



NEW YORK CITY COMPTROLLER
BRAD LANDER



Spotlight

Minimum Wage

BUREAU OF BUDGET

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Minimum Wage

The minimum wage for New York City more than doubled between 2013 and 2020, as a result of State legislation, but its purchasing power has been eroded by the high rate of inflation in the wake of the COVID-19 pandemic. Two different legislative proposals in Albany aim to address the issue.

- As part of the FY24 Executive Budget ([Education, Labor and Family Assistance](#) (ELFA) bill Part S), Governor Hochul proposes that the current minimum wage levels be indexed to inflation, starting in 2024, subject to a 3% cap and off-ramps, depending on economic conditions.
- The Raise Up NY proposal ([S3062D/A7503C](#)) would first increase the minimum wage between 2024 and 2026, to adjust for the purchasing power decline of recent years, and then index it to inflation *plus* nonfarm business labor productivity growth starting in 2027. (This is the same indexation currently being used by [NYS Division of Budget](#) to increase the minimum wage in upstate NY until it reaches \$15).

The proposals are part of a broader trend: the minimum wage is indexed or set to be indexed to inflation [in 18 states and Washington D.C.](#) With a few exceptions, indexing is based on the Consumer Price Index for all urban consumers (CPI-U) or for urban wage earners and clerical workers (CPI-W) but reference geographies and time periods vary. Many cities also index their minimum wage. [Seattle's](#) minimum is now \$18.69 for most employers and [San Francisco's](#) is \$16.99. [Washington D.C.](#) will raise the minimum from \$16.50 to \$17 in July. [Denver's](#) minimum is set at \$17.29. [Many localities](#), particularly in California where the statewide minimum is \$15.50, are well above \$15.

In this spotlight we compare the two proposals and estimate some of the potential impacts in NYC.

Background

New York State's first general minimum wage law set the universal rate at \$1.00 per hour in 1960, and since then, the minimum wage has been raised through State legislation as the cost of living grew. In 2012, one hundred NYC fast food workers staged a one day walk-out to kick off the Fight for \$15 movement to raise the minimum wage, which had been set at the federal level of \$7.25 since 2009. Between 2013 and 2020, New York phased in increases to the minimum wage to reach \$15 for all workers in NYC by 2020, as shown in Table S1 below.¹

As the Comptroller's office [September 2022 Spotlight](#) showed, this period of minimum wage raises corresponded with a period of strong job and new business growth in sectors characterized by a high number of minimum wage workers, as well as declines in poverty rates among covered workers.

Table S1. Recent history of minimum wage increases in NYC and recent proposals

Year	Large employers	Small employers	Fast food establishments
2009-2013	\$7.25	\$7.25	\$7.25
2014	\$8.00	\$8.00	\$8.00
2015	\$8.75	\$8.75	\$8.75
2016	\$9.00	\$9.00	\$10.50
2017	\$11.00	\$10.50	\$12.00
2018	\$13.00	\$12.00	\$13.50
2019	\$15.00	\$13.50	\$15.00
2020-2023	\$15.00	\$15.00	\$15.00

Source: NYS Division of Budget (2022) [Report on New York's Minimum Wage Increases Scheduled for 2022](#). Large employers are those with 11 or more employees.

Although indexing the minimum wage to inflation was discussed when the step increases to \$15 per hour were adopted in 2016, it was not included in the legislation. As a result, the minimum wage for New York City has remained flat at \$15 per hour since 2019, even as inflation has spiked in the wake of the COVID-19 pandemic.

Table S2 shows the decline in the minimum wage's purchasing power since 2019. Based on our forecast of NY area CPI, we project that its real value (measured in 2019, inflation-adjusted dollars) will drop below \$13 this year.

Table S2. Inflation-adjusted minimum wage*

Year	Inflation-adjusted minimum wage in NYC	
	Level	% Change
2019	\$15.00	-
2020	\$14.74	-1.7%
2021	\$14.25	-3.3%
2022	\$13.38	-6.1%
2023(F)	\$12.85	-4.0%

* The inflation adjustment uses the percentage change in annual average NY CPI-U. (F) denotes forecasted value.

Source: BLS, Office of the NYC Comptroller.

Legislative proposals

In New York State, two legislative proposals call for tying the minimum wage to inflation.

The Raise Up NY bill sponsored by Sen. Jessica Ramos ([S3062D/A7503C](#)) would require the minimum wage to progressively increase to \$17.25 in 2024, \$19.25 in 2025, and \$21.25 in 2026. Subsequently, indexation would be based on the sum of CPI-W for the US (if positive) and labor productivity growth (if positive).

In her FY24 Executive Budget ([Education, Labor and Family Assistance](#) (ELFA) bill Part S), Governor Hochul proposes that the minimum wage be indexed to CPI-W for the Northeast region (CPI-W NE) with the following limitations:²

1. Yearly increases would be capped at 3%;
2. Indexation would not take place if:
 - a. Inflation is negative;
 - b. First off-ramp rule: the average (seasonally adjusted) NYS unemployment rate in May-July is 0.5 percentage points above the low of the 3-month moving average over the previous 12-months; or
 - c. Second off-ramp rule: the (seasonally adjusted) NYS total nonfarm payroll in July is below the levels recorded in both January and April of the same year.

(NOTE: [Public Health Law Section 3614-F](#) increased the minimum wage for home care aides³ relative to the statewide minimum by \$2.00 starting on October 1, 2022, and by an additional \$1.00 starting October 1, 2023. The Executive Budget proposal provides that indexation for home care aides' wages will not start until the statewide minimum wage reaches \$18.)

Table S3 projects what the minimum wage increases would be under the two proposals. While the schedule for Raise Up NY is set by legislation, the increases under the Governor's proposal

depends on CPI-W NE and labor market conditions. Table S3 incorporates our forecast of CPI-W NE based on its relationship with national CPI-U. The forecast assumes that after spiking in 2021 and 2022, inflation in the US continues on a downward trend and falls below 3% in 2024. The 3% cap is projected to limit increases below the rate of inflation in 2024 and (marginally) in 2025. While we do not have a forecast of NYS total nonfarm payroll jobs and unemployment rate, it is possible that conditions 2b. and 2c. above could be triggered, lowering indexation to 0%.⁴ It should be noted that the reference period for the calculation of inflation falls in the previous calendar year.

Table S3. Minimum wage schedules under the two proposals

Calendar year	Raise Up NY		FY24 Executive Budget		CPI-W NE (reference period)
	Proposed wage	% Change	Forecasted wage	% Change	
2024	\$17.25	15.00%	\$15.45	3.0%*	6.2%
2025	\$19.25	11.60%	\$15.91	3.0%*	3.0%
2026	\$21.25	10.40%	\$16.28	2.3%	2.3%

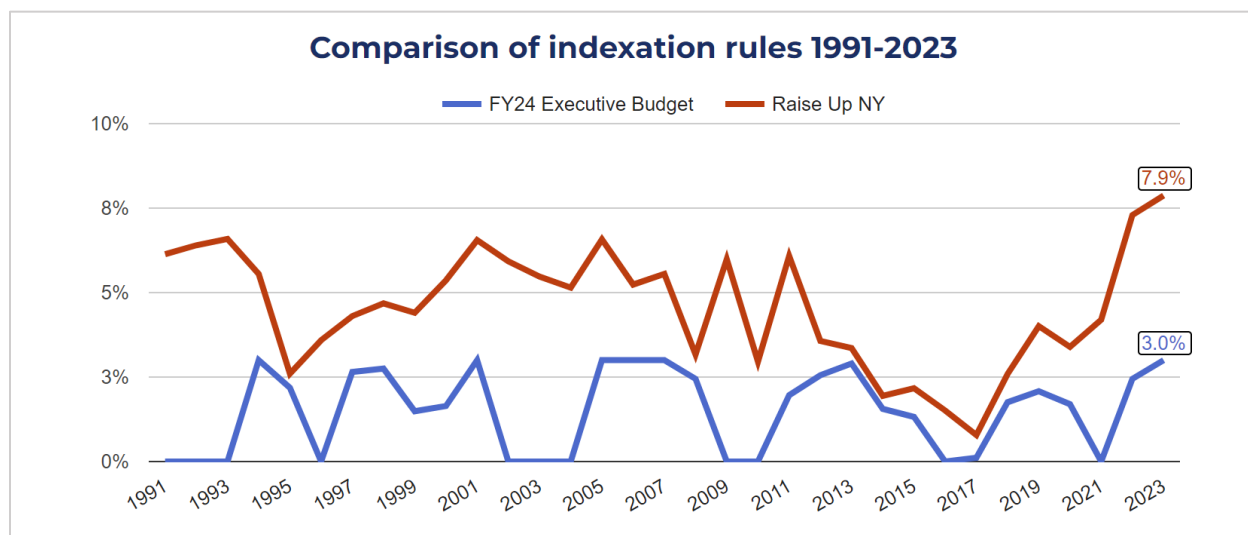
* CPI-W NE forecast above the 3.0% annual cap. The inflation adjustment uses the percentage change in average annual NY CPI-U. Because under the Governor's proposal the minimum wage is indexed to CPI-W from the previous year, the inflation-adjusted % change is not necessarily zero.

Sources: [S3062D/A7503C](#), SFY24 Executive Budget [ELFA Bill](#) Part S, Office of the NYC Comptroller.

In Chart S1, we show how the two indexation rules behaved historically, starting in 1991. This is the first year where both the unemployment rate and total nonfarm payroll data are available over the reference period to calculate indexation. There are several episodes where the off-ramps in the Executive Budget legislation would have applied and they generally correspond with recessions, with one exception in 1996 based on a decline of seasonally adjusted total nonfarm payroll in July of 1995 (see Table S5 in the technical appendix).

Overall, annual indexation under the Raise Up NY rules averaged 4.6% per year (2.0% from productivity and 2.6% from CPI-W inflation), versus 1.5% under the rules set in the Governor's proposal.

Chart S1



Source: BLS, Office of the NYC Comptroller.

Simulated Impacts on NYC Workers and Their Earnings

We simulate potential impacts of the two proposals on the wage distribution and wage income of workers in New York City using both CPS and American Community Survey (ACS) data for 2021. We do this because CPS has better measurement of hourly wages and more recent wage information but a smaller sample size.⁵ We limit ourselves to an estimate of those whose wage may be directly affected by the legislations (the “directly affected”), without behavioral shifts in either labor demand or supply.⁶

Because the Raise Up NY proposal increases the minimum to \$21.25 and the increase is faster than the projection of wage growth, the estimate of directly affected workers reaches 1.1 million in 2026, or about one quarter of the total working in NYC. Aggregate wage earnings gains increase by approximately \$2b each year (in 2022 dollars) through 2026.

Our analysis of the Governor’s proposal projects the share of directly affected NYC workers at around 14%, with much smaller aggregate wage earnings of approximately \$400 million in 2024. Because indexation falls behind the projection of wage growth, the estimates of impact decline over time.

Table S4. Simulation of directly affected NYC workers and aggregate change in earnings

Year	Raise Up NY			FY24 Executive Budget		
	Share	Number (000s)	Change in earnings (\$b, \$2022)	Share	Number (000s)	Change in earnings (\$b, \$2022)
2024	19.7%	795	\$2.3	14.3%	576	\$0.4
2025	23.4%	953	\$4.3	14.0%	570	\$0.4
2026	26.7%	1,102	\$6.3	13.5%	557	\$0.3

Source: IPUMS-CPS, IPUMS-USA, Office of the NYC Comptroller.

Conclusions

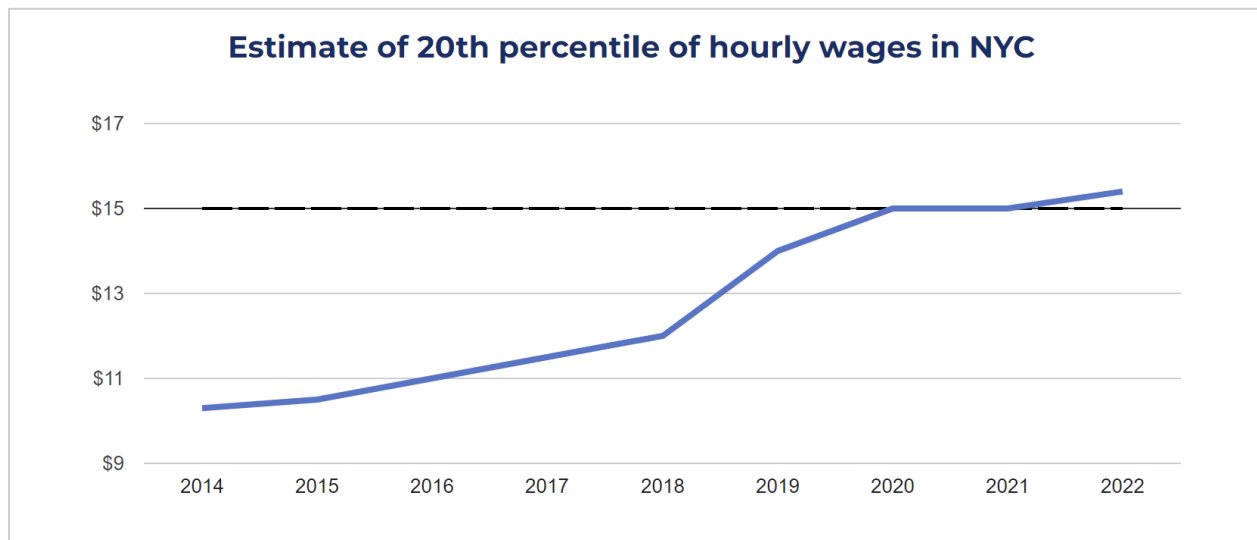
With prices continuing to rise and the value of minimum wage forecasted to dip below \$13 an hour in the coming year (in 2019, inflation-adjusted dollars), legislators are presented with two proposals to raise New York’s minimum wage and indexing it to inflation. Which of the two paths Albany chooses to take will have an impact on hundreds of thousands of New Yorkers. We project that the Raise Up NY proposal would raise the wages of nearly twice as many New York City workers over the next three years as the Governor’s proposal, and by significantly larger amounts.

Prepared by: Francesco Brindisi, Executive Deputy Comptroller. The author is indebted to Dr. Selçuk Eren who worked on an earlier version of the simulation methodology. He also wishes to thank James Parrott for thoughtful comments on an earlier draft.

Appendix

To place the minimum wage in NYC in context, we used Current Population Survey (CPS) monthly files to estimate the distribution of hourly wages. To estimate hourly wages, we used monthly Current Population Survey (CPS) data from 2014 to 2022 as available from IPUMS-CPS. The data has county information that allows to separate NYC, Long Island, and Westchester from the rest of NYS. Hourly wages are either reported directly or estimated by dividing [usual weekly earnings](#) by usual work hours (an overview of hours worked variables is available [here](#)), as in the analysis done by the [Congressional Budget Office](#).⁷ Chart S2 shows that, based on survey responses, 20% of employees had hourly wages up to \$15 in 2020 and 2021.

Chart S2



Source: Current Population Survey (IPUMS-CPS) monthly files, Office of the NYC Comptroller.

Table S5 below reports the performance of the off-ramp rules in the Executive Budget proposal. The recession periods are taken from the NYS DOL's [Index of Coincident Economic Indicators](#). The off-ramp rules coincide with recessionary periods (which are estimated based on composite index that includes labor data) with one exception in 1995.

Table S5. Timing of off-ramp triggers in the Executive Budget proposal

Year	Off-ramp triggers		NYS Recession	CPI-W NE over reference period
	Unemployment rate	Total nonfarm jobs		
1990	No	Yes	Mar. '89 - Nov. '92	5.4%
1991	Yes	Yes	Mar. '89 - Nov. '92	5.7%
1992	Yes	Yes	Mar. '89 - Nov. '92	3.1%
1995	No	Yes	-	2.6%
2001	No	Yes	Dec. '00 - Aug. '03	3.2%
2002	Yes	No	Dec. '00 - Aug. '03	1.8%
2003	No	Yes	Dec. '00 - Aug. '03	2.9%
2008	Yes	No	Apr. '08 - Nov. '09	4.1%
2009	Yes	No	Apr. '08 - Nov. '09	1.2%
2020	Yes	No	Nov. '19 - Jun. '20	1.4%

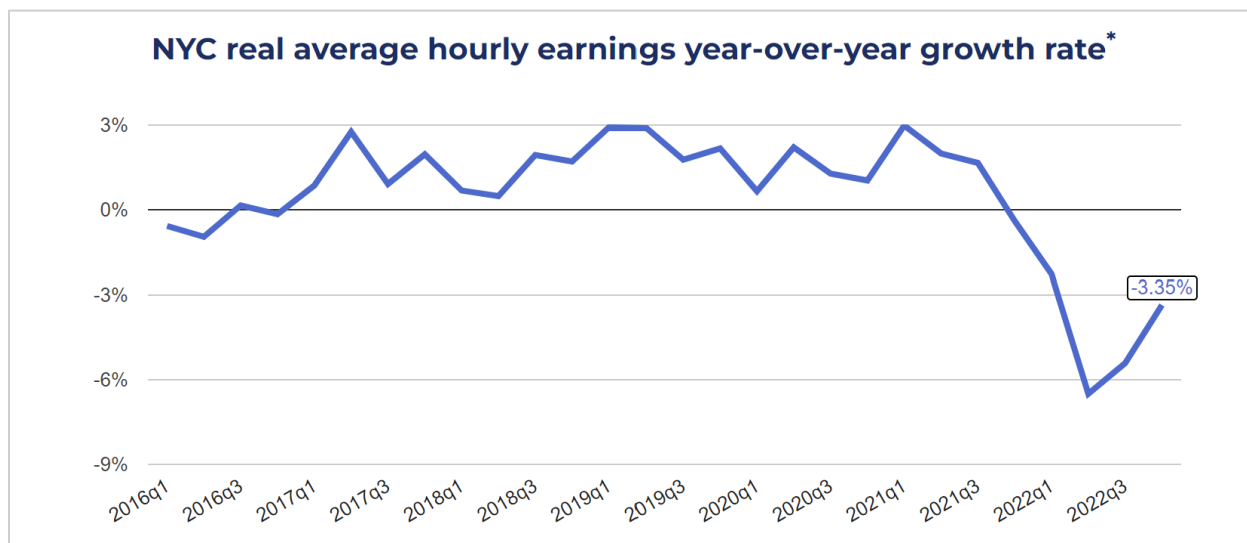
Source: BLS, NYS DOL, Office of the NYC Comptroller.

Wage simulation. The wage simulation was first set up by our previous colleague Dr. Selcuk Eren and subsequently integrated with CPS data, taking inspiration from the Economic Policy Institute's (EPI) [methodology](#). We performed multiple imputation of CPS wages into ACS controlling for a common set of explanatory variables including sex, age, marital status, race and ethnicity, educational attainment, industry, occupation, part-time status, geography, and time trends. The treatment of observations with wage below the minimum varies across studies. [CBO](#) does not attribute gains from lifting the minimum wage to this group, under the assumption that the conditions that prevent workers from obtaining the minimum would not change. EPI allows for some measurement error by attributing gains from a higher minimum to everybody with estimated wage within 80% of the minimum. In our analysis, we exclude very low estimated wages and cap wage gains. When a worker's estimated baseline hourly wage is above the existing minimum wage but below the scheduled minimum wage, we add the difference to bring the worker to the scheduled minimum wage. For those with wage below the existing minimum wage we add the minimum wage increase. For example, in the case of the Raise Up NY proposal in 2024, a worker with baseline wage of \$14.5 receives \$2.25, while a worker with baseline wage of \$16 receives \$1.25. After imputation, directly affected workers are estimated by place of work in ACS. This allows us to use 2022 Current Employment Statistics data and our forecast of payroll employment to project employment based on industry classifications in the survey data. After imputation of 2022 hourly wages, we use our forecast of the overall wage rate growth (net of the

securities industry) to trend hourly wages. The estimates in Table S4 are averages of the point estimates across the imputed datasets. The 2021 ACS reports a significant increase of respondents working from home and a decline of commuting into New York City for work. Depending on the location of their employers, a fraction of respondents working from home would be subject to NYC minimum wage, although the distribution is likely skewed toward higher wages.

Inflation. As chart S3 shows, average hourly earnings in NYC have not kept pace with inflation since the end of 2021. This is partly because of composition effects, as service industries more heavily affected by pandemic added jobs and lowered the overall average. However, the data hardly suggests a wage-price spiral.

Chart S3



* The inflation adjustment uses the yearly percentage change in the quarterly average of NY CPI-U.

Source: BLS.

The extent to which a higher minimum wage may be passed on to consumers in the form of higher prices is not well-established in empirical studies. A recent analysis focusing on regional CPI indexes⁸ found that a 10% increase in the minimum wage increases CPI by 0.14 percentage point in the first year and 0.11 percentage point in the second year with negligible impacts afterward. Using these estimates, the scheduled Raise up NY increases might add 0.2 percentage points to CPI in 2024, and 0.3 percentage points in 2025 and 2026.

Given the concentration of minimum wage workers in food services, it stands to reason that the impact on prices would be concentrated in food away from home. Using the same study, CPI in the food away from home category might increase by 0.6 percentage points in 2024 and 2025, and 0.5 percentage points in 2026. However, food away from home accounts for a relatively small share of the NY CPI indexes (4.5% for CPI-U and 6.1% of CPI-W), according to the [December 2022 tables](#). Other studies concentrating on menu items at fast food restaurants suggest a higher pass-through from wages to prices.⁹ Available data [at the state level](#) shows that 65% of food away

from home consumption is attributable to households at the top 40% of the income distribution suggesting price increases in the food service industry would not significantly fall on the beneficiaries of minimum wage increases.

Endnotes

¹ Food and service workers in the hospitality industry have a [tip allowance](#) of \$5.0 and \$2.50, respectively. Starting in 2021, tip allowances were eliminated in other (“miscellaneous”) industries. The minimum wage for home care aides is described in the main text.

² Outside of New York City and Nassau, Suffolk, and Westchester counties, indexation would start the year after the minimum reaches \$15.

³ The definition of home care aide is available [here](#).

⁴ This appears to be the case in NYS Department of Budget’s [projection](#), where the annual unemployment rate increases to 4.8% in 2023 and 5.2% in 2024, from its [average of 4.4% in 2022](#).

⁵ A description of the methodology is available in the technical appendix.

⁶ Wage compression would push compensation higher also above the minimum, generating a spillover effect onto “indirectly affected” workers. Given the uncertainty surrounding the simulation exercise, we don’t also make a modeling assumption regarding indirect effects. An alternative set of results for the Raise Up NY proposal (based on a different methodology that is also inclusive of indirect effects) is available from the [Economic Policy Institute](#). As a modeling choice, EPI assumes that wages between 100% and 115% of the minimum are indirectly affected while CBO stretches the boundary to 150% of the minimum. Spillover effects can be noisy in the data as documented in Autor D.H., Manning A., Smith C.L. (2016) “[The Contribution of the Minimum Wage to US Wage Inequality over Three Decades: A Reassessment](#),” *American Economic Journal: Applied Economics*, 8(1), January.

⁷ One of the main reasons for observing hourly wages below the minimum is the lower tipped minimum wage. The data are also subject to measurement error as usual work hours tend to [overestimate actual hours](#) (as surveyed in CPS). Measurement errors tend to be more prevalent among employees that are not paid by the hour (see Lemieux T. (2006) “Increasing Residual Wage Inequality: Composition Effects, Noisy Data, or Rising Demand for Skill?” *American Economic Review*, 96(3), June). A discussion of measurement error in survey responses regarding income and wages can be found in Meyer B.D., Mok, W. K. C., and Sullivan J. X. (2015) “Household Surveys in Crisis,” *Journal of Economic Perspectives*, 29(4), Fall.

⁸ Cooper D., Luengo-Prado M.J., and Parker J.A. (2020) “The Local Aggregate Effects of Minimum Wage Increases,” *Journal of Money, Credit and Banking*, 52: 5-35.

⁹ See Dube A., Lindner A. (2021) “[City Limits: What Do Local-Area Minimum Wages Do?](#)” *Journal of Economic Perspectives*, 35(1), Winter; Ashenfelter O.C., Jurajda Š. (2022) “Minimum Wages, Wages, and Price Pass-Through: The Case of McDonald’s Restaurants,” *Journal of Labor Economics*, Vol.40(S1).





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