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Immigration and the U.S. Labor Market

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Non-Technical Abstract

Over the last several decades, two of the most significant developments in the U.S. labor market have been: (1) rising inequality, and (2) growth in both the size and the diversity of immigration flows. Because a large share of new immigrants arrive with very low levels of schooling, English proficiency, and other skills that have become increasingly important determinants of success in the U.S. labor market, an obvious concern is that such immigrants are a poor fit for the restructured American economy. In this chapter, we evaluate this concern by discussing evidence for the United States on two relevant topics: the labor market integration of immigrants, and the impact of immigration on the wages and employment opportunities of native workers. In these dimensions, the overall labor market performance of U.S. immigrants seems quite favorable. U.S. immigrants have little trouble finding jobs, and this is particularly true of unskilled immigrants. Most U.S. immigrants experience substantial earnings growth as they adapt to the American labor market. For most immigrant groups, the U.S.-born second generation has achieved socioeconomic parity with mainstream society; for some Hispanic groups, however, this is not the case. On the whole, immigration to the United States has not had large adverse consequences for the labor market opportunities of native workers. Therefore, with regard to the economic integration and labor market impacts of immigration, it is not obvious that the seemingly haphazard nature of U.S. immigration policy has led to unfavorable outcomes.

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I. Introduction

Over the last several decades, two of the most significant developments in the U.S. labor market have been: (1) rising inequality, and (2) growth in both the size and the diversity of immigration flows. Because a large share of new immigrants arrive with very low levels of schooling, English proficiency, and other skills that have become increasingly important determinants of success in the U.S. labor market, an obvious concern is that such immigrants are a poor fit for the restructured American economy. In this chapter, we evaluate this concern by discussing evidence for the United States on two relevant topics: the labor market integration of immigrants, and the impact of immigration on the wages and employment opportunities of native workers.

To set the stage regarding immigrant skills, we calculated the educational distributions of native and immigrant men from U.S. Census microdata for the year 2000.¹ Fully a third of foreign-born men have less than 12 years of schooling, compared to only 9 percent of U.S.-born men. The contrast is even more striking for men with less than 9 years of schooling; this group represents 24 percent of the immigrant population and less than 3 percent of the native population. Looking at this same phenomenon from a slightly different perspective, immigrants comprise only about 13 percent of the overall sample of men, but they make up 35 percent of the men with less than 12 years of schooling and almost 60 percent of the men with less than 9 years of schooling. Education levels are particularly low for immigrants from Mexico (by far the largest national origin group of U.S. immigrants), with two-thirds of these men possessing less

¹ Though not described here, the educational distributions of women are similar. Our calculations are for men ages 25-59 who do not reside in institutions. We choose this age range so as to focus on men in their prime working years who likely have completed their formal schooling. Persons born abroad of American parents are excluded, because the distinction between immigrants and native is fuzzy for such individuals. Also excluded are foreign-born individuals who may have been younger than age 16 when they arrived in the United States, in order to avoid complications that arise with immigrants who arrived as

than 12 years of schooling. Clearly, immigrants are disproportionately concentrated among U.S. workers with the lowest education levels.

At the same time, however, immigrants are well represented among U.S. workers with the highest education levels. Completion of a bachelor's degree is about equally common for foreign-born men (27 percent) as for U.S.-born men (28 percent), whereas a higher fraction of foreign-born than U.S.-born men earn postgraduate degrees (13 percent versus 10 percent). Immigrants are overrepresented at the bottom and, to a lesser extent, the top of the U.S. educational distribution, and they are underrepresented in the middle (with 40 percent of immigrants, compared to 63 percent of natives, completing 12-15 years of schooling).

The backdrop for resurgent U.S. immigration has been an economy in which earnings inequality and the labor market rewards to education and other indicators of worker skill have increased dramatically (Levy and Murnane 1992; Autor and Katz 1999). How have U.S. immigrants fared in the last few turbulent decades? In particular, how have recent shifts in the wage structure and other ongoing changes in the U.S. economy affected the large group of immigrants who arrive with little in the way of schooling or skills? In effect, these unskilled immigrants are swimming upstream against the predominant economic currents that have heightened the importance of education and cognitive ability. In the restructured U.S. labor market, what is the role of immigrants, in general, and of unskilled immigrants, in particular?

II. Labor Market Integration of Immigrants

How quickly and completely do immigrants adapt to the U.S. labor market? In this section, we discuss five key aspects of immigrant economic integration: (1) the availability of

jobs for immigrant workers, (2) the extent to which the earnings of immigrants grow as they gain experience in the U.S. labor market, (3) the unique circumstances faced by illegal immigrants, (4) the potential for selective admissions policies to raise the skill content of immigration flows to the United States, and (5) the intergenerational mobility of immigrant families.

A. Employment

How well has the U.S. labor market been able to absorb the large inflows of immigrants received in recent years, especially the immigrants from less developed countries who often arrive with little education and few skills? An important indicator of the answer to this question is the ease with which these immigrants find gainful employment in the United States. Therefore, we first compare the employment rates of foreign-born and U.S.-born men, focusing in particular on how these comparisons vary by education and by the amount of time immigrants have had to adjust to their new country of residence.²

For the same sample of men from the 2000 U.S. Census described previously (see footnote 1 for details about this sample), we calculated employment rates for U.S. natives, all immigrants, and Mexican immigrants. Here, the employment rate represents the percentage of men who were employed at any time during the calendar preceding the Census. For each nativity group, employment rates were calculated separately by education group, as well as separately for recent immigrant arrivals (who have been in the United States for at most five years) and for earlier immigrants (who have lived in the United States for six or more years).

Sampling weights were used in the calculations.

² The labor supply decisions of women are often more sensitive than those of men to competing responsibilities within the household. As a result, we view male employment rates as primarily reflecting labor demand and the market opportunities available to specific groups of workers, whereas this view is less tenable for female employment rates. For this reason, we report results only for men. The general patterns, however, are similar for women.

Overall, male employment rates are similar for natives (91 percent) and immigrants (89 percent), but immigrant-native employment differences vary enormously by education level. Among high school dropouts, the employment rate of foreign-born men exceeds that of U.S.-born men by 12 percentage points, whereas employment rates are nearly identical (at around 88 percent) for immigrants and natives with 12 years of schooling. For those with more than a high school education, employment rates are 3-4 percentage points higher for natives than for immigrants. Immigrant men display high employment propensities, relative to native men, among those in the lowest education group, and the magnitude of this immigrant employment advantage is striking.

This pattern becomes even sharper once immigrants are disaggregated by their year of arrival in the United States. Immigrant employment rates are 7-10 percentage points lower for recent arrivals—men who have been in the country for five years or less at the time of the Census—than for earlier arrivals. The single cross-section of Census data analyzed here is incapable of distinguishing assimilation and cohort effects (Borjas 1985, 1995a), but other studies that follow immigrant arrival cohorts across Censuses show that the depressed labor force activity of recent arrivals primarily represents an adjustment process that all immigrant cohorts experience during their first few years in the United States³ In 2000 Census data, the employment rate of immigrant men shoots up by almost twenty percentage points during the first few years following arrival, and thereafter employment rises more slowly with further time in the United States until after about 13 years the immigrant employment rate converges to the 91 percent rate of U.S.-born men.

For our purposes, the key point is to disregard the recent arrivals and instead focus on the

employment rates of immigrants who have been here long enough to be past the initial period of adjustment to the U.S. labor market. Consider, for example, immigrant men who have lived in the United States for six or more years. Overall, the employment rate for these men exceeds 90 percent, and it is just half a percentage point below the corresponding rate for natives. In the lowest education group—those with less than 12 years of schooling—these immigrants hold a 14 percentage point employment rate advantage over U.S.-born men (an employment rate of 87 percent for the relevant immigrants versus 73 percent for the corresponding native men). In all of the other education groups, employment rates do not differ much by nativity, once we focus on immigrants who have had some time to adjust to their new surroundings.

Our analysis suggests that finding paid employment is not a major problem for U.S. immigrants. After a period of adjustment during the first few years upon arrival, the overall employment rate of immigrant men quickly approaches that of U.S. natives. Among those with the lowest education levels, immigrants exhibit substantially higher rates of employment than comparable natives. Despite ongoing structural changes in the U.S. labor market—including the widening of earnings inequality and a steep rise in the reward associated with additional years of formal schooling—employer demand for low-skill immigrant workers has remained high. Reinforcing this conclusion is the fact that employment rates for Mexican immigrants are similar to those for immigrants as a whole, notwithstanding the very low educational attainment of most Mexican immigrants.

B. Earnings Growth

³ See, for example, Chiswick, Cohen, and Zach (1997), Funkhouser and Trejo (1998), Schoeni (1998), Funkhouser (2000), and Antecol, Kuhn and Trejo (2006).

Labor economists have been studying, in a systematic way, the economic assimilation of immigrants for over thirty years. Analyzing data from the 1970 U.S. Census, Chiswick (1978) concluded that the earnings of immigrants grow rapidly as they adjust to the U.S. labor market, enabling immigrants, on average, to erase their initial earnings deficit relative to natives within ten or fifteen years, and immigrants then go on to earn more than natives in the later stages of their careers. Over the last half of the twentieth century, however, dramatic changes occurred in the national origin and skill composition of U.S. immigrant flows. The share of immigrants originating in Europe and Canada fell sharply, with the slack taken up by surging immigration from Asia and Latin America. A substantial body of research subsequently shows that more recent immigrant arrival cohorts are less skilled and have been less successful in the labor market than earlier cohorts, and that there are important links between the shifts in national origins and declining immigrant skills (Borjas 1992, 1994a, 1999; Card 2005).⁴ Contrary to the traditional view that immigrants rapidly assimilate into the economic mainstream of American society, the revisionist studies predict that most foreign-born workers who entered the United States in recent years will throughout their lifetimes earn substantially less than native workers (Borjas 1995a).

To date, Lubotsky (2006) provides the most convincing estimates of post-migration earnings growth for foreign-born workers in the United States. By employing longitudinal data from the social security earnings histories of individual workers, Lubotsky's analysis not only addresses unobserved heterogeneity across immigrant arrival cohorts, but it also accounts for selective emigration. Although correcting for these factors lowers estimates of immigrant

⁴ In particular, immigrant earnings in the United States are strongly correlated with per capita Gross National Product in the source country (Jasso and Rosenzweig 1986; Borjas 1987), presumably because workers from industrialized countries are better trained than workers from developing countries and their skills transfer more readily to the U.S. labor market.

earnings growth, Lubotsky still finds evidence of substantial labor market assimilation for U.S. immigrants: “over their first 20 years in the United States, immigrant earnings grow by 10-15 percent relative to the earnings of native-born workers” (Lubotsky 2006, p. 864). Consistent with other research (Borjas 1995a; Trejo 2003; Blau and Kahn 2007; Borjas and Katz 2007), Lubotsky also finds that earnings assimilation is considerably slower for Hispanic (predominately Mexican) immigrants than for other immigrants.

Antecol, Kuhn, and Trejo (2006) broaden the analysis of immigrant earnings growth in two interesting ways. First, they distinguish the separate impacts of assimilation on the employment and wage opportunities of immigrants. In percentage terms, the growth in total earnings arising from assimilation is equal to the sum of assimilation’s impacts on immigrant employment rates and on the weekly wages that immigrants earn when employed. Second, they provide a comparative analysis of immigrant earnings assimilation in Australia, Canada, and the United States, countries that share a common history as prime destinations for international migrants.

Analyzing Census data for each country that spans the decade of the 1980s, Antecol, Kuhn, and Trejo (2006) find large differences across countries in both the total amount and the form (i.e., the relative importance of employment versus wage adjustments) of immigrant earnings growth. They show that earnings assimilation is greatest in the United States and least in Australia. Furthermore, employment assimilation explains *all* of the earnings progress experienced by Australian immigrants, whereas wage assimilation plays the dominant role in the United States, with Canada in between these cases. They argue that these patterns reflect the impact of host country labor market institutions on the immigrant assimilation process, with relatively inflexible wages and generous unemployment insurance in countries like Australia

causing assimilation to occur along the “quantity” (i.e., employment) rather than the “price” (i.e., wage) dimension. In addition, Australia’s relatively compressed wage distribution reduces the scope for immigrant wage growth and might reduce incentives to make post-arrival investments in human capital.

C. Illegal Immigration

A key feature of U.S. immigration is that much of it is undocumented. How does legal status, by itself, affect the labor market opportunities of immigrants? Most data sources cannot identify illegal immigrants, and so they are unable to answer this question. Perhaps the best evidence on the labor market impact of legal status comes from a survey that tracked the experiences of initially-undocumented immigrants before and after they were granted permanent legal resident status through the amnesty provisions of the 1986 Immigration Reform and Control Act (IRCA). Despite using somewhat different approaches to analyzing these data, Rivera-Batiz (1999) and Kossoudji and Cobb-Clark (2002) reach similar conclusions. First, after controlling for observable skills constant, the estimates suggest that legalization raised the wages of these workers by about 5-10 percent relative to what their wages would have been had the workers remained undocumented. Second, by increasing the incentives for these workers to invest in human capital, legalization also may have induced greater skill acquisition and thereby boosted wages through this indirect channel.

Although data limitations preclude strong conclusions on this topic, available research suggests that labor market skills play a much bigger role than legal status in determining economic outcomes for U.S. immigrants. For example, the low wages earned by recent immigrants from Mexico and Central America, many of whom are undocumented, are primarily

due to their low levels of education and English proficiency, not their illegal status (Duncan, Hotz, and Trejo 2006). Unskilled immigrants, whether legal or illegal, tend to be treated similarly by the U.S. labor market. An open question, however, is whether legal status has important intergenerational effects. For example, how does growing up with an undocumented parent (or other family member) impact the U.S.-born children of immigrants? We currently know very little about this issue.

D. Raising Immigrant Skills through Selective Admissions Policies

If the United States wanted to improve the skill composition of its immigrant flow, how could it go about doing so? For several decades, immigrant admissions policies in Australia and Canada have incorporated some variant of a “point system” that screens for workers with special skills or high levels of education (Boyd 1976; Price 1979; Green and Green 1995). In these countries, some immigrants are able to gain admission by passing a “points test” that weights characteristics such as age, education, language ability, and occupation. Such efforts run counter to the family reunification emphasis of U.S. immigration policy. Is there any evidence that the skill-based admissions policies employed in Australia and Canada have raised the skill content of immigrant flows to these countries relative to the United States?

For several reasons, it is not a foregone conclusion that the Australian and Canadian systems lead to an immigrant flow that is highly selective in terms of characteristics associated with labor market success. First, both systems admit many immigrants who are not screened by a points test, including applicants with immediate family who are citizens of the destination country, refugees, and the family members who accompany those admitted by a points test. Second, both systems award a significant number of points based on a “personal assessment” of

the applicant by the immigration official conducting the face-to-face interview. Finally, Reitz (1998) argues that the Australian and Canadian points tests can be passed by applicants with quite modest skill levels, and therefore these tests may provide only very weak filters for immigrant labor market skills.

In an attempt to discern the effects of U.S. and Canadian immigration policy on immigrant outcomes, Duleep and Regets (1992) compare immigrants originating from the same region of the world. Although Canadian immigrants are more language proficient, they possess neither an education nor an earnings advantage relative to their U.S. counterparts. Duleep and Regets conclude that the Canadian points-based system has little effect on immigrant education and earnings. Pooling immigrants across all source countries, Borjas (1993) finds an earnings advantage for Canadian immigrants—resulting from Canadian immigrants having more education on average—which to a large extent disappears once immigrants from the same source country are compared. Borjas concludes that the Canadian immigration system produces a favorable effect on immigrant outcomes by altering the mix of source countries.

Using more recent data and extending the analysis to include Australia, Antecol, Cobb-Clark, and Trejo (2003a) reexamine the consequences of skill-based immigration policies on immigrant outcomes. They do so by comparing the observable skills—language fluency, education, and income—of immigrants to these three countries. Census data indicate that Australian and Canadian immigrants have higher levels of English fluency, education, and income (relative to natives) than do U.S. immigrants. This skill deficit for U.S. immigrants arises primarily because the United States receives a much larger share of immigrants from Latin America than do the other two countries.

For each destination country, Antecol, Cobb-Clark, and Trejo (2003a) show the region of birth distribution for the immigrants in their samples who arrived within ten years of the relevant Census.⁵ The most striking difference in the national origin composition of immigrants to the three countries involves Latin America. Almost half of post-1980 immigrants to the United States hail from Central or South America (including Mexico and the Caribbean), whereas only 14 percent of Canadian immigrants and 2 percent of Australian immigrants come from this region.⁶ In addition, the United States receives relatively fewer immigrants from the United Kingdom and Europe than do the other countries: immigrants from these regions comprise 11 percent of the U.S. immigration flow as compared to 26 percent of the Canadian flow and 33 percent of the Australian flow. Another difference is that Asians make up a somewhat larger share of the immigrant flow to Australia (36 percent) and Canada (40 percent) than to the United States (28 percent). Lastly, Australia receives a sizeable number of immigrants from New Zealand.

For post-1980/81 immigrant arrivals, Antecol, Cobb-Clark, and Trejo (2003a) then compare educational attainment by region of birth and destination country. Among immigrants from a particular source region, the education level of U.S. immigrants typically matches or exceeds that of Australian and Canadian immigrants, yet on the whole U.S. immigrants average about a year and a half less schooling than immigrants in the other two destination countries. The explanation for this pattern is the large immigration flow from Latin America to the United States. U.S. immigrants from Central and South America average less than ten years of

⁵ The data are from the 1991 Australian and Canadian Censuses and the 1990 U.S. Census. The samples include foreign-born men ages 25-59 who immigrated during 1981-91 in the Australian and Canadian data or during 1980-90 in the U.S. data.

⁶ The Australian and Canadian Census data do not identify particular countries or sub-regions within Latin America, so this region of birth cannot be disaggregated further.

schooling, and excluding this group from the calculations causes the mean education level of U.S. immigrants to shoot up from 11.7 years to 13.9 years. Considering only those who originate from outside of Latin America, U.S. immigrants average half a year *more* schooling than do immigrants to Australia or Canada. Consequently, the overall educational gap between U.S. immigrants and immigrants in the other two destination countries arises primarily because the United States receives a large flow of poorly-educated immigrants from Latin America.

The preceding discussion pertains to average schooling levels. Immigration point systems like those used in Australia and Canada might be particularly effective at screening out immigrants from the bottom tail of the education distribution. Antecol, Cobb-Clark, and Trejo (2003a) demonstrate, however, that the patterns evident at low education levels are similar to those just described for average education levels. For example, among immigrants arriving after 1980/81, the share with ten or fewer years of schooling is 15.8 percent in Australia, 15.7 percent in Canada, and 29.9 percent in the United States. Excluding immigrants from Latin America barely affects the Australian and Canadian calculations but drops the share for U.S. immigrants to 13.8 percent. Once immigrants from Latin America are excluded, U.S. immigrants are less likely than Australian and Canadian immigrants to possess low levels of schooling.

In his analysis of earlier Census data for Canada and the United States, Borjas reports a similar finding: “Differences in the national-origin mix of immigrants arriving in Canada and the United States since 1965 are mainly responsible for the higher average skills and relative wages of immigrants in Canada” (Borjas 1993, p. 35). The large U.S. immigration flow from Latin America plays a leading role in this story, although not quite as dominant a role in Borjas’s version of the story as it does in that of Antecol, Cobb-Clark, and Trejo (2003a).⁷ From his

⁷ See footnote 10 of Borjas (1993).

analysis, Borjas concludes that the Canadian “point system works because it alters the national-origin mix of immigrant flows” (Borjas 1993, p. 40).

In contrast, Antecol, Cobb-Clark, and Trejo (2003a) argue that their analysis provides little support for the proposition that the skills of U.S. immigrants would improve if the United States were to adopt an immigration point system similar to those in Australia and Canada. For several reasons, they strongly doubt that the Australian and Canadian point systems are the primary reason that these countries receive few Latin American immigrants relative to the United States. First of all, the United States shares a wide border and a long history with Mexico, and these factors undoubtedly contribute to the large presence of Latin American immigrants in the United States. Second, Australia and Canada never received many immigrants from Latin America, even before immigration point systems were adopted by Australia in the 1970s and by Canada in the late 1960s (see Reitz 1998, Table 1.1, pp. 10-12). Third, much of U.S. immigration from Latin America is undocumented (Warren and Passel 1987; Passel 2004; Passel, Capps, and Fix 2004) and subject to limited official control (Bean, Espenshade, White, and Dymowski 1990; Donato, Durand, and Massey 1992; Kossoudji 1992; Hanson 2006). A point system that screens legal immigrants for skills may do little to raise the skills or restrict the entry of Latin American immigrants to the United States, because these immigrants seem to find it relatively easy to enter outside of the official admissions system. Finally, Antecol, Cobb-Clark, and Trejo (2003a) note that the general patterns they find for men also emerge for women, even though female immigrants are much more likely to enter as dependent family members not subject to any particular selection criteria (Antecol, Cobb-Clark, and Trejo 2003b).

E. Intergenerational Mobility

Historically, much of the socioeconomic mobility achieved by U.S. immigrant families has taken place *across* rather than *within* generations. For example, previous waves of predominantly unskilled immigrants, such as the Italians and Irish, enjoyed substantial intergenerational progress that ultimately enabled their descendants to join the economic mainstream of American society, but this process took two or three generations to unfold (Chiswick 1977; Neidert and Farley 1985; Lieberman and Waters 1988; Farley 1990; Borjas 1994b; Perlmann and Waldinger 1997; Alba and Nee 2003; Perlmann 2005). There is considerable skepticism, however, that the processes of assimilation and adaptation will operate similarly for the predominantly non-white immigrants who have entered the United States in increasing numbers over the past several decades (Gans 1992; Portes and Zhou 1993; Rumbaut 1994). Indeed, Huntington (2004) voices a particularly strong version of such skepticism with regard to Hispanic immigration.

For a large number of national origin groups, Figure 1 shows one dimension of educational progress between immigrants and their U.S.-born children. Using 1994-2006 data from the Current Population Survey, we calculated high school dropout rates (i.e., the percentage of individuals with less than 12 years of schooling) for first- and second-generation men from the 51 source countries with reasonable sample sizes (at least 30 observations) for both generations. Here, the first-generation men are immigrants between the ages of 45-59. The second-generation men are the U.S.-born children of immigrants, and they are between the ages of 25-39. The regression line plotted in the figure shows the central tendency of the relationship between the dropout rate of the second-generation men from a particular source country and that of their immigrant ancestors.

Figure 1 illustrates several important points regarding the intergenerational mobility of immigrant families in the United States. First, note that U.S. immigrants with the lowest skills (i.e., the highest dropout rates) originate predominately in Hispanic countries. Six of the seven countries with immigrant dropout rates above 45 percent are Spanish-speaking (with Portugal being the lone exception), as are nine of the eleven countries with immigrant dropout rates exceeding 25 percent (with Haiti being the other exception). Second, the relatively high dropout rates of Hispanics persist into the second generation, particularly for the two most populous Hispanic groups (Mexicans and Puerto Ricans) and for two of the fastest-growing groups (Salvadorans and Dominicans). Indeed, the dropout rates of second-generation Mexicans and Puerto Ricans are well above the regression line, suggesting that the large educational deficit of these U.S.-born Hispanics is not simply due to their having poorly-educated immigrant parents. As a frame of reference, consider the comparable dropout rates for young (i.e., ages 25-39), non-Hispanic white and black men who are third generation or beyond (i.e., these men and both of their parents were all born in the United States). These dropout rates are 7 percent for whites and 10 percent for blacks. Therefore, by the second generation, young men from the vast majority of immigrant source countries already have lower dropout rates than the average American (see also Card, DiNardo, and Estes 2000; Card 2005). The primary exceptions are second-generation men from some of the largest Hispanic groups.

Finally, there exists considerable diversity across Hispanic national origin groups in the educational attainment of both immigrants and their U.S.-born children. Among second-generation men, for example, Cubans, Ecuadorians, Guatemalans, and Nicaraguans have low dropout rates (all are below 5 percent), especially compared to what we would expect given the schooling levels of their immigrant fathers. This contrasts sharply with the very high dropout

rates of second-generation Mexicans and Puerto Ricans (above 17 percent). The dropout rates of second-generation Salvadorans, Dominicans, and Hondurans fall between these two extremes (rates of 7-11 percent).

As a result, Hispanics assume a central role in current discussions of immigrant intergenerational progress and the outlook for the so-called “new second generation,” not just because Hispanics make up a large share of the U.S. immigrant population, but also because most indications of relative socioeconomic disadvantage among the children of U.S. immigrants vanish when Hispanics are excluded from the sample (Perlmann and Waldinger 1996, 1997). Therefore, to a great extent, concern about the long-term economic trajectory of immigrant families in the United States is concern about Hispanic-American families.⁸

III. Impact on Native Workers

In recent years, many studies have attempted to estimate the impact of immigration on the wages and employment opportunities of U.S.-born workers. Useful surveys of the academic literature on this topic include Borjas (1994a, 1999), Friedberg and Hunt (1995), Smith and Edmonston (1997, Chapters 4-5), and Card (2005). Lowenstein (2006) provides a non-technical discussion of the key issues that is both readable and nuanced.

For the most part, the empirical methodology used to estimate the impact of immigration on native workers has been to compare labor market outcomes (e.g., wages, employment rates, or unemployment rates) for natives in U.S. metropolitan areas that did and did not receive large inflows of immigrants. For example, over the past few decades, cities such as Los Angeles and Houston have received many new immigrants, especially unskilled immigrants, whereas other

⁸ See Smith (2006), however, for a more optimistic take on the intergenerational schooling gains made by Hispanics.

cities like Cleveland and Pittsburgh received few immigrants. Over this period, how have earnings and employment opportunities changed for native workers who might be thought to compete for jobs with unskilled immigrants, such as native workers who did not finish high school? If labor market competition with immigrants harmed unskilled native workers, then we would expect the wages and employment rates of unskilled natives in high-immigration cities like Los Angeles and Houston to have deteriorated relative to their counterparts in low-immigration cities such as Cleveland and Pittsburgh.

This type of analysis suggests that, on average, immigration has only very modest effects on the labor market opportunities of native workers, even for unskilled natives. Statistical correlations are weak across U.S. metropolitan areas between measures of immigrant penetration and native labor market outcomes. This remains true even after controlling for observable differences across cities (in, for example, demographics or industrial composition), and even when comparing intertemporal changes in immigrant inflows and native outcomes (in order to control for unobservable differences between cities that persist over time). After reviewing the available evidence, a National Academy of Sciences panel assembled to evaluate the impacts of U.S. immigration concluded that the “weight of the empirical evidence suggests that the impact of immigration on the wages of competing native-born workers is small—possibly reducing them by only 1 or 2 percent” (Smith and Edmonston 1997, p. 220). Similarly, Friedberg and Hunt (1995, p. 42) conclude their survey of the academic literature on the topic with the following summary:

“Despite the popular belief that immigrants have a large adverse impact on the wages and employment opportunities of the native-born population, the literature on this question does not provide much support for this conclusion. Economic theory is equivocal, and empirical estimates in a variety of settings and using a variety of approaches have shown that the effect of immigration on the

labor market outcomes of natives is small. There is no evidence of economically significant reductions in native employment. Most empirical analysis of the United States and other countries finds that a 10 percent increase in the fraction of immigrants in the population reduces native wages by at most 1 percent. Even those natives who should be the closest substitutes with immigrant labor have not been found to suffer significantly as a result of increased immigration.”

An important potential problem with the empirical methodology used in much of the literature is that immigrants may be choosing to locate in U.S. metropolitan areas with the most dynamic local economies. If sunbelt cities like Los Angeles and Houston are booming, then even with a large influx of immigrants, wage and employment growth for native workers in these cities may match or exceed the corresponding growth for native workers in less prosperous cities like Cleveland and Pittsburgh. What we really want to know, however, is whether labor market outcomes for natives in Los Angeles and Houston would have been even more favorable in the absence of the immigrant influx. Convincingly answering this kind of counterfactual question is typically difficult to do in nonexperimental settings. It would be easier to answer this question if we could study a large, exogenous, and unexpected inflow of immigrants to a particular city.

In an influential paper, Card (1990) studied an immigrant inflow that plausibly satisfies these conditions. In April 1980, Fidel Castro unexpectedly announced that Cubans wishing to emigrate to the United States were free to leave from the port of Mariel. From May to September 1980, some 125,000 Cuban immigrants arrived in Miami on boats and rafts. Half of these so-called Mariel immigrants settled permanently in Miami, increasing the city’s labor force by 7 percent and its Cuban work force by 20 percent. The influx of Mariel immigrants thus produced a large and unexpected increase in the supply of unskilled labor in Miami. Card estimates the impacts of this surge of unskilled immigrants by tracking labor market outcomes

for native workers in Miami during the years before and after the Mariel boatlift. In order to control for overall labor market trends, Card also compares the experiences of native workers in Miami with the experiences of native workers in four other metropolitan areas chosen for being similar to Miami demographically and economically: Atlanta, Houston, Los Angeles, and Tampa-St. Petersburg. Card's analysis finds no evidence that the Mariel immigrants adversely affected the wages, employment rates, or unemployment rates of native workers in Miami.

The textbook model of supply and demand predicts that, when a large influx of immigrants shifts out the supply of labor in a market, the equilibrium wage should fall as a consequence of movement along the downward-sloping demand for labor curve. It was therefore surprising to economists that spatial correlations (across U.S. metropolitan areas) between immigrant inflows and native worker outcomes suggest that immigrants do not significantly affect the wages or employment opportunities of natives. What could account for this result? One possibility is that the location decisions of native workers help to mitigate the local labor market effects of immigration. In response to any decline in labor market opportunities caused by a large immigration influx into a particular city, natives might leave that city or alter plans they had to move into that city. Indeed, Card (1990, p. 257) finds some evidence that "the net migration rate of natives and earlier immigrants into the Miami area slowed considerably after the Boatlift. To some extent the Mariels may have displaced other migrants from within the United States who could have been expected to move to Miami." There is disagreement, however, over the ultimate importance of this factor. Looking at data for a large number of cities in the late 1980s, Card (2001, p. 47) concludes that "mobility flows of natives and older immigrants are not very sensitive to inflows of new immigrants." On the other hand, using a somewhat different methodology applied to data for the 1960-2000 period, Borjas

(2006) finds a bigger impact of immigration on native internal migration.

Capital is also potentially mobile, given enough time, so if immigration were to lower the wages of unskilled workers in particular cities, businesses that intensively employ unskilled labor may move to or expand in these cities in order to take advantage of the low wages. Contrary to this explanation, Lewis (2003) and Card and Lewis (2007) show that when metropolitan areas receive an influx of unskilled immigrants, only a small portion of the influx is absorbed through an expansion of industries that intensively employ unskilled workers. Instead, most of the adjustment takes place *within* industries; in other words, cities that receive large inflows of unskilled immigrants tend to use unskilled labor more intensively—in *all* industries—than do cities that receive fewer unskilled immigrants. Lewis (2006) provides evidence that, in metropolitan areas where unskilled workers are plentiful due to immigration, industries are less likely to adopt advanced technologies such as automation that can substitute for unskilled labor.

Because of the possibility that equilibrating reallocations of labor and capital within the United States might make it difficult to detect the effects of immigration by comparing cities or regions, Borjas (2003) argues that it is best to analyze U.S. immigration at the national level. Instead of using the geographic clustering of immigrants to identify their impact, Borjas exploits the fact that new immigrant arrivals are concentrated in particular age groups and education levels, and that the extent and nature of this concentration has changed over time. Workers are sorted into cells defined according to age (as a proxy for work experience) and education, with each cell meant to represent workers with similar labor market “skills.” Because education remains fixed for most workers after they enter the work force full-time as adults, Borjas argues that native workers are unlikely to move across these skill categories in response to immigration. He therefore estimates the effects of immigration by examining how the earnings and

employment of natives in a particular skill group respond to immigration-induced changes in the supply of labor in that same skill group. Contrary to most of the previous literature, Borjas's approach produces estimates which imply that immigrants significantly depress the labor market opportunities of competing native workers. Using his estimates to simulate the impact of the large and relatively unskilled influx of immigrants that the United States received between 1980-2000, Borjas concludes that the adverse effects of immigrants on wages fell most heavily on younger native workers who failed to complete high school—in other words, the least skilled native workers.

Because no consensus has been reached, it is not straightforward to summarize the findings of academic research on the impact of immigration on native workers. One important conclusion, however, is that both immigrants and natives should be distinguished by their labor market skills. As noted by Borjas (1995b) and Card (2001, 2005), immigration will alter the wage structure—i.e., the relative earnings of different skill groups—only to the extent that the skill composition of immigrants differs from the skill composition of natives. Therefore, when estimating the impact of immigration, it is imperative that the overall influx of immigrants be disaggregated into labor inflows of various skill levels, and it is also imperative that these immigrant inflows be allowed to differentially affect native workers of different skill levels. A distinguishing feature of U.S. immigration over the past few decades is that, compared to natives, immigrants are disproportionately concentrated in the lowest education groups. Using broad occupation categories to approximate skill groups, Card (2001) exploits cross-city variation in the size and skill content of U.S. immigration inflows between 1985-90, and he finds evidence that immigration did reduce the wages and employment rates of competing native workers (particularly low-skilled natives living in high-immigration cities), although the

estimated effects are relatively modest. Using age and education to approximate skill groups, Borjas (2003) exploits national-level variation in the timing and skill content of U.S. immigration over the period 1960-2000, and he produces impacts of immigration that are roughly 2-3 times as large as those estimated by Card (2001).

Overall, earlier assessments (Friedberg and Hunt 1995; Smith and Edmonston 1997) that immigration's impact on native workers is minimal, even for low-skilled natives, are probably unduly optimistic, because this conclusion is based on studies that for the most part did not adequately account for the skill composition of immigrant flows and the differential effects of these flows on natives in disparate skill groups. Subsequent studies (Card 2001, Borjas 2003) that are careful to make these distinctions tend to find more negative impacts of immigration on low-skilled native workers, but I would still characterize the estimated effects as being fairly modest. The most adverse labor market consequences of immigration fall on workers without a high school diploma, a group that has become increasingly small among U.S. natives.

IV. Conclusion

As the other chapters in this volume make clear, there are many reasons to expect American immigrants to be less successful in the host country labor market than Australian immigrants. Unlike Australia, the United States makes little or no effort to regulate either the volume or the skill content of immigration flows to fit with current labor market needs. Moreover, a large share of U.S. immigration is illegal, and the government appears to have almost no control over this predominately unskilled flow. Finally, inequality and the returns to skill in the U.S. labor market have been rising over the last few decades as large numbers of unskilled immigrants have entered the country. Both in terms of design and implementation,

U.S. immigration policy seems haphazard when compared with Australian policy.

Despite all of these warning signs, the labor market performance of U.S. immigrants looks quite good, even when directly compared head to head with Australian immigrants. U.S. immigrants have little trouble finding jobs, and this is particularly true of unskilled immigrants. Most U.S. immigrants experience substantial earnings growth as they adapt to the American labor market. For most immigrant groups, the U.S.-born second generation has achieved socioeconomic parity with mainstream society; for some Hispanic groups, however, this is not the case. On the whole, immigration to the United States has not had large adverse consequences for the labor market opportunities of native workers. Therefore, with regard to the economic integration and labor market impacts of immigration, it is not obvious that the seemingly haphazard nature of U.S. immigration policy has led to unfavorable outcomes.

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Figure 1

Dropout Rates(%) of First and Second Generation Men

