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SECOND DISTRICT HIGHLIGHTS

New York City Immigrants: The 1990s Wave

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Fueled by a steady influx of immigrants, New York City's population turnover in the 1990s was almost double the average for the nation's 100 largest cities. A close look at the city's new foreign-born residents suggests that they are a very diverse group, showing marked differences in education level, English language fluency, and other characteristics that help determine labor market skills and performance.

During the 1990s, more than 1.3 million people left New York City for nearby suburbs and other states even as 1.2 million foreign immigrants flowed into the city. This "cycling" of the population, with a large influx of immigrants replacing a similarly large number of outgoing residents, has a long history in New York. Over many decades, it has produced a city in which, in the year 2000, 45 percent of the adult population was foreign born.

The high concentration of immigrants in New York has made these residents a critical component of the city's workforce. Nevertheless, it is difficult to generalize about their effects on the labor market and the economy because of the diversity of the immigrant groups. Not only do recent immigrants differ from native-born city residents in age, educational attainment, language, and other socioeconomic characteristics, they also differ markedly from one another. New York City has attracted both Ph.D.'s and those with little or no schooling, the English-fluent and those with no English at all.

In this edition of *Second District Highlights*, we present a detailed profile, based on 2000 census data, of New York City's most recent adult immigrants—defined here as those foreign-born New Yorkers who arrived in the United States between 1990 and 2000 and were residents of the city in April 2000.[1] Our premise is that a better understanding of the diverse characteristics of this population can help clarify how these new residents may influence the overall skill level of the city's labor supply. Thus, we chart the differences in education, English fluency, age, and gender that affect the skills of various immigrant groups and that help to determine how they fare in the workplace. In addition, we look at unemployment rates and labor force participation rates for different groups and touch on some of the policies that may enable these groups to take part more fully in the city's labor market.

We find that although the 1990s adult immigrants are on the whole better educated than foreign-born city residents who arrived in earlier decades, they tend to cluster at opposite ends of the education spectrum. Some groups— primarily from Asia—have considerably higher college graduation rates than native-born city residents, while substantial percentages of other immigrant groups— primarily those from Latin America, the Caribbean, and Mexico—arrive without English language competency or a high school diploma.

Unemployment and labor force participation rates also differ across groups. Immigrants from China, for example, have a relatively high labor force participation rate; by

contrast, immigrants from some former Soviet states have a low rate of labor force participation.

The heterogeneity of the immigrant population suggests that targeted outreach efforts would be especially useful in improving labor market outcomes. Job search assistance would benefit some groups, for example, while other groups would be helped most by continuing education programs and language training.

Components of Population Growth, 1990-2003

Foreign immigration, coupled with a higher number of births than deaths, continues to fuel population growth in New York City. While the city's population growth rate of 9.4 percent for the 1990s pales in comparison with the double-digit rates of many Sun Belt cities, the 700,000 additional residents it represents is nonetheless impressive. No other U.S. city added even half as many people during the 1990s.[2]

To be sure, the September 11 attacks and the globalization of production have caused some to question the sustainability of this growth in the new century. Nevertheless, the city's population did increase between 2000 and 2003, largely because of the high birth rate and continued influx of foreign immigrants.[3]

Discussions about New York City's population tend to center on international immigration, but the city's population growth is actually a combination of several different streams—the number of births and deaths, net international migration, and net domestic migration.

Consider net domestic migration—the sum of domestic inflow into, and domestic outflow from, New York City. In the typical southeast or southwest boomtown, domestic inflow is responsible for much of the population growth. New York City generally attracts more than 250,000 new residents a year from within the United States—equivalent to the population of a midsize city—but this inflow is exceeded by an even larger domestic outflow, much of it to surrounding suburban counties. However, this net domestic loss is offset by a large inflow from abroad.[4] In fact, in the 1990s, the number of immigrants to New York City—1.2 million— was greater than the total population of most major U.S. cities and greater than the populations of New York State's fourteen largest upstate cities combined.[5]

Net domestic migration appears to be sensitive to the business cycle (Chart 1). Throughout the 1990-99 period, domestic outflows exceeded domestic inflows, but the difference between them diminished markedly as the city's economy strengthened and job growth accelerated.[6] In the 2001-03 period, which included both the regional recession and the September 11 attacks, domestic outflows first increased relative to inflows and then declined in 2003 as the city's economy stabilized. It is too soon to tell if the pattern of diminishing domestic outflows will be sustained

Chart 1
New York City Net Domestic Migration, 1991-2003
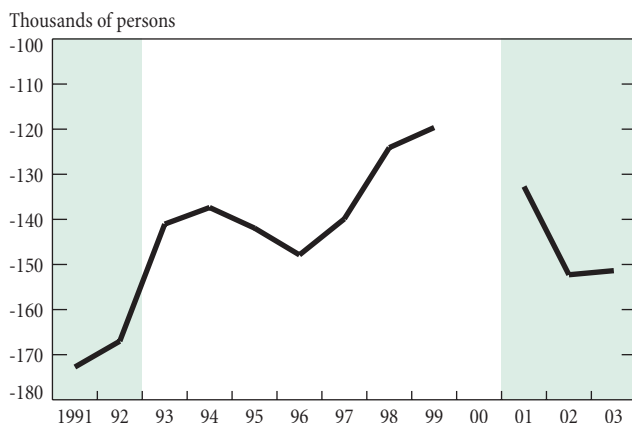
Thousands of persons

Source: U.S. Bureau of the Census, Population Division.

Notes: Migration data for the year 2000 are not available. Data for the 1991-99 and 2001-03 periods are not strictly comparable. Shaded areas in the chart represent regional recessions, dated by movements in the coincident index of economic activity developed by economists at the Federal Reserve Bank of New York. See James Orr, Robert Rich, and Rae Rosen, "Two New Indexes Offer a Broad View of Economic Activity in the New York–New Jersey Region," Federal Reserve Bank of New York *Second District Highlights* 5, no. 14 (October 1999).

Chart 2
New York City Net International Migration, 1991-2003

Thousands of persons

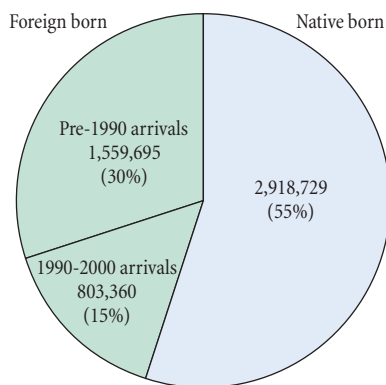Source: U.S. Bureau of the Census, Population Division.

Notes: Migration data for the year 2000 are not available. Data for the 1991-99 and 2001-03 periods are not strictly comparable. Shaded areas in the chart represent regional recessions, dated by movements in the coincident index of economic activity developed by economists at the Federal Reserve Bank of New York. See James Orr, Robert Rich, and Rae Rosen, "Two New Indexes Offer a Broad View of Economic Activity in the New York–New Jersey Region," Federal Reserve Bank of New York *Second District Highlights* 5, no. 14 (October 1999).

as the city's economy strengthens further, but the experience of the 1990-99 period and the easing in net domestic migration in 2003 suggest that it is possible. Such a development would have important implications for the city's labor supply because prime earners (those between the ages of twenty-five and fifty-four) are heavily represented among net domestic migrants; their outflow might well be reduced as the city's economy continues to improve.[7]

Net international migration appears to be less sensitive to economic conditions in New York City than is net domestic migration (Chart 2). For those coming to the United States, economic conditions in the country of origin may well influence the emigration decision more than business cycle variations in New York; changes in immigration laws may also affect international flows. Thus, while New York City lost more than 1.3 million residents to net domestic outflows during the 1990s, it also gained almost the same number of immigrants from abroad. In addition to the large number of immigrants, there were 500,000 more births than deaths in the city over the same period. Both factors, somewhat unusual for large U.S. cities, fueled the city's population growth in the 1990s.

Thus, New York's comparatively modest population growth rate masked a "churn," or population turnover, of 2.1 percent annually—nearly double the average for the 100 largest U.S. cities.[8] This substantial rate of population turnover, not revealed in population growth statistics, has long contributed to the city's economic growth as new immigrant groups have replaced others moving out. For instance, immigrants have revitalized many older, deteriorating neighborhoods in the city.
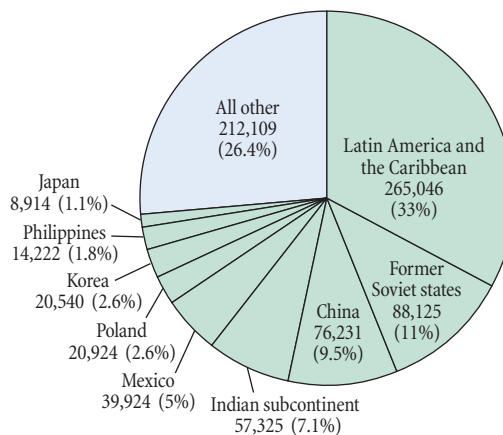
Overall, from 1990 to 2000, the population of New York City grew from 7.3 million to 8.0 million, and—despite the September 11 attacks and the 2001-03 regional recession—the population increased to a record 8.1 million by midyear 2003, a result of continued gains in foreign immigration and significant net gains in births over deaths.

Foreign Immigration, 1990-2000

In this section, we draw on 2000 census data to provide a fuller picture of the foreign born in New York City. We focus on immigrants aged 25 and over because these individuals have, for the most part, completed their formal education. As Chart 3 shows, in 2000 immigrants made up almost half of the 5.3 million New York City residents aged twenty-five and over. Fully a third of these foreign-born New Yorkers arrived in the United States during the 1990s.

In examining the composition of this population, we focus on immigrants from eleven "feeder" countries or country groups that account for nearly three-quarters of the adult immigration in the 1990s (Chart 4).[9] These countries or country groups, ranked by the number of immigrants who came in the 1990s and were living in New York in 2000, are 1) Jamaica, Trinidad and Tobago, Haiti, and Guyana; 2) the Dominican Republic; 3) Russia, Ukraine, and Uzbekistan; 4) China; 5) Ecuador, Colombia, Peru, Honduras, and El Salvador; 6) India, Bangladesh, and Pakistan; 7) Mexico;
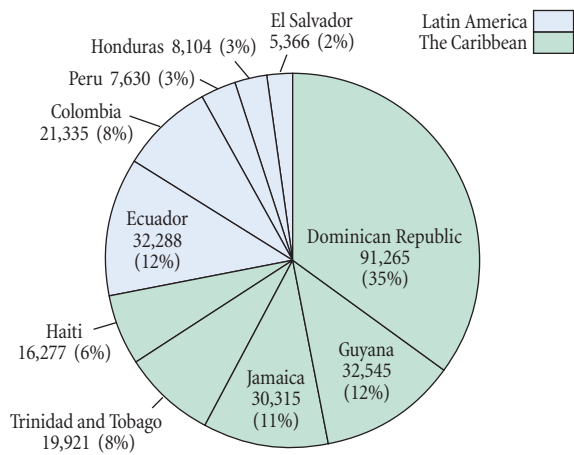
Chart 3
New York City Residents Aged 25 and Over
As of April 2000

Foreign born
Pre-1990 arrivals
1,559,695
(30%)

1990-2000 arrivals
803,360
(15%)

Native born
2,918,729
(55%)

Source: U.S. Bureau of the Census, Census 2000, Five Percent Public Use Microdata Sample (PUMS).

Chart 4
Immigrants to New York City, by Country or Region of Origin
1990-2000 Arrivals, Aged 25 and Over

All other
212,109
(26.4%)

Japan
8,914 (1.1%)

Philippines
14,222 (1.8%)

Korea
20,540 (2.6%)

Poland
20,924 (2.6%)

Mexico
39,924 (5%)

Latin America and the Caribbean
265,046
(33%)

Former Soviet states
88,125
(11%)

China
76,231
(9.5%)

Indian subcontinent
57,325 (7.1%)

Source: U.S. Bureau of the Census, Census 2000, Five Percent Public Use Microdata Sample (PUMS).

Note: Regions are defined as follows: Latin America and the Caribbean comprise Ecuador, Colombia, Peru, Honduras, El Salvador, Jamaica, Trinidad and Tobago, Haiti, Guyana, and the Dominican Republic; the former Soviet states comprise Russia, Ukraine, and Uzbekistan; China includes Hong Kong; the Indian subcontinent comprises India, Bangladesh, and Pakistan.

Chart 5
Latin American and Caribbean Immigrants to New York City, by Country and Region of Origin
1990-2000 Arrivals, Aged 25 and Over

Source: U.S. Bureau of the Census, Census 2000, Five Percent Public Use Microdata Sample (PUMS).

Table 1
Age Distribution of Foreign- and U.S.-Born New York City Residents, Aged 25 and Over
Percent

	25-34	35-64	65+
Foreign born, 1990-2000 arrivals	42	51	7
Native born only	27	53	20
All New York City residents	25	57	18
New York City residents less 1990-2000 arrivals	22	57	20

Source: U.S. Bureau of the Census, Census 2000, Five Percent Public Use Microdata Sample (PUMS).

8) Poland; 9) Korea; 10) the Philippines; and 11) Japan.[10] Recent immigrants from these countries—by our definition, those who arrived between 1990 and 2000—account for more than one in ten adult city residents.

A third of all recent arrivals are from Latin America and the Caribbean; just five Caribbean countries—the Dominican Republic, Guyana, Jamaica, Trinidad and Tobago, and Haiti—account for nearly one in four recent immigrants (Chart 5).

The Dominican Republic alone sent more adult immigrants to New York City in the 1990s—more than 90,000—than any other country, despite a population barely larger than the city itself. More than one in ten 1990s immigrants is from the Dominican Republic.

Gender and Age Composition
Women constitute the majority (54 percent) of the population aged twenty-five and over in New York City.[11] While there are slight differences between immigrants and the native born with respect to gender composition, these differences are not large enough to affect the overall distribution. It is worth noting, however, that while 20 percent of native-born city residents are sixty-five or older, only 7 percent of recent immigrants are in this age group (Table 1).

Fifty-two percent of 1990s adult immigrants are female. This statistic belies the common but outdated perception that the typical immigrant arriving in New York City is a

young male. Occupational opportunities in growing service sector industries—in particular, health and child care—may well have had an impact on the gender composition of these recent immigrants.[12] Of the eleven groups examined here, only immigrants from Mexico and the Indian subcontinent are predominantly male.

The relative youth of these recent immigrants also serves to counterbalance the net out-migration of young New Yorkers, a permanent feature of domestic population flows into the city.[13] Most strikingly, 42 percent of those who arrived between 1990 and 2000 were between the ages of twenty-five and thirty-four on census day 2000, compared with only 27 percent of native-born residents. Thus, if this immigration had not occurred, New York City would be considerably "greyer." These young immigrant workers will help increase the worker-retiree ratio during the baby boomers' retirement years.

Education and Earnings
Immigrants who arrived in the 1990s are less likely than native-born residents to have graduated from or even attended high school or college. A substantial percentage have only an elementary school education or less (Table 2). However, the college graduation rate for recent immigrants is, on average, 27 percent—still lower than the 31 percent rate for the native-born city residents, but significantly higher than the 21 percent average rate for earlier (pre-1990) immigrants.[14]

When college graduation rates are examined by country of origin, however, a more nuanced story emerges (Chart 6 and Table 2). Most notably, the college graduation rates for immigrants from Japan (62 percent); the Philippines (61 percent); Russia, Ukraine, and Uzbekistan (46 percent); India, Bangladesh, and Pakistan (42 percent); and Korea (41 percent) are all substantially higher than the 31 percent graduation rate for native-born city residents.[15]

Table 2

Educational Attainment for Foreign- and Native-Born New York City Residents, Aged 25 and Over

Percent

Country or Region of Origin	Elementary School or Less	Some High School	High School Graduate	Some College	College Graduate or Higher
Mexico	40	25	24	6	5
China	30	18	20	11	21
Dominican Republic	29	25	21	16	9
Latin America	27	18	27	15	13
Jamaica, Trinidad and Tobago, Haiti, Guyana	12	24	33	20	10
Indian subcontinent	11	16	19	12	42
Poland	8	14	34	22	22
Korea	7	6	25	22	41
United States	7	15	25	22	31
Former Soviet states	6	7	19	22	46
Philippines	5	2	11	20	61
Japan	1	0	11	25	62

Source: U.S. Bureau of the Census, Census 2000, Five Percent Public Use Microdata Sample (PUMS).

Notes: Foreign-born residents are those who arrived in the United States between 1990 and 2000. Regions are defined as follows: China includes Hong Kong; Latin America comprises Ecuador, Colombia, Peru, Honduras, and El Salvador; the Indian subcontinent comprises India, Bangladesh, and Pakistan; the former Soviet states comprise Russia, Ukraine, and Uzbekistan.

Nevertheless, with the exception of immigrants from Japan, median earnings for these groups are lower than those of native-born residents. As noted earlier, the immigrants of the 1990s are generally younger than native-born city residents, and thus may have less work experience; this difference may explain part of the earnings gap. Further, some percentage of even the most highly educated immigrants may be underemployed because of inadequate English language skills. Other possible explanations include variations in the quality of college education across countries, lack of contacts, and employment discrimination against the foreign born.

Immigrants from Mexico, the Caribbean, Latin America, and China have the lowest college graduation rates as well as the lowest median earnings of the groups examined. Still, there is not an exact correspondence between college graduation rates and median earnings. Immigrants from the Caribbean countries of Jamaica, Trinidad and Tobago, Haiti, and Guyana, for instance, have a college graduation rate of 10 percent and median earnings of $22,000, while immigrants from China have a 21 percent college graduation rate and median earnings of $15,000. This inconsistency may be due at least in part to varying degrees of English language

fluency—only about a third of the immigrants from China report speaking English well or very well, while about three-quarters of those from the Caribbean group fall into this category. In general, low levels of English language fluency are associated with low median earnings (Chart 7).

Note also that language ability and education may interact over time—for instance, an English-speaking Jamaican immigrant may be more likely to complete high school in the United States than his or her Chinese-, Korean-, or Spanish-speaking counterpart.[16]

Public Assistance, Unemployment, and Labor Force Participation Rates

As of April 2000, the unemployment rate for 1990s adult immigrants was 8.9 percent, higher than the 7.6 percent rate for native-born city residents (Table 3). Unemployment rates varied by country of origin, and were generally highest for the least educated groups. The rate for immigrants from the Dominican Republic, 17.1 percent, is almost twice the average for these recent arrivals.
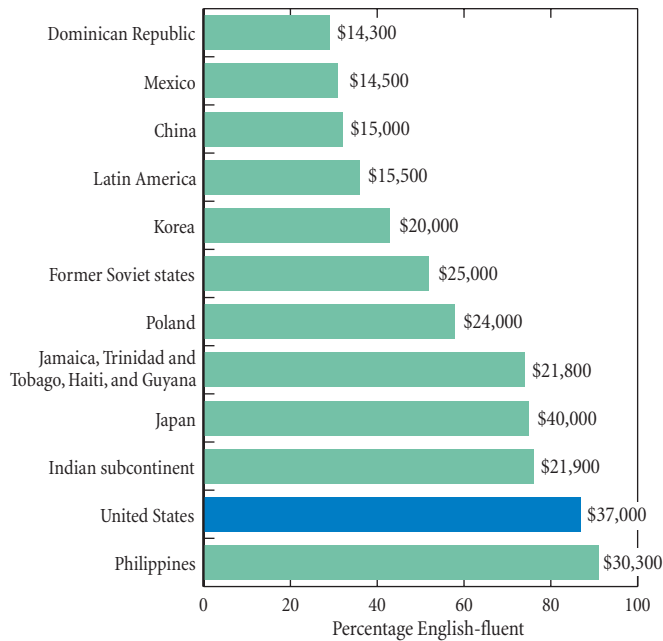
Chart 6

College Graduation Rate and Median Earnings for Foreign- and Native-Born New York City Residents, Aged 25 and Over
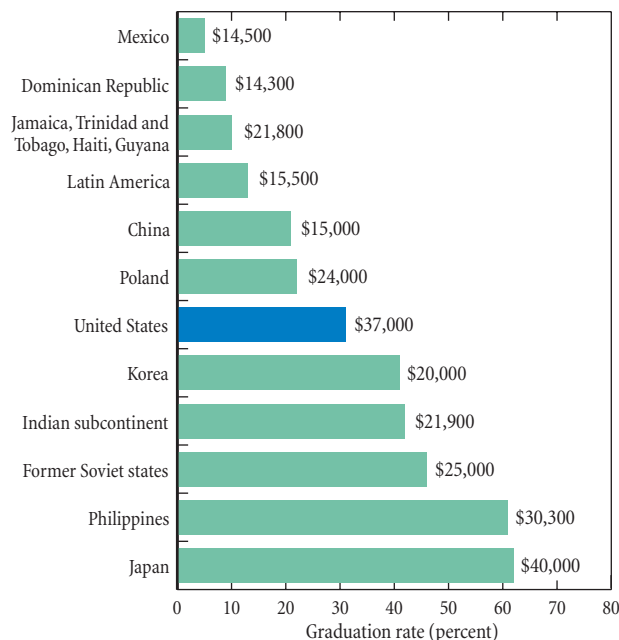
Source: U.S. Bureau of the Census, Census 2000, Five Percent Public Use Microdata Sample (PUMS).

Notes: Foreign-born residents are those who arrived in the United States between 1990 and 2000. Regions are defined as follows: Latin America comprises Ecuador, Colombia, Peru, Honduras, and El Salvador; China includes Hong Kong; the Indian subcontinent comprises India, Bangladesh, and Pakistan; the former Soviet states comprise Russia, Ukraine, and Uzbekistan.

Chart 7

English Language Fluency and Median Earnings for Foreign- and Native-Born New York City Residents, Aged 25 and Over

Country/Region	Median Earnings
Dominican Republic	$14,300
Mexico	$14,500
China	$15,000
Latin America	$15,500
Korea	$20,000
Former Soviet states	$25,000
Poland	$24,000
Jamaica, Trinidad and Tobago, Haiti, and Guyana	$21,800
Japan	$40,000
Indian subcontinent	$21,900
United States	$37,000
Philippines	$30,300

Percentage English-fluent (0–100)

Source: U.S. Bureau of the Census, Census 2000, Five Percent Public Use Microdata Sample (PUMS).

Notes: Foreign-born residents are those who arrived in the United States between 1990 and 2000. Regions are defined as follows: China includes Hong Kong; Latin America comprises Ecuador, Colombia, Peru, Honduras, and El Salvador; the former Soviet states comprise Russia, Ukraine, and Uzbekistan; China includes Hong Kong; the Indian subcontinent comprises India, Bangladesh, and Pakistan.

Table 3

Selected Characteristics for Foreign- and U.S.-Born New York City Residents, Aged 25 and Over

	Percentage Unemployed	Percentage in Labor Force	Percentage Receiving Public Assistance
Immigrants by country of origin, 1990-2000			
Jamaica, Trinidad and Tobago, Haiti, Guyana	10.6	66.2	2.8
Dominican Republic	17.1	50.9	8.0
Russia, Ukraine, Uzbekistan	7.7	49.4	8.2
China	5.9	62.6	1.8
Ecuador, Colombia, Peru, Honduras, El Salvador	12.3	57.8	2.9
India, Bangladesh, Pakistan	5.1	56.5	1.1
Mexico	9.4	57.3	3.7
Poland	7.3	67.7	1.3
Korea	5.1	60.6	1.3
Philippines	6.1	65.8	1.1
Japan	2.7	53.8	N.A.
All other countries	7.3	64.0	2.7
Total immigrants, 1990-2000	8.9	59.5	3.7
Pre-1990 immigrants	6.9	56.6	3.5
Total immigrants	7.6	57.6	3.6
Native born	7.6	56.8	4.9
Total population	7.6	57.1	4.3

Source: U.S. Bureau of the Census, Census 2000, Five Percent Public Use Microdata Sample (PUMS).

At the same time, the percentage of foreign-born New Yorkers on public assistance (3.6 percent) is lower than that of native-born city residents (4.9 percent). Interestingly, the rates are virtually identical for pre- and post-1990 foreign-born New Yorkers. However, percentages by country of origin range from less than 2 percent (Korea, the Philippines, Poland, the Indian subcontinent, China) to 8 percent or more (the Dominican Republic, the former Soviet states).

Contrary to what one might expect, however, it is not always the least educated or the least English-fluent groups that have the highest unemployment or public assistance rates. As noted earlier, immigrants from China have relatively low levels of education, English fluency, and income, yet their public assistance rate (1.8 percent) is one of the lowest reported. Their unemployment rate (5.9 percent) is also among the lowest reported, and their labor force participation rate (62.6 percent) one of the highest.

In contrast, immigrants from the former Soviet states of Russia, Uzbekistan, and Ukraine have higher college graduation rates than native-born residents and moderate levels of

English fluency (more than half report speaking English well or very well), but their public assistance rate (8.2 percent) is the highest reported and their labor force participation rate (49.4 percent) the lowest.

These findings suggest that a targeted outreach to immigrant groups might improve labor market outcomes. For instance, immigrants from Mexico, China, Latin America, and the French- and Spanish-speaking Caribbean countries might benefit especially from more widely available and affordable English language training, while immigrants with higher rates of English fluency and relatively low labor force participation might be better served by various kinds of job search assistance.

Conclusion

Robust foreign immigration in the 1990s helped New York City avoid the population losses experienced by many other Northeast urban centers. While detailed demographic information on immigrants arriving in the first years of the new century is not yet available, 2003 Census Bureau data suggest that the foreign inflow to the city is continuing at a good pace—despite both the September 11 attacks and the regional recession of 2001-03.

Our look at the immigrants who came in the 1990s highlights the diversity of the group. While these new residents are on average better educated than their immigrant predecessors, many immigrants from Latin America, the Caribbean, and China lack both a high school degree and English language skills. Unemployment rates and labor force rates also show considerable variation. Public assistance rates differ by group, though surprisingly—given the educational and language disadvantages of some groups—the overall rate of public assistance use is lower for the 1990s immigrants than for native-born city residents.

To help this diverse group of recent immigrants participate more fully in the city's labor market, a variety of approaches is needed, including assistance with job searches and vocational training. Programs and policies that support continuing education for the foreign-born, particularly the rapid acquisition of English, are especially useful, speeding immigrant entry into local labor markets and permitting the full utilization of skills that, owing to language barriers, might otherwise not be tapped.

Notes

1. Note that this measure, a snapshot of immigrants who arrived in the United States in the 1990s and were living in New York City on census day 2000, would not include immigrants who arrived in New York City during the 1990s but left before 2000. Those who arrived in the 1990s but lived somewhere else before moving to New York City would, however, be included. We use the terms "immigrant" and "foreign born" interchangeably in this article.

2. Even Las Vegas, North Las Vegas, and Henderson, Nevada, which together make up the booming Las Vegas metropolitan area, added "only" about 400,000 people.

3. U.S. Bureau of the Census (<http://www.census.gov/popest/cities/SUB-EST2003.html>).

4. As we noted earlier, births also contributed to population growth in New York City. There were twice as many births as deaths in New York City over this period.

5. The figure for foreign immigration is based on Census 2000's Five Percent Public Use Microdata Sample (PUMS) for New York City; the figure for net domestic migration is based on data from the U.S. Census Bureau, Population Division. The upstate cities are Buffalo, Rochester, Syracuse, Albany, Schenectady, Utica, Niagara Falls, Troy, Binghamton, Rome, Jamestown, Elmira, Poughkeepsie, and Ithaca. Population data for the upstate cities are from the Census 2000 Hundred Percent Data File.

6. Although we cannot directly compare the levels of net domestic migration for the 1990-99 and post-census 2000 periods, we can analyze cyclical behavior within each period. The data for 2001-03 reflect information provided by the 2000 Census, whereas the data for 1991-99 are based on the 1990 Census and were not adjusted for information collected in the 2000 Census. In this example, we are not comparing precise levels of net domestic or net international migration but rather are focused on the direction of the trend in each series as it relates to periods of economic expansion and contraction. The direction of the trend is largely unaffected by the updating of the data to reflect additional information in the 2000 Census.

7. Data on age composition are from the U.S. Bureau of the Census, Population Division.

8. "Churn" is defined by the Census Bureau as follows:

SUM(((Births - Deaths) + ((Absolute Value (Net Internal Migration) + Net Immigration)/2))/Population at the End of the Period)*100.

Among metropolitan areas with a population of 1.0 million or more, only Los Angeles has a greater population churn.

9. Demographic data (age, gender, and educational attainment) for New York City in the year 2000 describe New York City residents aged twenty-five and over as of April 2000. Economic data describe 1999 employment and earnings for these residents.

10. Countries were grouped on the basis of geography as well as similarities in culture, language, and income level.

11. U.S. Bureau of the Census, Census 2000, Five Percent Public Use Microdata Sample (PUMS).

12. Of course, the causality can run the other way as well; that is, the demand for labor may have responded to the influx of female immigrants.

13. See Internal Migration by Age by County 1995-2000 b2_table3_050, unpublished data available upon request from the U.S. Bureau of the Census.

14. The comparison with graduation rates for pre-1990 immigrants is available in U.S. Bureau of the Census, Census 2000, Five Percent Public Use Microdata Sample (PUMS).

15. For the 26 percent of immigrants in the 1990s who came from one of the many countries that sent relatively few immigrants to New York City during this period, the college graduation rate was 39 percent.

16. Census data do not reveal where a person's education was obtained.

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