

Part 1: Focus on Income Inequality

Focus on Income Inequality

New York City has seen rising levels of income inequality and a shrinking middle class over the past two decades, trends which featured prominently in the city's most recent mayoral election. In his inaugural remarks, Mayor de Blasio resolved that he would not let the "crisis of inequality" faced by the city "define our future."¹ In this year's *State of New York City's Housing and Neighborhoods in 2013* report, we examine trends in income and how they relate to disparities in neighborhood conditions and services.

1.

Income Distribution

Although inequality is not new to New York City, over the past two decades it has experienced a significant decline in the share of households in broad middle-income categories and an expansion of households in the lowest- and highest-income categories. These changes in the shape of the income distribution mirror the changes observed in the country as a whole.

a. The percentages of both high- and low-income households in New York City have grown as the share of middle-income households has shrunk.

Between 1990 and 2012, the percentage of New York City households earning more than \$250,000 (in real terms) in annual income grew from three to five percent, and the percentage of households earning \$40,000 or less grew from 35 to 40 percent.² As the number of New Yorkers at each income extreme increased, the percentage of households in the broad middle fell, with the percentage of city households earning between \$40,001 to \$250,000 decreasing from 61 to 56 percent. Figure 1.1 illustrates these trends.

The growth at each end of the income distribution in New York City and the declining share of middle-income earners parallel similar changes nationally, as Figure 1.2 reveals. Both the share of households in the highest-income category and their share of national income grew, making total income more concentrated among top earners.

In 2012, the five percent of households at the top of the national income distribution received 22 percent of national income (a four percentage point increase since 1990) and the top 20 percent received 51 percent of the national income (also a four percentage point increase from 1990). By contrast, the 20 percent of households in the middle of the national income distribution received only 14 percent of the national income (a two percentage point decrease since 1990).³ This concentration of income was even more marked in New York City, where the top five percent of households in the city's income distribution received about 28 percent of the city's income in 2012 and the top 20 percent received about 56 percent. The middle quintile received 13 percent of the city's income in 2012.⁴

b. Although levels of income inequality remain higher in New York City than in other major cities, inequality has increased in each city.

In 2012, New York City had the most unequal distribution of household income among the five largest U.S. cities,⁵ with generally larger proportions in the highest and lowest income categories. While New York City had the highest Gini coefficient (0.538 as shown in Figure 1.3; see sidebar for an explanation this measure) of the five largest U.S. cities in 2012, the Gini coefficient also rose in the next four largest cities.⁶

1 The Official Website of the City of New York: Inaugural Address of Mayor Bill de Blasio: Progress for New York (1 January, 2014). Retrieved from <http://www1.nyc.gov/office-of-the-mayor/news/005-14/inaugural-address-mayor-bill-de-blasio-progress-new-york#/0>.

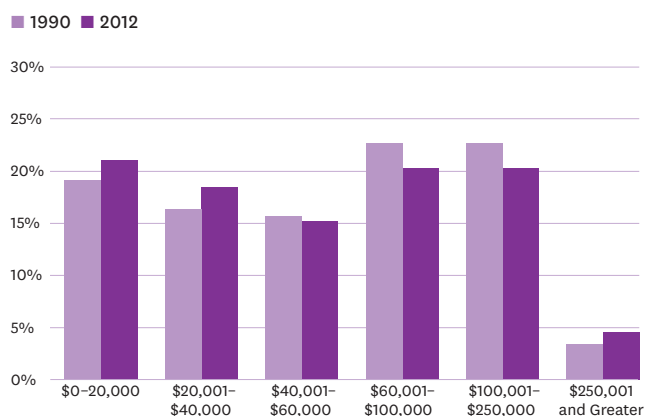
2 All dollar amounts in the *State of New York City's Housing and Neighborhoods* are reported in constant 2013 dollars. For more information on inflation adjustments, please see the Methods chapter.

3 U.S. Census Bureau 2014, Current Population Survey, Annual Social and Economic Supplements, Historical Income Table H-2. Available at: <https://www.census.gov/hhes/www/income/data/historical/household/>.

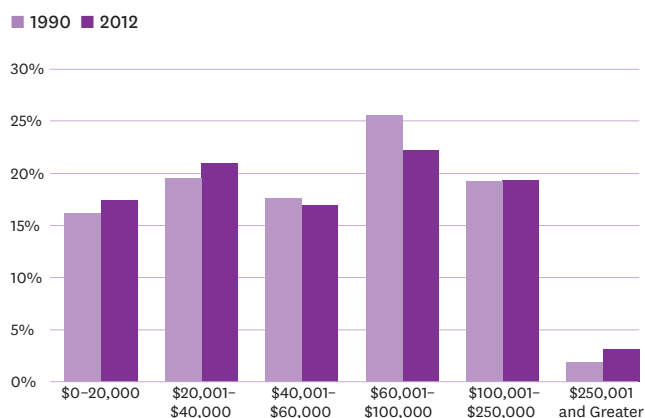
4 U.S. Census Bureau 2014, American Community Survey, Table B19082, Shares of Aggregate Income for New York City in 2012.

5 Where data are available, the *State of New York City's Housing and Neighborhoods in 2013* compares New York City to the next four largest cities in the United States—Chicago, Houston, Los Angeles, and Philadelphia—to help contextualize the city's experience. See the Methods chapter for more information.

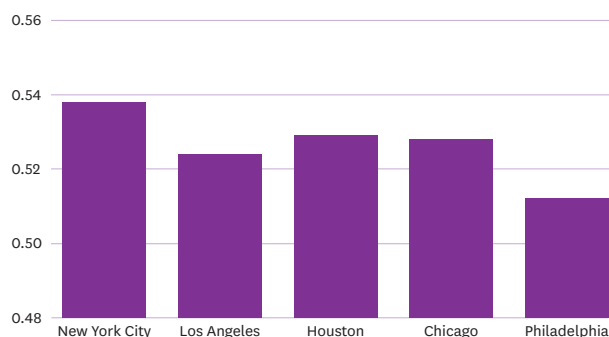
6 In alternative calculations we approximate Gini coefficients for the five largest U.S. cities in 1990. Chicago, Philadelphia and Los Angeles exhibited larger increases in their Gini coefficients between 1990 and 2012, while only Houston experienced a smaller increase than New York City. See Figure 4.4 in Part 2, Section 4: Income and Workers for additional details.

Figure 1.1: Distribution of Income (2013\$) Across Households, New York City

Sources: U.S. Census (1990), American Community Survey (2012), Integrated Public Use Microdata Series, NYU Furman Center

Figure 1.2: Distribution of Income (2013\$) Across Households, U.S.

Sources: U.S. Census (1990), American Community Survey (2012), Integrated Public Use Microdata Series, NYU Furman Center

Figure 1.3: Gini Coefficient of Household Income, Five Largest U.S. Cities, 2012

Sources: American Community Survey, NYU Furman Center

How do we measure income inequality and what difference does it make?

A simple approach is a ratio of incomes at two percentiles of the distribution, which provides a sense of the gap between those incomes. A higher ratio indicates a wider spread of incomes but does not measure the full distribution of incomes either beyond those quintiles or in between them. Measures of inequality using percentiles have the benefit of being easy to calculate, simple to understand, and uninfluenced by extreme outliers. The disadvantage of measuring inequality through the percentile ratios is that they only test for inequality between very high and very low income households and exclude large portions of the income distribution. In the State of New York City's Housing and Neighborhoods, the NYU Furman Center uses an **income diversity ratio** measured as the ratio of the 80th percentile of household income to the 20th percentile (as discussed in Part 2, Section 4: Income and Workers).

One of the most well-known measures of inequality is the **Gini coefficient**, which measures the dispersion of incomes on a scale of zero (all have the same income) to one (a single person or household obtains all income). The Gini coefficient has the benefit of taking into account the whole income distribution and being independent of population size, but the disadvantage of being difficult to decompose into measures by population groups or other dimensions within the total.

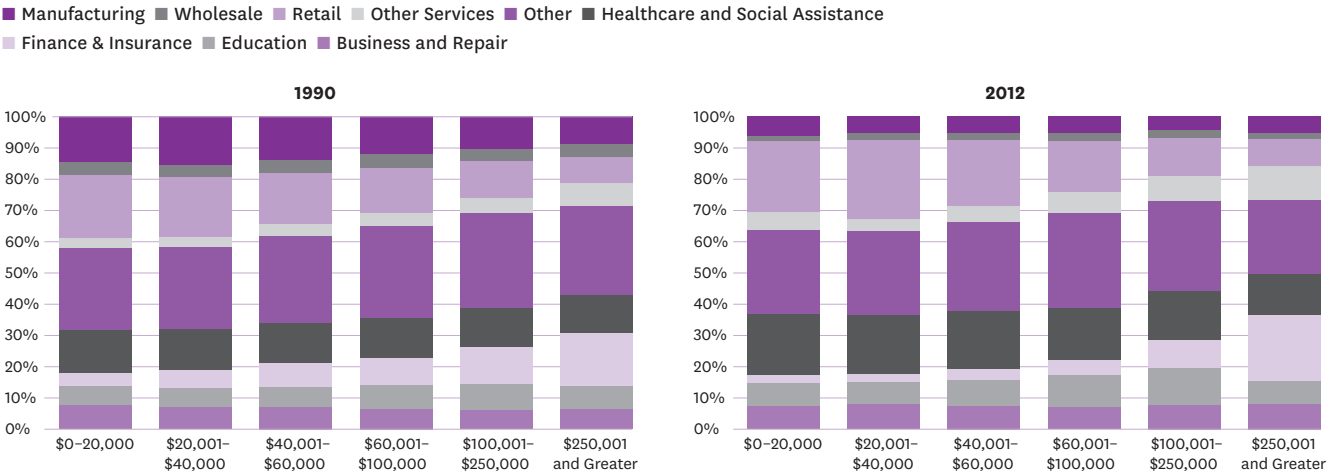
One can also examine not just inequality in the current moment but economic mobility over time. Recent research using historical income tax data has found that economic mobility varies significantly by metropolitan region and that a child growing up in the New York metropolitan region with parents with income at the 20th percentile of national income (\$26,000) ends up on average in the 43rd percentile of earners (\$52,000), compared to the 45th percentile in the Salt Lake City region or the 34th percentile in the Charlotte region. Mobility for a child growing up with parents in the 20th percentile of earners in the New York metropolitan region is similar to Los Angeles and greater than Houston (41st), Philadelphia (40th), and Chicago (38th).

Figure 1.4. Distribution of Income (2013\$) Across Households, Other Large U.S. Cities



Sources: U.S. Census (1990), American Community Survey (2012), Integrated Public Use Microdata Series, NYU Furman Center

Figure 1.5: Industry of Employment by Household Income, New York City



Sources: U.S. Census (1990), American Community Survey (2012), Integrated Public Use Microdata Series, NYU Furman Center

Figure 1.4 shows household income distributions for the next four largest cities. Between 1990 and 2012, New York, Los Angeles, Chicago, and Philadelphia experienced similar changes in their household income distributions. Houston's experience differed somewhat, as the lower-income share of households remained stable over this period. The parallel trends of rising shares at the income extremes and a shrinking middle class among the nation's other largest cities highlight how pervasive these income shifts are and how important it is to understand them in more detail.

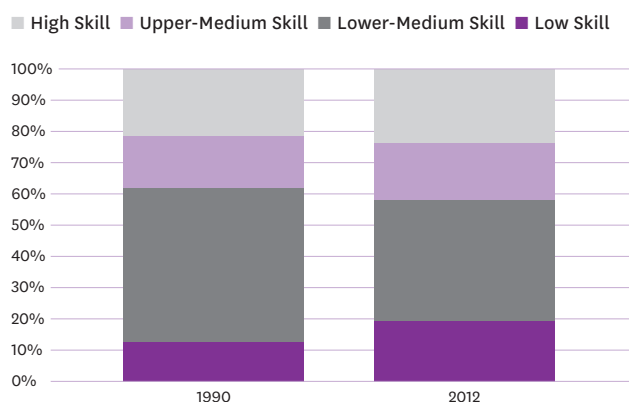
2. Work and Income

While there are many causes of this growing income inequality, one contributing factor has been the restructuring of local and national labor markets in ways that polarize the skill requirements and wage structures of available jobs. Since the 1970s, the United States, like other industrialized countries, has experienced significant economic restructuring shaped by technological advances and increasing international economic interconnectedness. Manufacturing employment in the United States has declined, service employment has increased, and the distribution of wages has become more polarized, with a growing premium paid in the highest-skilled jobs.

a. New Yorkers have become less likely to work in manufacturing and finance jobs and more likely to work in healthcare and retail.

Manufacturing in New York City has fallen since reaching its peak just before 1950. Losses have continued to be significant even over the past two decades, eliminating jobs that once provided middle-class wages for lower-skilled workers. Between 1990 and 2012, the share of workers with manufacturing jobs declined by more than seven percentage points in all income categories up to \$100,000. Overall, the percentage of New Yorkers with manufacturing jobs fell from twelve percent in 1990 to five percent in 2012.

Figure 1.6: Distribution of Job Skill Level of Employed New Yorkers



Sources: U.S. Census (1990), American Community Survey (2012), Integrated Public Use Microdata Series, NYU Furman Center

As manufacturing jobs declined, the set of industries in which high-income and low-income New Yorkers work has also become more polarized. For instance, shares of jobs in both retail and healthcare grew significantly among workers with earnings up to \$60,000 (increasing by approximately six percentage points among workers with earnings between \$20,000 and \$40,000). By contrast, the share of jobs in finance and insurance increased four percentage points among workers in the highest income category (over \$250,000) while declining in all other income categories.

b. The distribution of skill levels in jobs held by New Yorkers has become more polarized while median wages have fallen for all but the most highly-skilled jobs.

As discussed in greater depth in Part 2, Section 4: Income and Workers, more New Yorkers worked in either high-skill or low-skill jobs in 2012 than they did in 1990.⁷ As Figure 1.6 shows, the share of jobs requiring high, upper-medium, and low skill levels grew between 1990 and 2012, while the share of jobs demanding lower-medium skill levels—the largest category—decreased by more than 10 percentage points.

⁷ See Part 2, Section 4: Income and Workers for an explanation on the classification of skills across jobs.

Real median annual wages (not adjusted for number of hours or weeks worked) fell for jobs in all skill categories except those requiring high skills, as illustrated by Figure 1.7. Workers whose jobs required low skills lost more than one-quarter of their earnings, with real wages falling from \$26,326 in 1990 to \$19,523 in 2012. The real median annual wage for workers whose jobs required lower-medium and upper-medium skills fell by 14 percent and 16 percent, respectively, over the same period. Only workers employed in jobs demanding high skills experienced an increase in median earnings; their median wage rose by 10 percent in real terms between 1990 and 2012.

c. The income gap between high school and college educated New Yorkers has widened.

New Yorkers at all income levels have become more educated since 1990. The share of New Yorkers age 25 or over without a high-school diploma dropped from 31.7 percent in 1990 to 20.4 percent in 2012. Meanwhile, the share of New Yorkers age 25 or over with a bachelor's degree or higher grew over the same period, reaching 34.7 percent of New Yorkers in 2012—the highest percentage of any of the five major U.S. cities.

Median wages at all educational levels declined between 1990 and 2012. Yet, the gap between the wages of college degree holders and those without a degree increased, as illustrated by Figure 1.9. While those with advanced degrees experienced only a two percent decline in annual wages and those with a bachelor's degree experienced an eight percent decline, those without any college education faced a decline of approximately one-third in their median annual wages. Therefore, the relative economic returns to a college degree increased. The median wages of someone with a college degree were just more than double those of an individual without a high school diploma in 1990, but were nearly triple the wages of an individual without a high school diploma in 2012. The increase in returns to education combined with an increase in the relative importance of education at higher income categories have contributed to the rise in income inequality.

3.

Housing, Neighborhoods, and Income

What is most concerning about rising inequality is the effect that it can have on living conditions and access to opportunity for those in the middle and bottom of the income distribution. Below, we look at changes over time in various measures of living conditions for New Yorkers by income, particularly housing costs and access to neighborhood services.

a. Income Inequality and Housing

As discussed in greater detail in Part 2, Section 3: Renters and Their Homes, rental housing has become less affordable, with particularly heavy cost burdens for low-income renters.

i. As most renters' incomes have stagnated or declined, rental housing has become increasingly unaffordable.

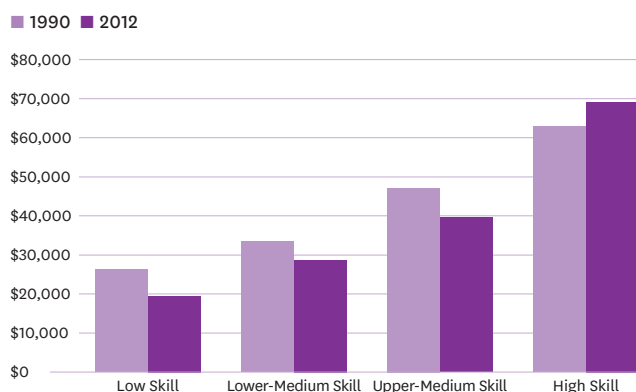
Between 2000 and 2012, the median income of renter households in New York City declined while the median rent rose. As a result, in 2012, a larger proportion of New York City households were rent burdened, paying 30 percent or more of their income to rent and utilities, in 2012 than a decade earlier. More than half (54%) of all renter households were rent burdened, up from 43 percent in 2000. Nearly one-third of New York City's renter households were severely rent burdened, spending at least half of their income on rent and utilities, in 2012. Rent burdens were especially severe for low-income households: more than three-quarters of low-income households were rent burdened and nearly half (47%) experienced a severe rent burden.⁸

ii. The shortfall of rental units that are affordable to lower-income New Yorkers is rising.

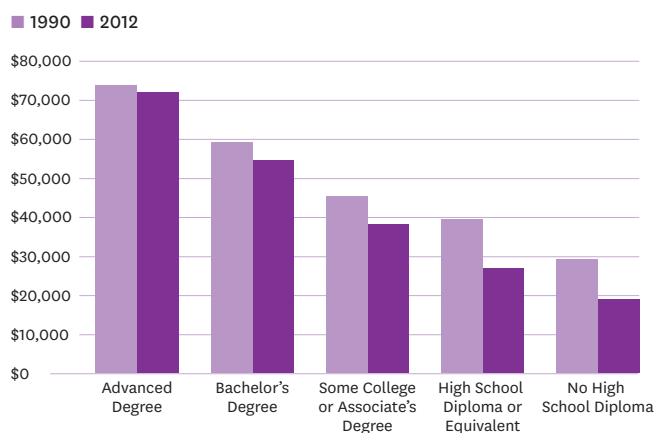
Figure 1.10 illustrates the increasing mismatch between the number of extremely low- and very-low-income households and the rental units potentially affordable to them.⁹

⁸ According to HUD's Section 8 and HOME program income guidelines, a three-person household was considered low-income (at or below 80 percent of the area median income) if it earned \$56,925 or less in 2000 or \$60,805 or less in 2012, both expressed in constant 2013 dollars.

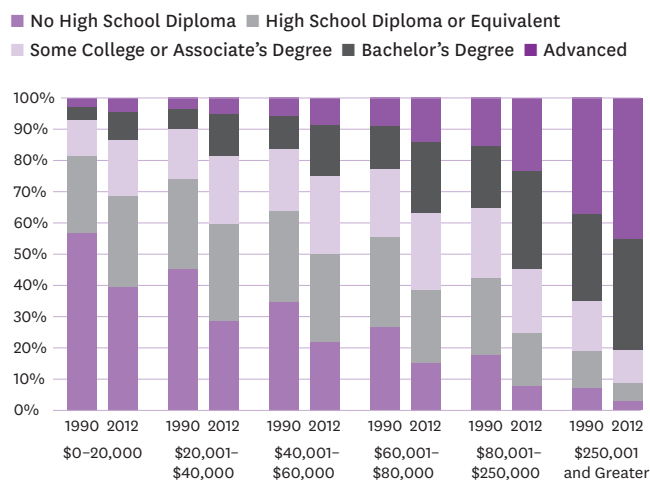
⁹ According to HUD's Section 8 and HOME program income guidelines, a three-person household was considered very low-income (at or below 50 percent of the area median income) if it earned \$35,605 or less in 2000 or \$37,978 or less in 2012, both expressed in constant 2013 dollars. The maximum affordable rents (including utilities) for those income levels were \$891 in 2000 and \$950 in 2012, both expressed in constant 2013 dollars.

Figure 1.7: Median Annual Wage (2013\$) by Job Skill Level, New York City

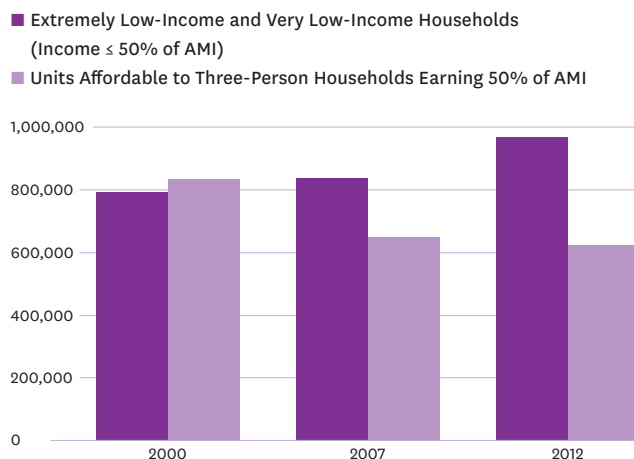
Sources: U.S. Census (1990), American Community Survey (2012), Integrated Public Use Microdata Series, NYU Furman Center

Figure 1.9: Median Annual Wage (2013\$) by Educational Attainment, New York City

Sources: U.S. Census (1990), American Community Survey (2012), Integrated Public Use Microdata Series, NYU Furman Center

Figure 1.8: Educational Attainment by Household Income (2013\$), New York City

Sources: U.S. Census (1990), American Community Survey (2012), Integrated Public Use Microdata Series, NYU Furman Center

Figure 1.10: Number of Units Affordable to Household Earning 50% of AMI

Sources: U.S. Census (2000), American Community Survey (2007, 2012), U.S. Department of Housing and Urban Development, NYU Furman Center

A housing unit is commonly considered affordable to a household if it rents for less than 30 percent of the household's monthly income. Even if every very low-income household earned as much as 50 percent of the area median income (the maximum income of a very low-income household), there would not have been enough rental units to prevent every very low-income household from being rent burdened in 2012. Since 2000, the number of rental units affordable to a household earning 50 percent of the area median income (AMI) declined by nearly 211,000. Meanwhile, the number of households earning less than 50 percent of AMI grew by about 176,000. Moreover, many lower-income households earn less than 50 percent of AMI and the relative shortage of affordable units for them is likely even greater.

b. Income Inequality and Income Segregation

One reason that access to housing is critical is that the location of a home also grants access to neighborhood amenities and services and determines potential exposure to neighborhood hazards. Increasing income inequality and declining housing affordability raise the possibility that neighborhood environments are becoming more polarized as well.

As the distribution of incomes widened and wages declined for all but the highest-income New Yorkers between 1990 and 2012, we find the very highest-income households have indeed become more isolated from other households. (For information about income thresholds used in this analysis, please refer to the Methods chapter.)

i. Income segregation of the top and bottom 10 percent of earners has increased.

Between 1990 and 2012, the highest-income New Yorkers received an increasing share of the city's aggregate income. Perhaps not surprisingly, households in the top 10 percent of earners (making more than \$162,138 in 2012) were more likely to have neighbors earning similarly high levels of income in 2012 than in 1990. Specifically, the average household in the top 10 percent of incomes lived in a neighborhood in which 22.4 percent of their neighbors were also in the top decile of earners in 1990 (i.e., an isolation index equal to 0.224); by 2008-2012, that percentage jumped to 24.8 percent (see Figure 1.13). In 2008-2012, the top 10 percent of earners had two and a half times more neighbors in the top decile than they would have had if the

Race, Ethnicity, Nativity, and Income Inequality in New York City

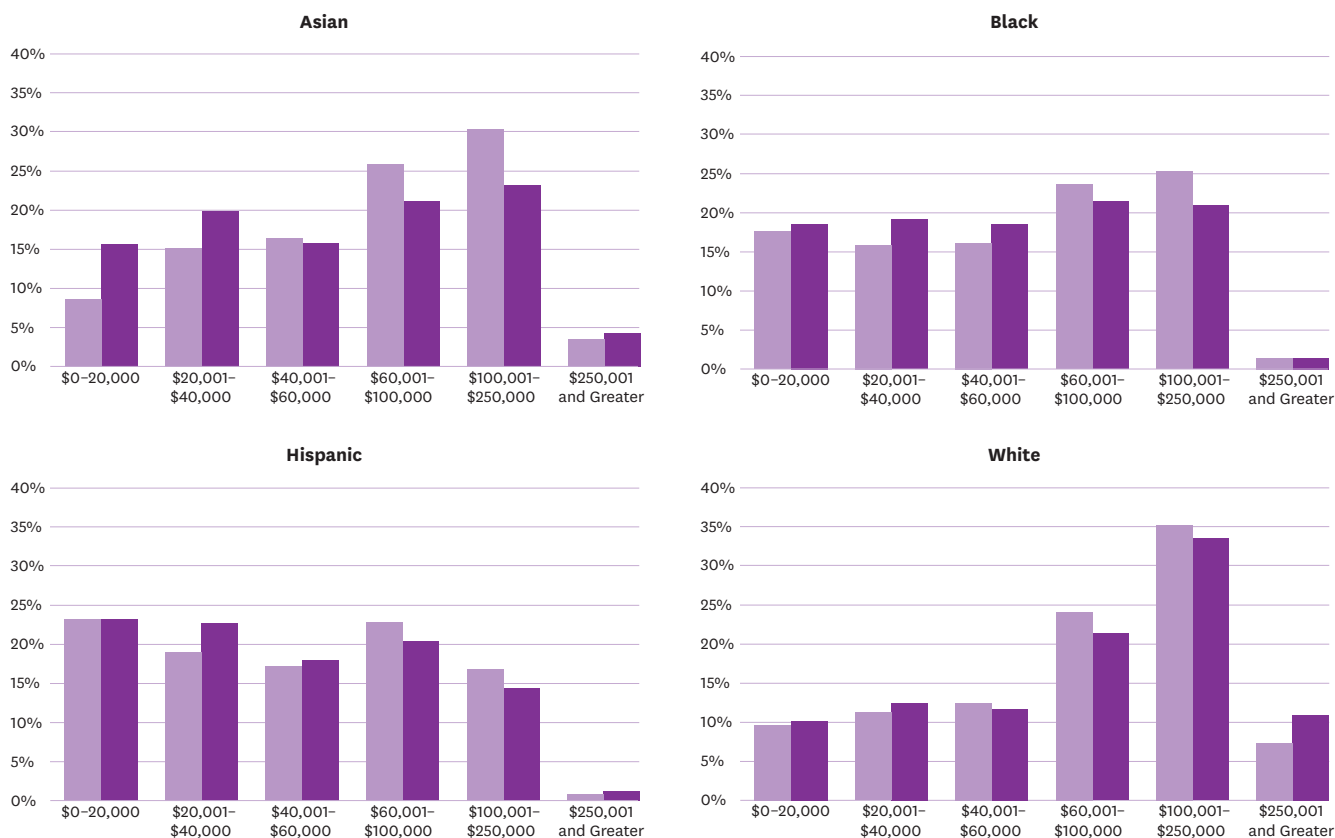
Between 1990 and 2012, New York City became more racially diverse, as the share of Asians and Hispanics grew and the share of whites and blacks declined. Over this period, different racial groups saw somewhat distinct shifts in their distribution of income, as shown in Figure 1.11. The distribution of income among whites remained concentrated above \$60,000, with an increase in the share of households earning more than \$250,000 and a slight decrease in the share earning between \$60,000 and \$250,000. Both blacks and Hispanics became less likely to earn household incomes between \$60,000 and \$100,000 and more likely to earn less than \$60,000. Meanwhile, the distribution of income changed most strikingly for Asians. Over the same period, the share of Asians with household incomes of less than \$40,000 increased from five to seven percentage points, while the share earning between \$60,000 to \$250,000 decreased by roughly the same amount.

Increasing income inequality citywide was reflected in the income distributions of both foreign- and native-born New Yorkers. For both groups, the share of households in the lowest and highest income categories increased between 1990 and 2012. As depicted in Figure 1.12, however, there were some differences in the changes. In particular, the share of New Yorkers born in the U.S. earning less than \$20,000 increased less than the share of foreign-born residents in this income category. Overall, the income distributions of foreign-born and native-born New Yorkers looked fairly similar in 2012, though foreign-born households were somewhat more likely to have incomes under \$60,000. While 54 percent of foreign-born households had incomes up to \$60,000 in 2012, only 48 percent of native-born households had incomes in this range.

population had been evenly distributed by income. One factor contributing to the increase in segregation among the top decile was the growth in incomes among the very highest earners. As incomes generally increased within the top decile, the differences in incomes between moderate- and high-income households widened. This widening of income gaps within the top quintile decreased the

Figure 1.11: Distribution of Household Income by Race, New York City

■ 1990 ■ 2012



Sources: U.S. Census (1990), American Community Survey (2012), Integrated Public Use Microdata Series, NYU Furman Center

Figure 1.12: Distribution of Household Income by Foreign-Born Status, New York City

■ 1990 ■ 2012



Sources: U.S. Census (1990), American Community Survey (2012), Integrated Public Use Microdata Series, NYU Furman Center

likelihood that lower-income households could afford to live in the same neighborhoods as the highest-income, leading to greater segregation of the most well-off. One expression of this segregation was the growing concentration of the highest-income households in Manhattan.

The bottom 10 percent of earners also became more segregated between 1990 and 2008-2012. This segment of households, making less than \$10,708 in 2012, experienced an increase in isolation from 0.148 to 0.163.¹⁰

ii. Levels of income segregation varied starkly by borough.

The extent to which the average household member in the top or bottom 10 percent of the income distribution was likely to be surrounded by neighbors of their same income group varied significantly by borough, as Figure 1.14 illustrates. The average household in the top 10 percent of New York City's income distribution in 2008-2012 had a larger share of neighbors in the same income decile if they lived in Manhattan (0.347) or Staten Island (0.189) than if they lived in the Bronx (0.109) or Queens (0.144). Meanwhile, the average household in the lowest 10 percent of the city's income distribution in 2008-2012 had a larger share of neighbors in the same income decile in the Bronx (0.207) and in Brooklyn (0.176), compared with lower shares in Staten Island (0.116) and Queens (0.114). The most striking difference among the boroughs is the significant concentration of the top decile in Manhattan.

Indeed, as shown in Figure 1.15, nearly half (47%) of households with incomes in the top 10 percent of the city-wide household income distribution lived in Manhattan in 2012, a noticeable increase from the 40 percent who lived in Manhattan in 1990. The borough shares of the city's top decile earners fell between 1990 and 2012 in Queens and the Bronx and remained relatively stable in Brooklyn and Staten Island as the top decile became more concentrated in Manhattan.

How do we measure segregation?

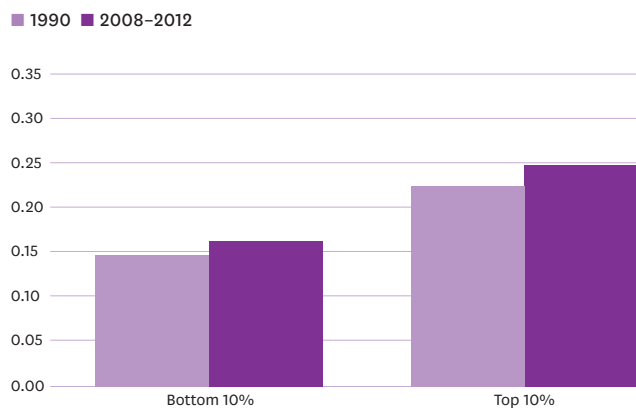
The isolation index captures the proportion of the neighborhood population that belongs to a single population group and is thus influenced both by the relative size of the group and the evenness with which the group is distributed across neighborhoods. It can be conceptualized as a measure of the extent to which the average member of a population group is likely to be exposed to members of that same population group within his or her neighborhood in the city.

Households in the bottom decile of the income distribution are more evenly distributed than those in the top decile. Thirty-four percent of the city's lowest decile earners lived in Brooklyn in 2012. Between 1990 and 2008-2012, the bottom 10 percent became slightly more concentrated in the Bronx, Queens, and Staten Island, while their shares decreased in Brooklyn and Manhattan.

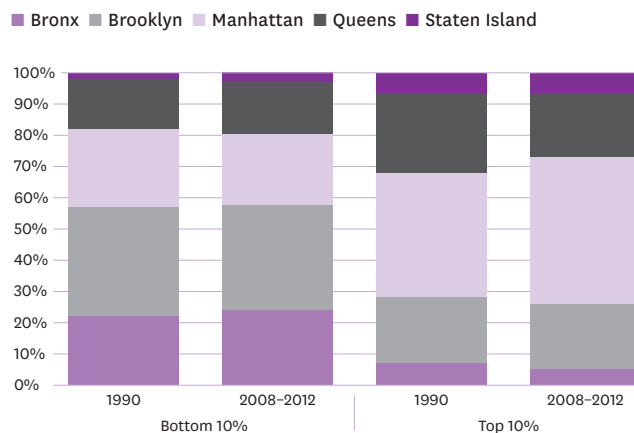
c. Income Inequality and Neighborhood Conditions

As discussed above, the highest-income households in the city have become somewhat less likely to live in the same neighborhoods as middle- or low-income families. This neighborhood income sorting can potentially generate large disparities in neighborhood conditions and services. In terms of two crucial variables, exposure to crime and access to high-performing elementary schools, conditions in the neighborhoods at all income levels improved between 2000 and 2012. Nevertheless, significant gaps persist between the neighborhood conditions experienced by the city's higher income residents and the city's lower-income residents, as discussed in greater detail in Part 2, Section 5: Neighborhood Services and Conditions.

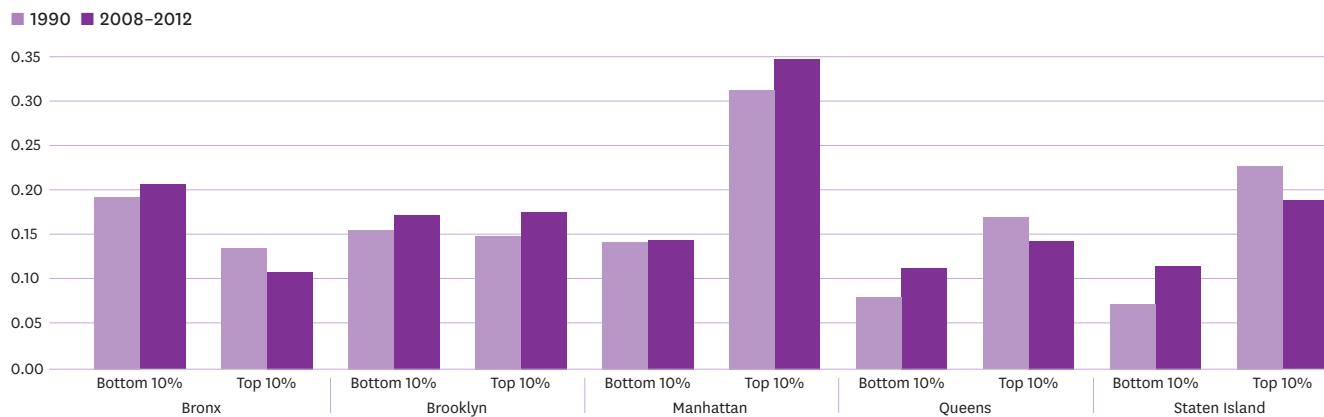
¹⁰ The isolation index is sensitive to the size of the group being measured relative to the total population. Thus, as this group comprises a larger share of the population, its isolation index rises. We approximate the lowest household income decile using rigid dollar ranges because the Census summary files do not include citywide decile shares. The percentage of households that our approximated decile represents fell from 10.5 percent in 1990 to 9.0 percent 2008-2012, suggesting that our estimated increase in the isolation index for the bottom 10 percent might be larger than it appears. For more information, see the Isolation Index section of the Methods chapter.

Figure 1.13 Isolation Index of the Top and Bottom Household Income Deciles, New York City

Sources: U.S. Census (1990), American Community Survey (2008–2012), NYU Furman Center

Figure 1.15: Borough Distribution of the Top and Bottom Household Income Decile

Sources: U.S. Census (1990), American Community Survey (2008–2012), NYU Furman Center

Figure 1.14 Isolation Index of the Top and Bottom Income Deciles by Borough

Sources: U.S. Census (1990), American Community Survey (2008–2012), NYU Furman Center

i. New York City's declining crime rates benefited New Yorkers at all income levels, but gaps persisted in exposure to violent crime by level of income.

The violent crime rate in New York City has continued to fall dramatically since 2000. The drop in violent crimes has benefited New Yorkers at all income levels, as shown in Figure 1.16. However, it appears to have benefited the lowest-income earners the most. The average household earning \$20,000 or less experienced a decrease of 3.1 violent crimes per 1,000 residents between 2000 and 2013. The average household earning more than \$250,000 experienced a decrease of 2.6 violent crimes per 1,000 residents. Despite the substantial decline at all income levels, the average household with an income of \$20,000 or less was saw a significantly higher violent crime rate (5.8 per 1,000 residents) than the average household with an income greater than \$250,000 (3.8 per 1,000 residents).

ii. Households in higher-income categories had access to higher performing elementary schools in their neighborhoods.

In terms of the performance levels of students in nearby elementary schools, the share of students scoring at a proficient or higher level on standardized tests in math and reading improved citywide between 2000 and 2012. The improvements were relatively balanced across income

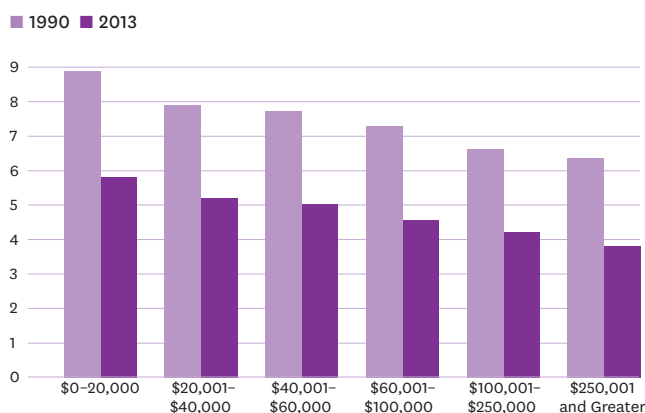
categories. However, households in higher income categories continued to have access to higher-performing schools in their neighborhoods, as seen in Figure 1.17.

4. Conclusion

New York City has experienced a hollowing out of the middle class over the past two decades. Despite increasing educational attainment by city residents at all income levels, the wage structure of available jobs has become more polarized and median household income overall has declined in real terms since 1990. As recently as 2012, two out of every five New York households earned less than \$40,000 in annual income. At the same time as the median household income declined, rents increased. Low-income New Yorkers had less disposable income net of housing costs.

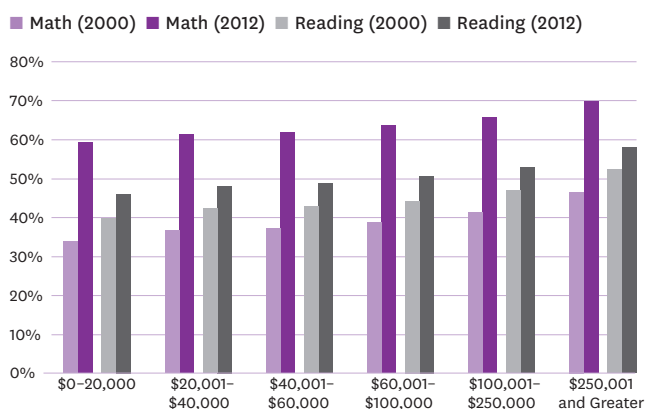
While neighborhood conditions improved for all New Yorkers over the past two decades, wide gaps remain. Lower-income New Yorkers still live in neighborhoods with higher crime and more poorly performing schools. The gains of the past two decades must be built upon and attention should be focused on ensuring that the city's shrinking middle-class and growing number of low-income households have access to affordable housing, safe neighborhoods, strong schools, and meaningful opportunities to advance. ■

Figure 1.16: Average Violent Crime Rate by Income (2013\$) of Household in New York City, 2000-2013



Sources: New York City Police Department, U.S. Census (2000), American Community Survey (2012), Integrated Public Use Microdata Series, NYU Furman Center

Figure 1.17: Percentage of Students Performing at Grade Level in Local Public Schools to Which Households of Differing Incomes (2013\$) Have Access, New York City



Sources: New York City Department of Education, U.S. Census (2000), American Community Survey (2012), Integrated Public Use Microdata Series, NYU Furman Center