

Entrepreneurship, transnationalism, and development¹

Alejandro Portes* and Jessica Yiu

Department of Sociology, Princeton University, Department of Sociology, Wallace Hall, Princeton, NJ 08544, USA.

*Corresponding author. Email: aportes@princeton.edu

Abstract

This article reviews the debate on economic and social consequences of immigrant entrepreneurship as well as theories advanced to explain different levels of self-employment among immigrant and ethnic minorities. We examine the impact of professional and entrepreneurial migration on sending countries from the viewpoint of traditional theories of the brain drain as well as from that of the more recent transnational perspective. Finally, we present the latest data on the effects of self-employment on income levels for various immigrant and ethnic groups. Results confirm the conclusion of a consistently positive net effect, both for annual incomes and hourly earnings. Implications of these results for theories of immigrant adaptation and policies implemented by sending and receiving countries are discussed.

Keywords: immigration, entrepreneurship, transnationalism, brain drain.

The relationship between immigration and entrepreneurship has been described from a number of perspectives, some of which are opposite to one another and others that take a more historical stance. The main debate is between those authors who emphasize the role of self-employment and ethnic entrepreneurship as an economic survival strategy—a recourse against destitution—and those who mainly describe it as a means of individual and collective mobility. For the most part, this debate has disciplinary overtones, with economists generally leaning toward the survival story and sociologists and anthropologists toward the business success angle. More recently, the advent of the transnational perspective in immigration studies has raised a series of novel issues, such as the extent to which the viability of immigrant enterprise is contingent on economic and social ties with the home country and the effect that the migration of talented business people and professionals have on prospects for social and economic development of sending countries.

Fortunately, the empirical literature on the subject has accumulated to a sufficient degree to adjudicate between these contrary positions and to clarify other issues. The purpose of this essay is to review selectively this literature and present recent evidence that bears on the relationship between self-employment and the economic destiny of contemporary immigrant minorities.

doi:10.1093/migration/mns036

1. The ethnic entrepreneurship debate

The skeptical view about the self-employment route for economic advancement relies on an optimistic view of labor markets and their capacity to reward human capital. Individuals with sufficient education and skills will rationally enter the labor market where they will be rewarded with higher wages. Those who become entrepreneurs do so *faute de mieux*, as they lack the skills or the experience to compete in the market. Ethnic enterprise, according to this view, can become a 'mobility trap' preventing minority persons from acquiring the necessary skills and experience and condemning them to a condition of permanently low returns (Borjas 1986, 1987; Bates 1989; Nee and Sanders 1994).

Such arguments are made despite empirical evidence consistently indicating higher incomes for the self-employed among the most diverse immigrant and ethnic minorities. Economists bat away that evidence with two arguments. First, after controlling for other predictors of economic achievement, the apparent advantage for the self-employed disappears. Second, even when this is not the case, the advantage is only present in aggregate incomes because the self-employed exploit themselves by working more hours. Once this is adjusted by dividing incomes by hours worked, the apparent advantage of entrepreneurs disappears or reverses itself (Borjas 1987).

On the opposite side, historians and sociologists have marshalled a large body of evidence indicating that, in the past as well as in the present, entrepreneurial minorities have been economically successful and their descendants have translated this success into higher-than-average educational and occupational achievement (Rischin 1962; Petersen 1971; Kim 1981; Goldscheider 1986; Kim 2006). These communities include German and Russian Jews and Japanese in the past and Chinese, Koreans, Cubans, Iranians, and Vietnamese today (Portes and Bach 1985; Zhou and Bankston 1998; Huynh and Yiu 2012). Business achievement, according to this literature, is important not only for their entire communities because these persons tend to become social and civic leaders, as well as economic role models (Tienda and Rajiman 2004; Zhou et al. 2008).

Empirically, this school counters the negative conclusions of prominent economists, such as Borjas (1987) and sociologists, such as Nee and Sanders (1994), with several points. First, the aggregate income advantage in favor of the self-employed, registered censuses and surveys could not occur if this path was merely an alternative to destitution. Rational actors would not choose it if its economic returns were consistently inferior to waged employment (Light 1984). Second, the disappearance of a positive self-employment effect in income or earnings regressions is an artifact of the use of the logarithmic transformation of dollars. Economists routinely use this transformation in order to smooth skewed income or earnings distributions, but its effect is to obscure the weight of outliers. Positive outliers (i.e. wealthy persons or high earners) are found disproportionately among the self-employed and among specific immigrant and ethnic groups (Portes and Zhou 1996).

Lastly, the argument that higher earnings among entrepreneurs are due to self-exploitation is logically fallacious. Rational economic actors would not work more hours if they were not profitable. Unlike wage workers who seldom can extend their work hours at will, the self-employed can and do *if* they are remunerative. From their viewpoint, the important outcome is total earnings that determine their ultimate economic status.

For that reason, extra work hours, rather than being a determinant of self-employment, are a *consequence* of it.

These arguments have been buttressed by analyses of US census data from the 1980s and the 1990s (Portes and Jensen 1989; Portes and Zhou 1999; Lofstrom 2002). In the following sections, we update these results with the most recent data available both for the general population and for selected foreign minorities. Before doing this, however, we examine the issue of determinants of immigrant entrepreneurship and its bearing on the countries of origin.

2. Determinants of self-employment

Economists and sociologists who have addressed the question have modeled ethnic entrepreneurship as a human capital function, including work experience, education, length of residence in the country, and gender. These studies have consistently found that entrepreneurs are disproportionately college-educated males with many years of experience in the receiving country (Borjas 1987; Bates 1989, Portes and Jensen 1989; Light and Rosenstein 1995; Portes and Zhou 1999). These findings contradict *prima facie* the characterization of ethnic entrepreneurship as a survival strategy because, should that be the case, it would be characterized by the opposite traits—low levels of education, work experience, and length of residence.

By the same token, results also show that entrepreneurship represents one, but not the only, strategy for economic mobility. For certain groups in the 1990s, a college degree increased the probability of self-employment, but a post-graduate degree reduced it pointing to professional-level occupations as an alternative path for economic mobility. Similarly, fluency in English tends to be positively associated with salaried employment, reflecting its facilitational role in the open labor market (Portes and Zhou 1999).

The consistent finding that gender (male) and marital status (married) are strong determinants of self-employment has been subject to different interpretations. Borjas (1986) argues that marriage resolves the ‘shirking’ problem for small entrepreneurs who are able to make use of the labor of family members. This argument is also supported by the generally positive effect of number of children on entrepreneurship. From a different, although not contradictory angle, Portes and Jensen (1989) and Zhou and Bankston (1998) argue that ethnic entrepreneurship is primarily a family affair in which men claim the firm as ‘theirs’ but that represents, in reality, a collective family endeavor. Although women seldom declare business ownership, their contribution to these firms is crucial, at least in its initial stages.

These findings are relevant to the explanation of differences in the probability for self-employment *within* immigrant and ethnic groups, but not to variations *between* them. All evidence, past and present, points to wide differences in this respect among ethnic groups, both domestic and foreign. In 2010, for example, the self-employment rate among white male workers, age 26–55, was 13.5 per cent, double the figure than among African Americans (6.2 per cent). The rates among immigrant groups ranged from 34 per cent for Israelis, 29 per cent for Iranians, and 27 per cent for Koreans to just 10 per cent for Mexicans and 9 per cent for Dominicans (American Community Survey 2011).

Several theories have been advanced to explain these differential propensities for self-employment. The most common explanation is the distinct cultural endowments of certain collectivities that lead them to seek avenues for profitable enterprise, whereas others remain content with wage employment. As Light (1979; 1984) noted, these cultural theories trace their origins, directly or indirectly, to Max Weber's thesis about the Protestant work ethic and its effects on the development of modern capitalism.

A first problem with culturalistic theories, however, is that they are mostly *post factum*, which is to say they are invoked once a group has achieved a notable level of business success, but they do not anticipate which ones will do so. A second problem is the diversity of national and religious backgrounds of entrepreneurially oriented groups. Among minorities with high rates of business ownership, we find Jews and Arabs, southern and northern Europeans, Asians, Middle Easterners, and some Latin Americans. They practice Protestantism, Catholicism, Greek Orthodoxy, Buddhism, Confucianism, Shintoism, and Islam. If a unique 'ethic' or set of distinct entrepreneurial values is to be associated with each of these religio-cultural backgrounds, we would end up with a rather messy theory. This theoretical untidiness is compounded by other groups of similar cultural or religious origins that are not significantly represented among business owners. Why, for example, are Chinese Buddhists so prone to entrepreneurship, but not Buddhist Cambodians? Why Catholic Cubans, but not Catholic Mexicans? A theory that must invent an *ad hoc* story for each instance of success and for each exception ends up explaining nothing.

For this reason, sociologists and other social scientists have moved away from exclusively culturalistic theories to focus on the structure of opportunities and concrete sets of skills characteristic of diverse groups and affecting their economic behavior. A series of such theories have been advanced but, in the end, the most persuasive is the one that pairs business skills *brought from the home country* with a positive mode of incorporation. When, by dint of historical circumstances, an immigrant group contains a significant number of people skilled in what sociologist Frazier (1949) long ago called 'the art of buying and selling' and when this presence is paired with a positive or at least neutral context of reception, we can predict the emergence of a significant entrepreneurial dynamic and the creation of ethnic business enclaves. Entrepreneurial know-how represents a particular form of human capital, not a religious ethic or set of distinct cultural values. Such skills can and have been found among immigrants raised in very different cultures.

It is true that difficulties with the host country language and racial or ethnic discrimination represent significant incentives for self-employment but, by themselves, these and other disadvantages will not lead to the consolidation of a strong business community (Bonacich and Modell 1980; Light and Bonacich 1988). It is only when business skills have been accumulated by a sizable number before immigration and when the receiving social and political context allows its deployment that the rise of an entrepreneurial community can be expected (Raijman 2001). On the contrary, when an immigrant group is composed primarily of low-skilled workers or when, by dint of unauthorized status or other negatively evaluated characteristics it confronts an unfavorable mode of incorporation, only a feeble set of enterprises catering mainly to the co-ethnic community can be expected. This theory explains the rise of the Jewish business enclave in the Lower East Side of Manhattan at the start of the twentieth century; the emergence of a Cuban enclave in Miami in mid-century;

and the consolidation of the Koreatown area of Los Angeles and of Little Saigon in Orange County by century's end (Risichin 1962; Howe 1976; Portes and Stepick 1993; Zhou and Bankston 1998; Min and Bozorgmehr 2000; Huynh and Yiu 2012). The theory can predict as well the rise and consolidation of ethnic enterprises and business collectives among contemporary migrants endowed with the requisite human capital and mode of incorporation. At the opposite end, it partially explains why other major immigrant minorities such as Cambodians, Laotians, Haitians, and Mexicans have not developed a strong business presence (Telles and Ortiz 2008; Zhou et al. 2008; Stepick et al. 2001).

3. Transnationalism and its effects on sending countries

There used to be a time when the literature on immigration and immigrant assimilation viewed the move as a one-way flight from misery and hopelessness, followed by a protracted effort at integration into the host society no longer. Starting in the early 1990s, a novel perspective brought to the fore the continuing and multiple relations sustained by immigrants with their home localities and nations. These take the form of a rising volume of remittances, periodic visits and investments in hometowns, and the emergence of a web of cultural, religious, political, and economic organizations straddling the cross-national space between 'there' and 'here' (Basch et al. 1994; Levitt and Glick Schiller 2004; Vertovec 2004). The study of ethnic entrepreneurship was affected by the new perspective in various ways: first, the character of business development in the host and home countries; second, the loss of human capital accompanying entrepreneurial out-migration; third, the counter flow of resources in the form of immigrant transnational investments and knowledge transfers. We review each of these developments in turn.

3.1 Business development at home and abroad

A series of studies in the USA have found that the character and the very existence of many immigrant firms depend on their regular contacts with their country of origin (Guarnizo et al. 1999; Portes et al. 2002; Itzigsohn 2009; Zhou and Lee 2012). These contacts, in turn, facilitate certain forms of business development in home country localities. In their detailed study of transnational ties among Salvadoran immigrants in the Los Angeles and Washington D.C., Landolt et al. (1999) developed a typology of migrant enterprises that has been applied subsequently to business development among other Latin American and Asian immigrant groups.

Circuit enterprises are the archetype of the transnational firms since they sustain the flow of material resources and information between the country of origin and its expatriate communities. In El Salvador, they range from informal travelers or *viajeros* who move back and forth delivering money and goods to large formal firms, like El Gigante Express, that performs similar functions on a large scale.

Cultural enterprises exploit the desire among expatriates to consume news and cultural products from their home country. Same-day Salvadoran newspapers can be regularly bought in Los Angeles and Washington D.C. in stores that also retail music CDs, videos, magazines, and books.

Ethnic enterprises include restaurants, food stores, clothing stores, and others that source their supplies abroad and cater both to an ethnic clientele and to mainstream clients. Salvadoran and other ethnic restaurants are patronized not only by co-ethnics but by American 'tourists' interested in the cuisine of other lands. It is not uncommon that ethnic enterprises import foodstuffs and other goods from more than one country.

Migrant return enterprises are the product of investments back home by former migrants who transfer not only capital, but know-how acquired abroad. These firms frequently pioneer in lines of business not seen before in the home countries, thus exploiting the informational advantage of migrant entrepreneurs. In El Salvador, they include fax and photocopy stores, Internet access stands, pizza parlors and restaurants with home delivery, automated car washes, English language schools, and sporting goods stores.

Transnational firms in expansion are established firms in home countries that come to perceive the expatriate communities as a new business opportunity and a platform for expansion into broader markets. The Constancia bottling company in El Salvador has a plant in Los Angeles to produce its beer and soft drinks both for the co-ethnic market and the larger Latino community of the area. Also found in Los Angeles, are supermarket chains from Mexico and El Salvador, such as the Salvadoran *Tapachulteca* chain (Landolt et al. 1999).

There are actually two types or levels of transnational enterprises: those initiated by immigrants of modest education and resources and those created by migrant professionals. The firms created by Salvadoran, Dominican, and Mexican immigrants described by Landolt et al. (1999), Itzigohn (2009), Roberts et al. (1999) and others belong primarily to the first category. At the other end, are firms founded by Israeli, Indian, Taiwanese, and other professionals that include information technologies, large scale import-export houses, and financial services of various kinds (Gold 1997; Hart and Acs 2011; Agarwala 2012). This type of firm is not only found in ethnic enclaves, but throughout the mainstream economy. Their size and economic heft has attracted the attention of sending country states, as we will see below.

As Zhou (2004) has noted, regardless of size, transnational enterprises depend for their operation of social networks across space. Bounded solidarity and trust stemming from a common national origin underlies many instances of risk-taking across borders. In this sense, *social capital* supplements or even takes the place of scarce money capital, at least at the start of migrant businesses. Like migration itself, social networks facilitate and are, in turn, strengthened by the emergence of these enterprises (Massey 1987; Tilly 1990; Guarnizo et al. 1999).

Lastly the empirical literature has unearthed a previously unnoticed characteristic of immigrant entrepreneurship. Although business owners have always represented a minority of their respective ethnic communities, the majority of them depend on transnational links for the viability and success of their firms. These links facilitate access to everything—from sources of capital to sources of labor, as well as access to competitively priced goods. For example, a study of entrepreneurship among Latin American immigrants in the USA revealed that, although business owners represented about 10 per cent of their respective communities, two-thirds of them relied on various transnational ties for the survival and/or

expansion of their firms (Portes et al. 2002). Similar patterns have been found for Chinese-, Indian-, and Korean-owned enterprises in the USA (Zhou et al. 2008; Agarwala 2012; Zhou and Lee 2012).

3.2 The brain drain and its aftermath

The counterpart of the finding that the success of immigrant enterprises depends largely on certain forms of human capital brought by migrants to the country of destination is the question of the effects that such outflows have on sending nations. Naturally, a first reaction is to regard such movements as a net loss, compounding the disadvantages of poor countries in an increasingly competitive world. For a long time, professional and entrepreneurial migrations were analysed through these lenses: less developed countries invested scarce resources in the training of young professionals only to see them move abroad after completion of their studies.

Mid-income countries such as Mexico, Colombia, Turkey, Egypt, and India are particularly susceptible to this loss because they possess sufficient resources to train their students in advanced science, engineering, business administration, and other fields, but not to employ gainfully many of them upon graduation. The relative deprivation that these young professionals experience as they compare their lot to their peers in developed countries creates a mass of disposable talent, easily hired by firms and universities of the advanced world. In this fashion, less developed nations end up subsidizing richer ones, although deepening their own underdevelopment. This process, sometimes dubbed 'modernization for emigration', is graphically portrayed in Figure 1.

The main problem with these theories is that they overlook the tendency of most immigrant workers and professionals alike, to remain in close touch with the places they came from. Like their theoretical cousin, the classical theory of assimilation, the orthodox portrayal of the brain drain assumes that, once these fortunate individuals leave their countries, they never look back. This does not happen. As seen previously, the longer adult immigrants have resided abroad and the better established they have become, the more likely they are to involve themselves in activities concerning their home nations. As a result, countries like India and China, once seen as the principal 'victims' of the brain drain because of the number of professionals they exported annually, have become significant beneficiaries of the success of their expatriates. Their multiple transnational projects have fueled technological and economic development back home to an extent unanticipated only a few years ago (Leung 2008; Agarwala 2012; Zhou and Lee 2012).

Such bi-national flows have been characterized by two features. First, as Annalee Saxenian has noted, the activities of return professionals have consequences that go well beyond those of the remittances and philanthropic contributions of less-skilled migrants:

By promoting the development of local capabilities in Tel Aviv, Hsinchu, Shanghai, Bangalore, and other technology Clusters, while also collaborating with entrepreneurs in Silicon Valley, the new 'Argonauts' have initiated a process of transformation that is shifting the global balance of economic and technological resources (Saxenian 2006: 14).

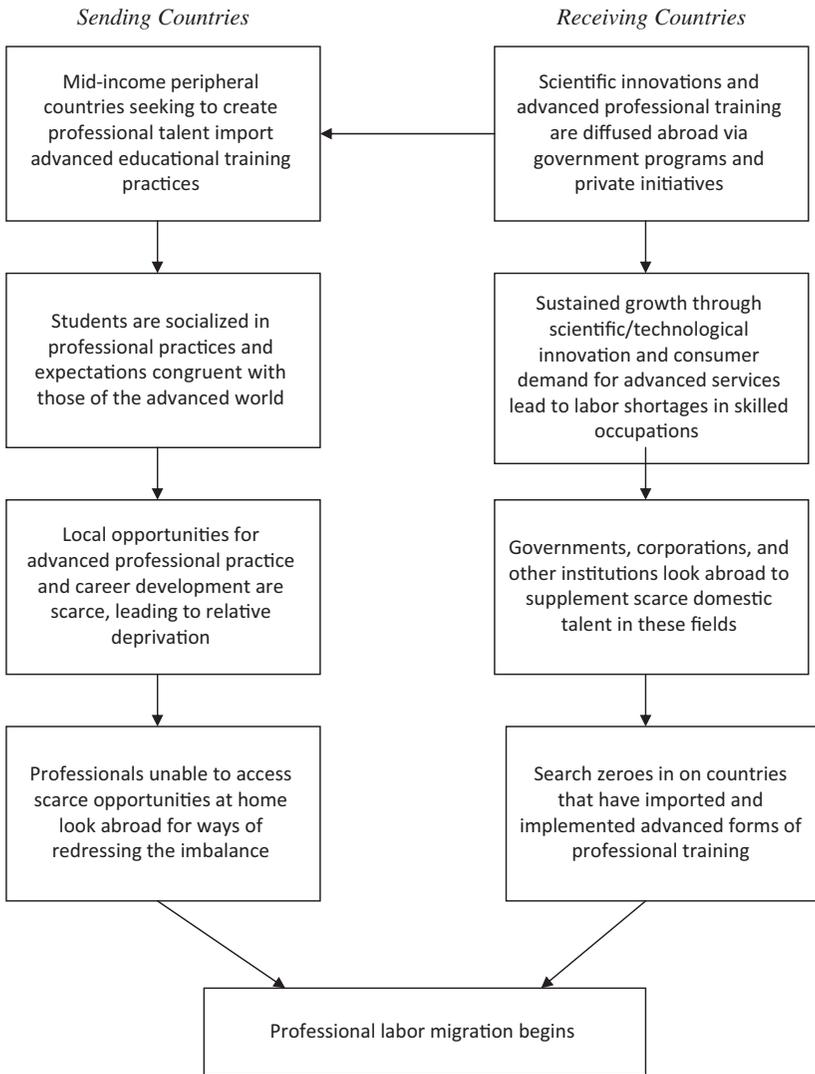


Figure 1. Dynamics of the brain drain – I.

Put differently, return professional migration possesses both structural importance for the sending economies and significant change potential for both sending and receiving regions. This potential is greater in the home countries because it can alter both their value systems and their skill repertoires, but it also can affect the institutional framework supporting technological entrepreneurship in the receiving societies (Zhou and Lee 2012). Second, the investments and knowledge transfers of

transnational entrepreneurs (whom Saxenian labels, the new ‘argonauts’) can be achieved *without leaving the host country*. The usual recommendation ensuing from traditional analyses of the brain drain is for source nations to try and repatriate their professionals. This solution rarely works because sending countries can seldom compete in terms of salaries or work conditions with those where their expatriates now live.

To the contrary, the transnational perspective highlights the key point that immigrant professional can, if they choose, transform permanent migration into a *cyclical* pattern through deliberate use of rapidly developing communication and transportation technologies. Indian engineers in Silicon Valley, Chinese software programmers in Boston and Filipino doctors everywhere can continue living and working in the USA while conducting a steady stream of exchanges and investments in their own countries. This is a direct reflection, at the personal level, of the compression of space brought about by the new technologies and the growing connectedness of the global economic system (Guarnizo 2003). Figure 2 portrays the dynamics at play.

A partial exception to the transnational trend among expatriate professionals is the case of political refugees. Communications and investments in their home country are commonly blocked because of their opposition to the dominant regime. Their case may be labeled ‘blocked transnationalism’ because, despite their skills and resources, they are prevented or prevent themselves from engaging in these kinds of activities for political reasons. Although exceptions to this pattern have been detected here and there, the main result is that nations forcing their educated citizens to flee effectively lose the significant developmental potential associated with their know-how and economic resources. Refugee communities in this situation tend to concentrate in consolidating their economic position abroad. If they possess a substantial entrepreneurial and professional presence, the result is normally the emergence of an ethnic business enclave. Cuban exiles clustered in Miami in the 1960s and 1970s; the Vietnamese in Orange County in the 1970s and 1980s; and Russian refugees in New York at century’s end provide examples of this pattern (Portes and Stepick 1993; Zhou and Bankston 1998; Kasinitz et al. 2008; Huynh and Yiu 2012).

4. Latest trends

As indicated before, theories about the positive effects of self-employment on the economic well-being of immigrant and ethnic groups have been buttressed by national-level data from the 1980s and 1990s. In this section, we explore the question of whether such theories hold in the twenty-first century as well. A first source of data is the Survey of Minority-owned Business Ownership, conducted by the US Census every 5 years. The latest data, for 2007, are presented in Table 1. It shows the number of firms owned by selected immigrant nationalities and native minorities, the number of such firms per 1,000 population, and their aggregate and per-firm business receipts. A useful feature of these data is that it separates firms without employees and those with at least one employee. The first type comes closer to the definition of self-employment as an economic survival

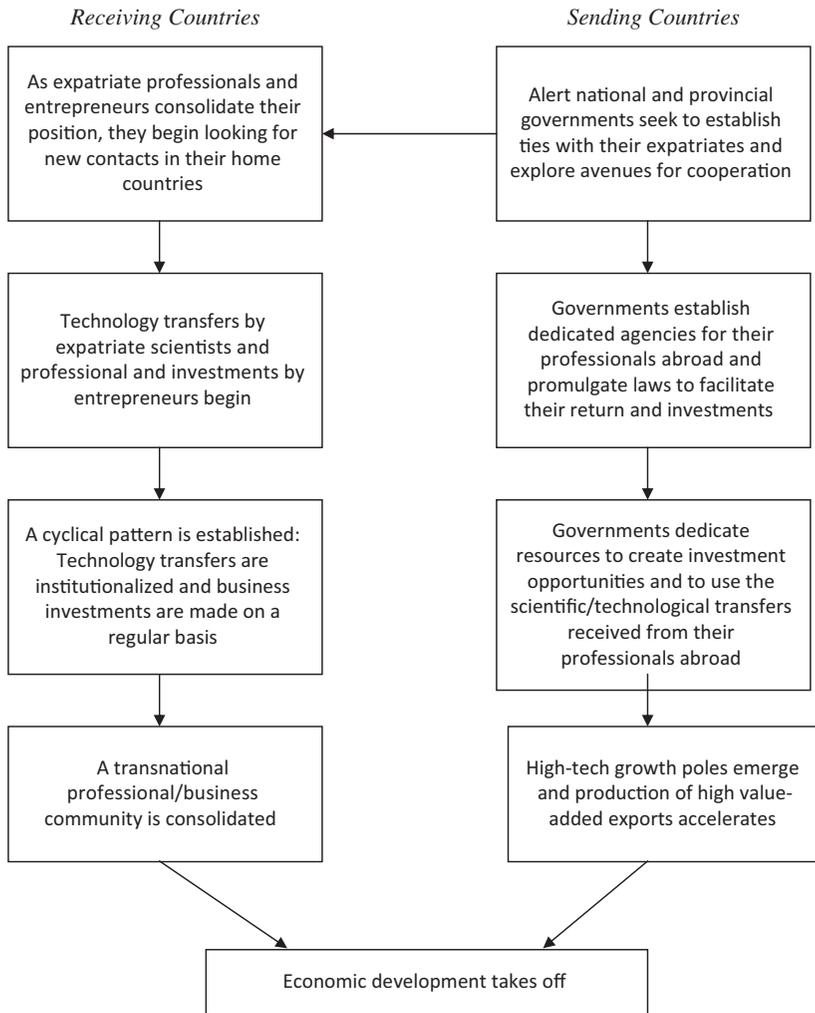


Figure 2. Dynamics of the brain drain – II.

strategy; whereas the second corresponds more accurately to its definition as a vehicle for economic mobility.

If we focus first on the total number of firms, Cubans appear as the most business-oriented group, followed by Koreans and Chinese. However, if we consider firm size, as indicated by gross receipts per capita, Asian Indian enterprises emerge as the largest, followed by Korean firms. Cuban enterprises are smaller, suggesting that they are mostly created for economic survival. At the bottom, under both criteria, are Filipino, Mexican, and African American enterprises. Filipinos, a highly educated group, have mostly opted

Table 1. Minority firm ownership and indicators of firm performance, 2007

Group	All firms					Firms with paid employees				
	Total number of firms	Firms per 1,000 population	Sales, receipts, or value of shipments \$1,000	Gross receipts per firm	Number of firms	Firms per 1,000 population	Employees per firm	Sales, receipts, or value of shipments \$1,000	Gross receipts per firm	
Asian										
Korean	192,509	143.20	78,265,621	406,556	71,411	53.10	5.9	71,878,029	1,006,540	
Asian Indian	308,491	120.00	151,787,438	492,032	109,151	42.50	7.7	140,241,758	1,284,842	
Japanese	108,338	134.90	39,329,933	363,030	22,820	28.40	9.2	35,887,794	1,572,647	
Chinese	423,650	139.40	142,430,082	336,198	109,653	36.10	7.1	127,702,215	1,164,603	
Filipino	163,163	67.60	20,119,442	123,309	21,067	8.70	6.7	15,655,435	743,126	
Latin American										
Cuban	250,976	155.80	58,307,148	232,322	32,210	20.00	7.7	50,478,443	1,567,167	
Mexican	1,035,920	35.50	154,942,238	149,570	119,233	4.10	8.6	120,754,906	1,012,764	
African American	1,921,864	51.50	135,739,834	70,629	106,566	2.90	8.5	97,144,898	911,594	

Sources: US Census Bureau, 2007 Survey of Business Owners; US Census Bureau, 2007 American Community Survey.

for the professional salaried route in lieu of autonomous enterprise. The figures for Mexicans and African Americans reflect, on the other hand, the position of both minorities at the bottom of the economic ladder. Notice that, in absolute terms, Mexican and African American firms are the most numerous, but these figures are swamped by the size of their respective populations.

If we turn now to firms with employees, we notice at once that they are much larger in terms of gross receipts. Koreans are at the top of this league in terms of firms per thousand population, followed by Indians. As a highly educated group, Indians combine the professional salaried route with sizable entrepreneurial investments. Their economic resources and human capital insure that their firms become vehicles for accumulation, rather than just survival. Cubans present a paradoxical picture, being one of the groups least represented in the category of enterprises with employees, but having the second largest firms in terms of receipts per firms. Figures for this group on the left and right sides of Table 1 reflect its bifurcation between the earlier upper and middle class exiles that arrived in the 1960s and 1970s, and subsequent refugee waves that came after the chaotic Mariel exodus of 1980 (Portes and Stepick 1993; Nijman 2011). Earlier exiles were responsible for the emergence of the flourishing enclave economy in Miami, anchored by large and mid-size firms. These earlier generations are now dying off and have been increasingly replaced by less-educated refugees who, although also entrepreneurially inclined, lack the resources to create anything more than single-person businesses. The large number of such firms on the left side of the table and the small relative number of established Cuban firms on the right reflect these demographic trends.

African Americans, Filipinos, and Mexicans are least represented in the category of better-established enterprises, although Mexicans have the largest absolute number of such firms. Again, these absolute numbers are swamped by the large size of the Mexican population. The data in this table paint a complex picture that suggests different entrepreneurial paths governed by the resources, histories, and context of reception of various ethnic and immigrant minorities.

A second key data source is the American Community Survey, conducted by the US Census in 2010. It provides information on an array of personal variables—including education, occupation, and income—that can be, in turn, broken down by national origins and ethnicity. Table 2 presents data for the self-employment rates, annual incomes, and hourly incomes for native whites, African Americans, and ten immigrant groups. These groups include the three largest (Mexicans, Chinese, and Indians); the three most entrepreneurial in terms of self-employment rates (Israelis, Iranians, and Koreans); three among the least entrepreneurial (Mexicans, Dominicans, and Jamaicans); and two of the largest refugee groups (Cubans and Vietnamese). The sample is restricted to adult males in the civilian labor force.

Self-employment is defined in two categories—general and incorporated. The first category includes all types of enterprises—from personal survival ventures to established firms. The second more closely reflects the latter type. A first anticipated finding is that the immigrant self-employment rate exceeds that of natives, although this is due to the low rate among African Americans; native whites are at par with immigrants on this score. Regardless of whether a broad or restricted definition of entrepreneurship is adopted, the

Table 2. Employment type and incomes for native and selected immigrant groups, 2010^a

Characteristics	Immigrants											Average	
	Natives												
	White	Black	Chinese	Cuban	Dominican	Indian	Iranian	Israeli	Jamaican	Korean	Mexican	Vietnamese	
Type of employment													
Waged/salaried worker	86.50	93.80	88.00	80.70	90.90	89.80	71.40	66.30	89.10	73.30	90.20	86.00	87.30
Self-employed—General	13.50	6.20	12.00	19.30	9.10	10.20	28.60	33.70	10.90	26.70	9.80	14.00	12.70
Self-employed—Incorp.	5.60	2.10	6.00	8.30	3.00	7.00	18.20	20.10	4.70	13.00	2.00	4.80	5.20
Annual income—Mean	59,235	38,431	62,211	44,622	32,470	82,485	85,562	106,864	42,753	60,610	27,404	46,961	55,583
Waged/salaried worker	58,025	38,178	67,129	44,632	32,883	81,698	85,637	115,261	44,083	59,450	27,234	47,765	54,447
Self-employed—General	67,001	42,263	59,462	44,581	28,359	89,380	85,374	90,319	31,825	63,789	28,945	42,039	63,401
Incorp.	88,825	61,818	79,071	64,661	32,514	102,556	108,349	109,037	33,976	78,415	41,450	61,378	85,798
Hourly income—Mean	26.20	18.30	30.20	20.60	15.30	37.20	37.30	43.20	20.00	27.50	13.40	22.30	24.80
Waged/salaried worker	25.50	18.10	30.60	20.50	15.40	37.00	37.20	47.20	20.60	26.70	13.20	22.60	24.20
Self-employed—General	30.40	20.10	26.70	21.10	14.70	38.10	37.40	35.30	15.20	29.90	14.90	20.50	29.00
Incorp.	38.40	28.00	34.30	26.60	15.50	42.30	46.80	41.40	15.30	34.80	19.40	29.00	37.10
Mean home worked per week	42.90	40.20	42.10	40.70	41.10	42.90	44.50	46.60	40.60	43.00	40.50	40.50	42.40
N ^b	484,394	43,327	6,481	1,943	1,490	199	956	199	1,179	2,245	31,358	2,927	670,370

^aSample restricted to males, between ages of 26 and 65 in civilian labor force. ^bUn-weighted sample. Figures in the table are adjusted using person-level analytical weights. *Source:* American-Community Survey, 2010.

same rank order obtains among immigrant groups—with Israelis, Iranians, and Koreans consistently on top and Mexicans and Dominicans at the bottom. Self-employment rates among these last groups still exceed, by a considerable margin, that of the largest native minority (African Americans).

Annual income figures confirm results from census data of the 1980s and 1990s: the self-employed earn more on average, both among natives and among immigrants. This finding holds, for the most part, for both definitions of self-employment although there are exceptions when the general (unrestricted) definition is considered. When restricted to incorporated businesses, the only exception are Jamaicans: whether average income for a particular group is above the national average—as among Indians, Iranians, and Chinese—or below—as among Dominicans and Mexicans—established business owners tend to earn significantly more. Exactly the same result obtains when we consider mean hourly earnings. This last finding provides an authoritative rebuttal to the argument that higher annual incomes among entrepreneurs are due to higher work effort in terms of hours worked (Bates 1989). Self-employment turns out to be more profitable both by the year and by the hour.

Table 3 presents results of a regression analysis of annual incomes on the usual set of human capital predictors plus self-employment and national origins. The left-most columns of Table 3 present results using a broad definition of self-employment; the right-most columns use a definition restricted to incorporated businesses. The models use real dollars rather than logged dollars as the dependent variable for reasons explained previously. Nationality variables use native whites as the reference category.

Results reproduce the familiar effects of human capital on incomes. With less than high school as the reference category, a bachelor's degree increases annual earnings by a net \$41,211 and a post-graduate degree by \$73,570. Fluency in English yields a net payoff of \$11,575 per year. With all other predictors controlled, the effect of general self-employment remains highly significant, adding a net \$2,435 per year. For comparison, this effect quadruples that of work experience, as indexed by age. If we shift attention to the net effects of incorporated firm ownership, the coefficient rises to an equally significant, but much more sizable, \$18,917 per year. These findings confirm those reported for earlier census years, indicating the positive overall effect of entrepreneurship on the economic well-being of immigrant groups.

Finally, Table 4 presents parallel regressions, this time with average hourly income as the dependent variable. These results again address the objection that higher economic rewards for entrepreneurs are a result of their extra work effort. As shown in the table, the positive economic effect of entrepreneurship remains highly significant, reaching almost \$8 per hour for owners of established businesses. All other effects run parallel to those described previously. It is worth noting that when self-employment enters the equation, many nationality effects—including those associated with entrepreneurial groups like Koreans, Chinese, and Cubans—turn negative or insignificant for both annual and hourly incomes. This indicates that whatever economic advantage these immigrant groups possess on average, it is largely due to their participation in independent business ventures. Exceptions are Israelis, Iranians, and Indians—groups with extraordinarily high levels of human capital—which, as seen previously, also allows them to derive high incomes from salaried employment.

Table 3. Regressions of annual incomes on self-employment, nationality, and selected predictors

Predictors	Self-employed vs. not		Self-employed, incorporated vs. not	
	Coeff.	SE	Coeff.	SE
Nationality (ref. native whites)				
African Americans	-9,462***	276	-9,101***	275
Chinese	-4,532***	715	-4,532***	713
Korean	-8,494***	1,162	-9,494***	1,158
Vietnamese	-2,954**	1,034	-2,828**	1,035
Cuban	-3,095**	1,247	-3,485**	1,244
Dominican	-6,278***	1,419	-6,111***	1,415
Mexican	-3,868***	457	-3,562***	466
Jamaican	-10,472***	1,567	-10,402***	1,563
Israeli	31,907***	3,811	29,807***	3,800
Iranian	5,647***	1,745	3,862*	1,740
Indian	3,201***	677	2,889***	675
Self-employed	2,435***	214	18,917***	319
Age	683***	6	663***	6
Married, spouse present	10,580***	176	10,338***	176
Number of children	4,871***	71	4,794***	71
Lives in South	-722***	149	-815***	148
Knows English well	11,575***	447	11,531***	446
Education (ref. less than high school)				
H.S. graduate	5,985***	289	5,875***	288
Associate degree	13,795***	290	13,670***	289
College graduate	41,212***	305	40,755***	304
Post-graduate degree	73,530***	334	72,967***	336
Adjusted R^2	0.225		0.230	

* $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$ Source: Microdata sample, American Community Survey, 2010.

5. Conclusion

Despite a dip brought about by the great economic downturn of 2008–10, immigration is likely to continue and grow in future years, driven by the structural need of the American economy for both manual and highly qualified labor, plus the dense transnational networks created by people across space. In this context, it makes every sense to inquire about the best path for occupational and economic incorporation for immigrants and their descendants.

Table 4. Regressions of mean hourly incomes on self-employment, nationality, and selected predictors

Predictors	Self-employed vs. not		Self-employed, incorporated vs. not	
	Coeff.	SE	Coeff.	SE
Nationality (ref. native whites)				
African American	-3.19***	0.15	-3.11***	0.15
Chinese	-0.56	0.40	-0.59	0.40
Korean	-2.69***	0.64	-2.95***	0.64
Vietnamese	0.03	0.57	0.08	0.57
Cuban	-0.76	0.69	-0.87	0.69
Dominican	-2.39***	0.79	-2.36**	0.78
Mexican	-0.95***	0.26	-0.86***	0.26
Jamaican	-3.72***	0.87	-3.73***	0.87
Israeli	10.57***	2.11	9.91***	2.11
Iranian	2.46**	0.97	1.87*	0.96
Indian	2.80***	0.37	2.65***	0.37
Self-employed	2.02***	0.12	7.72***	0.18
Age	0.32***	0.00	0.31***	0.00
Married, spouse present	3.88***	0.10	3.79***	0.10
Number of children	1.70***	0.04	1.67***	0.04
Lives in South	-0.62***	0.08	-0.66***	0.08
Knows English well	4.73***	0.25	4.71***	0.25
Education (ref. less than high school)				
H.S. graduate	2.40***	0.16	2.33***	0.16
Associate degree	5.83***	0.16	5.70***	0.16
College graduate	16.96***	0.17	16.74***	0.17
Post-graduate degree	29.75***	0.19	29.48***	0.19
Adjusted R^2		0.136		0.136

* $P < .05$; ** $P < .01$; *** $P < .001$ Source: Microdata sample, American community Survey, 2010.

With much reason, standard econometric and sociometric models of minority employment and income zero in on the human capital endowment of different groups. This is a crucial factor, but certainly not the only one. As the previous findings show, even groups with relatively modest average education can move ahead economically. The key factor is entrepreneurship.

Advantages accruing to an ethnic community by virtue of widespread business development extend beyond the economic success of individual business owners. A cadre of successful entrepreneurs provides accessible role models to others in the same

community and generally contributes to the strengthening of ethnic institutions. Bounded solidarity tends to be high among groups that define themselves and are defined by others in terms of their distinct physical or cultural characteristics (Rischin 1962; Goldscheider 1986; Portes and Sensenbrenner 1993). For this reason, the economically and professionally successful within these groups tend to support their own, a pattern that creates significant multiplier effects. This is especially the case when economic success has been built on co-ethnic networks facilitating access to capital, labor, or markets (Gold 1997; Zhou et al. 2008).

The analysis of individual-level census data cannot demonstrate these collective processes, and, for this reason, it conveys an impoverished image of the character and consequences of entrepreneurship. Among other things, it promotes relatively sterile debates about whether the self-employed gain or lose when their work effort is factored in or when the earnings equation employs a logarithmic transformation. Such debates are beside the point when the goal is to examine the collective consequences of a particular social process. More relevant for this purpose are historical and contemporary ethnographic studies that document the community-level advantages noted previously. The multiplier effects of independent business creation are present not only among immigrants but among other solidary groups, as well, whether these are defined in terms of class, culture, or race.

The findings from the previous analysis provide a point of departure for a final reflection. All too often, scholarly writings and policy prescriptions to ameliorate the plight of African Americans and other domestic minorities discard entrepreneurship as a viable option. They concentrate instead on issues of spatial segregation or advocate solutions as modest as minimum-wage public-works schemes. We do not believe that African American enterprise, at least as a partial answer to the condition of this minority, should be so easily disregarded. Although it is clear that the social and economic bases that sustain immigrant enclaves are commonly absent in areas of African American concentration (Bogan and Darity 2008), there is no *a priori* reason that they cannot be promoted or functional equivalents identified. The work of several scholars, primarily Butler (1991), documents the existence of vibrant black economies in a number of southern cities at the turn of the century. Although it would be naïve to attempt their resurrection under present conditions, they offer a suitable point of reference for programs in support of new African American enterprise.

A common misconception of past programs in support of minority business development is that such firms must be sizable in order to make a difference. This is not the case, as the experience of a number of immigrant enclaves makes clear. It is rather the proliferation of small firms, often not employing more than immediate family members, that creates the necessary environment for the self-sustaining capacity of an entrepreneurial community. The lesson that comes from these experiences is to start small and involve as many people as possible.

Lastly, professional and business immigrant communities need not drain their sending countries of talent and resources. As we have seen, by dint of their acquired knowledge and capital, these communities can make a significant contribution to development of the places they come from. The transnational literature makes clear that motivations to do so are present in most immigrant communities. The key variable is the policies and actions

of sending states. For immigrant groups to make a significant contribution to home country development *there must be something to return to*. The Chinese and Israeli governments, as well as those of several Indian states have learned this lesson, creating and supporting scientific and technological centers capable of engaging with professionals expatriates and encouraging knowledge transfer and investments from them.

Governments content with lying back and living off the flow of remittances will not garner the full benefits of economic and occupational achievements among their expatriates. In such cases, immigrant transnationalism can yield scarcely more than isolated works of philanthropy. Both in receiving and sending nations, the socio-political context is decisive since it governs the structure of opportunities for migrants to put their talent and motivation to work for economic advancement abroad and for sustained development of the places they left behind.

Note

1. Keynote address to the conference on Immigrant Entrepreneurship, University of Maryland at College Park and German Historical Institute of Washington DC, 13 September 2012. Partial support for this article was provided by a grant from the Spencer Foundation of Chicago.

References

- Agarwala, Rina (2012) 'Tapping the Indian diaspora for Indian development', *Paper Presented at the Conference on Immigrant Transnational Organization and Development*. Center for Migration and Development, Princeton University (May).
- Basch, Linda G., Glick-Schiller, Nina and Blanc-Szanton, Cristina (1994), *Nations Unbound: Transnational Projects, Post-colonial Predicaments, and De-territorialized Nation-States*. Langhorne, PA: Gordon and Breach.
- Bates, Timothy (1989) 'The Changing Nature of Minority Business: A Comparative Analysis of Asian, Non-minority, and Black-Owned Business', *The Review of Black Political Economy*, 18, 25–42.
- Bogan, Vicki and Darity, William Jr (2008) 'Culture and Entrepreneurship? African American and Immigrant Self-employment in the United States', *Journal of Socio-Economics*, 37/5, 1999–2019.
- Bonacich, Edna and Modell, John (1980), *The Economic Basis of Ethnic Solidarity: Small Business in the Japanese-American Community*. Berkeley: University of California Press.
- Borjas, George J. (1986) 'The Self-employment Experience of Immigrants', *The Journal of Human Resources*, 21, 485–506.
- (1987) 'Self-selection and the Earnings of Immigrants', *American Economic Review*, 77, 531–53.
- Butler, John S. (1991), *Entrepreneurship and Self-help Among Black Americans*. Albany: State University of New York Press.
- Frazier, E. Franklin (1949), *The Negro in the United States*. New York: Macmillan.

- Gold, Steven J. (1997) 'Transnationalism and Vocabularies of Motive in International Migration: The Case of Israelis in the United States', *Sociological Perspectives*, 40, 409–27.
- Goldscheider, Calvin (1986), *Jewish Continuity and Change: Emerging Patterns in America*. Bloomington, IN: Indiana University Press.
- Guarnizo, Luis E. (2003) 'The Economics of Transnational Living', *International Migration Review*, 37/Fall, 666–99.
- & Sanchez, Arturo I. and Roach, Elizabeth (1999) 'Mistrust, Fragmented Solidarity, and Transnational Migration: Colombians in New York and Los Angeles', *Ethnic and Racial Studies*, 22, 367–96.
- Hart, David M. and Acs, Zoltan J. (2011) 'High-tech Immigrant Entrepreneurship in the United States', *Economic Development Quarterly*, 25/2, 116–29.
- Howe, Irving (1976), *World of Our Fathers*. New York: Harcourt, Brace, and Jovanovich.
- Huynh, Jennifer and Yiu, Jessica (2012) 'Breaking blocked transnationalism: intergenerational change in homeland ties', *Paper Presented at the Conference on Immigrant Transnational Organizations and Development*. Center for Migration and Development, Princeton University (May).
- Itzigsohn, Jose (2009), *Encountering American Faultlines: Race, Class, and the Dominican Experience*. New York: Russell Sage Foundation.
- Kasinitz, Philip et al. (2008), *Inheriting the City: The Children of Immigrants Coming of Age*. New York: Russell Sage Foundation.
- Kim, Ilsoo (1981), *New Urban Immigrants: The Korean Community in New York*. Princeton, NJ: Princeton University Press.
- Kim, Daeyoung (2006) 'Stepping-stone to Intergenerational Mobility? The Springboard, Safety Net, or Mobility Trap Functions of Korean Immigrant Entrepreneurship for the Second Generation', *The International Migration Review*, 40/4, 927–62.
- Landolt, Patricia, Autler, Lilian and Baires, Sonia (1999) 'From 'Hermano Lejano' to 'Hermano Mayor': The Dialectics of Salvadoran Transnationalism', *Ethnic and Racial Studies*, 22, 290–315.
- Leung, Maggi W.H. (2008) 'Homeward Bound Investors: The Role of Overseas Chinese in China's Economic Development', in van Naerssen, T., Spaan, E. and Zoomers, A. (eds), *Global Migration and Development*, pp. 288–308. New York: Routledge.
- Levitt, Peggy and Glick Schiller, Nina (2004) 'Conceptualizing Simultaneity: A Transnational Social Field Perspective on Society', *International Migration Review*, 38/Fall, 1002–39.
- Light, Ivan (1979) 'Disadvantaged Minorities in Self-employment', *International Journal of Comparative Sociology*, 20, 31–45.
- (1984) 'Immigrant and Ethnic Enterprise in North America', *Ethnic and Racial Studies*, 7, 195–216.
- and Rosenstein, Carolyn (1995) 'Expanding the Interaction Theory of Entrepreneurship', in Portes, A. (ed.), *The Economic Sociology of Immigration*, pp. 166–212. New York: Russell Sage.
- and Bonacich, Edna (1988), *Immigrant Entrepreneurs: Koreans in Los Angeles 1965–1982*. Berkeley: University of California Press.

- Lofstrom, Magnus (2002) 'Labor Market Assimilation and the Self-employment Decision of Immigrant Entrepreneurs', *Journal of Population Economics*, 15/1, 83–114.
- Massey, Douglas S (1987) 'Understanding Mexican Migration to the United States', *American Journal of Sociology*, 92, 1372–403.
- Min, Pyong Gap and Bozorgmehr, Mehdi (2000) 'Immigrant Entrepreneurship and Business Patterns: A Comparison of Koreans and Iranians in Los Angeles', *International Migration Review*, 34/3, 707–38.
- Nee, Victor and Sanders, Jimmy (1994) 'Job Transitions in an Immigrant Metropolis: Ethnic Boundaries and the Mixed Economy', *American Sociological Review*, 59, 849–72.
- Nijman, Jan (2011), *Miami: Mistress of the Caribbean*. Philadelphia, PA: University of Pennsylvania Press.
- Petersen, William (1971), *Japanese Americans: Oppression and Success*. New York: Random House.
- Portes, Alejandro and Bach, Robert L. (1985), *Latin Journey: Cuban and Mexican Immigrants in the United States*. Berkeley, CA: University of California Press.
- and Stepick, Alex (1993), *City on the Edge: The Transformation of Miami*. Berkeley: University of California Press.
- and Sensenbrenner, Julia (1993) 'Embeddedness and Immigration: Notes on the Social Determinants of Economic Action', *American Journal of Sociology*, 98, 1320–50.
- and Jensen, Leif (1989) 'The Enclave and the Entrants: Patterns of Ethnic Enterprise in Miami Before and After Mariel', *American Sociological Review*, 54, 929–49.
- and Zhou, Min (1996) 'Self-employment and the Earnings of Immigrants', *American Sociological Review*, 61, 219–30.
- (1999) 'Entrepreneurship and Economic Progress in the 1990s: A Comparative Analysis of Immigrants and African Americans', in Bean, F. and Bell-Rose, S. (eds), *Immigration and Ethnicity in the United States*, pp. 143–71. New York: Russell Sage.
- & Haller, William and Guarnizo, Luis E. (2002) 'Transnational Entrepreneurs: An Alternative Form of Immigrant Adaptation', *American Sociological Review*, 67, 278–98.
- Raijman, Rebecca (2001) 'Determinants of Entrepreneurial Intentions: Mexican Immigrants in Chicago', *Journal of Socio-Economics*, 30, 393–411.
- Rischin, Moses (1962), *The Promised City: New York Jews 1870–1914*. Cambridge, MA: Harvard University Press.
- Roberts, Bryan R., Frank, Reanne and Lozano-Asencio, Fernando (1999) 'Transnational Migrant Communities and Mexican Migration to the United States', *Ethnic and Racial Studies*, 22, 238–66.
- Saxenian, Anna Lee (1999), *Silicon Valley's New Immigrant Entrepreneurs*. San Francisco: Public Policy Institute of California.
- (2006), *The New Argonauts: Regional Advantage in a Global Economy*. Cambridge, MA: Harvard University Press.
- Stepick, Alex et al. (2001) Shifting Identities and Generational Conflict: Growing up Haitian in Miami, in Rumbaut, R. G. and Portes, A. (eds), *Ethnicities: Children of Immigrants in America*. Berkeley, CA: UC Press and Russell Sage Foundation.
- Telles, Edward E. and Ortiz, Vilma (2008), *Generations of Exclusion: Mexican-Americans, Assimilation and Race*. New York: Russell Sage Foundation.

- Tienda, Marta and Raijman, Rebecca (2004) 'Promoting Hispanic Immigrant Entrepreneurship in Chicago', *Journal of Developmental Entrepreneurship*, 9/1, 1–21.
- Tilly, Charles (1990) 'Transplanted Networks', in Yans-McLaughlin, V. (ed.), *Immigration Reconsidered: History, Sociology, and Politics*, pp. 79–95. New York: Oxford University Press.
- Vertovec, Steven (2004) 'Migrant Transnationalism and Modes of Transformation', *International Migration Review*, 38, 970–1001.
- Zhou, Min (2004) 'Revisiting Ethnic Entrepreneurship: Convergencies, Controversies, and Conceptual Advancements', *International Migration Review*, 38(Fall), 1040–1074.
- and Bankston, Carl (1998), *Growing up American: How Vietnamese Immigrants Adapt to Life in the United States*. New York: Russell Sage Foundation.
- et al. (2008) 'Success Attained, Deterred, and Denied: Divergent Pathways to Social Mobility in Los Angeles' New Second Generation', *Annals of the American Academy of Political and Social Sciences*, 620, 37–61.
- and Lee, Rennie (2012) 'Traversing ancestral and new homelands: Chinese immigrant organizations in the United States', *Paper Presented at the Conference on Immigrant Transnational Organization and Development*. Center for Migration and Development, Princeton University (May).