An Economic Profile of Immigrants in New York City 2017

Results from NYC Opportunity’s Experimental Population Estimate

February 2020
Introduction

This Brief marks New York City’s second release of research on the economic well-being of immigrants in the city. These data are important in evaluating the needs of some of the city’s most vulnerable communities, and for developing programs and strategies to address poverty issues specific to immigrants. New York City is the only city to implement the methodology used in this report, resulting in more accurate data about immigrant populations and their economic status than are available elsewhere.

In 2008, the Mayor’s Office for Economic Opportunity (then the Center for Economic Opportunity) began producing an alternative poverty measure for New York City. Similar to the Census Bureau’s Supplemental Poverty Measure (SPM) which was developed several years later, this measure provides a more realistic picture of poverty by accounting for social safety net benefits that are not reflected in the federal official poverty measure. This alternative measure for New York City, the NYC Government Poverty Measure (NYCgov poverty measure), has significantly informed our knowledge about poverty in the city and the local effect of large-scale anti-poverty policies.1

The NYCgov measure enables us to better understand poverty between and within the subgroups of the city’s population. The foreign-born population is one such group. Noncitizens, who account for slightly less than one-half of the foreign-born, have poverty rates higher than rates for other groups long associated with entrenched poverty.2 However, information on legal status of

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2 As shown in the report, New York City Government Poverty Measure 2017, noncitizen poverty rates have declined by 4.4 percentage points between 2010 and 2017 but are still higher than the citywide average. In 2017 the noncitizen poverty rate was 25.2 compared to 19.0 for the citywide rate.
noncitizens, an important factor affecting poverty status, is not collected in the American Community Survey (ACS), the principal data source used for the analysis in this Brief. The Mayor’s Office for Economic Opportunity, or NYC Opportunity for short, has remedied this challenge by creating a methodology to assign inferred legal status to noncitizens in the ACS. This is an innovative approach that integrates the NYC alternative poverty measure with a legal status indicator for immigrants (See Appendix A for a description of the methodology). Using this methodology, NYC Opportunity is able to estimate and analyze poverty rates by legal status, an exercise that enables us to identify potential reasons for poverty among different groups of immigrants. It is important to note that this methodology is an experimental research measure and will continue to evolve as scholarship advances and new data become available. Nevertheless, this research marks a significant step forward. See Box 1 for definitions of legal status used in this Brief.

This Brief presents key socio-economic indicators by immigration status. Special focus will be paid to the declining undocumented population and how their characteristics have changed between 2008 and 2017. These findings are followed by a presentation of poverty rates by legal status. Policy implications and suggestions for future research conclude this Brief.

3 The ACS is the largest US household survey covering approximately one percent of the total population or about 3 million households. The survey gathers detailed social and economic information on a representative sample of population for all states, cities, counties, metropolitan areas, and groups of 100,000 people or more. The Census Bureau is required by law to ensure that no individual person or household can be identified in these survey data. NYC Opportunity’s methodology to assign legal status uses the ACS microdata as its primary database.

4 Unless otherwise indicated, all data presented in this Brief come from the 1-year 2017 American Community Survey public use micro data as augmented by NYC Opportunity.
Box 1. Legal Status Definitions

**U.S.-born citizens:** Persons born in the 50 states, Puerto Rico and other U.S. territories. Also included are children born abroad to U.S. citizen parents.

**Foreign-born:** Persons born outside of the U.S. or its territories. Immigrants and foreign-born are used interchangeably in this Brief.

**Naturalized citizens:** Immigrants who were admitted into the U.S. as Lawful Permanent Residents (LPRs) and have become U.S. citizens through the naturalization process.

**Green card holders and other status:** LPRs, refugees, immigrants granted asylum, and nonimmigrants or temporary immigrants admitted on temporary visas such as students and workers admitted with H1B visas and their spouses and children. Green card holders and other status and Lawful noncitizens and are used interchangeably in this Brief.

**Undocumented immigrants:** Persons who either entered the country across a U.S. border without inspection or had legal status but subsequently lost it.

**Mixed-Status Households:** A household that has at least one resident undocumented immigrant.
Legal Status Estimates of the Foreign-born Population

- Immigrants comprised 37.2 percent (3.14 million) of New York City’s population in 2017.

- An increasingly large share of the foreign-born population is comprised of naturalized citizens accounting for 55.0 percent (1,727,000) in 2017, up from 50.7 percent in 2008.

- The remaining noncitizen population is comprised of 942,000 immigrants with green cards or other legal status and 507,000 undocumented immigrants.

- Both the number and share of undocumented immigrants has declined notably between 2008 and 2017. In 2017 they accounted for 15.0 percent of the total foreign-born population, down from 20.0 percent in 2008.

While the number of immigrants in New York City remains at an all-time

*The number of undocumented immigrants presented in this pie chart has been adjusted for undercount whereas the other subgroups have not. As a result, the addition of these categories will add to a sum greater that the total. See methodology, Appendix A, for description of undercount adjustment.
high, the undocumented population has been declining steadily since 2008. The number of undocumented immigrants was 674,000 in 2008, the first year for which our estimates are available (Figure 2 on the following page). By 2017, that number had declined to 507,000, a drop of 166,000 or 24.7 percent. The city’s decline in the number of undocumented immigrants mirrors the national trend. In 2017, there were 10.7 million undocumented immigrants in the U.S., down from 11.7 million in 2010.

The number of undocumented immigrants declined from every area of the world between 2008 and 2017 (Figure 3). The largest declines were for immigrants from the non-Hispanic Caribbean countries such as Trinidad and Tobago, Jamaica and Guyana. The undocumented population from this area of the world declined by almost half (47.9 percent, data not shown). There was also a significant decline in the number of undocumented immigrants from Mexico by about 37,000 (26.7 percent). The smallest decline in the number of immigrants was for Asia: 6.2 percent. This relatively small drop was due in part to a substantial increase in the undocumented population from China – 27.7 percent between 2008 and 2017.

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5 Prior to 2008, data needed to infer legal status in the ACS were not available.

6 Due to improvements in the methodology, the yearly estimates of the undocumented population presented in this Brief differ from what was published in 2016: An Economic Profile of Immigrants in New York City. The estimates will also differ from estimates published in the 2019 Annual Report from Mayor’s Office of Immigrant Affairs (MOIA). See the description of the methodology in Appendix A for more details. [https://www1.nyc.gov/assets/immigrants/downloads/pdf/moia_annual_report%202019_final.pdf](https://www1.nyc.gov/assets/immigrants/downloads/pdf/moia_annual_report%202019_final.pdf)

Figure 2
Undocumented Immigrants
NYC, 2008-2017

In thousands

In thousands

Figure 3
Change in Undocumented Population by Place of Birth
NYC, 2008 and 2017
The undocumented immigrant population has changed in other significant ways between 2008 and 2017. Undocumented immigrants are older in 2017 (Table 1). The median age for this group increased from 33 years in 2008 and is now the same as the city’s overall median age of 36 years in 2017. There was also noteworthy change in the educational attainment of undocumented immigrants. The share with less than a high school degree declined from 36.5 to 31.7 percent between 2008 and 2017 (Figure 4 on the following page). And, one-in-five of all undocumented immigrants had a Bachelor’s degree or higher, up from 17.0 percent in 2008. While educational attainment has been increasing citywide, the percent of the city’s population with less than a high school degree is still far higher for undocumented immigrants, 31.7 percent, compared to the 17.2 percent for the total city. (Data not shown)

Table 1
Median Age by Nativity and Immigration Status
NYC, 2008 and 2017

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total, NYC</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>U.S.-Born Citizens</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>Total Foreign-born</td>
<td>43</td>
<td>47</td>
</tr>
<tr>
<td>Naturalized Citizens</td>
<td>50</td>
<td>53</td>
</tr>
<tr>
<td>Green Card Holders &amp; Other Status</td>
<td>40</td>
<td>42</td>
</tr>
<tr>
<td>Undocumented Immigrants</td>
<td>33</td>
<td>36</td>
</tr>
</tbody>
</table>
Mixed-Status Households

The estimate of a half million undocumented constitutes 5.6 percent of the city’s population. This relatively small share of the population however is closely integrated into the rest of the city. About 1.03 million New Yorkers lived in mixed-status households, defined here as a household with at least one undocumented immigrant.

Figure 5 presents relationships within mixed-status families: head of household and/or spouses comprise 32.0 percent of all mixed-status households, and children under 18 account for 26.8 percent. Other relatives (such as grandparents and cousins) and nonrelatives (roomers and housemates) account for 27.4 percent and 13.8 percent respectively. Within each relationship category, the split between those who are lawfully resident New Yorkers and those who are not is fairly even with the exception of children. Of the 276,000 children in mixed-status households, an overwhelming majority 87.5 percent are lawfully resident New Yorkers.
Figure 5
Persons in Mixed-Status Households by Relationship to Householder and Legal Status
NYC, 2017*

Figure 5a
Persons in Mixed-Status Households by Relationship to Householder
Labor Force Participation, Education and Earnings

- Immigrants comprise 37.2 percent of the city's population but 44.2 percent of the labor force.

- Undocumented immigrants have labor force participation rates higher than the citywide average: Over three-quarters (77.5 percent) of undocumented immigrants, 16 years and older, are in the labor force compared to the city's U.S. born population (64.9 percent) (Figure 6).

- While educational attainment has increased overall for the undocumented population, the share of those with less than a high school education is still much higher than the share for the city overall: 33.1 percent compared to 17.6 percent (Figure 7).

- Despite higher labor force participation and increases in educational attainment, median annual earnings for undocumented immigrants ($25,300) is significantly lower than the earnings for U.S.-born citizens ($45,500) as shown in Figure 8.

- The wage differential is due in part to the heavy concentration of undocumented immigrants in the service and construction occupations: they comprise 25 percent or more of all construction laborers and painter/paper hangers, dishwashers and cooks, and maids and housekeepers/cleaners (Table 2)

Figure 6
Labor Force Participation Rate by Immigration Status
NYC, 2017*

*Persons 16 and older who are employed or unemployed but seeking work
Figure 7
Educational Attainment by Immigration Status
NYC, 2017*

*For persons 25 years and older

Figure 8
Median Annual Earnings by Immigration Status
NYC, 2017*

*Persons 16 and older with positive earnings
As reported in NYC Opportunity’s annual poverty report, the city’s 2017 poverty rate was 19.0. After assigning immigration status to respondents in the ACS sample, NYC Opportunity is able to estimate a poverty rate for the city - one that reflects the differences in eligibility for specific benefits based on legal status. A primary example is the Earned Income Tax Credit (EITC); because undocumented immigrants are ineligible, the EITC is not imputed to anyone whose inferred legal status would make them ineligible. See Technical Note in Appendix B for a more detailed explanation. This rate, to distinguish it from the NYCgov poverty rate, is known as the NYCgov/ImmPov rate.

- Incorporating legal status into the poverty model generates a higher poverty rate for the city than the NYCgov rate; 19.5 compared to 19.0.
- The NYCgov/ImmPov rates for naturalized and U.S.-born citizens were the lowest of all the groups; 18.3 and 18.0 respectively.
- The noncitizen poverty rate increased when legal status was taken into account; 26.7 compared to the NYCgov rate of 25.1.
- Within the noncitizen population, the NYCgov/ImmPov rate for undocumented immigrants was 28.8 percent, significantly higher than the 25.6 percent for lawful noncitizens.

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Table 2
Concentration of Undocumented Workers in Selected Occupations
NYC, 2017

<table>
<thead>
<tr>
<th>Category</th>
<th>Total</th>
<th>Workers as a Percent of Total NYC Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total, NYC Workers 16 and Older</td>
<td>4,976,000</td>
<td>7.2</td>
</tr>
<tr>
<td>Construction and Painter/Paper Hangers</td>
<td>103,000</td>
<td>33.3</td>
</tr>
<tr>
<td>Dishwasher and Cooks</td>
<td>77,000</td>
<td>27.2</td>
</tr>
<tr>
<td>Maids and Housekeepers/Cleaners</td>
<td>81,000</td>
<td>24.8</td>
</tr>
</tbody>
</table>

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Figures 9 and 10 present poverty rates from the peak year of the city’s recession in 2013 to 2017. During this time period, the NYCgov/ImmPov rate is higher than NYCgov rate for each year and all differences are statistically significant. The citywide poverty rate, taking into consideration immigration legal status, tracks closely with the NYCgov rate between 2013 and 2017. For both poverty rates, there was a decline from 2013 to 2017.

### Table 3
**Poverty Rates Before and After Adjusting for Legal Status of Immigrants**
**NYC, 2017**

<table>
<thead>
<tr>
<th></th>
<th>NYCgov/ ImmPov Rate</th>
<th>NYCgov Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>19.5</td>
<td>19.0</td>
</tr>
<tr>
<td>U.S.-Born Citizens</td>
<td>18.0</td>
<td>17.6</td>
</tr>
<tr>
<td>Foreign-Born</td>
<td>22.1</td>
<td>21.3</td>
</tr>
<tr>
<td>Naturalized Citizens</td>
<td>18.3</td>
<td>18.3</td>
</tr>
<tr>
<td>Noncitizens</td>
<td>26.7</td>
<td>25.1</td>
</tr>
<tr>
<td>Green Card Holders</td>
<td>25.6</td>
<td>N/A</td>
</tr>
<tr>
<td>Undocumented Immigrants</td>
<td>28.8</td>
<td>N/A</td>
</tr>
</tbody>
</table>
There was a significant decline in poverty rates for the undocumented population over the 2013-2017 period, as well as for immigrants with green cards. The NYCgovImmPov rate for the undocumented population dropped by 6 percentage points; from 34.8 in 2013 to 28.8 in 2017. While naturalized citizens had the lowest poverty rate among the foreign-born groups, the poverty rate for this group showed no statistically significant decrease between 2013 and 2017.

There are many reasons for the observed higher poverty rates among undocumented immigrants. Disparities in incomes, combined with an over-representation of undocumented workers in predominantly low-paying sectors hint at possible forces driving this population into poverty at a higher rate. Public benefits such as the EITC, an important mitigating factor in reducing poverty, play a crucial role in the difference because undocumented immigrants are not eligible to receive most public benefits.

Differences in educational attainment also help to explain the higher undocumented immigrant poverty rate: among all New Yorkers 25 years and older, the NYCgov/ImmPov rate was 31.8 percent for those who did not complete high school, but fell to 8.5 percent for those with a Bachelor’s degree or higher—a drop of 23.3 percentage points (Figure 11 on the following page).9

For undocumented immigrants, the role of education in keeping individuals out of poverty is weaker. Undocumented immigrants lacking a high school degree had a poverty rate of 38.0 percent, but a college degree reduced the rate to only

9 Using the NYCgov measure, the poverty rates among New Yorkers 25 years and older who did not complete high school and those with a Bachelor’s degree or higher were 31.5 and 7.8, respectively.
17.5, a relatively smaller decline of 20.5 percentage points. The increase in the share of undocumented immigrants with a college degree between 2008 and 2017 as noted earlier, did not significantly lower this poverty rate.

Policy Implications

The de Blasio Administration has played a critical role in promoting immigrant equity and facilitating immigrant inclusion. Recognizing the opportunities that attach to legal status, the City has invested an unprecedented amount of public dollars—more than $30 million in fiscal year 2018—to provide free immigration legal services to immigrant New Yorkers through ActionNYC and other programs. These programs place legal services at community-based organizations, schools, and hospitals. Data show that attaining citizenship is a powerful tool for fighting poverty. This administration has recognized this by investing in NYCitizenship, a program that provides free citizenship application assistance, including screenings and full legal representation, as well as financial empowerment services to those becoming citizens. IDNYC, the largest municipal ID program in the U.S., was developed to ensure that all New Yorkers, regardless of immigration status, can have a government-issued form of identification that can facilitate access to City services and amenities. These are just a few examples of many ways the City creates and promotes New York City as a safe, inclusive and
welcoming city.10

As the federal administration continues to mount additional attacks on immigrant families, the City remains committed to supporting our communities. In August 2019, the Trump Administration published a regulation that changes when certain immigrants are considered a “public charge” for immigration purposes.11 While the “public charge” rule applies only to a narrow subset of immigrants who use public benefits, the announced changes have already had a broad chilling effect on public benefits enrollment among immigrant New Yorkers – regardless of whether they are actually impacted or not.12 In response, the City is engaged in a variety of strategies, including litigation, engaging partners and community members to share resources and accurate information about public benefits and immigration, connecting immigrants to legal services, and working with agency partners to ensure that immigrant New Yorkers can continue to access the services and resources they need and for which they are lawfully eligible. This includes the City’s new NYC Care program, which will guarantee low-cost and no-cost services through the City’s Health + Hospitals systems to every New Yorker, regardless of immigration status or ability to pay.

Immigration status nevertheless presents challenges to poverty responses, the most daunting of which are structural. For example, undocumented immigrants are not eligible for the majority of federally funded public benefits. A differentiated approach is therefore required to address poverty among the various immigrant groups according to legal status. The ability to disaggregate and thus analyze the foreign-born population by immigration legal status offers us an opportunity to create policy more effectively tailored to the different needs of these populations.

Future Research

The creation of the NYCgov/ImmRate is a useful tool for analyzing specific populations. As we continue to refine this measure, it will be more valuable for developing and evaluating future policy. Further analysis is needed before it can be fully implemented into the current NYCgov measure, but we are committed to publishing results from this ongoing research annually (See Technical Note 2). These data generated by NYC Opportunity demonstrate the City’s commitment to identifying and addressing the needs of all New Yorkers irrespective of immigration status.13

11 See nyc.gov/public.charge.
13 Additional data on the foreign-born can be found in the Annual Report from the Mayor’s Office of Immigrant Affairs.
Appendix
Appendix A
Methodology used to Estimate the Immigration Status of Noncitizens

Over the past decade, statisticians have developed increasingly accurate ways to make estimates of the undocumented population. NYC Opportunity has synthesized these new approaches with our own poverty-focused model. Because New York City’s immigrant population is much more diverse than other places, certain assumptions applicable in many of the national models are not appropriate when developing a methodology to estimate the immigration status of the city’s various immigrant groups. To address some of these issues, NYC Opportunity, in conjunction with the Center for Migration Studies (CMS), created a method that places more emphasis on country of birth in determining legal status. This results in an undocumented population that reflects the diversity that is known to exist in the larger NYC foreign-born population.

Beginning with the noncitizen population, the methodology is divided into three steps and is summarized below.

**Step 1.** NYC Opportunity made a series of assumptions (or “logical edits”) based on characteristics of noncitizens in the ACS. During this process, legal status was inferred based on responses in an augmented ACS data file that NYC Opportunity has created to produce the City’s alternative poverty model. For example, noncitizens reporting the receipt of Supplemental Security Income (SSI) are assumed to have lawful immigration status. Immigrants with temporary visas such as foreign students or diplomats are also assigned lawful immigration status based on their characteristics, such as date of entry and on certain educational and occupational characteristics. This step produced a noncitizen population that was assumed to have lawful immigration status. The remaining noncitizens are most likely to be undocumented immigrants.

**Step 2.** To further refine the analysis, independent estimates of undocumented immigrants are needed. NYC Opportunity used country-specific ratios that were created by the Center for Migration Studies (CMS). The CMS ratios, derived using administrative and other data, were then multiplied by the number of potentially undocumented immigrants from each country of origin as derived in step 1. This produces the final estimate of undocumented immigrants counted in the ACS.

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14 See Passel, Van Hook, and Bean (2004) for a detailed description of the various methods to estimate undocumented immigrants that evolved beginning in the mid-1980s.

15 Data on the receipt of public benefits are collected in the ACS for only four public benefits: Supplemental Security Income, Medicaid, SNAP, public assistance and other cash benefits. The methodology used to create the NYCgov alternative poverty rate involves the imputation of other benefits such as WIC, and HEAP. A tax model inferred refundable tax credits such as the EITC.


17 Because ACS is a sample of the total population, weights are needed to produce full population counts. In this step of the methodology, we are assigning ratios on the unweighted data, i.e. those counted in the survey.
Step 3. Underenumeration or undercount is inevitable in sample surveys, particularly for hard-to-reach groups. Studies have shown that underenumeration for undocumented immigrants is negatively correlated with length of stay in the United States—the longer an undocumented immigrant has been in the United States, the less likely she is to be missed by a sample survey. NYC Opportunity applied undercount rates that range from about 2 percent for those who arrived in 1982 to 14 percent for those who entered in 2017. These undercount assumptions are consistent with undercount rates measured by the Census Bureau over the last few decades.

In the past year, improvements were made to the data used in the methodology. The ratios described in Step 2 were refined and updated by CMS based primarily on a detailed analysis of annual DHS administrative data from 2010 to 2017. The result of the analysis was a slight increase in the ratios for many of the countries that send immigrants to New York City. The cumulative effect of these changes was to increase the total population by about four percent for the years 2014 to 2017.

This methodology will continue to evolve as scholarship advances and new data become available. Accordingly, these estimates are subject to periodic revisions. Based on the most recent revisions, changes in the total number of undocumented immigrants are not likely to exceed a few percentage points. Further, these revisions are unlikely to affect the characteristics of this population.

Although the estimates are currently based on the best data and methodology available, they are still subject to both sampling and non-sampling error in which inevitably some misclassification of undocumented immigrants is expected. For this reason, numbers have been rounded to avoid a false sense of accuracy. Nevertheless, these estimates accurately reflect the size and characteristics of this population. As such, they add a valuable dimension to policy planning and implementation.
Appendix B
Technical Notes

Technical Note 1
The NYCgov Poverty Rate Incorporating Legal Status

The NYCgov Poverty Measure differs from the official U.S. poverty measure in several ways, including the inclusion of post-tax income in the income measure. The EITC plays an important role in lowering the poverty rate when included as a resource. The established model assigns EITC without regard to the legal status of immigrants. However, the EITC can only be claimed by legally resident tax filers with Social Security Numbers. The legal status model assumes immigrants file tax returns as a show of good faith on their path to citizenship. The penalties for invalid EITC claims are severe and obviate a filing in good faith. We assume the EITC is not claimed unless a parent and child have citizenship status and both consequently have social security numbers.

Technical Note 2

Testing and refinement of the immigration model will continue and will be used to generate population estimates as well as the corresponding NYCgov/ImmPov rates annually. The NYCgov poverty measure will continue to be the standard for New York City’s local rate.

We have historically compared the NYCgov measure to the federal Supplemental Poverty Measure (SPM). It is a comparable national measure that allows us to assess poverty in NYC compared to the country as a whole. The SPM does not include immigration status. Immigration status is also not captured in the official federal poverty measure, another basis of comparison. Our standard model will allow us to maintain this comparability. (See https://www.census.gov/topics/income-poverty/supplemental-poverty-measure.html for more on the SPM.)