Section 4: Income and Workers

Between 2011 and 2012, New York City’s median household income, workforce participation rate, and unemployment rate improved slightly, and the metropolitan area’s gross domestic product continued to grow. However, despite overall growth in the metropolitan area’s economy, not all of the city’s residents have reaped the benefits. Poverty and unemployment rates have remained elevated, and income inequality has stayed quite high, after rising sharply between 1990 and 2005.

1. Income, Poverty, and Inequality

a. Median household income recovered slightly from 2011 to 2012.
For the first time since the onset of the recession, New York City’s real median household income increased slightly between 2011 and 2012. As shown in Figure 4.1, New York City’s median household income grew modestly from $51,281 in 2011 to $51,750 in 2012. However, consistent with the experiences of the next four largest U.S. cities, New York City’s median household income remained well below its pre-recession peak in 2008. Without accounting for differences in the costs of living, New York City’s median household income also continued to rank highest of the five largest U.S. cities.

b. Fewer households are receiving income from income-generating assets.
The sources of income for New Yorkers have changed since the recession. As illustrated in the top panel of Figure 4.2, the percentage of New York City households receiving income from interest, dividends, real estate, and other income-generating assets decreased by nearly six percentage points since the onset of the recession in 2008. Over the same period, the share of households receiving retirement income also fell marginally by almost one percentage point, while the share of households with self-employment income remained unchanged.

c. More households depend on the Supplemental Nutrition Assistance Program.
As shown in the bottom panel of Figure 4.2, the percentage of households receiving benefits from the Supplemental Nutrition Assistance Program (SNAP, previously called the Food Stamp Program) grew by seven percentage points between 2007 and 2011 and then remained steady between 2011 and 2012. The percentage of households receiving Supplemental Security Income (SSI) program benefits increased mildly from 2009 to 2010, and remained at nearly the same level through 2012. In contrast to increases in SNAP and SSI participation, the share of households receiving Social Security and Temporary Assistance for Needy Families or other cash public assistance payments has remained generally stable since 2006.

d. New York City’s poverty rate has stabilized at roughly 21 percent.
The poverty rate in New York City remained stable from 2011 to 2012 at roughly 21 percent, the lowest rate of the five largest U.S. cities in both years. In all five cities, as shown in Figure 4.3, the poverty rate increased after the beginning of the recession in 2008 and has remained elevated. From 2011 to 2012, only Philadelphia’s poverty rate decreased meaningfully, by over one percentage point.

e. In the past two decades, income inequality grew by the same amount in New York City as in other major U.S. cities.
As discussed in Part 1: Focus on Income Inequality, income inequality has been higher in New York City than in the

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1 Data from the Bureau of Economic Analysis show that the real gross domestic product (GDP) of the New York-Newark-Jersey City, NY-NJ-PA metropolitan statistical area grew by 6.7 percent overall during the same period.
next four largest cities. For example, Figure 4.4 shows that the income diversity ratio, which we discuss in the next section, suggests a widening of the gap between the highest and lowest household income quintiles from 1990 to 2012. Since 1990, the income diversity ratios of Los Angeles, Chicago, and Houston increased by roughly the same amount as New York City’s, while Philadelphia’s income diversity ratio increased somewhat less. By 2012, New York City’s income diversity ratio had risen to 6.0, while the ratios of the other cities ranged from 5.3 (Houston) to 5.7 (Chicago and Philadelphia). Although the income diversity ratio does not measure inequality in the middle or extremes of the distribution, the story it tells of

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2 The income diversity ratio is defined as the 80th percentile of household income divided by the 20th percentile of household income. For example, in 2012, the household at the 80th percentile in New York City earned six times more income than the household at the 20th percentile. As the income distribution becomes more unequal, the ratio increases.
rising inequality is consistent with measures that describe the entire distribution, including the Gini coefficient, described in more detail in Part 1.

2. Labor Force

a. Labor force participation increased in New York City from 2010 to 2012.
The labor force participation rate is the percentage of civilian working age individuals who are either employed or unemployed but actively seeking a job. Since 2005, New York City’s labor force participation rate has been lower than that in Los Angeles, Chicago, Houston, and the U.S. as a whole, but higher than that in Philadelphia. As Figure 4.5 shows, the labor force participation rate in the U.S. increased in the beginning of the recession from 2007 to 2008 and then decreased steadily from 2008 to 2012, falling by just over two percentage points. Labor force participation rates have changed much less in the five largest cities between 2008 and 2012. New York City’s labor participation rate fell slightly between 2009 and 2010, but quickly recovered from 2010 to 2012 and returned to its 2008 level.

b. Leading into the recession, more women and older adults entered New York City’s workforce.
Analyzing the labor force participation rate for key groups within New York City shows differences by age and gender. Figure 4.6 shows that labor force participation remained stable and high for men at roughly 69 to 70 percent from 2005 to 2012. It increased for women from 55 percent in 2005 to 58 percent in 2008, and stayed relatively constant through 2012. Similar to trends for women, older adults increased their labor force participation from 60 to 64 percent from 2005 to 2008, and remained as active in the labor force through 2012. Younger adults, aged 16 to 29, participated in the labor force at roughly the same rate from 2005 to 2012, at just over 60 percent.

c. New York City’s unemployment rate continued its fall since 2010.
In line with the gradual recovery of the U.S. labor market from the Great Recession, the unemployment rate in New York City has fallen since 2010 but not as fast as the overall U.S. unemployment rate. Figure 4.7 compares annual unemployment rates of New York City and the U.S. as reported from the Bureau of Labor Statistics (BLS).\(^2\) Unemployment rates in both New York City and the U.S. sharply increased from 2008 to 2010 and then declined after 2010. From 2010 to 2013, the U.S. unemployment rate fell by 2.2 percentage points, while New York City’s unemployment rate dropped by nearly a percentage point.

Average annual unemployment rates in each of the next four largest cities also fell from 2010 to 2013 as shown in Figure 4.8. The unemployment rate fell the most in Los Angeles, though that city still had the highest rate of unemployment in 2013 among the five largest cities (10.8%). In 2013, New York City’s unemployment rate was the second lowest of the five cities.

3. Education and Skills

a. The proportion of New Yorkers with a college degree increased between 2005 and 2012, while the share without a high school diploma fell only slightly.
In 2012, the share of New York City’s residents with a bachelor’s degree or higher was 34.7 percent, the highest of the five major cities. While this proportion had increased by 2.4 percentage points between 2005 and 2012 in New York City, it increased by even more in each of the other large cities except for Houston, as shown in Figure 4.9. Meanwhile, each of the next four largest cities also saw a larger decline in the share of residents with less than a high school diploma.

\(^3\)This section reports unemployment data from the Bureau of Labor Statistics (BLS) instead of the American Community Survey (ACS) used throughout Part 3. The BLS makes more recent unemployment data available at the city and county level, but not for smaller geographies, while the ACS permits the calculation of an unemployment rate at the sub-borough area. In order to facilitate comparisons of the unemployment rate from sub-borough areas to larger geographic areas, we report the unemployment rate from only the ACS in Part 3. Because the BLS uses a different survey, the Current Population Survey, among other sources to generate its unemployment rate for local areas, we advise against comparing any BLS unemployment data reported in this section to any ACS unemployment rate data shown in Part 3.
Figure 4.5: Labor Force Participation Rate, Five Largest U.S. Cities
- New York City
- Los Angeles
- Chicago
- Houston
- Philadelphia
- U.S.

72%
66%
60%
54%

54% 2005 2006 2007 2008 2009 2010 2011 2012

Figure 4.6: Labor Force Participation Rate by Gender and Age, New York City
- Age 16–29
- Age 55–64
- Male
- Female

72%
66%
60%
54%

54% 2005 2006 2007 2008 2009 2010 2011 2012

Sources: American Community Survey, NYU Furman Center

Figure 4.7: Unemployment Rate, U.S. and New York City
- New York City
- U.S.

10%
8%
6%
4%

4% 2005 2006 2007 2008 2009 2010 2011 2012 2013

Sources: Bureau of Labor Statistics, NYU Furman Center

Figure 4.8: Unemployment Rate, Five Largest U.S. Cities
- New York City
- Los Angeles
- Chicago
- Houston
- Philadelphia

15%
12%
9%
6%
3%

Sources: Bureau of Labor Statistics, NYU Furman Center

Figure 4.9: Educational Attainment, Five Largest U.S. Cities
- Bachelor's Degree or Higher, 2005
- Bachelor's Degree or Higher, 2012
- Less Than High School Diploma, 2005
- Less Than High School Diploma, 2012

40% 35% 30% 25% 20% 15% 10% 5% 0%

Sources: American Community Survey, NYU Furman Center
The skill levels of jobs held by New Yorkers became increasingly polarized.

Over the past two decades, the occupations of New Yorkers shifted away from lower-medium-skill jobs and towards occupations at the low and high ends of the skills distribution. Figure 4.10 shows the skills distribution of jobs held by New Yorkers in 1990 and 2012. In 2012, jobs demanding lower-medium skills (transportation, unskilled manufacturing, sales, and administrative support occupations) continued to be the most prevalent among New Yorkers, but the share of workers in these occupations declined substantially from 1990 to 2012, falling by over 10 percentage points. At the same time, the share of jobs demanding low skills increased by over six percentage points, while the share of occupations with high and upper-medium skills increased by about two percentage points each. Thus, the occupational distribution of New Yorkers has become more polarized over the past two decades.

c. Real wages declined for lower and medium-skill jobs between 1990 and 2012.

As seen in Figure 4.11, from 1990 to 2012, the median real annual wage (without controlling for weeks or hours worked) fell in each skill category except for high-skill jobs. The decline was particularly large for low-skill jobs: the median annual wage for this skill group fell by just over 25 percent over this period, while median wages dropped for both lower-medium and upper-medium-skill jobs by about 15 percent. However, the median annual wage for high-skill jobs rose over the same period by about 10 percent. Trends in the median annual wage for upper-medium and high-skill jobs in New York City were generally consistent with those in the next four largest cities (results not shown). However, wage declines were more modest for lower-medium-skill and low-skill jobs in the other four cities. Wages for low-skill jobs fell by only 14 percent and 12 percent in Philadelphia and Los Angeles, respectively, remained stable in Chicago, and increased by 5 percent in Houston. The diverging wages between high-skill and medium- to low-skill jobs held by New Yorkers contributed to increasing inequality in the distribution of income.

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4 To proxy the skill levels of jobs, we adapt an approach used in a recent report by the Federal Reserve Bank of New York. Given that occupations that demand more skills should be associated with higher wages, that report assigns skill levels to workers’ occupations based on their rankings of median wages in 2010 for major occupational categories. High-skill jobs include legal, financial, scientific, medical, and managerial occupations; upper-medium-skill jobs include skilled manufacturing, construction, teachers, arts/entertainment, and government occupations; lower-medium-skill jobs include transportation, unskilled manufacturing, sales, and administrative support occupations; and low-skill jobs include personal care, healthcare support, maintenance, and food services positions. Abel, J. R., & Deitz, R. (2012). Job Polarization and Rising Inequality in the Nation and New York-Northern New Jersey Region, Federal Reserve Bank of New York. Retrieved from http://www.newyorkfed.org/research/current_issues/ci18-7.pdf.
Figure 4.10: Distribution of Job Skill Level of Employed New Yorkers

<table>
<thead>
<tr>
<th>Skill Level</th>
<th>1990</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Skill</td>
<td></td>
<td></td>
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<tr>
<td>Upper-Medium Skill</td>
<td></td>
<td></td>
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<tr>
<td>Lower-Medium Skill</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Skill</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Figure 4.11: Median Annual Wage (2013s) by Job Skill Level, New York City

<table>
<thead>
<tr>
<th>Skill Level</th>
<th>1990</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Skill</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower-Medium Skill</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower-Medium Skill</td>
<td></td>
<td></td>
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<tr>
<td>High Skill</td>
<td></td>
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</tr>
</tbody>
</table>

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

Figure 4.12: Mean Travel Time to Work (Minutes) by Household Income, New York City*

<table>
<thead>
<tr>
<th>Income Range</th>
<th>1990</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0-$20,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$20,001-$40,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$40,001-$60,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$60,001-$100,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$100,001-$250,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$250,001 and Greater</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Excludes workers in agriculture, mining, forestry, and manufacturing industries, and those who travel for less than 10 minutes or more than 90 minutes.

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

Figure 4.13: Means of Transportation to Work by Household Income, New York City*

<table>
<thead>
<tr>
<th>Income Range</th>
<th>Public Transportation</th>
<th>Car</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0-$20,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$20,001-$40,000</td>
<td></td>
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<td>$40,001-$60,000</td>
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<td>$60,001-$100,000</td>
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<tr>
<td>$100,001-$250,000</td>
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<tr>
<td>$250,001 and Greater</td>
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<td></td>
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</tr>
</tbody>
</table>

*Excludes workers in agriculture, mining, forestry, and manufacturing industries, and those who travel for less than 10 minutes or more than 90 minutes.

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