

Will They Stay? Foreign-Born Out-Migration from New U.S. Destinations

Mary M. Kritz · Douglas T. Gurak · Min-Ah Lee

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Abstract Immigrants living in new destinations in 1995 were 2.5 times more likely to have migrated to another labor market by 2000 as immigrants living in traditional places. The researchers look at two competing explanations for immigrants' differential internal migration patterns, namely that immigrants prefer areas with relatively large nativity concentrations which provide them with social support versus immigrants are target earners who prefer robust labor markets with strong employment growth and high wages. Utilizing confidential Census data for 1990 and 2000, the authors develop new destination classifications for 741 labor markets that take into account the differential growth and composition characteristics of 24 Asian, Latin American and Caribbean immigrant groups living in those markets. The empirical analysis of labor market out-migration indicates that immigrants do not see internal migration as an either/or choice between economics and social support but prefer residence places that allow them to maximize both conditions.

Keywords Immigration · New destinations · Foreign-born internal migration · Immigrant group differences · Labor markets · Nativity concentration

M. M. Kritz (✉) · D. T. Gurak
Department of Development Sociology, Cornell University, Warren Hall, Ithaca, NY, USA
e-mail: mmk5@cornell.edu

D. T. Gurak
e-mail: dtg2@cornell.edu

M.-A. Lee
Department of Sociology, Chung-Ang University, 211 Heukseok-dong, Dongjak-gu,
Seoul 156-756, Korea
e-mail: malee@cau.ac.kr

As evidence grows that immigrants are dispersing to new destinations throughout the United States, many questions are being raised about the determinants and consequences of these settlement shifts. To date, researchers have carried out studies on the changes underway in immigrants' settlement patterns (Durand et al. 2000; Frey and Liaw 2006; Funkhouser 2000; Goździak and Martin 2005; Lichter and Johnson 2006; Massey and Capoferro 2008), the characteristics of places receiving immigrants (Donato et al. 2007), the economic and social forces attracting immigrants to new destinations (Hernández-León and Zúñiga 2000; Johnson-Webb 2002; Parrado and Kandel 2008), group relations between immigrants and natives in new destinations (Winders 2005), and integration processes (Bohon et al. 2005; Leach and Bean 2008). A parallel body of research focuses on the shifting settlement patterns of Latinos given that native-born Latinos as well as their foreign-born counterparts are also moving to new destinations (Fischer and Tienda 2006; Kandel and Parrado 2004, 2005; Lichter and Johnson 2009; Millard and Chapa 2004; Parrado and Kandel 2008; Singer 2004; Suro and Singer 2002; Zúñiga and Hernández-León 2005). One question that has not yet been addressed in the literature is whether immigrants who are moving to new destinations are likely to settle permanently in those places? This is an important question since new destinations are probably not places to which most immigrants have close community ties or where they are likely to find informal or institutional support systems comparable to those available to them in large metropolitan places. This paper examines whether immigrants in new destinations are more likely to migrate than their counterparts in traditional areas and considers how economic and social conditions in local labor markets condition out-migration.¹

Research indicates that social networks play an important role in shaping immigrants' initial settlement choices (Massey et al. 1987; Portes and Rumbaut 1990) but only a few studies have looked at whether networks have the same effect on immigrants' internal migration behavior. Economic conditions in local labor markets are usually identified as key determinants of internal migration. According to neo-classical economic theory, workers who are satisfied with their jobs and communities are less likely to migrate internally than dissatisfied workers who believe that they can improve their economic conditions by moving (Sjaastad 1962). Empirical research on the native born provides support for that thesis and shows that wages and employment growth deter out-migration (Greenwood 1985; Kuznets and Thomas 1958; Pandit and Withers 1999). There are only a few studies, however, that examine whether robust economic conditions also deter immigrants from migrating internally and they show mixed findings. A couple of studies, for instance, found that employment growth deters immigrants from interstate migration (Gurak and Kritz 2000; Frey and Liaw 2005a; Ellis and Goodwin-White 2006) but Bartel and Koch (1991) found that unemployment and wages had no effect on foreign-born SMSA migration. Tienda and Wilson (1992), on the other hand, found that higher SMSA wages increased out-migration of Mexican and Cuban men rather than

¹ The terms foreign born and immigrants are used interchangeably in this paper. Although some foreign born in the United States are not immigrants and will leave after their visas expire, the U.S. census does not differentiate immigrants by their visa status.

decreasing it, as expected, but wages had no effect for Puerto Rican men. Gurak and Kritz (2000) found that the percentage of the labor force employed in manufacturing deterred interstate migration but Ellis and Goodwin-White (2006) did not find a similar effect for that measure. Frey and Liaw (2005b) found that per capita income deterred interstate migration of Asians, Hispanics, and whites. The conflicting results of these studies could stem partly from their use of different spatial units, explanatory variables, and study populations.

Another line of research has focused on foreign-born social context and found that nativity concentration deterred out-migration from communities where large numbers of nationals from the same origin country lived (Bartel 1989; Bartel and Koch 1991; Ellis and Goodwin-White 2006; Frey and Liaw 2006; Kritz and Nogle 1994; Neuman and Tienda 1994). Studies of native-born ethnics show a similar deterrent effect of co-ethnic communities on out-migration (Kobrin and Speare 1983; Tienda and Wilson 1992). Most research on the effects of nativity or co-ethnic concentration on migration has been carried out in the United States but similar findings have been observed for other countries, including Canada (Newbold and Liaw 1995; Nogle 1994), Israel (Rebhun 2006), and Spain (Reher and Silvestre 2009).

Although the literature provides compelling evidence that residence in concentrated immigrant or co-ethnic settlements constrains out-migration (Bartel and Koch 1991; Ellis and Goodwin-White 2006; Frey and Liaw 2006; Kritz and Nogle 1994), scholars have not identified what it is about those communities other than size that discourage immigrants from moving. Explanations usually focus on how social support systems assist immigrants in securing employment, housing, and other valued community services. Portes and Sensenbrenner (1993) argue that enclaves provide immigrants with economic and social capital that furthers their economic integration and socio-economic mobility. Others point to the large array of institutional resources and services available to immigrants in large metropolitan areas and how those deter migrants from moving to dispersed communities (Breton 1964). It is also argued that “new” immigrants from Asia and Latin America face housing and employment discrimination because of their racial and cultural backgrounds, which makes it difficult for them to “melt” into communities settled largely by Americans of Anglo-Saxon stock (Massey 1998; Portes and Zhou 1993). Boswell (2008) discusses other mechanisms through which migration may be linked to community size and norms, including the “herd” effect, which holds that individuals stay put or migrate simply because their peers are doing so. The “culture of migration” concept is similar—it focuses on the normative values that develop in societies with high rates of out-migration. Although these socio-cultural explanations cannot be evaluated with census data, it is important for researchers to recognize their importance and to gather additional data on socio-cultural beliefs and norms that would improve understanding of why affinity ties are instrumental in migration decisions.

Given the relative dearth of research on immigrants’ secondary migrations, particularly those that are occurring to new destinations, and assuming for the moment that new destinations are places that have robust economic conditions, it is unclear whether immigrants will be more likely to leave those places because they

lack compatriot affinity or stay because they have strong economic conditions. Compatriot affinity is used here to refer to the socio-cultural ambient that is shared by people from the same country, culture or ethnic origins. It is typically measured by nativity concentration in studies that use census data because of the lack of more appropriate indicators in those data. Studies that have looked at both nativity concentration and labor market indicators have concluded that nativity concentration is a greater deterrent (Bartel and Koch 1991; Ellis and Goodwin-White 2006; Frey and Liaw 2005b; Gurak and Kritz 2000; Tienda and Wilson 1992). Those studies, however, were based on relatively large aggregations, namely states or metropolitan areas, and did not consider whether findings differed for new versus traditional destinations nor whether there might be interactions between nativity concentration and labor market conditions.

Our research design differs from previous research in three respects. First, we examine out-migration for a larger number of labor markets than previous studies because we use the confidential long-form 16% samples for 2000 and 1990 census data which have over three times more foreign-born cases than PUMS files do and allow researchers to form their own geographic units. Second, we classify labor markets as new versus traditional based on the composition and growth characteristics of immigrants from their own origin countries since research shows that national origin is an important factor that differentiates the settlement and internal migration behavior of immigrants (Bartel and Koch 1991; Kritz and Nogle 1994; Massey and Capoferro 2008; Newbold 1996; Scott et al. 2005). Third, in addition to considering immigrant's individual characteristics, we examine how the labor market and nativity group context in which immigrants live influences their migration decisions. Four specific questions are addressed: (1) did the likelihood of out-migration differ for immigrants living in new versus traditional labor markets in 1995; (2) did the composition, growth, and size of immigrant's national origin group in their 1995 residence place affect the likelihood that they out-migrated; (3) if national origin group context did condition out-migration, was this effect independent of labor market economic context or interactive with it; and (4) did national origin groups differ from each other in their migration responses to labor market economic conditions and nativity concentration in their 1995 residence places?

Foreign-Born Out-Migration from New Destinations: Study Directions

Economic restructuring has been identified as an important reason why immigrants, Hispanics, or other ethnics move to new destinations. Hirschman and Massey (2008, p. 8), for instance, argue that industrial restructuring has led to the loss of well-paid, unionized jobs and growth of low wage non-unionized ones that foreign-born workers find attractive. According to that argument, growing global competition has forced employers to reduce costs by locating in places where operating costs are low, outsourcing job to labor subcontractors, and hiring immigrant workers willing to work for low wages. Massey and Capoferro (2008) document immigrants' decline in traditional gateway states and their growth in Southern and other interior

states where relatively few immigrants lived before the 1990s. Kandel and Parrado (2005, Parrado and Kandel 2008) describe how industrial restructuring transformed agricultural and meat processing industries and attracted low-skilled immigrants to non-metropolitan areas in the Southeast and upper Midwest. Broadway and Ward (1990) found that many food processing firms relocated from the North Central region to the South to take advantage of non-unionized, low wage labor.

If immigrants are moving to new destinations to take advantage of employment opportunities, then it is reasonable to expect that they will be less likely to leave those places provided that economic conditions remain strong. On the other hand, immigrants are sensitive to compatriot affinity and less likely to leave places that have relatively large numbers of immigrants from their homelands (Ellis and Goodwin-White 2006; Kritz and Gurak 2001). While it is plausible that immigrants living in new destinations will be more likely to out-migrate because those places have relatively few of their compatriots, they should also be deterred from migrating if wages and employment growth remain robust. Immigrants, however, may not rationalize that it is better to stay put or leave a place based upon whether it has one condition or the other as it has been conceptualized, but rather evaluate whether the place allows them to maximize simultaneously economic opportunity and compatriot availability. We examine that possibility in this study by looking at whether immigrants are significantly less likely to leave labor markets that have both robust economic conditions and high compatriot affinity. Previous studies were constrained from looking at this question because their analysis units were states, which are the only available national-level units in census data with individual-level data on the total foreign-born population. States, however, are large heterogeneous geographic units that contain both dynamic and stagnant labor markets and thus are not ideal contexts within which to detect interactions between economic conditions and compatriot affinity in local labor markets. By drawing on long-form restricted access census data for this analysis, we could construct a large set of geographic units that are relatively homogeneous and do a better job of approximating local labor markets, which are the contexts where people make migration decisions.

In addition to expecting out-migration to be conditioned by interactions between labor market economic conditions and compatriot availability, we hypothesize that the strong effect of nativity concentration observed in previous studies should diminish considerably after controlling for those interactions. Immigrants' migration decisions are also expected to be a function of their individual characteristics. Most migration studies show that age, sex, and education are strong correlates of internal migration decisions—migration declines with age, women are less likely to migrate than men, and education facilitates migration (Greenwood 1985). Studies based on immigrants have identified additional individual characteristics that influence migration—English language fluency and recent immigrant status are positive correlates; immigrant nativity concentration is a deterrent; and immigrants from some national origins are more likely to migrate than others (Bartel and Koch 1991; Frey and Liaw 2005b; Kritz and Nogle 1994). Since Bartel (1989) first reported an interaction between education and immigrant concentration and found that the internal migration of educated immigrants depended less on

compatriot availability than it did for their lesser educated counterparts, others have replicated that finding (Ellis and Goodwin-White 2006; Frey and Liaw 2005b).

We examine four specific hypotheses. The principal hypothesis is that immigrants will be less likely to leave labor markets that have both robust economic conditions and large numbers of settled compatriots. That hypothesis is evaluated for a combined foreign-born sample that includes the 24 largest Asian, Latin American and Caribbean groups, and Canadians; and then separately for each origin group. Secondly, we hypothesize that the main effects of nativity concentration are largely accounted for by interactions between local labor market economic conditions and compatriot affinity. Third we hypothesize that college-educated immigrants will be less likely to leave places where they have large numbers of compatriots but more likely to leave new destinations. That expectation is based on the assumption that while the college educated are more likely to migrate internally and to move to new destinations, they will also be more likely to leave new destinations, either because of the lack of compatriot affinity and co-ethnic amenities in those places or the relative advantage education gives them to seek employment opportunities elsewhere. Simply put, the college-educated are more mobile than others because more options are available to them, and, thus they can respond by leaving if the place where they live lacks compatriots or other amenities. Finally we hypothesize that these findings will be robust and hold up in group-specific models.

Defining and Measuring New Destinations

Suro and Singer (2002) developed a methodology for defining new Hispanic destinations that we adapt in this study. In particular, they aggregated the 100 largest metropolitan areas into four categories, namely Established Latino Metros, New Latino Destinations, Fast-Growing Latino Hubs, or Small Latino Places. Singer (2004) used a similar methodology to aggregate 45 metropolitan areas into six immigrant gateway categories. Both classifications were based on the composition and growth trends of the referent group of interest (Hispanics or immigrants); others have used comparable classifications (Fischer and Tienda 2006; Lichter and Johnson 2009). Our paper takes this same approach but in order to standardize for national origin diversity in settlement and dispersion trends, rather than using national-level foreign-born growth and composition characteristics or ones based on immigrant's pan-ethnic (e.g. Asian or Hispanic) or regional origins (e.g. Asia or Latin America), we developed refined growth and composition categories for 24 foreign-born groups. The United States has a highly heterogeneous foreign-born population and, to the extent that origin homogeneity can be found within that population, it occurs at the origin country level. In addition, differential origin group size can distort findings when pan-ethnic categories are used. Mexicans, for instance, constitute over 60% of all Hispanics, which means that pan-ethnic categories such as Hispanics largely reflect Mexican averages.

Previous national-level studies of immigrant or Latino settlement in new destinations have used states (Funkhouser 2000; Massey and Capoferro 2008), counties (Kandel and Parrado 2004, 2005; Parrado and Kandel 2008), or Consistent Public Use Microdata Areas (Lichter and Johnson 2009) as geographic units. In addition, those that have utilized individual-level data have relied on public use files and thus been restricted to the limited geographic units and sample sizes in those files. In order to obtain greater geographic detail, a larger number of foreign-born cases, and the ability to disaggregate the foreign-born into national origin categories in local labor markets, we use confidential long-form data from the 1990 and 2000 censuses. In contrast to PUMS files, the largest of which is a 5% sample of the population, long-form census data include the full 16% census microdata sample. Use of these data permits construction of local labor market units for 1990 and 2000 that have identical boundaries and are relatively homogeneous on economic indicators. By building on the work of Tolbert and colleagues who developed a set of geographic units for the entire country based on county commuting and economic linkages in 1990 (Tolbert et al. 2006; Tolbert and Sizer 1996), we constructed 741 labor market units for this analysis. While the larger labor markets in our sample are metropolitan area equivalents, others are small non-metropolitan areas that cover sparsely populated territories.

The analytic sample includes non-institutionalized foreign-born adults aged 25–59 in 2000 from 23 of the largest “new” national origin groups—eleven from Latin America (Mexicans, Cubans, Salvadorans, Dominicans, Colombians, Guatemalans, Ecuadorans, Hondurans, Peruvians, Nicaraguans, and Brazilians), nine from Asia (Filipinos, Chinese, Indians, Vietnamese, Koreans, Taiwanese, Iranians, Pakistanis, and Laotians), and three from the non-Hispanic Caribbean (Jamaica, Haiti, and Guyana). Canadians are included for comparative purposes and used as the reference population since they have a relatively dispersed settlement pattern and socio-cultural characteristics similar to native-born non-Hispanic Whites. In 2000, each of the study groups had national populations of at least 200,000; together they constituted 72% of the total foreign-born population. While several European and other origin countries had populations of comparable sizes, including the former USSR, Germany, the United Kingdom, Italy, Poland and Japan, they were not included in the sample because they are traditional senders. Given that the majority of immigrants now come from Asia or the Americas, the sample design indirectly sheds insights on discussions about whether immigrants from “new” origins will follow the spatial assimilation trajectories that earlier immigrants did (Huntington 2004; Massey 1995; Portes and Zhou 1993). It is also useful to compare internal migration patterns of Hispanics and Asians from different countries because they differ sharply in their human capital profiles.

The 741 labor markets were aggregated into four geographic categories (traditional, influx traditional, new, or emerging) for each origin group depending upon whether each labor market’s growth and composition characteristics were above or below each group’s national growth and composition averages. To make those determinations, we first calculated each group’s percentage of the national population in 1995 and then classified labor markets as being above or below the group’s national average. Second, for each group, we classified labor markets as

having high or low growth based on whether their 1990–1995 growth rates were above or below each group’s national growth averages in that period. Then, the 741 labor markets were aggregated for each origin into four categories by cross classifying the high/low composition and growth categories as follows: high composition and low growth (traditional areas); high composition and high growth (influx areas); low composition and high growth (new destinations); and low composition and low growth (emerging destinations). Given that there are 741 labor markets and 24 origin groups, there were 17,784 possible labor market categories where immigrants could live in 1995. Because many labor markets had no nationals from some origin countries, the actual number of group-specific labor market areas in 2000 was 10,788. The categories are not mutually exclusive in that more than one origin group could reside in the same labor market areas. While the four categories are referred to as *destinations* in the paper, the analysis that follows focuses on out-migration from those areas from 1995 to 2000; Census do not tell us when immigrants actually settled in those areas.

Although the metropolitan and non-metropolitan areas included in each origin group’s destination categories differ, the larger metropolitan Gateways where most immigrants live, including Los Angeles, Miami, New York, and Chicago are in most groups’ traditional category. On the other hand, the labor markets included in the new destination and emerging categories vary considerably across groups. The composition and growth cut points used for each origin group’s labor market classifications are shown in the last two columns of Appendix 1 along with the number of labor markets that each group had in the four categories. Given that some origin groups such as Cubans, Dominicans and Guyanese are highly concentrated in one or two labor markets, it is not surprising that their traditional category had only one or two labor markets. From the standpoint of the analysis, the important point is that all 741 labor markets had immigrants from at least one national origin in 1995 and there were large numbers of individual foreign born in all labor markets and destination categories. Appendix 2 shows the population distribution of each origin group across the four categories.

The percentage of labor markets settled by origin groups is in part a function of each group’s population size. Figure 1 displays results from a regression of origin group population size (log) on the percentage of the 741 labor markets in which they were settled. The R^2 statistic for that regression was 0.54. Origin countries located above the line were more dispersed than expected based on their population size while those below the line were less dispersed. Mexicans and Canadians were the most dispersed—each had nationals settled in 96% of the labor markets—but relative to their population size, Mexicans were actually less dispersed than expected while Canadians were more dispersed. Immigrants from Asian countries, including the Philippines, South Korea, India, Vietnam and China also had relatively high levels of dispersion for their size. In contrast, Guyanese, Haitians and Dominicans were the least dispersed—only 35% of the labor markets had any Guyanese or Haitians. With few exceptions, Fig. 1 indicates that Asian groups were more dispersed relative to their size while Latin American and Caribbean groups were less dispersed.

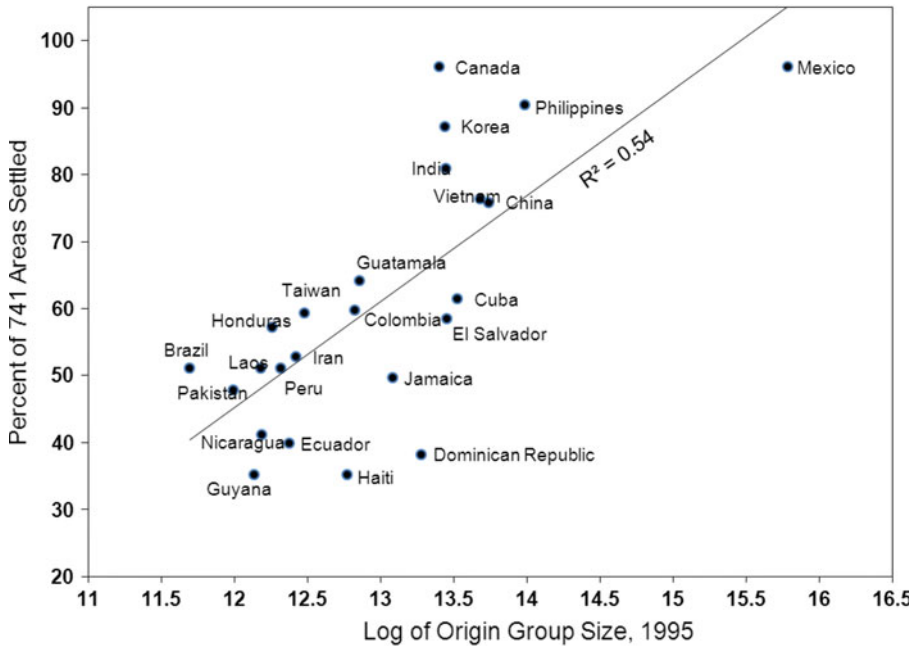


Fig. 1 National origin group population size and percent of labor markets settled, 1995

We are particularly interested in migration processes in new destinations but all four categories are of interest because their characteristics suggest different settlement dynamics. For instance, the influx areas are of interest because they have the composition and growth characteristics that immigrants should consider ideal, namely robust economic conditions and above average shares of and growth rates for compatriots from a given immigrant's homeland. Many of the labor markets in the influx category are metropolitan areas that were identified as new destinations in studies that focused on metropolitan areas (Fischer and Tienda 2006; Suro and Singer 2002). That finding could occur if new destinations are identified based on patterns for all Hispanics, since that approach will turn up many places where Mexicans reside in large numbers given that they constitute the majority of Hispanics and were already relatively dispersed in 1990 compared to other Hispanics. The emerging destination category is of interest because it includes *pioneer* areas that had relatively few foreign born in 2000 and where growth in foreign-born numbers remained low in the 1990s. Those areas, however, may become nodes for *future new destinations* in decades ahead. Because traditional destinations are where most foreign born still lived in 2000, it remains important to monitor which of the largest gateways continue to retain and attract immigrants and which ones are deflecting them (Light 2006). As Hempstead observed (2007), the states where most traditional labor markets are located continued to gain significant foreign-born population in the 1990s, both from abroad and through internal migration. That trend occurred, in part, because many new destinations are actually located in traditional immigration states.

For the logistic regression analysis, out-migration was defined as a move from one labor market to another that involved a distance of at least 50 miles in the 1995 to 2000 period. The analysis focuses on accounting for why labor markets differed in the likelihood of out-migration from the four destination categories described above. The models control for several individual-level covariates as well as economic conditions and nativity concentration in each labor market. Labor market economic conditions are evaluated based on three measures: employment change, wages, and housing costs. Labor market employment change was measured by the percentage change in native-born employment from 1990 to 2000. By using the native-born change measure, we avoid problems with endogeneity which occur when that measure is based on foreign-born trends. Research indicates that destinations with employment growth attract both immigrants and natives (Frey and Liaw 2006) and therefore it is reasonable to use native-born means to measure employment trends. The labor market average wage was calculated for all full-time employed workers in the year before the 1990 census and adjusted for inflation in the 1990s. The labor market average rent fee for the total population was used in order to assess the merit of claims that housing costs in concentrated immigrant areas may be more important for out-migration than jobs or wages (Ley 2007; Light and Johnston 2009). Nativity concentration was measured by each group's absolute size in each labor market. While group size is a crude proxy for compatriot availability, census data do not permit further refinement. Because the labor market measures are positively skewed, natural log transformations were used. The economic and nativity context measures are not highly correlated with each other.

The analysis also controls for several individual characteristics of immigrants. Dummy variables are specified for sex (male = 1), citizenship (citizen = 1), speaks English only or very well = 1, and possession of one or more college degrees = 1. Two continuous variables are used, age at U.S. entry and number of years in the United States. Using the two age measures together captures important life cycle events that are independently related to internal migration and not fully captured by age alone (Ellis and Goodwin-White 2006). For instance, immigrants who arrive as children or at younger ages are more likely to have received some of their education in the United States and be more assimilated. Age at U.S. entry indirectly measures that possibility. In addition, as immigrants spend more time in the United States, they put down roots and migrate less internally, regardless of their age at entry. Measurement and national summary statistics for individual and aggregate variables are provided in Appendix 3.

The four destination categories differ sharply in out-migration, economic conditions, nativity levels and individual characteristics. Figure 2 and the first row in Table 1 show that the foreign born were more than twice as likely to leave new and emerging destinations as they were to leave traditional and influx areas—22% of the foreign born left new destinations but only 9% left traditional destinations. The context and individual means for the destination categories also suggest that they attract different types of immigrants. For instance, in the 1990s employment grew by 11% in new destinations but declined by 3.6% in traditional destinations. While traditional and influx destinations had the highest wages and housing rents, they also had the lowest education profiles—only 18% of immigrants in those areas

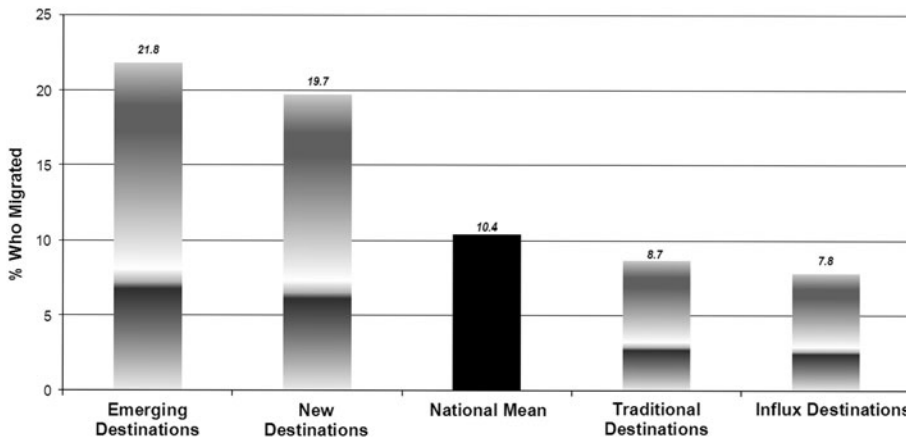


Fig. 2 Labor market out-migration by destination type, 1995–2000

Table 1 Means for total United States and four foreign-born growth and composition categories, 2000

	National	Emerging destinations (LoC_LoG)	New destinations (LoC_HiG)	Influx destinations (HiC_HiG)	Traditional destinations (HiC_LoG)
Labor market out migration + 50 mile distance	10.44	21.79	19.71	7.79	8.65
LM context measures					
Annual wages (\$)	41,241	37,484	35,544	41,321	43,159
Employment change, 1990–2000 (%)	1.5	5.2	10.9	4.2	−3.6
Monthly housing rent (\$)	633	534	498	620	706
Origin group size (unweighted N)	380,411	4,754	12,145	149,708	694,642
Individual measures					
College	20.3	42.2	26.3	18.6	17.7
High school or some college	36.1	39.3	34.1	37.4	35.3
Less than high school	43.6	18.5	39.5	44.1	47.0
Speaks English only or very well	42.3	66.0	46.7	42.4	38.6
Speaks English well	24.8	21.4	24.2	24.3	25.7
Speaks poor or no English	32.9	12.5	29.1	33.3	35.7
Age at U.S. entry	22.1	21.6	22.5	22.6	21.7
Years in United States	17.4	19.5	15.9	16.8	18.1
Citizen	44.8	59.9	42.6	44.2	44.2
Male	50.5	48.1	53.6	51.6	49.1

Note: Sample includes foreign-born aged 25–59 from 24 national origins

LM labor market context measures, *LoC_LoG* low nativity composition and low nativity growth areas, *LoC_HiG* low nativity composition and high nativity growth areas, *HiC_HiG* high composition and high growth areas, *HiC_LoG* high composition and low growth areas

had college educations versus 26% in new destinations and 42% in emerging destinations. Differences in sex, age at U.S. entry, and years in United States were minor across the categories but the fact that 60% of immigrants living in emerging destinations were citizens suggests that a different settlement dynamic attracted immigrants to those areas.

Migration from New Destinations: Who Leaves?

To evaluate the effect that economic conditions and nativity concentration in different labor markets have on out-migration net of immigrant's individual characteristics, we estimated a series of nested binary logistic regressions. We use census person weights in all stages of the analysis. For descriptive statistics and aggregation from person records to labor markets, Stata frequency weights are used. Probability weights are used for the multivariate analysis to adjust for census sampling design without impacting the estimation of standard errors. Because the analysis focuses on both individuals and the labor markets in which they reside, we considered using a multi-level model but chose to employ basic logistic regression for several reasons. Most importantly, it is not necessary to use a more demanding method to produce the estimates central to our analysis because we utilize Stata's cluster option, treating labor markets as the cluster variable, to insure that reliable standard errors are estimated. This allows us to produce unbiased coefficient estimates and make appropriate statistical inference decisions. The computational and conceptual complexity of multilevel models demand parsimony in model specification that we are not prepared to accept for this analysis because it would require the use of reduced sets of individual and labor market covariates. Given the paucity of previous research on this topic and our use of 24 dummy variables to control for origin countries and large numbers of other measures, it would be difficult to identify an appropriate reduced set of covariates. In addition, since origin groups are not clearly nested within labor markets, a crossed-, rather than nested-estimation framework would be necessary (Rabe-Hesketh and Skrondal 2008, Chap. 11). This would demand even more rigorous parsimony in model specification and would shift the analytic focus towards assessing the relative importance of labor markets and compatriot affinity rather than identifying whether both factors interact to affect migration.

The models are first specified for the combined foreign-born sample and treat Canadians as the reference category (Table 2). Model 1 provides the baseline for out-migration from new, emerging and influx destinations relative to traditional destinations. That model shows no significant difference between the two high composition areas in their zero-order migration odds but it establishes that immigrants living in new destinations had migration odds that were 2.6 times larger than those of immigrants in traditional destinations. Immigrants living in emerging destinations had odds of migration 2.9 times larger than those in traditional destinations. After controlling for group size and a quadratic term for group size, Model 2 reveals the expected deterrent effect of nativity concentration. In particular, the deterrent effects of nativity concentration as measured by group size in each

Table 2 Logistic regressions of labor market migration on origin-group nativity growth and composition context, economic context, nativity concentration and individual characteristics (odds ratios)

Variables	Base Model 1	LM size Model 2	LM economic Model 3	Additive Model 4	Interaction Model 5
LM emerging destinations	2.941***	1.216***	2.619***	1.170**	1.106
LM new destinations	2.592***	1.189***	2.194***	1.041	1.464
LM influx destinations	0.892	0.775***	0.909	0.814***	1.37
LM group size (log)		0.652***		0.665***	1.081
LM group size squared (log)		1.013***		1.012***	1.008*
LM average wage (log)			0.231***	0.267***	0.688
LM employment change, 1990–2000 (log)			0.733*	0.661***	1.06
LM average rent (log)			0.865	1.297**	1.202
College education or more				1.717***	4.027***
Speaks English only or very well				1.171***	1.171***
Citizen				0.754***	0.762***
Age at U.S. entry				0.961***	0.961***
Years in United States				0.929***	0.928***
Years in USA squared				1.001***	1.001***
Male				1.155***	1.154***
Mexico				0.947	0.977
Cuba				0.847	0.895
El Salvador				0.675***	0.677***
Dominican Republic				0.817***	0.815***
Colombia				0.93	0.921
Guatemala				0.671***	0.672***
Ecuador				0.533***	0.529***
Honduras				0.673***	0.684***
Peru				0.589***	0.578***
Nicaragua				0.504***	0.514***
Brazil				0.621***	0.599***
Philippines				0.808***	0.843***
China				1.165	1.187
India				1.166**	1.157**
Vietnam				0.870*	0.891*
Korea				1.143	1.175
Taiwan				0.924	0.886
Iran				0.633***	0.610***
Pakistan				0.877	0.818*
Laos				0.923	0.946
Jamaica				0.831	0.843

Table 2 continued

Variables	Base Model 1	LM size Model 2	LM economic Model 3	Additive Model 4	Interaction Model 5
Haiti				0.745**	0.746**
Guyana				0.580***	0.583***
LM emerging destination by LM group size					1.012
LM new destination by LM group size					0.962
LM influx destination by LM group size					0.955*
LM wages by LM group size					0.912*
LM employment change by LM group size					0.938*
College (individual) by LM group size					0.913***
Observations	1,625,960	1,625,960	1,625,960	1,625,960	1,625,960
Log likelihood	-527966***	-519514***	-523815***	-496566***	-495722***

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

labor market level off at higher levels and then become positive. Although controlling for nativity concentration greatly reduces the odds of out-migration from emerging and new destinations, immigrants living in those areas still had a significantly higher tendency to out-migrate. In addition, net of group size differences, immigrants in influx destinations were significantly less likely to migrate. The third model was estimated without the nativity concentration measures in order to evaluate the effect of economic conditions alone on out-migration from the four destination categories. That model indicates that robust labor market conditions also reduced the odds of out-migration but not as dramatically as nativity concentration did. The signs and directions of the economic measures are as expected and significant except for average rent. Immigrants were significantly less likely to migrate if they lived in an area in 1995 that had relatively high wages and high rates of employment growth.

The full additive Model 4 includes labor market economic and nativity concentration indicators along with individual controls for immigrant's human capital and national origin. That model indicates that both nativity concentration and robust economic conditions remained strong deterrents of migration after controlling for immigrant's human capital and national origins. While the differential between new and traditional destinations was insignificant in the additive model, if immigrants lived in an emerging destination they were significantly more likely to migrate and if they lived in an influx destination, they were significantly less likely to do so. Labor market rent also increased out-migration, as expected, in the additive model. The individual covariates have the

expected relationships. Out-migration is higher for the college educated as well as for English speakers who are fluent or close to fluent and for men. In addition, migration declines as age at entry and years in the United States increase. Naturalized citizens are significantly less likely to migrate. The positive quadratic term for years in the United States indicates that beyond a certain point, probably when immigrants start to retire from their paid employment, out-migration increases. The nativity origin coefficients show that net of individual human capital and labor market economic and nativity conditions, the odds of migrating internally were not significantly different between Canadians and 9 origin groups (Mexicans, Cubans, Colombians, Chinese, Koreans, Taiwanese, Pakistanis, Laotians, and Jamaicans); thirteen groups were significantly less likely than Canadians to migrate internally; and Indians were significantly more likely to do so. Accounting for group differences is not our main purpose here but other research indicates that human capital, immigration statuses, and group contexts underlie them (Gurak and Kritz 2010; Kritz and Nogle 1994; Rebhun 2006).

Model 5 addresses whether immigrant's out-migration decisions tend to be conditioned jointly by economic conditions and nativity concentration in labor market contexts. That model has six interaction terms, including ones between each origin group's labor market size and the three destination categories, as well as between origin group size and labor market wages, labor market employment change, and college education. The model shows that immigrants who lived in labor markets where wages and origin group size were both high as well as those who lived in ones where economic growth and origin group size were both high were significantly less likely to migrate. In addition, immigrants living in influx destinations with larger numbers of compatriots were also significantly less likely to migrate. After controlling for these interactions, the main effects for the labor market destination categories, economic conditions, and origin group size were no longer significant. Those findings confirm that nativity concentration effects as measured here by origin group size are not independent of economic conditions. The interaction term between nativity concentration and college education was also negative indicating that immigrants with college education who lived in labor markets that scored high on nativity concentration were significantly less likely to migrate. After controlling for that interaction, the main effect for college education increased dramatically from 1.2 to 4.0, which indicates that college-educated immigrants living in labor markets with fewer compatriots had migration odds four times higher than the non-college educated living in comparable places. On the other hand, the inclusion of origin group size interactions had minimal effect on the magnitudes and signs of the other human capital or origin country individual covariates.

The migration odds ratios from Table 2 models are displayed in a bar chart (Fig. 3) to show how they changed after controlling for different covariate subsets. Solid filled columns indicate that coefficients were statistically significant at the 0.05 level. The column labeled *base model* corresponds to the first model in Table 1. The *LM Group Size* column indicates that if only nativity concentration is controlled, immigrants who lived in low composition labor markets remained significantly more likely to migrate, albeit with reduced odds, while those in rapidly

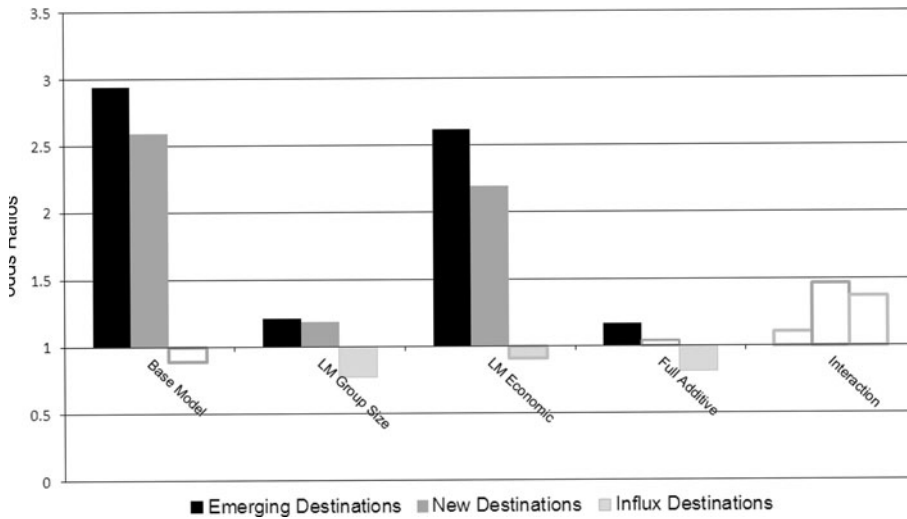


Fig. 3 Odds ratio changes in labor market out-migration from emerging, new, and influx destinations (based on models 1–5, Table 2). *Note:* Solid filled columns represent statistically significant coefficients. Estimates correspond to models 1–5, Table 2

growing high composition ones were less likely to do so. The *LM Economic* column also shows modest reductions in migration differences but the remaining ones are highly significant. After controlling for both economic and nativity conditions as well as the individual covariates in the *Full Additive* model, a significant share of the variance in migration for the destination categories is accounted for. If the analysis stopped there, the conclusion would be that while both labor market nativity concentration and economic conditions deter foreign-born out-migration, nativity concentration appears to have a stronger effect on immigrant's internal migration. However, by going beyond that finding, an *Interaction* model indicated that out-migration differences between the destination areas depended both on labor market group size and nativity concentration. This finding for the combined models supports our hypothesis that immigrants are less likely to leave labor markets with robust economic conditions if those areas also have relatively high nativity concentration.

National Origin Models

Thus far the analysis has focused on relationships for the combined sample, controlling for individual human capital and national origin differences while examining simultaneously the relative importance of labor market economic conditions and nativity concentration. The findings indicate that both labor market dimensions are important but because immigrant groups differ significantly in their internal migration levels, it could be the case that the findings observed in the

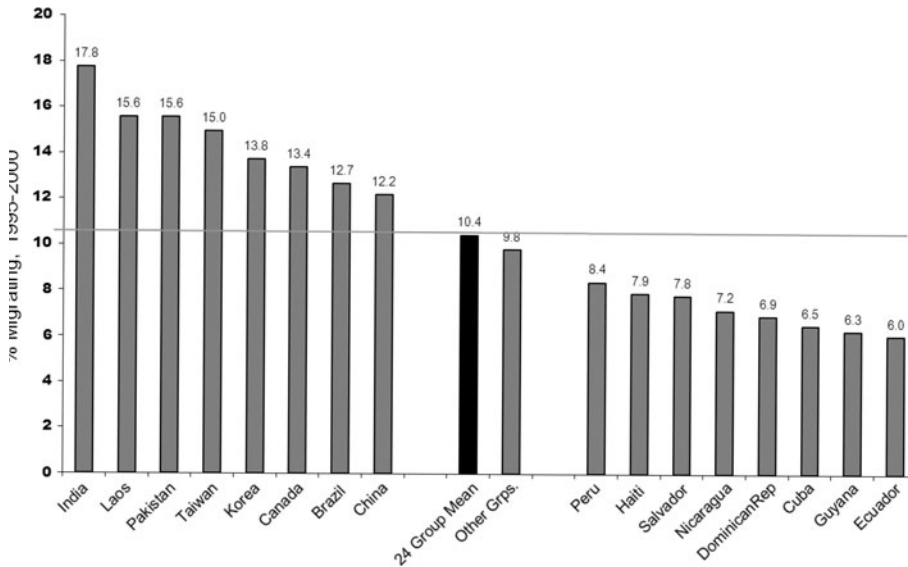


Fig. 4 Labor market internal migration by foreign-born national origin, 1995–2000

combined models result from differential group responses, population sizes, and migration tendencies. Figure 4 shows that there are large differences across the study groups in their internal migration levels, ranging from a high of 18% for Indians down to 6% for Ecuadorans. To evaluate whether the relationships in the combined model are robust and hold up for immigrants from different national origins, we estimated separate models for the 24 groups. If immigrants are indeed taking local labor market conditions as well as compatriot affinity into consideration in deciding whether to migrate internally, then we would expect to find that the effects observed in the combined interaction model hold up in the group models.

Table 3 displays odds ratios for new and emerging destinations from two sets of group-specific models, namely a zero-order model that included only the three labor market destination categories and an interaction model that included all context and individual covariates specified in Table 2, Model 4 except national origin, plus 3 of the interaction terms used in Model 5, namely the ones between labor market group size and wages, labor market group size and employment change, and labor market group size and college education. Both sets of models were estimated separately for each origin group. The statistics for the interaction models in Table 3 were drawn from the group models shown in Appendix 4, rows 1 and 2; shaded cells indicate significant out-migration differences at the 0.05 level between traditional destinations versus new or emerging destinations. The zero-order models in Table 3 show that the odds of out-migration from new and emerging destinations were significantly higher for 22 origin groups. In the models summarized in Table 3, the destination category was insignificant for Laotians in both new and emerging

Table 3 Odds ratios for labor market migration from new and emerging destinations, zero-order and interaction models estimated separately for 24 origin Groups (odds ratios)

	New destinations (LoC_HiG)		Emerging destinations (LoC_LoG)	
	Zero-order model	Interaction model	Zero-order model	Interaction model
Mexico	1.91	0.82	2.48	0.80
Cuba	2.46	0.70	1.31	0.78
El Salvador	2.39	1.00	2.20	1.04
Dominican Republic	3.33	1.36	7.08	1.78
Colombia	3.60	1.52	1.65	1.06
Guatemala	2.40	0.89	2.45	1.05
Ecuador	2.85	0.97	2.09	1.08
Honduras	1.96	1.13	2.54	1.20
Peru	3.11	0.89	2.34	0.91
Nicaragua	2.30	0.74	2.83	0.91
Brazil	2.71	1.26	2.67	1.47
Philippines	3.02	1.14	2.50	1.06
China	6.06	1.37	9.81	1.34
India	3.21	0.98	3.87	1.16
Vietnam	2.37	0.90	2.65	0.98
Korea	3.50	1.00	3.75	0.99
Taiwan	1.72	0.77	2.31	0.94
Iran	2.29	0.94	2.29	1.06
Pakistan	3.30	1.46	2.79	1.39
Laos	0.98	0.87	0.77	0.91
Jamaica	5.15	2.01	2.57	1.78
Haiti	3.82	1.51	2.42	1.51
Guyana	4.09	1.57	2.72	1.53
Canada	2.10	1.18	1.59	1.00

Note: Bold represent statistical significance at 0.05 level or higher level. The zero-order and interaction models were estimated separately for 24 national origin groups. Traditional labor markets were the reference category for both sets of models

destinations as well as for Taiwanese in new destinations and Cubans in emerging destinations. Moreover, for most origin groups, the zero-order significant differences were fully accounted for after controlling for interactions between labor market group size, economic context, and college education. In the new destination interaction models, no significant out-migration differential remained for 17 of 24 origin groups and in the emerging destination models, no significant difference remained for 19 groups. These findings provide additional support for our argument, namely that in deciding whether or not to migrate internally, immigrants from most origins do not just consider economic conditions versus compatriot availability in places where they live but take both factors into account.

Further group-specific analysis would be necessary to explain why significant differences remained for a few origin groups in the interaction models. In both sets of models, Jamaicans, Guyanese, and Pakistanis were significantly more likely to migrate if they lived in new or emerging destinations. Because large numbers of Jamaicans and Guyanese work in the health industry, one could speculate that they may have gained admission to the United States because they agreed to work in a healthcare professional shortage area for a minimum of 3 years (Ester 2008). Foreign medical graduates who work in underserved rural areas receive visa preferences. However, after living in those places and meeting the residency requirement, they may decide to migrate to take advantage of opportunities elsewhere. Cultural context may also enter into the decision of immigrants from some origins. Pakistanis, for instance, are predominately Muslims and may be sensitive to the absence of mosques and a supportive cultural environment in places where they have few compatriots. While most Iranians are Muslims too, their responses may differ because larger numbers of them adhere to secular values.

Laotians, in contrast, were not significantly more likely to leave low composition areas in either set of models. That pattern could stem from the fact that Laotians came to the United States as refugees and were immediately dispersed to different parts of the country by refugee resettlement agencies. Their dispersed settlement pattern, in turn, would have given them opportunities to build networks to churches and government agencies that regularly assist refugees. If Laotians have built weak ties to formal institutions, then that would potentially give them support systems in dispersed areas that make them less likely to leave those places than members of groups that lack such ties. The refugee resettlement argument is also supported by the finding that Cubans were significantly less likely to leave new destinations and showed no significant difference in out-migration from emerging destinations. Cubans too started as a refugee group and although they have now built up a large enclave community in Southeastern Florida, some Cubans still remain in the hinterlands and retain formal and informal ties to those places.

Discussion

Scholars are giving increased attention to immigrant settlements in new destinations but many questions remain unanswered about why this growth has occurred or its implications for immigrants and natives settled in those places. This paper examined a couple of questions not previously addressed in the literature, namely why out-migration levels from new and emerging destinations from 1995 to 2000 were double those for immigrants living in traditional areas and whether differentials in out-migration from destination contexts that have different nativity growth and composition characteristics stem from interactions between labor market economic conditions and compatriot availability? The central hypothesis that guided the analysis was that immigrants would be less likely to leave labor markets that have both robust economic conditions and high levels of compatriot availability as

measured by nativity concentrations. We examined that hypothesis in a combined foreign-born sample that included the largest Asian, Latin American and Caribbean groups, and Canadians, and in 24 national origin group-specific models. Overall, the combined and group models provide strong support for the argument that immigrant's out-migration decisions are responsive to both economic conditions and compatriot affinity in labor market areas. While immigrants were overwhelmingly more likely to leave new and emerging destinations than they were to leave traditional ones from 1995 to 2000, the likelihood that they did so depended on economic conditions and numbers of compatriots available to them in their 1995 labor markets. In addition, college-educated immigrants were significantly less likely to leave places with relatively high compatriot availability and more likely to leave places that had fewer compatriots.

The findings for the college-educated are of interest to pursue since most new destination studies have focused on low skilled Hispanics or immigrants. While it is well known that the foreign-born population is bifurcated along skill lines, our research indicates that skilled migrants are more likely than unskilled ones to migrate internally and settle in new destinations. They also appear to respond differently than unskilled migrants in out-migration likelihood from new destinations. Our analysis shows that there are strong interaction effects between college education and nativity concentration. If the college educated reside in places with high nativity concentrations, they are less likely to leave those places than their lesser educated counterparts and they are also more likely to leave new and emerging destinations if they have few compatriots in those areas. We believe those findings occur because the college educated have more choices than others and can selectively locate themselves in places that allow them to maximize both economic and social opportunities.

A related question that has not been addressed by researchers is why skilled immigrants migrate to new and emerging destinations in the first place. We used a relatively high minimum age cutoff in this analysis to reduce the likelihood that we were capturing persons attending college in new and emerging destinations, and we also verified that school attendance was unrelated to migration outflows in the study sample. We suspect that restructuring in health, education, or other professional or high technology industries underlie the migrations of many skilled immigrants to new destinations since those industries too have experienced significant restructuring in recent decades that has implications for internal migration of skilled immigrants. Health maintenance organizations, for instance, have extended their outreach into remote regions of the country and set up satellite health clinics in small towns throughout rural America that provide basic health services and channel patients needing acute care to metropolitan areas. In order to contain costs, large health networks have recruited foreign-born medical personnel to work in non-metropolitan areas because it is difficult to attract native health workers to those areas. Comparable changes are underway in higher education, as states expand their community colleges and technical schools in order to give rural and small town residents access to tertiary education on a commuting basis. In the higher education industry, too, growing numbers of teachers, instructors and other workers are immigrants. To the extent that these

industry changes attract immigrants to new destinations, they have implications for out-migration because workers in professional industries tend to be more mobile than ones in other fields.

The analysis suggests that new destinations should be measured based on immigrants' national origins rather than by using pan-ethnic categories. Specification of the Hispanic pan-ethnic category is particularly problematic given that Mexicans dominate that category and have very different migration, settlement and dispersion patterns than other Spanish-origin groups. In addition, skill profiles and niche strategies differ widely across Hispanic origin groups. Asians are an even more heterogeneous category than Hispanics and also differ widely in their migration, settlement, and skill profiles. Identifying new destinations based on pan-ethnic classifications can obscure actual trends underway and make findings difficult to interpret. Scholars, of course, have resorted to the aggregation approach largely because of insufficient sample sizes. Unfortunately given that there was no long form census sample in 2010, it will be difficult to replicate this type of study in the future since even combining five years of American Community Survey (ACS) data will not yield the sample size that the long-form decennial samples had and there will be the added problem of how to interpret migration and other patterns that span 5–10 year periods.

An important next step is to look more closely at the characteristics of labor markets in the four destination categories that influence immigrants' migration decisions since that would allow us to confirm whether speculations advanced here are correct about what attracts immigrants to new destinations. It would also be important to examine how destination choices differ for immigrants from different origins since in addition to being influenced by niche strategies and social networks, many immigrants may be moving to new destinations that are in the hinterlands of their concentrated metropolitan settlements. The gravity effect of distance has long been shown to be an important deterrent of migration. Finally, although our analysis shows that immigrants take compatriot affinity into account in deciding whether to migrate internally, we know little about whether compatriot-availability levels after internal migration tend to be higher, the same, or lower. Another important issue for future studies to consider is whether there is a threshold level of compatriot availability that meets immigrants' needs and if so, whether that number varies across origin groups.

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Appendix 1

See Table 4.

Table 4 Labor market classifications of 24 Asian, Caribbean, and Latin American foreign-born origin groups based on each group's 1995 group-specific growth and composition context in 741 labor markets, 1990–1995

	Emerging destinations (LoC_LoG)	New destinations (LoC_HiG)	Influx destinations (HiC_HiG)	Traditional destinations (HiC_LoG)	Group labor market Ns	Group % of national population, 1995	Group % population change, 1990–1995
Mexico	103	502	59	48	712	2.91	70.12
Cuba	119	328	6	2	455	0.30	3.64
El Salvador	65	344	20	4	433	0.28	51.25
Dominican Republic	87	190	5	1	283	0.24	71.18
Colombia	121	306	11	5	443	0.15	33.28
Guatemala	88	349	30	8	475	0.15	71.92
Ecuador	86	200	7	2	295	0.10	67.42
Honduras	121	275	19	9	424	0.09	96.90
Peru	106	248	18	6	378	0.09	57.43
Nicaragua	62	228	6	9	305	0.08	18.06
Brazil	137	214	19	8	378	0.05	47.75
Philippines	210	427	20	13	670	0.48	32.64
China	167	374	15	6	562	0.38	38.52
India	219	347	18	15	599	0.28	56.66
Vietnam	181	345	25	15	566	0.36	64.22
Korea	167	436	22	21	646	0.28	24.21
Taiwan	165	241	19	14	439	0.11	11.03
Iran	161	211	11	8	391	0.10	18.39
Pakistan	136	187	20	11	354	0.07	78.81
Laos	89	204	52	33	378	0.08	14.92
Jamaica	124	225	14	5	368	0.20	48.31
Haiti	60	189	9	3	261	0.14	58.89
Guyana	97	154	8	2	261	0.08	56.79
Canada	212	364	76	60	712	0.27	−8.13
Labor market total national Ns	3,083	6,888	509	308	10,788	na	na
National averages	na	na	na	na	741	10.03	28.67

Note: There are 741 labor markets but no origin groups had nationals present in all areas. Column cell numbers indicate the number of labor markets where at least one national of each origin group lived in 1995. The number of labor markets settled by each origin group is provided in the column labeled “Group Labor market Ns.” The row labeled “Labor market total national Ns” indicates the number of labor markets in each category that had immigrants. There were 17,784 potential settlement areas (741×24) but only 10,788 areas actually had immigrants

Appendix 2

See Table 5.

Table 5 Percentage of foreign-born national origin group in each growth and composition context

	Emerging destinations (LoC_LoG)	New destinations (LoC_HiG)	Influx destinations (HiC_HiG)	Traditional destinations (HiC_LoG)	Sample weighted N
Mexico	0.6	13.3	31.7	54.4	4,995,294
Cuba	12.0	6.5	71.1	10.5	426,001
Salvador	1.7	9.4	41.5	47.4	526,205
Dominican Republic	1.7	8.2	27.1	63.0	404,304
Colombia	13.3	9.7	44.7	32.2	265,316
Guatemala	2.1	11.0	24.3	62.6	278,880
Ecuador	6.1	6.3	76.4	11.1	172,706
Honduras	4.1	15.4	23.4	57.1	150,978
Peru	8.6	12.1	43.2	36.1	158,437
Nicaragua	2.9	12.2	44.9	40.0	132,759
Brazil	13.2	9.0	41.1	36.6	88,222
Philippines	6.2	13.8	21.5	58.5	825,828
China	5.3	23.3	41.0	30.3	612,276
India	12.3	14.5	22.0	51.2	530,888
Vietnam	7.1	16.0	26.5	50.4	648,548
Korea	7.3	16.9	17.8	58.0	472,777
Taiwan	12.7	12.7	55.7	18.9	207,161
Iran	15.2	12.0	51.5	21.3	178,164
Pakistan	10.2	10.7	56.8	22.3	120,594
Laos	15.7	11.0	42.2	31.2	143,166
Jamaica	9.1	4.5	76.0	10.5	333,462
Haiti	4.1	5.5	22.7	67.7	252,339
Guyana	8.0	5.9	79.5	6.6	132,183
Canada	14.0	23.7	21.1	41.2	357,421
Combined 24 group total	4.8	13.1	35.1	47.0	12,413,909

Note: The statistics were calculated for immigrants aged 25–39. The rows sum to 100% for each group

Appendix 3

See Table 6.

Table 6 Variable definitions and descriptive statistics (weighted) for labor market and individual covariates

	Variable definition	Mean	Group with lowest mean	Group with largest mean
LM out-migration, 1995–2000	Dummy variable = 1 if foreign born aged 25–59 migrated from one LM to another between 1995 and 2000 and moved a distance of at least 50 miles	10.44	Ecuador	India
College or more	Dummy variable = 1 if individual had a college degree or higher level of education, 2000	0.20	Mexico	Taiwan
High school grad or some college	Dummy variable = 1 if individual had a high school degree or some college education, 2000	0.36	India	Peru
Less than high school	Dummy variable = 1 if individual did not have a high school degree, 2000	0.44	Taiwan	Mexico
Speaks English only or very well	Dummy variable = 1 if individual speaks English only or speaks English very well, 2000	0.42	Mexico	Jamaica
Speaks English well	Dummy variable = 1 if individual speaks English well, 2000	0.25	Jamaica	Taiwan
Speaks English poorly or not at all	Dummy variable = 1 if individual speaks English poorly or not at all, 2000	0.33	Jamaica	Mexico
Citizen	Dummy variable = 1 if individual is a naturalized citizen, 2000	0.45	Guatemala	Taiwan
National origin	Dummy variables for 24 national origin groups = 1 based on immigrant's country of birth	–	Brazil	Mexico
Age at U.S. entry	Continuous variable that indicates the age at which immigrant entered the USA	22.10	Canada	Peru
Years in USA	Continuous variable that expresses the difference between immigrant's current age and age of U.S. entry	17.40	Honduras	Canada
National origin	Dummy variables for 24 national origin groups = 1 according to individual's country of birth, 2000	–	Brazil	Mexico
Sex	Dummy variable = 1 if sex is male	0.51	Korea	Pakistan

Table 6 continued

LM aggregate context	LoC_LoG	LoC_HiG	HiC_HiG	HiC_LoG
LM group size, 1995	380,411	12,145	149,708	694,642
LM 1990-2000 employment change	1.45	10.98	4.17	-3.62
LM average 1990 wage	41,241	35,544	41,321	43,159
LM average rent	633	498	620	706

Appendix 4

See Table 7.

Table 7 Logistic regressions for 24 foreign-born origin groups of labor market migration on destination categories, economic context, nativity concentration, and individual characteristics (odds ratios)

	Mexico	Cuba	Salvador	DR	Colombia	Guatemala	Ecuador	Honduras	Peru	Nicaragua	Brazil	Philippines
Origin group context												
LM emerging destinations	0.799	0.777*	1.037	1.782	1.057	1.047	1.083	1.195	0.907	0.909	1.469*	1.057
LM new destinations	0.824	0.699*	1.001	1.363	1.518*	0.889	0.971	1.128	0.886	0.735	1.256	1.139
LM influx destinations	0.787**	0.535*	0.895	0.910	0.842	0.882	0.815	0.891	0.821*	0.803	0.939	1.009
LM group size (log)	1.125	1.035	5.817***	0.694	1.095	0.417	0.788	1.280	2.059	8.917***	2.972	1.173
LM group size squared	1.020***	0.997	1.016*	1.041	0.996	1.039***	1.030**	1.023	1.003	0.995	0.996	1.005
Economic context												
LM average wage (log)	6.035**	0.558	7.674	6.112	0.218	1.916	1.204	0.879	0.670	1.298	0.469	0.957
LM NB employment change, 1990–2000 (log)	1.671	0.834	2.215	0.110	0.607	0.389	0.209	0.964	1.341	5.830*	1.495	0.791
Individual characteristics												
College education or more	3.802***	1.336	5.096***	1.375	1.753**	4.086***	0.990	3.170***	2.116**	3.193***	1.608	1.962***
Male	1.276***	1.138**	1.127***	1.145***	1.104***	1.176***	0.968	1.267***	1.175**	1.054	1.115*	0.981
Age at U.S. arrival	0.973***	0.970***	0.977***	0.983***	0.967***	0.980***	0.978***	0.974***	0.968***	0.969***	0.973***	0.948***
Years in U.S.	0.938***	0.934***	0.918***	0.990	0.932***	0.932***	0.992	0.957**	0.931***	0.926***	0.942***	0.923***
Years in U.S. squared	1.001***	1.001**	1.001***	1.000	1.001**	1.001*	1.000	1.000	1.001**	1.001**	1.000	1.001***
Citizen	0.826***	0.700***	0.863**	0.890	0.853**	0.899	0.954	0.751***	0.820**	0.930	0.971	0.739***
Speaks English only or very well	1.063**	1.018	1.117*	1.244***	1.209***	1.096	1.233*	1.218***	1.381***	1.307***	1.319***	1.332***
Interaction terms												
LM wages × LM group size	0.795***	0.964	0.566***	0.596*	1.072	0.797	0.675*	0.859	0.811	0.710*	0.877	0.836*

Table 7 continued

	Mexico	Cuba	Salvador	DR	Colombia	Guatemala	Ecuador	Honduras	Peru	Nicaragua	Brazil	Philippines
LM employment change \times LM group size	0.900**	0.958	0.691***	1.051	0.929	1.106	1.025	0.876	0.834	0.621***	0.768	0.960
College (individual) \times LM group size	0.927***	1.003	0.881*	1.005	0.976	0.910*	1.040	0.912**	0.962	0.930*	1.009	0.950***
Observations	678,000	50,783	67,791	49,984	32,670	35,564	21,491	19,069	19,899	16,017	11,081	108,460
Log likelihood	-199560***	-12404***	-17165***	-12193***	-10336***	-10593***	-4570***	-6286***	-5396***	-3882	-3875	-32657
	China	India	Vietnam	Korea	Taiwan	Iran	Pakistan	Laos	Jamaica	Haiti	Guyana	Canada
Origin group context												
LM emerging destinations	1.337	1.157	0.978	0.994	0.936	1.056	1.391*	0.912	1.781***	1.514	1.532*	0.997
LM new destinations	1.373*	0.978	0.895	0.997	0.767*	0.939	1.463**	0.874	2.005***	1.514	1.567*	1.178
LM influx destinations	1.350*	0.843	0.768**	0.830**	0.716*	0.965	1.102	0.839	1.117	0.965	1.557**	1.056
LM group size (log)	2.619	2.357	1.023	0.728	1.264	0.601	3.024	5.209	0.280*	0.249*	1.356	0.980
LM group size squared	0.998	0.986	1.021*	0.977***	0.991	0.980*	0.990	1.035*	0.991	1.031*	1.006	0.999
Economic context												
LM average wage (log)	0.398	0.773	3.785	0.298	5.083	0.244	0.0341*	10.840	0.001***	0.071	0.105	0.939
LM NB employment change, 1990-2000 (log)	1.935	2.103	0.468	0.227***	0.418	0.343	3.472	2.080	0.176	0.0938*	0.500	1.165
Individual characteristics												
College education or more	3.566***	3.131***	7.577***	4.114***	2.725***	1.235	1.515	5.815***	3.232***	3.670***	1.875*	2.930***
Male	1.093*	1.285***	1.080**	1.064*	1.136***	1.111*	1.084*	1.075*	0.990	1.092**	1.011	1.018
Age at U.S. arrival	0.957***	0.937***	0.955***	0.941***	0.924***	0.945***	0.961***	0.965***	0.954***	0.962***	0.958***	0.958***
Years in U.S.	0.910***	0.869***	0.939***	0.914***	0.892***	0.919***	0.909***	0.911***	0.946***	0.938***	0.977	0.907***
Years in U.S. squared	1.000	1.002***	1.001	1.000**	1.001*	1.001*	1.001	1.001**	1.000	1.000	1.000	1.001***
Citizen	0.532***	0.649***	0.738***	0.833***	0.660**	0.744***	0.771***	0.776***	0.919	0.820**	0.711***	0.928*
Speaks English only or very well	1.306***	1.200***	1.196***	1.151**	0.947	1.154*	1.401***	1.117	1.205	0.991	1.115	1.332**

Table 7 continued

	China	India	Vietnam	Korea	Taiwan	Iran	Pakistan	Laos	Jamaica	Haiti	Guyana	Canada
Interaction terms												
LM wages \times LM group size	0.744	0.850	0.660**	0.947	0.631*	1.079	1.080	0.529**	1.937***	1.178	0.875	1.004
LM employment change \times LM group size	0.829	0.861	1.005	1.158**	1.067	1.106	0.742*	0.700	1.111	1.138	0.903	0.977
College (individual) \times LM group size	0.970	0.947*	0.864***	0.912***	0.954	1.040	1.022	0.841***	0.926**	0.905**	0.971	0.924**
Observations	78,223	68,616	84,844	60,881	26,886	22,882	15,179	19,636	40,028	30,182	16,172	51,622
Log likelihood	-23693	-27993	-26258	-21837	-9192	-6554	-6011	-7820	-10991	-7835	-3538	-21109

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

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