## 02.Mar. 2023

## Productivity: Revised Sharply Lower

Bottom Line: The Bureau of Labor Statistics' annual benchmark revisions resulted in sharply lower productivity in the 4th Quarter than previously reported. Output growth was only modestly lower, but unit labor costs were sharply higher. Compensation costs were nearly 200 basis points higher than previously reported, up $6.4 \%$ annualized in the 4th Quarter and $7.05 \%$ from year-ago levels. Annual average productivity decreased $1.7 \%$ from 2021 to 2022. This is the largest annual decline in the measure since 1974. Overall, the 4th Quarter rebound in productivity was even less than previously reported and did little to change the slowing trend. Businesses have been content to avoid laying off workers (and in many cases have continued to pay them more) as activity has slowed.

## Labor productivity (output per hour)

4Q-22: $+1.7 \%$, consensus: $+2.5 \%$


## Compensation



## Unit labor costs



| Productivity $=$ <br> Output/Hrs. <br> Worked | 4Q22qoq <br> ann. | 3Q22 | 2Q22 | 1Q22 | 4Q22 yoy | 3 Q22 <br> yoy | 3y Avg. | 5y Avg. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Labor <br> productivity <br> (output per <br> hour) | $\mathbf{1 . 6 6 \%}$ | $\mathbf{1 . 1 8 \%}$ | $\mathbf{- 3 . 7 6 \%}$ | $\mathbf{- 6 . 0 9 \%}$ | $\mathbf{- 1 . 8 1 \%}$ | $\mathbf{1 . 4 0 \%}$ | $\mathbf{1 . 5 4 \%}$ | $\mathbf{1 . 4 2 \%}$ |
| Output | $3.08 \%$ | $3.64 \%$ | $\mathbf{- 1 . 2 4 \%}$ | $\mathbf{- 2 . 4 7 \%}$ | $0.72 \%$ | $7.26 \%$ | $3.58 \%$ | $2.31 \%$ |
| Hours worked | $1.39 \%$ | $2.44 \%$ | $2.61 \%$ | $3.86 \%$ | $2.57 \%$ | $5.78 \%$ | $2.50 \%$ | $1.00 \%$ |

Labor productivity, or output per hour, is calculated by dividing an index of real output by an index of hours worked by all persons, including employees, proprietors, and unpaid family workers.

| Unit Labor <br> Costs = <br> Comp/Output | 4Q22qoq <br> ann. | 3 Q22 | 2 Q22 | 1Q22 | 4 Q22 <br> yoy | 3Q22 yoy | 3y Avg. | 5y Avg. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Unit labor <br> costs | $\mathbf{3 . 2 1 \%}$ | $\mathbf{6 . 9 1 \%}$ | $\mathbf{6 . 6 2 \%}$ | $\mathbf{8 . 5 0 \%}$ | $\mathbf{6 . 2 9 \%}$ | $\mathbf{3 . 1 6 \%}$ | $\mathbf{4 . 8 5 \%}$ | $\mathbf{1 . 9 5 \%}$ |
| Compensation | $6.39 \%$ | $10.80 \%$ | $5.29 \%$ | $5.82 \%$ | $7.05 \%$ | $10.65 \%$ | $7.81 \%$ | $4.12 \%$ |


| Output | $3.08 \%$ | $3.64 \%$ | $-1.24 \%$ | $-2.47 \%$ | $0.72 \%$ | $7.26 \%$ | $3.58 \%$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

The BLS calculates unit labor costs as the ratio of hourly compensation to labor productivity. Increases in hourly compensation tend to increase unit labor costs and increases in productivity tend to reduce them. Real hourly compensation takes into account consumer prices.

| Output and Cost Details | $\begin{aligned} & \text { 4Q22qoq } \\ & \text { ann. } \end{aligned}$ | 3Q22 | 2Q22 | 1Q22 | $\begin{aligned} & \text { 4Q22 } \\ & \text { yoy } \end{aligned}$ | 3Q22 yoy | 3y Avg. | 5y Avg. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employment | 2.25\% | 2.63\% | 3.74\% | 4.66\% | 3.31\% | 5.50\% | 2.22\% | 1.02\% |
| Avg weekly hours worked | -0.84\% | -0.18\% | -1.09\% | -0.76\% | -0.72\% | 0.26\% | -0.10\% | -0.11\% |
| Hours worked | 1.39\% | 2.44\% | 2.61\% | 3.86\% | 2.57\% | 5.78\% | 2.50\% | 1.00\% |
| Current dollar output | 6.42\% | 7.56\% | 8.34\% | 4.95\% | 6.81\% | 14.29\% | 8.45\% | 4.44\% |
| Nonlabor payments | 6.46\% | 3.38\% | 12.53\% | 3.79\% | 6.48\% | 19.53\% | 10.69\% | 5.47\% |
| Hourly compensation | 4.93\% | 8.16\% | 2.61\% | 1.89\% | 4.37\% | 4.61\% | 6.31\% | 3.32\% |
| Unit nonlabor payments | 3.28\% | -0.25\% | 13.95\% | 6.41\% | 5.72\% | 11.44\% | 4.98\% | 2.65\% |
| Implicit price deflator | 3.24\% | 3.78\% | 9.70\% | 7.60\% | 6.05\% | 6.55\% | 4.43\% | 2.02\% |
| Real hourly compensation | 0.73\% | 2.48\% | -6.43\% | -6.04\% | -2.39\% | -1.95\% | 1.56\% | 0.99\% |
| Output per job | 0.81\% | 0.99\% | -4.80\% | -6.80\% | -2.51\% | 1.67\% | 1.40\% | 1.30\% |
| Labor share | -0.03\% | 3.01\% | -2.81\% | 0.83\% | 0.23\% | -3.18\% | 0.57\% | -0.02\% |

