Security (2013) would suggest that only approximately 15% of all lawful permanent residents admitted annually are legally considered economic immigrants in the sense that they are either investing in the U.S. economy or working for a U.S. employer. But we know that a much larger percentage of permanent resident immigrants are working or seeking work, regardless of whether or not they are legally classified as a skilled or employment-based immigrant.

Previous studies reveal that refugees are usually incorporated into the labor market fairly quickly upon receiving refugee status (Nawyn 2010; Batalova et al 2010; Ager and Strang 2008; Muus 1997). A substantial proportion of immigrants with family-based green cards also find work shortly after arriving in the United States especially in family businesses or ethnic enclaves

economies (Min 2008; Bloemraad 2006; Waldinger 1999). These studies not only reflect the economic factors that migration theorists have long emphasized but they also reveal that regardless of any legal classification, most immigrants become active participants in the labor market. The question is not so much about distinguishing economic migrants from non-economic migrants. Rather, it is about analyzing where in the labor market new immigrants end up, if they are able to gain access in the first place, and whether this outcome is related to factors tied to the immigration selection and admission process.

Classifying Green Card Holders and Permanent Residents

To the extent that migrants can make decisions to move to a new country, they are limited by legal constraints that shape their migration and integration experience. Immigration selection policies and specifically those governing the different classes of admission ultimately determine who is eligible to lawfully move to the United States and the objectives for immigrating.

All immigrants to the United States intending to seek lawful permanent resident status are required to apply for an immigrant visa or a green card. All applicants must be considered admissible to the country in order for their application to be eligible. Various factors can jeopardize an applicant's admissibility into the country including but not limited to having a communicable disease, being perceived as likely to become a public charge, being an immediate family member of a drug trafficker, or having been convicted of crimes. In addition to being admissible, prospective immigrants or their sponsors must file a petition for immigration for approval. For family and employment immigrants, it is usually the case that the sponsor must be the one to initiate the application process by submitting a petition. After the petition is approved, the next step is to pay processing fees and prepare the supporting documents required for an

immigrant visa. Though the process of obtaining lawful permanent resident status is essentially the same for most immigrants, different immigrant visas have different requirements that applicants must be able to demonstrate in their application or through supporting documents. Requirements such as having a family sponsor, a job offer, or refugee status, may be consequential beyond the process of becoming a legal permanent resident; for new immigrants, these conditions determine eligibility and admissibility

Employment-based green cards. Employment-based visas cover immigrants who are able to contribute to or participate in the U.S. economy. The majority of applicants in this category are coming into the country for work. Such individuals are typically required to have an employer sponsor their application. Employers who act as sponsors agree to offer the intending immigrant a full-time, permanent position. Prior to formally sponsoring an application though, employers must apply for labor certification through the Department of Labor; this process is to ensure that the position being offered will not adversely affect the opportunities, wages, and working conditions of U.S. workers. If the intending immigrant is coming in as a new arrival or if their future employer is a family member or relative that has more than 5% ownership in the company the applicant intends to work for, an affidavit of support is required.

Sponsorship is exempt for a very small and select group in this category. Those with enough economic capital, \$500,000 to \$1,000,000 of unborrowed money, can apply for LPR as investors with the expectation that they will create jobs in the U.S. Individuals who have demonstrated extraordinary ability or prestige may also be considered for employment-based green cards without a sponsored application. Such cases are rare and require the applicant to receive a *National Interest Waiver* to demonstrate that their work has substantial intrinsic merit that benefits the national interest of the United States.

It is uncommon to find literature on the employment outcomes of immigrants that is limited to only employment-based green card holders. However, several comparative studies in the U.S., Canada, and Australia, indicate that compared to other groups, workers who obtained LPR through the employment-based channel tend to have more promising outcomes.

Roth et al's (2012; 2011) study using the Longitudinal Survey of Immigrants to Canada finds that employment-based immigrants have significantly better outcomes than family immigrants who, often due to language barriers and extensive ethnic networks, end up in enclave ethnic economies. The same study also indicates that since employment-based immigrants are selected for their skills and credentials, and sometimes labor market fit, they often have better outcomes compared to refugees who are selected based on humanitarian obligations. Similar observations are made in the Australian context. Because employment-based immigrants are screened for their skills and labor market fit, it is not surprising that they tend to do better than other groups of immigrants (Aydemir 2012).

Labor market fit and skills are important and appropriate considerations for labor market participation, but they are not characteristics exclusive to individuals coming through the employment-based category. In the U.S. context, sponsorship from an employer or a job offer, can help new immigrants bypass the job search process and provide a gateway into the formal labor market.

Individuals seeking to immigrate for the purpose of employment ultimately require a connection to a specific firm (Anderrson et al 2014). At least for new arrivals, employment-based immigrants have almost always secured this connection before they are given permanent resident status. Essentially, this group of immigrants already has a stable, permanent, full-time position lined up for them even prior to receiving their green card. This job offer removes many

of the barriers for new immigrants seeking formal employment in the United States. Unlike their U.S. counterparts, employment based immigrants in Canada experience many more barriers to labor market integration, despite having comparable levels of education, training and skill (Somerville and Walsworth 2009; Dean and Wilson 2009). In order to permeate the Canadian labor market, many immigrants eventually accept employment below their skill levels (Dean and Wilson 2009). In contrast, Batalova et al.'s (2010) analysis of highly-skilled immigrants using the NIS finds that respondents with an employment offer tend to work in a position that was of comparable quality to their last job abroad. Somerville and Walsworth (2009) attribute these challenges that immigrants to the United States tend to avoid to structural differences embedded in employment-based selection criteria between the two countries – the most notable being the United States' requirement for an employer sponsor. This example suggests that having the competent skills and ability to succeed in the labor market may not always be enough for new immigrants to successfully gain employment in positions they are qualified for, if they are able to gain employment at all. However, having a direct route into the labor market via employer sponsorship seems to alleviate some of the challenges immigrants face in terms of economic incorporation and participation.

In addition to a direct entry into the labor market through an employer sponsor, employment-based immigrants also seem to avoid the problems associated with occupational downgrading or deskilling. Initially, upon arriving or adjustment, employment-based foreign-born workers are the most likely of all immigrants to be represented in highly skilled and professional occupation groups including physicians, executives and engineers (Jasso and Rosenzweig 1995). Batalova et al.'s (2008) study demonstrates that high-skilled immigrants with postsecondary degrees can be found across all visa categories but even when skills are held

constant, individuals with non-employment based green cards are much more susceptible to deskilling and occupational degrading.

Advantages of an employment-based green card also extend to more conventional measures of employment outcomes, such as wages and job stability. As a group, employment-based immigrants tend to find better-paying and less precarious jobs than their family-based counterparts (Jasso & Rosenzweig 2008; Akresh 2006). The same observation has been made in the Canadian (Roth et al. 2012) and Australian context (Jasso & Rosenzweig 2008).

Family reunification green card holders.. As the name implies, this category of admissions is oriented towards reuniting family members. Immediate relatives and family members of U.S. citizens or green card holders make up the majority of applicants in this group. In order to apply for a visa in this category, prospective immigrants must have a family member or relative in the United States sponsor their application by filing *Form I-130 Petition for Alien Relative*.² Sponsors must also sign an affidavit of support, also known as *Form I-184*, which is a legally binding document stating that the sponsor has enough income or assets to financially support the intending immigrant for 40 qualifying work quarters or until he or she becomes a U.S. citizen. By signing the affidavit of support, sponsors are also agreeing to maintain a standard of living for the intending immigrant at a level not lower than 125% of the federal poverty line. These requirements of sponsorship and financial obligation prevent family-based immigrants from becoming a public charge, or relying on federally-funded public benefits.

² A small proportion of family reunification visas are reserved for individuals caught in special circumstances. For example, this could include persons born to foreign diplomats, widower of a U.S. citizen, or battered family members. The majority of applicants in these special categories are exempt from sponsorship requirements and can usually access federally-funded public benefits.

The previously discussed literature suggests that workers with a family reunification visa don't do as well in the labor market as their employment-based counterparts. Overall, family immigrants are more likely to find themselves in lower quality jobs initially upon arrival or adjustment. Using data from U.S. Immigration and Naturalization Services, Jasso & Rosenzweig (1995) find that over 30% of marital immigrants are represented as service workers or unskilled laborers initially upon receiving LPR status. More general findings on this entire group suggest that existing family ties can channel workers into family businesses or ethnic enclave economies where low-skill positions are more common (Min 2008; Bloemraad 2006; Waldinger 1999).

The upside of this is that clustering in the lower ranks of the labor market offers more room for upward mobility. Earnings for employment based and family reunification green card holders seem to converge over time, as family-based immigrants eventually catch up (Jasso & Rosenzweig 2008; Jasso & Rosenzweig 2000).

Green card by adjustment through refugee status. Humanitarian-based immigrations cover refugees and asylum seekers. Technically, prospective immigrants in this category are not initially applying for a visa but are rather seeking status as a refugee. Refugees can be considered a distinct group, separate from other immigrants, in that their resettlement patterns are driven by circumstances of forced migration. However, most refugees, like other lawful permanent residents, will eventually have a green card, and even become a citizen of their new host country, which is why they are included as a comparable group in this analysis.

Refugee status is usually recommended by the UN Refugee Agency (UNHCR), U.S. Embassy, or a non-governmental organization. However, this does not guarantee that refugee status will be recognized. Eligibility is determined on a case to case basis through an interview with a specially trained U.S. Citizenship and Immigration Services Officer. There are generally

four criteria points that must be met. First, the individual must be qualified under designated processing priority, meaning that the individual has referrals from a reputable party, such as the UN Refugee Agency or a non-governmental organization. Second, the individual must meet the definition of a refugee. According to U.S. Citizenship and Immigration Services, a refugee is someone who is located outside of the United States and is of humanitarian concern to the United States. Specifically, a refugee is also someone who is able to demonstrate “that they were persecuted or fear persecution due to race, religion, nationality, political opinion, or membership in a particular social group” (U.S. CIS). Third, the individual cannot be already resettled in another country. Lastly, like all other immigrants, the individual must be considered admissible under U.S. law.

LPR status is not granted right away even if refugees meet all the above conditions. Meeting the above conditions merely allows refugees to lawfully reside in the United States. In order to receive a green card, refugees must apply for lawful permanent residence by adjusting their status. Unlike other categories of immigrants, refugees are the only group of immigrants who are able to access federally-funded benefits upon lawful entry into the country. They are also able to access resources through refugee resettlement programs.

Research on the social and economic incorporation of refugees has been well-documented, although research on their outcomes relative to other categories of immigrants is less extensive. Recent analysis shows that even though refugees often have comparable levels of education and fairly high employment rates, their incomes are approximately \$3000 and \$8000 lower than those of other immigrants and the native-born, respectively (Capps and Newland 2015). That refugees on average tend to have lower earnings than other immigrant groups does not necessarily reflect a lack of integration in the U.S. labor market (Roth et al 2012; Aydemir

2012; Batalova et al 2008). In fact, over time, most refugees become self-sufficient and successfully integrate into the U.S. labor market (Capps & Newland 2015).

As the only group of immigrants eligible to access federally funded benefits and assistance through resettlement programs, refugees are in a better position to utilize reliable resources that may aid their integration into their host society. While it does seem to be the case that refugees are able to find employment, they often end up in positions for which they are overqualified. Contrary to popular belief, a substantial proportion of refugees are actually highly skilled and educated, and many were employed in professional positions prior to their resettlement. As a group, refugees have comparable levels of educational attainment to other immigrants, as well as the native-born population (Capps & newland 2015; Batalova et al. 2008; Muus 1997). Qualitative work by Nawyn (2010) shows that some NGOs were so oriented towards securing quick employment that refugees were often channeled into low skill positions that reinforced racial and ethnic hierarchies. Moreover, because refugees are often highly educated and skilled, they are also likely to experience occupational downgrading due to discrimination or devaluation of their foreign credentials (Ager & Strang 2008). In some circumstances though, refugees have also become successful entrepreneurs, opening new restaurants, salons and grocery stores that provide employment for their communities (Singer and Wilson 2006).

Diversity lottery visas. The diversity visa program is unique to the U.S. immigration system and brings in about 45,000 new permanent residents annually (DHS 2014). Introduced as part of the 1990 Immigration Act, the objective of this initiative was to increase migrant flows from underrepresented countries. A number of visas are allotted for eligible countries and these numbers are evaluated annually as part of the goal to diversify migrant flows and increase

representation from countries with low migration rates to the United States. Ethiopia, Egypt, Nigeria, Bangladesh, Kenya, Bulgaria, and Albania are some of the countries that have been top recipients of the diversity visa program.

In order to be eligible for a diversity visa, prospective immigrants must first be randomly selected through the annual diversity lottery system. Only individuals from a list of eligible countries with low migration flows to the U.S. are qualified to enter the lottery. If selected, immigrants can move forward with obtaining a green card provided they meet the minimum requirements, which are oriented towards labor market participation. At minimum, applicants must have a high school diploma reflecting the completion of a full course of study. Vocational training or equivalency degrees are not accepted. The high school diploma requirement may be waived if the applicant is a skilled worker in an occupation that requires at least two years of training. To ensure that diversity immigrants do not become a public charge, applicants in this category must also file an affidavit of support by finding a sponsor if the individual cannot demonstrate sufficient income or assets.

In recent years, the diversity visa program has been the subject of controversy. Many argue that the intended outcomes have not been met. Analyses by Logan and Thomas (2012) demonstrate that the costs of turning a lottery win into a green card are so high that in the end, the majority of those that are able to obtain LPR status end up coming wealthier, predominately European countries. The year 2015 is expected to be the last year for prospective immigrants to enter the diversity visa lottery for the opportunity to secure LPR status in the United States.

Immigrants of the diversity lottery program are perhaps the most understudied group. Diversity green cards make up a mere four percent of all green cards granted annually (Office of Immigration Statistics 2012). Focusing only on a highly-skilled sample, Batalova et al. (2008)

reveals that diversity immigrants fared considerably worse than other groups of immigrants when seeking employment opportunities. This disadvantage persisted even with time spent in the United States. When the sample is expanded to include permanent residents of all skill levels, diversity-immigrants continue to experience poorer employment outcomes despite having a fairly competitive skill set. According to pilot findings from the New Immigrant Survey (NIS-P), diversity immigrants have the second highest levels of schooling, after employment-based immigrants yet their median earnings were only \$15,600 and \$11,336 for men and women respectively (Jasso et al. 2000). Meanwhile, family based immigrants reported median earnings in the range of \$12,844 and \$18,000 while employment-based immigrants had median earnings between \$26,750 and \$36,400 (Jasso et al. 2000). If labor market outcomes were determined by human capital, then diversity immigrants, like their employment-based counterparts, should outperform family based immigrants. Diversity applicants are granted residency on the presumption that they have the qualifications to independently integrate into mainstream society and while statistics certainly validate diversity immigrants as an educated and skilled group, the above findings suggest that high levels of human capital may not always translate into equivalent employment outcomes.

Adjustment through legalization. A long-standing legalization program has never been at the core of the U.S. immigration system. Efforts to provide legal status to undocumented and unauthorized immigrants in the U.S. have largely occurred through legalization initiatives, with the most significant one being the 1986 Immigration Reform and Control Act (IRCA) which granted amnesty to approximately 1.7 million previously unauthorized workers (Kossoudji and Cobb-Clark 2002). It is commonly the case that applicants must first obtain temporary legal status first before applying for permanent legal status.

Under the provisions of IRCA, only certain unauthorized or undocumented individuals were eligible to apply for temporary legal status. In order to be considered eligible according to U.S. Citizenship and Immigration Services, “aliens must have continuously resided in the U.S. in an unlawful status since January 1, 1982” and “have entered the U.S. either 1) illegally before January 1, 1982, or 2) as temporary visitors before January 1, 1982 with their authorized stay expiring before that date or with the Government’s knowledge of their unlawful status before that date.” After successfully obtaining temporary residency, individuals have the opportunity to apply for LPR status through adjustment, provided that they maintain continuous residence in the country, are considered admissible, and demonstrate knowledge and understanding of the English language, U.S. history, and government.

Legalization provides a lawful pathway for undocumented and unauthorized residents to file an application for LPR status through adjustment. Although there is currently no formal way to officially apply for legalization with the Department of Homeland Security, legalized immigrants nonetheless make up a substantial portion of lawful immigrants in the country.

Studies on legalized immigrants have attributed various benefits to legalization programs. Beyond the lawful status that legalization affords previously undocumented and unauthorized individuals, legalization also paves the way for social inclusion and economic mobility. Paral et al (2011) find that Mexicans legalized through IRCA made tremendous gains in educational attainment and their earning potential. Compared to non-authorized workers, those who are legalized were more likely to experience more occupational mobility (Hill et al 2010) and higher rates of labor force participation (Borjas and Tienda 1993). Another study also estimates that unauthorized workers have a wage penalty in the range of 14% to 24%, when compared to their legalized counterparts (Kossoudji and Cobb-Clark 2002). The ability to lawfully seek

employment is important; however, Hill et al (2010) also point out that mobility for legalized immigrants is also influenced by skill level. Consistent with expectations, those who were already highly skilled tend to experience greater gains after gaining legal status. Though we know that workers with legal status as immigrants have better outcomes than their undocumented or unauthorized counterparts, it is less clear how legalized immigrants compare to other categories of workers with LPR status.

Becoming a Lawful Permanent Resident and Obtaining a Green Card

While there may be certain advantages associated with specific categories or classes of admission, much of this is possibly explained by a set of tightly governed rules and procedures surrounding eligibility within a category and receiving LPR status.

Rules of sponsorship and affidavits of support. The majority of applicants have their petition sponsored by at least one person, usually a family member, relative, or employer (Department of Homeland Security). It is also not uncommon to have joint sponsors especially if an affidavit of support is necessary. By law, sponsors must at least be lawful permanent residents, if not citizens of the United States in order to initiate a petition for the intending immigrant. Furthermore, family sponsors in particular, are legally obligated to financially support the intending immigrant for a number of years. Employer sponsors, on the other hand, are usually, agreeing to provide permanent full-time employment for the immigrant they are sponsoring. Though a legal process governs sponsorship procedures, these connections arguably also have utility beyond the application stages. Such connections strengthen the sort of resources available through social networks, which for many immigrants, are integral during the migration and integration process. In addition to lowering the risks and costs association with the

migration process, social capital also plays a role in helping immigrants gain access to employment (Massey et al. 1994; Massey 1993).

Consular processing vs. adjustment. The process of obtaining a green card and LPR status occurs through two primary channels: consular processing, and adjustment of status. Prospective immigrants residing abroad typically file a petition for immigration through consular processing, which takes place at a U.S. embassy or consulate. Once their application is approved, they are issued a visa which allows them to seek admission to the United States as a lawful permanent resident. This group is commonly referred to as new arrivals. It is more common for new immigrants to file for an adjustment of status. This option is open to individuals already residing in the United States, usually on a temporary visa. Adjustment allows temporary residents in the United States to adjust their temporary status to reflect lawful permanent residency, provided that they meet all the other specifications and eligibility requirements.

With the exception of refugees and legalized immigrants who by legal requirements and by nature of their position must apply for LPR status through adjustment, other categories of immigrants can initiate an application through either consular processing or adjustment depending on their individual circumstances. In terms of labor market outcomes, those adjusting their status tend to report higher wages and less occupational deskilling than those who receive their LPR status as new arrivals (Hao 2013; Batalova et al 2010). This is likely explained by the fact that adjusting immigrants have had more time to accumulate U.S. work experience and knowledge.

Taking into account the conditions and implications common to the average immigrant in each admission category, I propose the following hypotheses:

Hypothesis 1. Employment-based immigrants will better outcomes in terms of annual earnings and job quality, relative to other groups of immigrants.

Hypothesis 2. Employment-based immigrants will experience more earnings growth and job quality improvement over time, relative to other groups of immigrants.

DATA

The data for this study come from waves 1 and 2 of the New Immigrant Survey (NIS), which is a nationally representative panel study of lawful immigrants to the United States. The sampling frame is from electronic administrative records from the U.S. Immigration and Naturalization Service (INS). All respondents in the NIS are either adjusted immigrants or new arrivals who have been granted a green card, and have obtained LPR status in the United States by the time of the first wave of data collection.

The NIS is a unique data set containing information on a broad range of topics including housing environment, health, and employment. For this particular study, I utilize the data files for demographics (A), pre-migration experiences (B), employment (C), income (G), social variables (J), migration history (K), and interviewer comments (R). I also use a number of variables from the preload file (CIS), which provides information on the respondent's admission category and adjustment status.

The sample used for the first portion of the analyses on annual earnings consists of 796 respondents. Because the variable for annual earnings was calculated differently based on how the respondent reported their earnings, missing data was especially problematic if there was not enough information to determine how often the respondent work and how often they were being paid. A more detailed overview of the missing data and sample size with regards to annual earnings is attached in the methodological appendix.

The second part of the analyses focusing on job quality utilizes a sample of 1215 respondents. This sample includes respondents who were working full-time for pay during both waves of data collection.

Descriptive Statistics

Table 1 presents an overview of the distribution of respondents by category across the independent and dependent variables of interest. Many of the characteristics from wave one are carried over into wave two but updated variables for wave two were included where appropriate. For example, changes in marital status and age were captured. Changes in job position, whether at the same place of employment or elsewhere, were also included as long as the respondent was working for pay at both points of data collection. Overall, the sample from the NIS is fairly consistent with official statistics from the Department of Homeland Security in terms of representation from the major categories of admission.

	Employment		Family		Diversity		Refugees		Legalized		Other		Total	
	W1	W2	W1	W2	W1	W2	W1	W2	W1	W2	W1	W2	W1	W2
Married %	81.7	86.8	87.5	89.3	60.0	68.6	78.4	82.4	77.0	82.3	52.3	74.8	76.7	83.1
Male %	68.4		55.9		71.4		63.5		73.5		62.6		65.6	
Age	36.4	40.4	36.2	40.4	32.3	36.8	39.5	43.7	38.9	43.1	36.6	40.9	36.3	40.4
Race (White Ref) %	45.8		43.4		39.3		51.4		49.6		33.6		43.7	
Am Ind/Ala Nat.	2.37		0.71		2.86		1.35		3.54		3.74		2.22	
Asian	32.04		33.45		35.43		31.08		21.24		28.04		31.44	
Black/Af Am	10.75		13.17		17.14		9.46		16.81		25.2		14.0	
Nat Haw/Pac Isl.	0.65		1.78		0.00		0.00		0.88		0.00		0.74	
Missing	8.39		7.47		6.29		6.76		7.96		9.35		7.82	
Hispanic %	34.0		29.2		28.0		40.5		31.9		25.2		31.4	
Missing	0.22		1.07		2.86		0.00		1.77		0.00		0.91	
Region (Europe Ref) %	22.8		17.4		47.4		41.9		0.00		4.67		22.6	
Africa	4.09		5.69		35.4		25.7		1.77		4.67		10.1	
Asia	62.2		27.4		12.0		12.2		0.00		34.6		35.6	
Latin America	10.5		49.1		4.57		20.3		96.5		56.1		31.2	
Missing	0.43		0.36		0.57		0.00		1.77		0.00		0.49	
Eng. Prof. (1 – 5)	4.36		3.14		2.92		3.08		2.01		2.74		3.43	
Years of education	16.9		12.9		15.2		13.9		8.97		12.3		14.4	
U.S. work exp	3.21		1.81		0.81		2.32		4.31		1.60		2.43	
Unionized%	9.03	11.2	13.5	14.6	9.71	17.1	17.6	16.2	16.8	15.0	8.41	12.2	11.4	13.58
Missing	6.67	5.59	8.19	5.00	13.7	13.1	6.76	8.11	3.54	4.42	6.54	7.48	7.74	6.75
Bus/Org Type (Priv FP)%	79.8	70.3	82.2	70.5	87.4	72.6	74.3	62.2	87.6	71.7	86.0	63.6	82.4	69.7
Fam Business/Farm	1.08	1.72	2.14	4.63	2.86	2.29	2.7	2.70	0.88	5.31	2.80	5.61	1.81	3.21

Govnt/Pub.Sector	2.80	6.88	4.98	6.41	1.14	10.86	16.2	9.46	2.65	0.00	0.93	4.67	3.70	6.67
Private Non-Profit	13.8	14.0	5.34	4.98	4.57	5.14	4.05	13.5	2.65	4.42	1.87	4.67	7.82	8.89
Individual	1.51	2.58	3.56	8.19	1.71	2.86	0.00	0.00	5.31	15.0	7.48	11.2	2.80	5.68
Missing	1.08	4.52	1.78	5.34	2.29	6.29	2.70	12.2	0.88	3.54	0.93	10.3	1.48	5.84
Occupation (Manager)	16.6	21.3	6.41	12.8	5.71	10.3	2.70	9.46	4.42	6.19	3.74	5.611	9.55	14.2
Professional/Tech	65.6	60.2	18.9	20.3	13.7	22.9	24.3	27.0	2.65	5.31	6.54	7.48	33.7	33.8
Sales	3.01	4.30	6.41	7.12	18.9	8.00	6.76	2.70	2.65	6.19	11.2	14.0	7.00	6.42
Admin/Clerical	3.23	3.23	11.7	13.5	5.71	14.3	16.2	16.2	9.73	8.85	14.0	9.35	7.90	9.05
Service	6.45	4.73	21.4	18.5	28.0	13.1	13.5	6.76	30.1	28.3	21.5	24.3	17.0	13.2
Farming	0.00	0.00	2.14	0.71	0.00	0.00	0.00	0.00	1.77	0.88	3.74	1.87	1.00	0.41
Prod/Crafts/Repair	2.80	1.72	21.4	16.0	17.1	13.7	21.6	14.9	30.1	19.5	17.8	23.4	14.2	11.1
Assemblers/Inspectors	1.51	2.15	2.85	3.91	3.43	4.00	2.70	8.11	7.08	6.19	7.48	2.80	3.21	3.62
Transport/Moving	0.65	1.08	6.05	6.05	6.29	10.3	10.8	10.8	11.5	16.8	14.0	10.3	5.51	6.42
Protective Services	0.00	0.22	1.78	0.71	1.14	2.29	1.35	1.35	0.00	0.00	0.00	0.00	0.66	0.66
Missing	0.22	0.44	1.07	0.36	0.00	1.14	0.00	2.70	0.00	1.77	0.00	0.93	0.33	1.07
Years in U.S.	1.92		3.68		0.99		6.68		6.43		1.82		2.89	
Principal Applicant	93.1		92.2		87.4		82.4		100.0		84.1		91.3	
Adjust	69.7		65.5		14.3		100.0		100.0		32.7		62.1	
Job Relative/Fam	5.59	5.59	24.9	21.0	21.1	20.0	10.8	10.8	13.3	12.4	33.6	28.9	15.8	14.2
Prior Job Offer	40.0		6.05		8.00		2.70		0.00		7.48		18.7	
Fam Sponsor	4.52		88.6		27.4		29.7		7.08		100.0		37.5	
Emp Sponsor	90.5		23.8		7.43		6.76		1.77		24.3		44.0	
Naturalized		7.96		18.51		9.71		23.0		1.77		9.35		11.1
Logged Med. Earn (N=796)	11.27	11.41	10.20	10.42	9.89	10.34	10.32	10.51	10.36	10.39	9.96	10.26	10.52	10.76
Job Quality (0-6)	3.35	4.11	2.50	3.32	2.10	3.26	2.91	3.49	2.88	3.02	2.11	3.00	2.80	3.57
N														

Dependent Variables

Annual earnings were calculated from the reported salary and wage variables from the employment data file, which asks respondents to report their salary or their wage. Respondents who reported a wage instead of a salary had their annual earnings calculated based on the number of weeks and hours they worked per year and week respectively. Without these two pieces of information, it was impossible to calculate the annual earnings in instances where respondents reported their hourly wage, as opposed to a monthly, weekly, or bi-weekly wage. A lot of respondents were lost in the sample from this step in the data cleanup. There were also respondents who reported their income in a currency other than United States dollars. I used the average exchange rate during the period in which the data were collected to convert their

reported annual earnings into U.S. dollars. To normalize the distribution of this variable, I logged annual earnings in my analysis. To make this variable comparable across the two waves, I adjusted the final annual earnings amount for inflation according to the CPI-U-RS series.

The median annual earnings by admission categories are presented in Table 1. Two observations stand out. First, across all groups, earnings increase over time. Second, employment-based immigrants have the highest earnings during both waves of data collection. When converted to real dollars, non-employment groups trail far behind, with respondents earning less than half of what their employment-based counterparts earn.

To measure job quality, I constructed an index based on six indicators that a respondent might be employed in a better job: health insurance, pension benefits, paid vacation, job stability, and disability coverage. My analysis of job quality borrows slightly from Kalleberg et al.'s (2000) analysis of what constitutes a “bad job” versus a “good job”. The authors focus primarily on three characteristics: low pay, health insurance, and pension benefits. Rather than incorporating low pay as an indicator in my index, I analyze annual earnings separately as a continuous variable, as described above. I do, however, include both health insurance and pension as key indicators that improve the quality of a respondent's job. The NIS also asks questions on whether the respondent has paid vacation and disability coverage through their employer, which are included as indicators for my index. I also include a variable on job stability, which I constructed based on whether the respondents work stable and consistent hours. There is also an indicator which shows if the respondent is unionized or covered by a bargaining contract.

The job quality index scores, listed at the bottom of Table 1, in the first wave are lower than expected, with the highest score of 3.37 belonging to employment-based respondents.

Diversity visa holders had the lowest scores in wave one, averaging in at 2.16. Wave two paints a slightly more optimistic picture as quality index scores increase across all groups. Once again, employment-based respondents continue to lead, meeting around 4 out of 6 indicators of what makes a good job.

Independent Variables

Immigrant category is coded as a series of five dummy variables: employment-based, family-based, diversity, legalized, humanitarian, and other. Employment-based immigrants are designated as the reference category for the regression models. For the purposes of this study, all entrants under the family reunification program are grouped together as one category. It is common for immediate family members to be distinguished from relatives. However, sponsorship requirements are mostly the same for either type of family-based immigrant. I also include legalized immigrants as part of my analysis. Although their path to obtaining permanent residency departs from the traditional pathways due to their previous unauthorized status, they nonetheless make up a substantial and relevant component of U.S. immigrants. Furthermore, their status as legal immigrants with opportunities for naturalization is comparable to that of other new immigrants to the United States. The humanitarian category includes asylum seekers and refugees who have already been granted green cards through adjustment. Though the diversity lottery is being phased out of the current immigration system, I include this group as an immigrant category in this study as it has been a distinct feature of the U.S. immigration system for over two decades. The diversity program has also been an unparalleled experiment that only the United States has implemented and despite the controversy surrounding it, it has been a key aspect of the U.S. immigration system since the 1990s. The other category represents a small group of immigrants who were granted LPR under specific circumstances not pertaining to the

primary categories. They are included to maximize the number of respondents available for the analyses, but are not central to the overall discussion.

The distribution of respondents across these categories is fairly consistent with the overall distribution of immigrants into the United States. Employment-based and family reunification immigrants together make up the majority of new residents granted permanent status annually.

Demographic Controls

The conventional demographic variables used for studying labor market outcomes are included in the analyses as controls.

Age is modelled as a continuous variable, ranging from 20 to 82 for full-time, working adults. An age-squared term is also included. The mean age of respondents during the first wave of data collection was 36. To calculate respondents' age in wave two, the difference in number of years between the first and second time they were interviewed was added to their age in wave one. In the second wave of data collection, the mean age of respondents was 40.

Prior research has demonstrated that marital status can be correlated with earnings (Roth et al 2011). A binary variable is included in the analyses indicating if the respondent is married. Though the majority of respondents in the sample are married, family-based immigrants have the highest proportion of married respondents. This is expected considering that a number of family-based visas are obtained through marriage with a U.S. citizen or U.S. permanent resident. Aside from refugees, all other groups saw slight increases in the proportion of respondents married during the second wave of data collection.

Research, as well as recent news reports, has consistently demonstrated that a gender gap exists when it comes to wages and earnings. Furthermore, immigrant women in particular are also more likely to be concentrated in more precarious sectors of the labor market, which are

associated with poor working conditions and lower wages (Fuller and Vosko 2008; Browne and Misra 2003). Gender is accounted for through a binary variable, with male coded as 1.

The sample utilized in this analysis has a higher proportion of males represented than females. This is likely due to the fact that this sample is limited to currently employed respondents who are working full-time. Overall however, the lower percentage of males in the family-based category is consistent with expectations.

Perceptions of the value of previous work experience and foreign credentials can vary by region, with European nations more likely to be perceived more favorably (Batalova et al 2008; Reitz and Verma 2004;). Using responses on the origin country, I generated a categorical variable representing four major regions: Europe, Asia, Latin America, and Africa.

Consistent with official statistics on the immigrant profile from the Department of Homeland Security, the majority of immigrants come from Asia or Latin America. Employment-based immigrants overwhelmingly come from Asian countries while the majority of family-based immigrants come from Latin America. Both the diversity program and refugee resettlement program have helped to increase migrant flows from Europe and Africa. Not surprisingly, nearly all respondents who obtained LPR status through legalization indicate Latin America as their region of origin.

Racial discrimination has been a common explanation for explaining disparities within the immigrant population. Visible minority status has been linked to lower occupational mobility (Yoshida and Smith 2005). The experience of non-European immigrants has also been demonstrated to be associated with lower success in the labor market (Reitz and Verma 2004).. Race is measured using a categorical variable and includes Black/African American, American Indian/Alaska Native, Asian, Pacific Islander/Native Hawaiian, and European/White, which

serves as the reference category. Especially after limiting the sample to respondents employed full-time, the number of respondents identifying as American Indian/Alaskan Native or Pacific Islander/Native Hawaiian is incredibly low³.

Hispanicity is captured through a binary variable. A missing category is also included in the analyses to reflect respondents who declined to provide an answer.

Contrary to expectations, there is not a strong correlation between the variables measuring race and ethnicity, and the region variable described above. This is in part due to many respondents coming from fairly multi-ethnic regions such as Canada, and several European nations.

Human Capital Controls

Difference in employment outcomes are often attributed to differences in the quality and quantity of human capital one has. English proficiency, education, and previous work experience are all included as control variables for human capital.

Because English serves as the primary language in the U.S., it is expected that having a good command of the English language is crucial to succeeding in the labor market, especially for those employed in the formal sector. Previous research has established a positive association between English proficiency and earnings (Akresh 2006; Trejo 1997; McManus 1990). Not knowing English or having a weak command of the language has always been linked to an increasing likelihood of working in an unskilled job (Batalova et al 2008). English proficiency is

³ The *New Immigrant Survey* classifies a respondent as American Indian or Alaska Native if the respondent has “origins in any of the original peoples of North, Central, or South America, and who maintains tribal affiliation or community attachment.” The *NIS* classifies a respondent as Native Hawaiian or Other Pacific Islander if the respondent has “origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.” (NIS Codebook 2003)

coded on a five point scale, whereby 5 represents very good English proficiency and 1 indicates that the respondent's interview was conducted in a different language. Previous studies have demonstrated that respondents are likely to exaggerate or understate their language abilities when asked to self-evaluate in surveys (Akresh 2014). The NIS accounts for this by providing interviewer rated English proficiency scores, which I utilize in this study.

Employment-based respondents, on average, had higher scores indicating good or very good English proficiency. On the other hand, legalized immigrants had the lowest scores. As a group, the entire sample had a satisfactory rating for English proficiency.

Education is coded as a continuous variable based on the years of schooling the respondent had at the time of the interview. This includes any schooling attained abroad or in the United States. For the sake of maintaining the largest sample size possible, it made more sense to measure education this way rather than by degree attained. Discrepancies exist between how foreign degrees are perceived and validated (Oreopoulos 2009). To counteract some of these effects, a variable for previous U.S. work experience is included as another control for human capital.

Respondents from the employment category by far have the most years of schooling, averaging almost 17 years. Diversity immigrants are also fairly educated, with over 15 years of schooling. Legalized immigrants on average have less than 10 years of schooling.

Job-level Controls

I include occupation as a control in my analyses to account for the difference in wages across different sectors of work. Occupation is coded in the NIS based on the 2003 Census 4-

digit codes, ranging from 10 to 9990. For my analysis, I collapsed these occupations into the conventional groupings used in the NLSY '79.

Aside from the employment group, most respondents in other admissions groupings experienced upward mobility in their occupational trajectory between the first and second wave of data. Perhaps most prominent is the growth of family and diversity immigrants into higher level occupations including professional or managerial positions. In wave two, a sizeable proportion of employment based respondents fall out of professional or managerial positions, and move into sales, administrative/clerical work, and service work.

The type of organization or business that respondents work for is accounted for in my study by a categorical variable indicating whether respondents are currently working for a private for-profit, a family business or farm, the public sector or the government, an individual, or in the non-profit sector. Unfortunately the distribution across these five sectors is not ideal in terms of having more representation outside the private for-profit sector. Nonetheless, this measure is included since previous studies have demonstrated that public sector work may help boost the wages and improve working conditions for new immigrants (Waldinger 1996), while employment in family enterprises can be detrimental to incorporation outcomes (Roth et al 2012).

Unionization is included as a control variable in the analyses of annual earnings. Research has consistently linked unionization to higher wages and better working conditions for immigrants (Milkman 2011). Unionization rates among immigrants have been mixed. Most findings generally show that rates increase with duration of time in the U.S. and naturalizing (Reitz and Verma 2004; Kim and Kim 1997; Defreitas 1993). This measure is coded as a dummy variable, to indicate if the respondent is unionized or covered by a collective bargaining contract.

Respondents who responded “don’t know” are assumed for the purposes of this study, to not be unionized or covered by a collective bargaining contract. Those who refused to respond to the question are coded under a missing category and accounted for in the analyses.

Previous U.S. work experience can be an indicator of an individual’s familiarity with the U.S. labor market and workplace labor standards. Furthermore, prior work experience may also be advantageous for immigrant job applicants in that employers are also likely to have a better idea of how to evaluate potential employees. Early research by Mullan (1998) finds that U.S. work experience contributed greatly to the occupational mobility of Mexican immigrants. More recent work from Akresh (2006) finds that U.S. work experience is positively associated with better employment outcomes for most groups of immigrants, regardless of where they come from. These considerations are accounted for by including a continuous variable measuring years of paid work experience in the United States. This includes any paid work experience accumulated while on a temporary visa or otherwise, prior to receiving LPR status.

Though legalized immigrants lack the English proficiency and educational attainment other immigrants have, legalized immigrants have around accumulated four years of U.S. work experience which is the highest of any other admissions group. Employment based immigrants come in second with an average of three years of U.S. work experience. Although diversity immigrants are often selected for labor market fit and skill, they are the least likely to have accumulated U.S. work experience since they tend to receive their green cards as new arrivals rather than status adjusters.

Immigration related controls

My analysis controls for whether the respondent was the principal applicant on the immigration petition. The main person applying for a specific visa is considered the principal

applicant while their children, partner or family member accompanying them are considered non-principal applicants or dependents. It is likely that the principal applicant, rather than the accompanying immigrant, will have more knowledge of the application process and procedures.

In this sample, the vast majority of respondents are indeed the principal applicant, suggesting that they were heavily involved during the application process.

The length of time spent in the U.S. prior to applying for LPR status is also included as a control. Attempts to measure this are captured through a measure for time spent in the U.S., which is a continuous variable created through piecing together respondents' migration history. It is expected that even in the absence of U.S. work experience, time spent in the U.S. could be advantageous in terms of acquiring pertinent knowledge regarding the immigration process or labor market.

As expected, groups that are required to adjust their status – refugees and legalized immigrants – tend to have spent more time in the U.S. Likewise, diversity immigrants, most of whom are new arrivals, have spent the less time in the U.S. at the time of receiving their LPR status or green card.

Entry or adjustment via any of the main categories of admission all lead to permanent residency and potentially citizenship, if the applicant later chooses to apply for admission. Selecting the most appropriate category of admission or green card largely comes down to the intending applicant's circumstances, social connections and resources. Family reunification applicants are required to have a family member or relative who legally resides in the U.S. to sponsor their application and provide financial support. Employment-based applicants are usually also required to have sponsorship but from their future employer, who usually have to confirm that a permanent full-time job offer has been extended to the intending immigrant.

To control for the influence of sponsorship, two binary measures are included in the analyses: family sponsorship and employer sponsorship.

Family sponsorship is a binary variable indicating whether the respondent had a family member or relative petition, sponsor, or co-sponsor their application for immigration. Family sponsors are required to sign an affidavit of support which is a legal agreement stating that they will financially support the applicant at a level of 125% above the national poverty line. Because of these requirements, family sponsorship may also be a potential proxy for gauging access to financial support or job opportunities.

Employer sponsorship is also included as a binary variable to indicate whether the respondent had an employer as petition, sponsor, or co-sponsor their application for immigration. Employer sponsors provide evidence that they will hire the applicant on a permanent full-time basis. While this requirement is not a substitute for financial support, sponsorship from an employer is a useful measure of whether individuals have direct access into the formal labor market.

It is likely that different categories of immigrants access the labor market in different ways. Immigrants sponsored by an employer usually have a permanent, full-time job offer that has been reviewed and certified by the U.S. Department of Labor prior to arrival or adjustment of status. The majority of those who have a job offer have employment-based visas, simply due to the requirement of having an employer sponsor. A binary variable, job offer, is included to account for the effect of having a job offer as part of the immigrant petition.

While most family sponsored immigrants do not have the advantage of being able to start working right away upon receiving LPR status, they often have social connections that aid them in the job seeking process (Mullan 1998; Waldinger 1996). However, previous research

demonstrates that jobs found through family networks can often lead new immigrants to ethnic economies, which are sometimes characterized by lower wages and fewer labor standards (Roth et al. 2012). A binary variable is included in the analyses to identify respondents who obtained their current job through a family member or relative.

The place from which a petition for immigration is initiated is also consequential and affects the procedures associated with obtaining a green card. Adjustment refers to the process of switching from a temporary visa to that of a permanent one. This is usually the case for immigrants who apply for LPR status from within the United States. The alternative to this is consular processing, whereby the applicant usually does not currently have a visa and must apply for a green card at a U.S. embassy or consulate from their home country. Immigrants who obtain their green cards through adjustment as opposed to consular processing typically have spent more time in the U.S, and are more likely to have work experience (Batalova et al 2008), which can be advantageous in gaining access to and participating in the labor market, especially the formal sectors. Applicants who are already in the United States on a temporary visa can usually apply for permanent residency via adjustment. The ability to adjust your status from a temporary visa is arguably an advantage for integration purposes tied to two related characteristics that are included as controls: previous job experience in the U.S. and time spent in the U.S.

Though adjustment itself is really a procedural aspect of the application process, it is likely that respondents adjusting their status have spent more time in the country and therefore, might have a more accurate perspective on and comprehensive knowledge of the U.S. labor market. This is especially true for legalized immigrants or those in the humanitarian category. By the nature of their circumstances, legalized immigrants must have previously spent time in the U.S. under unauthorized or undocumented status in order to initially be considered for

legalization. Unlike other groups of LPR immigrants, refugees and asylum seekers do not arrive in the country with LPR status and they must apply for it through adjustment of status after one year of arriving in the United States. These observations are reflected in Table 1, whereby 100% of respondents in both these categories are status adjusters.

Additional Variables for Wave 2 Analyses

Naturalization is included as a control to measure if the respondent had successfully applied for and became a U.S. citizen by the second wave of data collection. Naturalization is a key variable that encourages political and economic participation (Bloemraad 2006; Woodrow-Lafield et al 2004). In the second wave of data, naturalization is included as a binary variable to designate whether the respondent had changed their status from a permanent resident to a U.S. citizen since the first wave of interviews. Prior research utilizing admission categories find that employment-based immigrants and refugees were the most likely groups to naturalize and become citizens (Batalova et al 2008).

The logged annual earnings from wave one are included as predictor in the wave two analyses of annual earnings. Since decisions about starting wages or wage increases often depend on previous earnings, including the outcome variable from wave one as an independent variable will help account for any promotional gains or increases expected between the two time periods. In a similar vein, the job quality index scores from wave one are also included as an independent variable in the wave two analyses of job quality.

Since a key objective of this analysis is to understand the utility of resources different categories of immigrants bring with them, I keep the original measures for human capital, work experience, and previous U.S. trips from wave one for the second wave of analysis. These

variables are important measures that potentially help explain why some groups enter the labor market much later after receiving their green card, or why some groups switch jobs.

ANALYTIC METHOD

The first part of my analyses addresses the following question: do point of entry categorizations, as defined by broad admission class or visa categories, influence the annual earnings of new immigrants to the United States? To answer this question, I rely on a series of OLS regressions with logged annual earnings as the dependent variable. This portion of the analyses is limited to full-time workers who worked at least 35 hours per week. Self-employed workers were excluded from the sample.

The first model includes only the admission categories as the independent variables, as a way of establishing a baseline. The second model adds demographic controls about the respondent's marital status, gender, age, race and ethnicity, and region of origin. Human capital controls are included in the third model to account for the effects of English proficiency, education, and previous work experience. The fourth model accounts for job-level characteristics such as occupation, business type, unionization, and whether the respondent found the job through a relative or family member. The fifth model includes variables related to immigration and the application process: time spent in the U.S., principal applicant, adjustment, sponsorship, and job offers.

These series of regressions were repeated for the second wave of data, with the starting earnings included as an independent variable in order to model changes in earnings over time. My descriptive analyses of annual earnings confirm that all groups see an increase in their earnings from wave one to wave two. Therefore, the regression models in this phase of the analysis are measuring differences in earnings growth of non-employment groups relative to the

employment group.. Naturalization is also included as an additional control to account for respondents who have acquired U.S. citizenship by the second wave of data collection.

The second part of my analyses answers the following question: Are there quantitative differences in the quality of jobs between different categories of immigrants? I also run a series of OLS regressions and control for the influence of demographic, job-level, human capital, and migration-related characteristics. Unionization is removed as an independent variable as it is a component of the outcome variable measuring average number of good job characteristics.

RESULTS

Annual Earnings in Wave 1 and Wave 2

A total of five models are presented in Table 2 to demonstrate how the relationship between admission categories and wave one annual earnings changes as controls are added. These five models do not yet account for the hypothesized mediating variables. Model 1 establishes a baseline and includes only the admission categories as independent variables. Without any controls, admission categories account for approximately 31% of the variance observed in annual earnings when immigrants first receive LPR status or their green card. All non-employment based groups are observed to have significantly lower earnings than the employment-based category. This observation persists in the second model after standard demographic and individual-level controls are added. The addition of demographic controls only seems to decrease the magnitude of effect of admission categories on annual earnings for family-based and legalized immigrants, relative to employment-based immigrants. The majority of family-based immigrants and nearly all legalized immigrants, come from Asian and Latin American countries respectively. Of the region controls, migrating from an Asian or Latin

country is associated with lower annual earnings. Both gender and age are significant factors influencing the annual earnings of lawful permanent residents in the U.S.

The third model controls for three measures of human capital, two of which are perhaps more salient for a foreign-born workforce: English proficiency and years of U.S. work experience. The third human capital control is education, measured by years of schooling. Although only three additional variables are added, the increase in explanatory power is larger than observed for when other controls are added. This suggests that English proficiency, education, and previous work experience are tied to a respondent’s earnings and that having the right skills and qualifications can reduce some disadvantages of being a new immigrant in the labor market..

The fourth model includes a number of job-level characteristics as well as major occupational groupings. The variance explained is substantially increased when job-level controls are added. With the exception of professional and technology occupations, all other occupational groups have significantly lower earnings than the managerial group. The business or type of organization that respondents work for, and unionization or coverage by a collective bargaining contract, did not appear to be significant in determining annual earnings.

Finally, the addition of immigration-related controls in the fifth model did not appear to improve the model fit substantially.. However, being a status adjuster rather than a new arrival was associated with higher earnings while utilizing family ties to find a job was associated with lower earnings.

TABLE 2
Annual Earnings of Full-Time Workers (Wave 1)

	Model 1		Model 2		Model 3		Model 4		Model 5	
Employment (Ref)	B	s.e.	B	s.e.	B	s.e.	B	s.e.	B	s.e.
Family	-1.13***	0.09	-0.88***	0.10	-0.64***	0.10	-0.41***	0.10	-0.36**	0.14
Diversity	-1.54***	0.11	-1.59***	0.12	-1.19***	0.12	-0.74***	0.13	-0.45***	0.15
Refugees	-0.99***	0.14	-1.00***	0.15	-0.68***	0.14	-0.40***	0.15	-0.46***	0.17
Legalization	-0.86***	0.12	-0.49***	0.14	-0.15	0.14	-0.01	0.13	-0.05	0.16

Married	0.15*	0.09	0.19**	0.08	0.14*	0.08	0.11	0.08
Male	0.27***	0.07	0.26***	0.07	0.34***	0.07	0.28***	0.07
Age	0.09***	0.03	0.09***	0.03	0.10***	0.03	0.09***	0.03
Age-squared	-0.00***	0.00	-0.00***	0.00	-0.00***	0.00	-0.00***	0.00
Race (White Ref)								
Am Ind/Ala Nat.	0.08	0.23	0.07	0.22	0.03	0.21	0.01	0.21
Asian	0.20**	0.09	0.18**	0.08	0.15*	0.08	0.13	0.08
Black/Af Am	0.06	0.11	0.09	0.10	0.07	0.10	0.09	0.10
Nat Haw/Pac Isl.	0.12	0.46	0.14	0.45	-0.10	0.43	-0.06	0.42
Missing (N=68)	0.33***	0.12	0.26**	0.12	0.21*	0.11	0.21*	0.11
Hispanic	0.04	0.09	0.02	0.08	0.03	0.08	0.01	0.08
Missing (N=5)	-0.65	0.42	-0.55	0.40	-0.62	0.39	-0.69*	0.38
Region (Europe Ref)								
Africa	-0.06	0.12	-0.16	0.12	-0.08	0.12	-0.10	0.12
Asia	-0.22**	0.10	-0.15*	0.09	-0.09	0.09	-0.03	0.09
Latin America	-0.57***	0.11	-0.32***	0.11	-0.12	0.11	-0.20*	0.11
Missing (N=4)	0.09	0.47	-0.05	0.45	0.10	0.43	0.14	0.42
Eng. Prof. (1 – 5)			0.12***	0.08	0.08***	0.02	0.07***	0.02
Years of education			0.03***	0.01	0.01	0.01	0.01	0.01
U.S. work exp			0.03***	0.01	0.03***	0.01	0.01	0.01
Unionized					0.10	0.10	0.13	0.10
Missing					-0.13	0.13	-0.02	0.13
Bus/Org Type (Priv FP)								
Fam Business/Farm					0.13	0.23	0.09	0.22
Govnt/Pub.Sector					0.14	0.17	0.16	0.17
Private Non-Profit					-0.12	0.11	-0.11	0.11
Individual					0.24	0.17	0.28	0.17
Missing (N=42)					0.25	0.20	0.24	0.26
Occupation (Manager)								
Professional/Tech					-0.12	0.11	-0.16	0.11
Sales					-0.88***	0.16	-0.81***	0.16
Admin/Clerical					-0.72***	0.15	-0.65***	0.15
Service					-1.01***	0.14	-0.93***	0.14
Farming					-1.27***	0.33	-1.17***	0.32
Prod/Crafts/Repair					-0.92***	0.14	-0.81***	0.14
Assemblers/Inspectors					-0.78***	0.21	-0.74***	0.20
Transport/Moving					-1.02***	0.17	-0.92***	0.17
Protective Services					-1.48***	0.37	-1.32***	0.36
Missing (N=2)					-0.39	0.60	-0.57	0.59
Years in U.S.							0.01	0.01
Adjust							0.44***	0.09
Principal Applicant							0.15	0.12
Employer Sponsorship							0.09	0.09
Family Sponsorship							-0.02	0.11
Prior Job Offer							0.11	0.09
Job through Family							-0.22**	0.09
Constant	10.99***	0.05	9.20***	0.09	7.85***	0.56	8.40***	0.54
Adjusted R-Squared	0.31		0.36		0.41		0.49	
N	796		796		796		796	

*p < 0.10, **p < 0.05, ***p < 0.01

Several general observations stand out across these models. First, modeling only the admission categories as the independent variables, with the employment category as the reference group, suggests that immigrants classified as family, diversity, and refugees, earn significantly lower annual earnings than employment-based immigrants. While legalized immigrants have lower earnings than employment immigrants, this difference is no longer significant once human capital characteristics are included. With the exception of respondents in the legalized category, this differential persists across all five models although the disadvantage is reduced considerably as additional controls are added. Second, diversity immigrants as a group tend to have the worst economic outcomes compared to employment immigrants. . Lastly, as expected, earnings inequality among new immigrants is also gendered, with males earning significantly more than females.

TABLE 3
Changes in Annual Earnings from Wave 1 to Wave 2

	Model 1		Model 2		Model 3		Model 4		Model 5	
Employment (Ref)	B	s.e.	B	s.e.	B	s.e.	B	s.e.	B	s.e.
Family	-0.57***	0.09	-0.51***	0.09	-0.44***	0.09	-0.41***	0.10	-0.23*	0.14
Diversity	-0.50***	0.11	-0.72***	0.12	-0.64***	0.12	-0.57***	0.13	-0.64***	0.15
Refugees	-0.54***	0.13	-0.57***	0.14	-0.47***	0.14	-0.44***	0.14	-0.45***	0.17
Legalization	-0.70***	0.11	-0.48***	0.13	-0.29**	0.13	-0.26**	0.13	-0.35**	0.16
Logged AE W1	0.29***	0.03	0.24***	0.03	0.20***	0.03	0.18***	0.04	0.17***	0.04
Married			-0.15*	0.08	0.18**	0.08	0.18**	0.08	0.21**	0.09
Male			0.17***	0.06	-0.18***	0.06	0.18***	0.07	0.20***	0.07
Age			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Age-squared			-0.00	0.00	-0.00	0.00	-0.00	0.00	-0.00	0.00
Race (White Ref)										
Am Ind/Ala Nat.			-0.02	0.21	-0.02	0.21	0.01	0.22	0.05	0.22
Asian			0.02	0.08	0.01	0.08	0.01	0.08	-0.01	0.08
Black/Af Am			0.03	0.10	0.05	0.10	0.05	0.10	0.05	0.10
Nat Haw/Pac Isl.			-0.55	0.42	-0.37	0.42	-0.40	0.42	-0.31	0.42
Missing (N=68)			0.09	0.11	0.08	0.11	0.10	0.11	0.09	0.11
Hispanic			-0.10	0.08	-0.13	0.08	-0.12	0.08	-0.11	0.08
Missing (N=5)			-0.05	0.38	-0.02	0.38	-0.09	0.38	-0.08	0.38
Region (Europe Ref)										
Africa			-0.05	0.11	-0.11	0.11	-0.09	0.12	-0.10	0.12
Asia			-0.21**	0.09	-0.20**	0.09	-0.18**	0.09	-0.17*	0.09
Latin America			-0.42***	0.10	-0.26***	0.10	-0.24**	0.10	-0.23**	0.11
Missing (N=4)			-0.16	0.43	-0.11	0.42	-0.09	0.42	-0.06	0.42
Eng. Prof. (1 – 5)					0.05**	0.02	0.05**	0.02	0.05**	0.02
Years of education					0.03***	0.01	0.02***	0.01	0.02**	0.01
U.S. work exp					-0.01	0.01	-0.01	0.01	-0.02	0.01

Unionized							0.03	0.09	0.04	0.09
Missing							-0.18	0.12	-0.22	0.13
Bus/Org Type (Priv FP)										
Fam Business/Farm							-0.21	0.17	-0.18	0.17
Govnt/Pub.Sector							-0.08	0.13	-0.03	0.13
Private Non-Profit							0.01	0.11	0.01	0.11
Individual							0.19	0.13	0.18	0.13
Missing (N=42)							0.03	0.13	0.10	0.14
Occupation (Manager)										
Professional/Tech							-0.07	0.10	-0.08	0.10
Sales							-0.25*	0.15	-0.22	0.15
Admin/Clerical							-0.22	0.14	-0.22	0.14
Service							-0.36***	0.14	-0.34**	0.14
Farming							-0.02	0.50	-0.03	0.51
Prod/Crafts/Repair							-0.21	0.13	-0.18	0.13
Assemblers/Inspectors							-0.18	0.18	-0.18	0.18
Transport/Moving							-0.20	0.16	-0.19	0.16
Protective Services							-0.43	0.61	-0.30	0.60
Missing (N=2)							0.28	0.35	0.32	0.35
Years in U.S.									-0.01*	0.01
Adjust									0.01	0.09
Principal Applicant									0.15	0.12
Employer Sponsorship									-0.17*	0.10
Family Sponsorship									-0.31***	0.10
Prior Job Offer									0.06	0.09
Job through Family									-0.07	0.09
Constant	8.13***	0.36	8.89***	0.39	8.56***	0.39	8.96***	0.42	9.01***	0.44
Adjusted R-Squared	0.27		0.30		0.32		0.32		0.33	
N	796		796		796		796		796	

*p < 0.10, **p < 0.05, ***p < 0.01

Changes in Annual Earnings between Wave 1 and Wave 2

Table 3 displays the models measuring change or growth in annual earnings since the first wave of data collection. Initial earnings and admission categories alone account for just under a third of the total variance observed in growth of annual earnings. All groups experience increases in their annual earnings over time, but to varying degrees. Absent any controls, respondents in the employment category saw an average increase of 8.13 logged units to their annual earnings by the second wave of data collection, or approximately four to five years later. All non-employment groups had significantly less growth in their earnings when compared to the employment group.

The addition of demographic, human capital, job-level, and immigration level controls do little to improve the model fit from the baseline, suggesting that there are other factors unaccounted for that better explain differences in annual earnings growth over time.

Similar to its association with initial earnings, migrating from an Asian or Latin American country is associated with less growth in earnings and this relationship holds as additional controls are included. Perhaps one of the more striking differences is the lack of association between occupation and change in annual earnings. While previously, occupation was closely tied to initial earnings after receiving LPR status, its influence on earnings growth is much more limited.

Both types of sponsorship limited growth in earnings. While the negative relationship between family sponsorship and change in earnings is predictable, it is less apparent why employer sponsorship also has the same negative association. A possible explanation may be that employment-based immigrants who were sponsored were already working in relatively well paying positions where there are fewer opportunities for moving up.

Job Quality in Wave 1 and Wave 2

Tables 5 displays the OLS regression results of starting job quality scores by category. The baseline model indicates that mean index scores measuring the number of good job characteristics are significantly lower for non-employment groups when compared to the employment-based category. However, this gap is substantially reduced, and even eliminated for some groups, once demographic, job-level, and migration-related controls are included. In fact, once job-level controls are added, legalized respondents actually had higher job quality scores than employment-based respondents, although this difference is not statistically significant.

When all controls are accounted for, diversity immigrants and family-based immigrants were the only two categories that have significantly lower job quality scores relative to the employment category. Being that refugees and legalized immigrants are likely to have acquired more knowledge about U.S. labor markets and labor standards by way of being in the country longer prior to receiving their green cards, it is not surprising that they are better represented in positions that have more qualities of a good job. Federally-funded employment assistance agencies and non-profits are also an integral resource to the economic integration of refugees and although outcomes have been mixed, positions found through this channel should be more consistent with standard labor practices in the formal labor market.

English proficiency and occupation were both salient predictors of differences in job quality. Aside from being associated with higher earnings and job growth, English proficiency was also positively associated with higher job quality scores. Nearly all occupational groupings were associated with lower job quality scores compared to the managerial group, which is largely occupied by employment-based immigrants at least initially.

Having a prior job offer that was labor certified also improved job quality. The employment-based category has the highest share of respondents who received a permanent job offer as part of their application for a green card. On the other hand, obtaining a job through family networks was associated with lower job quality scores. Similar to the analysis of initial annual earnings, adjustment is also associated with better outcomes when analyzing job quality.

TABLE 4
Job Quality of Full-Time Workers (Wave 1)

	Model 1		Model 2		Model 3		Model 4		Model 5	
Employment (Ref)	B	s.e.	B	s.e.	B	s.e.	B	s.e.	B	s.e.
Family	-0.85***	0.09	-0.80***	0.11	-0.56***	0.11	-0.32***	0.11	-0.27*	0.16
Diversity	-1.24***	0.11	-1.33***	0.13	-0.98***	0.13	-0.59***	0.14	-0.30*	0.17
Refugees	-0.45***	0.16	-0.49***	0.16	-0.20	0.16	-0.02	0.17	-0.09	0.19
Legalization	-0.47***	0.13	-0.35**	0.16	0.06	0.16	0.17	0.16	0.13	0.19
Married			0.07	0.09	0.09	0.09	0.06	0.09	0.02	0.09

Male			-0.10	0.08	-0.11	0.08	-0.05	0.08	-0.08	0.08
Age			0.05	0.03	0.04	0.03	0.05*	0.03	0.05*	0.03
Age-squared			-0.00	0.00	-0.00	0.00	-0.00*	0.00	-0.00	0.00
Race (White Ref)										
Am Ind/Ala Nat.			0.39	0.25	0.40	0.24	0.39*	0.24	0.42*	0.24
Asian			0.04	0.10	0.03	0.09	0.01	0.09	0.03	0.09
Black/Af Am			-0.07	0.12	-0.04	0.12	-0.05	0.11	-0.02	0.11
Nat Haw/Pac Isl.			-0.98**	0.42	-0.86**	0.41	-1.02**	0.40	-0.97**	0.40
Missing (N=95)			0.24*	0.12	0.19	0.140	0.18	0.14	0.18	0.14
Hispanic										
Missing (N=11)			-0.09	0.10	-0.09	0.09	-0.11	0.09	-0.13	0.09
Region (Europe Ref)										
Africa			-0.15	0.14	-0.23*	0.14	-0.18	0.13	-0.16	0.13
Asia			-0.28***	0.10	-0.22**	0.10	-0.18*	0.10	-0.09	0.10
Latin America			-0.27**	0.12	-0.03	0.12	0.11	0.12	0.07	0.12
Missing (N=6)			-1.11**	0.51	-1.23**	0.50	-0.98**	0.49	-0.91*	0.49
Eng. Prof. (1 – 5)					0.12***	0.02	0.08***	0.02	0.07***	0.02
Years of education					0.04***	0.01	0.01	0.01	0.01	0.01
U.S. work exp					0.01	0.01	0.01	0.01	-0.01	0.01
Bus/Org Type (Priv FP)										
Fam Business/Farm							-0.28	0.26	-0.40	0.26
Govnt/Pub.Sector							0.20	0.19	0.23	0.19
Private Non-Profit							0.16	0.13	0.15	0.13
Individual							-0.29	0.21	-0.32	0.21
Missing (N=18)							-0.50*	0.28	-0.37	0.28
Occupation (Manager)										
Professional/Tech							-0.19	0.13	-0.23*	0.13
Sales							-0.81***	0.18	0.77***	0.18
Admin/Clerical							-0.67***	0.17	-0.64***	0.17
Service							-0.98***	0.16	-0.88***	0.16
Farming							-0.95**	0.38	-0.86**	0.39
Prod/Crafts/Repair							-0.81***	0.17	-0.71***	0.17
Assemblers/Inspectors							-0.77***	0.23	-0.74***	0.23
Transport/Moving							-0.89***	0.20	-0.77***	0.20
Protective Services							-0.70	0.44	-0.67	0.44
Missing (N=4)							-1.67***	0.60	-1.79***	0.60
Years in U.S.									0.02**	0.01
Adjust									0.39***	0.10
Principal Applicant									-0.04	0.13
Employer Sponsorship									0.09	0.11
Family Sponsorship									0.04	0.12
Prior Job Offer									0.23**	0.11
Job through Family									-0.25**	0.10
Constant	3.35***	0.06	2.84***	0.60	1.57**	0.61	2.17***	0.61	1.93***	0.64
Adjusted R-Squared	0.14		0.15		0.19		0.23		0.25	
N	1215		1215		1215		1215		1215	

*p < 0.10, **p < 0.05, ***p < 0.01

Changes in Job Quality over Time

Changes in job quality from wave one to wave two are presented in Table 6. On average, employment-based immigrants saw nearly a three point increase to their initial job quality scores.

This number remains fairly stable even once various controls are accounted for. Legalized immigrants were the only group to see comparable levels of improvement to their job quality. Refugees, diversity immigrants, and family-based immigrants all had significantly less improvement to their job quality scores relative to those in the employment category.

While previously insignificant when analyzing earnings and initial job quality, business or organization type becomes a salient predictor of changes in job quality over time. More specifically, working for a family business, farm, or individual is associated with lower job quality while working in the public sector or for the government is associated with higher job quality.

TABLE 5
Changes in Job Quality from Wave 1 to Wave 2

	Model 1		Model 2		Model 3		Model 4		Model 5	
Employment (Ref)	B	s.e.	B	s.e.	B	s.e.	B	s.e.	B	s.e.
Family	-0.48***	0.10	-0.30***	0.11	-0.15	0.11	-0.12	0.11	-0.34**	0.16
Diversity	-0.41***	0.12	-0.53***	0.13	-0.27**	0.14	-0.25*	0.14	-0.38**	0.17
Refugees	-0.47***	0.16	-0.41**	0.16	0.17	0.16	-0.20	0.16	-0.36*	0.19
Legalization	-0.93***	0.13	-0.55***	0.16	-0.19	0.16	-0.08	0.16	-0.20	0.19
Job Quality W1	0.36***	0.03	0.36***	0.03	0.31***	0.03	0.27***	0.03	0.27***	0.03
Married			-0.19**	0.09	-0.16*	0.09	0.17*	0.09	0.18*	0.10
Male			0.04	0.08	0.04	0.08	0.12	0.08	0.12	0.08
Age			-0.00	0.03	0.00	0.03	-0.00	0.00	-0.00	0.00
Age-squared			-0.00	0.00	-0.00	0.00	0.00	0.00	0.00	0.00
Race (White Ref)										
Am Ind/Ala Nat.			-0.05	0.25	-0.02	0.24	0.02	0.24	0.04	0.24
Asian			-0.17*	0.10	-0.17	0.09	-0.17	0.09	-0.16*	0.09
Black/Af Am			-0.13	0.12	-0.08	0.12	-0.06	0.11	-0.05	0.11
Nat Haw/Pac Isl.			-0.11	0.42	-0.03	0.41	-0.15	0.40	-0.08	0.41
Missing (N=68)			-0.04	0.14	-0.08	0.14	-0.09	0.14	-0.09	0.14
Hispanic			-0.06	0.10	-0.06	0.09	-0.07	0.09	-0.07	0.09
Missing (N=5)			0.12	0.39	0.32	0.38	0.25	0.37	0.31	0.38
Region (Europe Ref)										
Africa			-0.02	0.14	-0.13	0.14	-0.16	0.13	-0.18	0.13
Asia			-0.05	0.10	-0.03	0.10	-0.03	0.10	-0.05	0.10
Latin America			-0.49***	0.12	-0.24**	0.12	-0.21*	0.12	-0.20*	0.12
Missing (N=4)			0.78	0.52	-0.64	0.51	0.45	0.49	0.42	0.49
Eng. Prof. (1 – 5)					0.16***	0.02	0.13***	0.02	0.13***	0.02
Years of education					0.03***	0.01	0.00	0.01	0.00	0.01
U.S. work exp					-0.02	0.01	-0.01	0.01	-0.01	0.01
Bus/Org Type (Priv FP)										
Fam Business/Farm							-0.50**	0.20	-0.47**	0.20
Govnt/Pub.Sector							0.62***	0.14	0.61***	0.15
Private Non-Profit							0.16	0.13	0.15	0.13
Individual							-0.54***	0.16	-0.55***	0.16

Missing (N=42)							-0.14	0.15	-0.15	0.15
Occupation (Manager)										
Professional/Tech							-0.16	0.11	-0.16	0.11
Sales							-0.58***	0.17	-0.59***	0.17
Admin/Clerical							-0.03	0.15	-0.03	0.15
Service							-0.47***	0.15	-0.48***	0.15
Farming							-0.07	0.55	0.03	0.55
Prod/Crafts/Repair							-0.39**	0.16	-0.39**	0.16
Assemblers/Inspectors							-0.13	0.21	-0.14	0.21
Transport/Moving							-1.00***	0.18	-1.01***	0.18
Protective Services							0.30	0.44	0.25	0.44
Missing (N=11)							-0.38	0.38	0.35	0.37
Years in U.S.									-0.02*	0.01
Adjust									0.09	0.10
Principal Applicant									-0.00	0.13
Employer Sponsorship									-0.19*	0.11
Family Sponsorship									0.12	0.12
Prior Job Offer									0.06	0.11
Job through Family									-0.01	0.10
Naturalized									0.24**	0.11
Constant	2.91***	0.11	3.53***	0.62	2.28***	0.62	2.80***	0.28	2.95***	0.32
Adjusted R-Squared	0.20		0.22		0.25		0.30		0.30	
N	1215		1215		1215		1215		1215	

*p < 0.10, **p < 0.05, ***p < 0.01

DISCUSSION

The findings in these analyses echo some of the previous findings from prior research. Perhaps the most obvious is the incredible advantage associated with the employment-based category. Consistent with prior studies on the U.S., Canadian, and Australia context, my study also finds that employment-based immigrants tend to have much better outcomes compared to immigrants in non-employment admission categories. At least for annual earnings, most non-employment based immigrants continue to lag behind their counterparts who hold an employment-based green card. Moreover, this pattern persists over time when growth in earnings over time is compared. Unlike Jasso and Rosenzweig's (2010; 2008) comparative analyses of family and employment immigrants, I did not observe significant convergence between these two groups in terms of their employment outcomes, either along the dimension of annual earnings or job quality. In my study, employments continue to experience gains, rather than

declines, over time, thereby maintaining a gap between themselves and family-immigrants, as well as other non-employment based groups.

The gap between family and employment-based workers can partially be explained by some of the conditions that are more characteristic of family-based green card holders. Since family-based individuals usually do not have a formal job offer as part of their petition for immigration, it is likely that those who intend to work rely more heavily on their social networks to gain access to the labor market. Though not directly measured in this analysis, evidence from earlier studies suggest that while the support from family and relatives can be important resources, they can also channel new immigrants into less desirable positions of employment where wages are usually lower and labor standards are less regulated (Roth et al. 2011; Min 2008; Bloemraad 2006; Waldinger 1999).

Those that secured LPR status through the diversity visa program had the lowest earnings when compared to employment-based immigrants. In addition, diversity program permanent residents were also the only group alongside family immigrants to work in lower quality jobs relative to the employment group upon receiving LPR status. Over time, diversity immigrants also see less improvement to their job quality. Work experience and education are prioritized for diversity immigrants who often don't have extensive networks in the country and must demonstrate that they will not become a public charge. Even though diversity visa winners are screened for labor market fit, they are also particularly vulnerable to experience occupational mismatch and downgrading (Batalova et al. 2008). Although the addition of human capital controls reduces the magnitude of effect substantially between having a diversity visa and the outcome variables, the disadvantage nonetheless remains significant. Overall, the findings in this

study are consistent with Batalova et al.'s (2008) and Jasso et al.'s (2000) conclusions that diversity immigrants have poorer economic outcomes that persist over time.

Like other non-employment groups, the earnings trajectory of refugees continues to trail behind those in the employment category, reinforcing previous findings that while refugees are economically incorporated, they tend not to receive the same returns to their human capital (Capps and Newland 2015; Roth et al 2012; Aydemir 2012; Batalova et al. 2008). Analyses of job quality paint a much more optimistic picture. Once job-level controls are accounted for, the quality of jobs occupied by refugees initially upon receiving LPR status is no longer significantly different than that for employment immigrants. In the absence of social networks and personal resources, federally funded resources and resettlement agencies play an important role in integrating refugees into their new communities. These organizations often offer employment services which can speed up the job search process, although sometimes at the cost of occupational downgrading (Nawyn 2010). Nonetheless, jobs found through federally funded organization or agencies are arguably more likely to be from the formal sector, where labor standards are enforced more closely. This may help explain why refugees do not experience the same disadvantage shared by diversity and family-based residents relative to the employment category, in terms of job quality indicators. Over time, however, employment immigrants still hold an advantage over refugees in terms of being able to improve their job quality score.

Legalized immigrants were the only category of respondents who did not have significantly different initial earnings than employment immigrants once job-level controls were included. Because legalization programs aim to provide a pathway to lawful residence for unauthorized or undocumented residents, all respondents in this category must adjust their status. At least for earnings, adjusting status, rather than coming in as a new arrival, is associated with

an increase in wages across both waves of modelling. However, it also appears that region of origin may counteract some of these effects; nearly all respondents in the legalized category report coming from a Latin American country, which is negatively correlated with earnings in the annual earnings models.

In terms of job quality, the difference between employment-based and legalized immigrants is practically non-existent once all controls are included. Though my analysis does not allow for any strong conclusions about why legalized immigrants hold jobs that are of comparable quality to those held by employment immigrants, there are several plausible explanations. First, becoming “legal” affords previously undocumented workers the opportunity to address workplace concerns or violations without fear of deportation. Secondly, human capital is important and legal status may allow workers to access jobs more congruent with their skill level that they couldn’t have accessed before. There is typically more upwards mobility after legal status is gained, but this increase is more pronounced for the highly skilled (Hill et al. 2010). Jobs requiring a higher skill set are generally less precarious with labor standards in place. An awareness of one’s legal status combined with extensive experience in and knowledge of the United States might serve as an advantage for this specific group of workers. Even when other categories of immigrants adjust their status, their knowledge of the social, economic, and political terrain of their host country is likely limited compared to their legalized counterparts, who have spent a considerable amount of time working and living in the country prior to receiving lawful permanent resident status.

Limitations

There are several shortcomings and limitations in this study. First, the findings in this study are largely limited to a privileged group of immigrants who were able to find employment.

Although this study demonstrates that immigrants who enter on non-employment visas actively participate in the labor market, this analysis fails to account for those who are not working and those who are looking for work but have not found it. If the goal is to understand immigrant integration, then it is important to investigate those who have not successfully been incorporated into the labor market. Questions of who is excluded from the labor market and why, are largely unanswered by this study about unequal employment outcomes.

Second, future studies on differences in job quality should account for the qualitative differences between various indicators of what makes one job better than another. My approach in this study unfortunately assumes that all indicators are qualitatively equal. A possible approach for remedying this could be to model each indicator individually and predicting the likelihood of having that specific indicator, rather than combining all of them into an index.

CONCLUSION

Studies on the employment outcomes and economic integration of immigrants have largely ignored the structural aspects of the U.S. immigration system. More specifically, explanations for why there are unequal outcomes for immigrants have not sufficiently accounted for stratification processes that might occur during the application process, prior to individuals actually becoming lawful permanent residents. Findings from this study contribute to this void in the literature by pointing to admission categories, as a starting point for analyzing inequality among immigrants. Furthermore, the addition of the legalized population as well as winners of the diversity visa program, provides additional insight on how the employment outcomes of two often overlooked groups of immigrants, compare to other lawful permanent residents of the same cohort.

The one-of-a-kind diversity program, spanning nearly three decades, has finally run its course. In this study, diversity immigrants trailed behind their employment-based counterparts in terms of annual earnings and job quality. However, even though they failed to close this gap, as a group, diversity immigrants experienced tremendous gains in their annual earnings, suggesting that they are integrating economically over time. In the absence of family in the U.S., or a certified job offer, the diversity program is the only channel through which certain individuals can have any chance of obtaining permanent residency in the U.S.

The inclusion of legalized immigrants as a comparison group in my study provided new insight into relative success of legalization programs in incorporating previously undocumented and unauthorized workers into the labor force. My findings suggest that while legalized immigrants lag behind employment-based workers, they are on par with, or doing better than other non-employment based categories of immigrants. This is evidenced in descriptive statistics of their median annual earnings and regression analyses of their job quality. Once controls are added, the jobs that previously deemed unlawful immigrants hold are not significantly different in quality than those held by employment-based immigrants.

Overall, this study highlights that the process of becoming a lawful permanent resident in the United States is associated with perpetuating inequalities within the immigrant population. Visa categories matter for employment outcomes, even if they are simply a nominal designation and channel through which prospective immigrants obtain LPR status, and subsequently citizenship, in the United States. Even though differences in outcomes are substantially reduced once demographic, job-level, and human capital characteristics are accounted for, my analyses suggest that structural factors related to immigration policies governing the selection and application process are also relevant for understanding immigrant stratification

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METHODOLOGICAL APPENDIX

Missing Data and Calculation of Sample Size for Annual Earnings Analysis

In both waves, respondents were grouped into two pools depending on how they reported receiving their pay: (1) Respondents who reported being paid a salary

(2) Respondents who reported being paid an hourly wage

Respondents who reported being paid a salary reported their pay in 1 of 5 ways: annual earnings, weekly pay, bi-weekly pay, monthly pay, or hourly pay.

If the respondent reported their annual earnings directly, no additional information was needed.

If the respondent reported their weekly, bi-weekly, or monthly pay, information on how many weeks worked per year was needed in order to calculate annual earnings.

If the respondent reported their hourly wage, information on the hours worked per week, and weeks worked per year, was needed in order to calculate annual earnings.

A. Calculating Wave 1 Annual Earnings

5058 out of a total of 8543 currently working for pay

3884 out of 5058 are full-time workers who are not self-employed

1. Respondents who reported being paid a salary: 1859

Respondents who reported salary amount: 1469 Missing 390

Respondents who reported the salary unit: 1432 Missing 37

Reported salary unit (annual): 816

Reported weekly, bi-weekly, or monthly salary: 577

Reported weeks per year: 506 Missing 71

Reported hourly wage: 39

Reported hours per week: 39

Reported weeks per year: 29 Missing 10

Annual earnings calculated for 1351 respondents.

2. Respondents who reported being paid an hourly wage: 2690

Respondents who reported hourly wage: 2674 Missing 16

Reported hours per week: 2431 Missing 243

Reported weeks per year: 2058 Missing 373

Annual earnings calculated for 2058 respondents

Complete annual earnings information in Wave 1: 3409

→ Limit sample to full-time workers: 2999

B. Calculating Wave 2 Annual Earnings

3095 out of a total of 4363 currently working for pay

2168 out of 3095 are full-time workers who are not self-employed

Respondents who reported being paid a salary: 773

Respondents who reported salary amount: 747 Missing 26

Respondents who reported the salary unit: 743 Missing 4

Reported salary unit (annual): 434

Reported weekly, bi-weekly, or monthly salary: 276

Reported weeks per year: 256 Missing 20

Reported hourly wage: 37

Reported hours per week: 37

Reported weeks per year: 32 Missing 5

Annual earnings calculated for 722 respondents.

2. Respondents who reported being paid an hourly wage: 1271

Respondents who reported hourly wage: 1170 Missing 101

Reported hours per week: 1170

Reported weeks per year: 1052 Missing 118

Annual earnings calculated for 1052 respondents

Complete annual earnings information in Wave 2: 1774

→ Sample already limited to full-time workers

C. Calculating the Final Sample

Respondents working full-time during both waves, not self-employed: 1396

Respondents working during both waves with W1 earnings info only: 200

Respondents working during both waves with W2 earnings info only: 224

Respondents working during both waves with no W1 or W2 earnings info: 93

Missing 517

Respondents working during both waves with complete W1 and W2 earnings info: 879

Respondents excluded from models due to missing data from continuous variables: 83

Missing 83

Final sample size for analyses of annual earnings: 796