



NYC ECONOMIC BRIEF

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Income Analysis of a \$15.00 Minimum Wage in New York City

Despite growing income inequality and a disturbing stagnation in the wages of working Americans, Congress has not raised the national minimum wage since 2009. With the current federal minimum of \$7.25 per hour widely seen as inadequate, the number of states adopting their own minimum wage has grown to 29. Moreover, a growing number of municipalities across the nation have adopted local minimum wages that are higher than the federal level and higher than their respective state levels.

Cities with local minimum wage laws include San Francisco, San Jose, Oakland, San Diego, Santa Fe, Albuquerque, Seattle, Chicago, Louisville and Washington D.C., as well as Montgomery and Prince George's counties in Maryland. A number of other cities are considering them.

The economic rationale for adopting minimum wages that differ across states and metropolitan areas is strong. There is a 35 percent difference in the cost of living between the highest-cost state (Hawaii) and the lowest-cost state (Mississippi), and in virtually every state the cost of living in the largest metropolitan area is higher than in the small cities and rural areas of that state.¹ There is also evidence that worker productivity varies with metropolitan area size.²

In the 2013-2014 New York State legislative session, bills were introduced in the Assembly and

Senate³ that would have raised the State minimum wage to \$10.10 per hour and allowed cities within the state to establish their own minimum wages up to 30 percent higher than the statewide rate, or up to \$13.13. In June, 2014, New York City Comptroller Scott Stringer released an analysis of the income effects of a \$13.13 minimum wage on City residents.⁴

During 2014, the cities of Seattle, SeaTac and San Francisco adopted local minimum wages that phase in a \$15.00 per hour minimum wage, and the Los Angeles city council is currently considering an ordinance that would raise its minimum wage to \$15.25. There is interest in raising the minimum wage in New York City to a similar level, as evidenced by budget legislation introduced by the New York State Assembly in 2015.⁵

The Assembly bill (which was not enacted in the final State budget) proposed raising the statewide minimum wage in increments to \$12.60 per hour by 2019, and raising the minimum in New York City to \$12.50 in 2017, \$13.75 in 2018, and \$15.00 in 2019. It also would have raised the minimum wage in the other downstate counties of the Metropolitan Commuter Transportation District (MCTD) in tandem with the increases to the New York City minimum. This brief provides an analysis of the potential income effects of a \$15.00 minimum wage, using the phase-in schedule of the Assembly proposal.

¹ U.S. Bureau of Economic Analysis. *Real Personal Income for States and Metropolitan Areas, 2008-2012*.

² Gerald Carlino. "Three keys to the City: Resources, Agglomeration Economies, and Sorting." *Business Review*, 3Q 2011. Federal Reserve Bank of Philadelphia.

³ A08343A/S06518A

⁴ *Income Analysis of a \$13.13 Minimum Wage in New York City*. NYC Office of the Comptroller, June 2014.

<http://comptroller.nyc.gov/wp-content/uploads/2014/06/Minimum-Wage-Briefing-.pdf>

⁵ A6006, Part N.



Primary Income Effects

Forecasting the income effects of increasing the minimum wage between 2017 and 2019 requires some baseline assumptions of how the population of low-wage workers in New York City would change over time, and how much their hourly wages would grow, without the proposed minimum wage increases.

Future low-wage employment growth and wage growth push estimates of the aggregate impact of minimum wage increases in opposite directions. Increasing employment of low-wage workers implies that, over time, there will be more workers benefitting from a higher minimum wage. Conversely, if market wages rise, fewer workers may be affected by the increased minimum and those affected may benefit less.

The Comptroller's Office estimates that between 2000 and 2014, low-wage employment in New York City grew at an annual rate of 1.1 percent. The period from 2000 to 2009 saw an actual decline in low-wage employment, but from 2009 through 2014 the rate of growth was 3.9 percent annually. The three largest sectors employing low-wage workers—food services, retail trade, and home health care—have grown at a 5.5 percent rate since 2009. However, tightening labor and housing markets as well as limited retail space in the city may constrain employment going forward, so employment gains in those sectors can be expected to slow in coming years. The Comptroller's estimates of the minimum wage impacts consequently assume 2.0 percent annual growth of low-wage jobs between 2014 and 2019.

Several data sets and estimating procedures indicate that average wages in the sectors employing the most low-wage workers increased by 1 to 3 percent annually since 2000, barely keeping pace with inflation during that period. Based on those analyses, the Comptroller's Office assumed an underlying rate of wage inflation in those sectors of 2.0 percent through 2019.

Table 1 shows the estimated increases in worker incomes that could be expected in 2017, 2018 and 2019 if a \$15.00 minimum wage were phased in according to the schedule in the Assembly budget bill. The figures represent the income gains to workers compared to a scenario in which current State law prevails, which increased the minimum wage to \$8.75 on December 31, 2014 and will increase it further to \$9.00 on December 31, 2015. The assumptions utilized for employment growth and wage inflation roughly offset, meaning that

the estimates shown are approximately the same as those that would be generated if no employment growth or wage inflation were projected.

Table 1

Estimated Primary Income Effects from a Phased-in \$15 Minimum Wage in New York City			
Year: 2017	Minimum Wage at \$12.50		
	Workers Affected	Avg Weekly Increase	Annual Increase
	(number)	(\$ dollars)	(\$ millions)
Bronx	200,100	88	915
Brooklyn	311,000	79	1,280
Manhattan	152,900	85	672
Queens	309,200	82	1,317
Staten Island	26,500	80	110
Total	999,700	83	4,293
Year: 2018	Minimum Wage at \$13.75		
	Workers Affected	Avg Weekly Increase	Annual Increase
	(number)	(\$ dollars)	(\$ millions)
Bronx	231,700	118	1,425
Brooklyn	388,900	104	2,110
Manhattan	200,600	104	1,083
Queens	381,500	111	2,194
Staten Island	40,200	95	198
Total	1,242,900	109	7,016
Year: 2019	Minimum Wage at \$15.00		
	Workers Affected	Avg Weekly Increase	Annual Increase
	(number)	(\$ dollars)	(\$ millions)
Bronx	256,300	149	1,992
Brooklyn	453,400	131	3,083
Manhattan	237,100	130	1,602
Queens	456,300	136	3,228
Staten Island	52,800	113	311
Total	1,455,900	135	10,219

Source: Current Population Survey, 1/2014-12/2014, Comptroller's Office Imputed Estimates

A \$15.00 minimum wage, phased in as per the Assembly budget bill, would raise NYC workers' wages by about \$4.3 billion in 2017, by \$7.0 billion in 2018, and by \$10.2 billion in 2019. As the minimum wage increased each year, a greater number of workers would benefit from it, with the number reaching 1.46 million by 2019.



Among the boroughs, Queens would be the biggest beneficiary of a higher minimum wage. The Comptroller projects that over 456,000 Queens residents would benefit from a \$15 minimum wage, generating an additional \$3.2 billion in income for Queens workers in 2019. Brooklyn is projected to follow close behind, with 453,000 workers realizing additional wages of about \$3.1 billion.

Impact on Spending

Wage increases resulting from a higher minimum wage would lead to increased household spending by New York City residents. The Comptroller estimates that a minimum wage of \$15/hour would lead to aggregate wage increases of \$10 billion distributed across more than 1 million New York City households, implying an average increase of about \$10,000 per household. Tabulations from the Consumer Expenditures Survey show families with \$10,000 more wage income in a year spend \$1,100 to \$1,800 more annually on housing, \$300 to \$600 more on groceries, \$200 to \$400 more on entertainment, \$200 to \$300 more on healthcare, and \$200 to \$300 more on food consumed outside the home. A \$10,000 increase in earnings is also associated with additional payments of \$900 in Social Security and other social insurance contributions, and \$200 to \$500 less in public assistance receipts (SSI, food stamps, etc).⁶

Based on those consumption patterns, it can be expected that a \$15 minimum wage would raise annual aggregate New York City spending on housing by \$1 to \$2 billion, \$300 to \$600 million on groceries, \$200 to \$400 million on entertainment, and by \$200 to \$300 million at restaurants and other food service establishments.

The public expense of supporting low-wage workers would also be reduced by a higher minimum wage. In 2015, eligibility for Food Stamps phases out at monthly incomes between \$1,265 (single) and \$2,584 (for a family of four), and eligibility for Medicaid in New York State phases out at slightly higher thresholds. We estimate

public spending on those programs would decline by \$200 to \$500 million annually. Households receiving additional income from a \$15 minimum wage would also be expected to pay approximately \$250 million in additional New York City income taxes.

An analysis of the spending impacts of minimum wage increases by economists Daniel Aaronson, Sumit Agarwal and Eric French found that, in households with minimum wage income, a one dollar increase in the minimum wage was associated with increased spending of about \$700 quarterly. Spending was found to increase by \$815 per quarter for households that received over 20 percent of their income from minimum wage jobs. A large portion of those spending increases were driven by increases in durable goods purchases, in particular new and used car purchases, among a relatively small group of minimum wage workers, suggesting that minimum wage increases eased credit constraints on those households.⁷

We estimate that roughly 50 percent of the 1 million households in New York City that would benefit from increasing the minimum wage to \$15 do not currently own cars, and that their increased earnings would allow approximately 50,000 of them to purchase automobiles to ease their daily commutes.⁸

Impact on Income Distribution

Workers potentially benefitting from a \$15 minimum wage can be found in households across a wide range of incomes. The Comptroller's analysis finds that the median household income of a New York City worker earning less than \$15 in inflation-adjusted terms in 2013⁹ was approximately \$45,000 in 2013, with the largest number residing in households with incomes between \$30,000 and \$40,000.

Using 2013 American Community Survey (ACS) data, the Comptroller's Office projected the income distribution of New York City households for 2019 under a "current law" scenario, in which the minimum wage reaches \$9.00 in 2016 and stays at that level

⁶ BLS, Consumer Expenditure Survey, Table 1202. *Income before taxes: Annual expenditure means, shares, standard errors, and coefficient of variation, Consumer Expenditure Survey, 2013*, available at: <http://www.bls.gov/cex/2013/combined/income.pdf>, accessed 4/1/2015

⁷ Daniel Aaronson, Sumit Agarwal, and Eric French, *The Spending and Debt Response to Minimum Wage Hikes*, American Economic Review 2012, 102(7): 3111–3139

⁸ Simple linear regression of New York City car ownership on household incomes of families earning less than \$50,000, using the 2013 American Community Survey, suggests a \$10,000 increase in income would result in a 10 percent increase in car ownership among affected families. This result is broadly consistent with the economic literature on income and car ownership.

⁹ Assuming 2 percent inflation, a \$15 wage in 2019 is equivalent to \$13.32 in 2013.



thereafter, and under a scenario in which the minimum wage is raised to \$15 per hour in 2019. Consistent with actual trends in earnings between 2000 and 2013, the projections assumed an underlying rate of wage inflation of 2.0 percent annually for workers with no college education and of 4.0 percent for those with at least some college training.

Table 2 shows how the City’s household income distribution would look under current law and with a \$15 minimum wage. The higher minimum wage would not dramatically decrease the number of households earning under \$10,000 annually, as those are primarily families with no working members, the majority of which are headed by an elderly person. However, the higher minimum wage would significantly decrease the number of households earning from \$10,000 to \$29,999, while increasing the number earning from \$30,000 to \$39,999 by almost 67,000.

Table 2

Projected Household Income Distribution for New York City in 2019, Two Minimum Wage Scenarios				
Household Income	\$9.00/hr		\$15.00/hr	
	Number	%	Number	%
Less than \$10,000	736,000	23.9	717,000	23.3
\$10,000 to \$19,999	164,000	5.3	83,000	2.7
\$20,000 to \$29,999	176,000	5.7	107,000	3.5
\$30,000 to \$39,999	199,000	6.5	266,000	8.6
\$40,000 to \$49,999	165,000	5.4	158,000	5.1
\$50,000 to \$59,999	171,000	5.5	167,000	5.4
\$60,000 to \$69,999	156,000	5.1	179,000	5.8
\$70,000 to \$79,999	140,000	4.6	148,000	4.8
\$80,000 to \$89,000	117,000	3.8	128,000	4.2
\$90,000 to \$99,999	103,000	3.4	118,000	3.8
\$100,000 to \$109,999	99,000	3.2	111,000	3.6
\$110,000 to \$119,999	84,000	2.7	88,000	2.9
\$120,000 and over	774,000	25.1	814,000	26.4
Total	3,084,000	100.0	3,084,000	100.0

Source: New York City Comptroller’s Office

Interestingly, the higher minimum wage would also boost the number of New York City households earning above \$60,000 and even the number earning above \$100,000 annually.¹⁰ Those households can be presumed to have second or third earners earning at or near the \$9 minimum wage, in addition to a “breadwinner” whose income is well above the

minimum. For example, we estimate that 68 percent of the beneficiaries of a \$15 minimum wage living in households earning under \$60,000 would be the householder or the householder’s spouse, compared to only 40 percent of those in households with incomes of \$60,000 or more. In households earning \$60,000 or more, we expect that about one-quarter of the beneficiaries of the higher minimum will be a child of the householder. Often, that child is a student.

Overall, we estimate that about 13 percent of workers who stand to benefit directly from a \$15 minimum wage in 2019 would be students. In households earning less than \$60,000 annually, about 12 percent of the low-wage workers would be students, whereas students would represent about 17 percent of the minimum wage beneficiaries in households earning \$100,000 or more.

If a higher minimum wage makes it more feasible for young people to attend college, it could affect the income distribution far into the future. Student debt has mushroomed in recent decades, partially because wages paid on part-time and seasonal jobs have trailed far behind college costs. Between 1980 and 2011, for example, the federal minimum wage increased by about 134 percent while the cost of attending a private 4-year college or university increased by 409 percent. A \$15 minimum wage would nearly restore the parity between the minimum wage and college costs that existed in 1980. However, other factors could offset that affordability effect, and it is not certain that more young people would attend college if the minimum wage were higher.

Effects on Housing Expenditures

Data from the Consumer Expenditures Survey suggests that as incomes rise in the lower- to middle-income ranges, housing represents the single largest item of increased household expenditures. However, it can also be expected that the increase in housing expenditures occurs gradually as a household’s income rises, as apartment leases expire and families seek to improve their housing circumstances, or as they transition from renting to home-owning.

In the short-run, it can be expected that the initial effect of a higher minimum wage would be to lower the

¹⁰ In the \$15/hr scenario, we reduced the assumed annual rate of household income growth from business from 4 percent to 2 percent, to reflect any possible offsets to small business profitability due to the higher minimum. Our analysis of small business incomes in other jurisdictions that have raised minimum wages suggests that that is a conservative estimating assumption.



amount of a household's income devoted to rent or mortgage payments. Table 3 shows how the rent-to-income ratios of New York City's renter households can be expected to change if the minimum wage is raised to \$15 per hour by 2019.

Table 3

Projected Rent-to Income Ratios of New York City Renter Households in 2019, Two Minimum Wage Scenarios		
Current 2013		
Rent-to-income ratio	Number	Percent
20% or less	628,000	29.9
over 20% up to 30%	463,700	22.1
over 30% up to 40%	264,000	12.6
over 40% up to 50%	166,500	7.9
50% & over	576,000	27.5
Total	2,098,200	100.0
2019 with \$9.00 Minimum Wage		
Rent-to-income ratio	Number	Percent
20% or less	598,400	28.5
over 20% up to 30%	372,600	17.8
over 30% up to 40%	204,200	9.7
over 40% up to 50%	126,800	6.0
50% & over	796,200	38.0
Total	2,098,200	100.0
2019 with \$15 Minimum Wage		
Rent-to-income ratio	Number	Percent
20% or less	660,900	31.5
over 20% up to 30%	410,300	19.6
over 30% up to 40%	205,400	9.8
over 40% up to 50%	116,000	5.5
50% & over	705,600	33.6
Total	2,098,200	100.0

Source: New York City Comptroller's Office

The analysis shows that without a substantial rise in the underlying rate of wage increase, or a higher

legislated minimum wage, the number of New York City families that are severely rent-burdened will continue to rise.¹¹ Under a current-law scenario in which the minimum wage rises to \$9.00 per hour, the percentage of New York City renter households paying 50 percent or more of their income in rent will grow from 28 percent in 2013 to 38 percent in 2019. The percentage paying at least 40 percent of their income in rent will grow from 35 percent to 44 percent.

However, if the minimum wage is raised to \$15 per hour by 2019, the number of renter households paying at least 50 percent of their incomes in rent will grow from 28 percent to only 34 percent, while the percentage devoting more than 40 percent of their incomes to rent will grow from 35 percent to 39 percent.

With fewer households severely rent-burdened, landlords could expect to suffer lower collection losses due to non-payment, and lower legal expenses related to collection proceedings and evictions. The additional incomes of households benefitting from the higher minimum wages might also be expected to support higher rental rates for apartments, especially in areas of the city in which many low-wage workers reside.

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¹¹ Average rents are projected to grow at 3.0 percent annually between 2013 and 2019, compared to an actual rate of 4.2 annually between 2000 and 2013.