A Rising Tide (Still) Lifts All Boats—Wages Really Do Grow With Productivity

Scott Winship

In Reality

American workers have done better than influential doomsayers claim; but to the extent that they have not done as well as workers in the past, the most effective solution is more economic growth, not more redistribution. Between 1973 and 2007, at comparable points in the business cycle, hourly compensation rose at almost precisely the same rate as productivity. Indeed, a historical review of labor's share of economic output makes clear that U.S. workers continue to receive the same portion of the economic pie as they always have.

During 1973–2007, the pay of middle-class women kept pace with aggregate productivity growth; after a period of stagnation, growth in male hourly compensation has accelerated since the mid-1990s, suggesting that it will more closely track productivity in the future. The slower growth in U.S. wages since the Great Recession reflects America's diminished economic growth—not a structural change or government policy that disadvantages workers.

Key Findings

- During 1973–2007, U.S. hourly compensation rose 71 percent, while productivity rose 74 percent.
- In 1973, U.S. workers received 70 percent of the income produced by businesses; in 2007, they received 69 percent.
  - For the past 70 years, labor's share of income has fluctuated—almost without exception—between 67 percent and 71 percent.
- Since 1929, the U.S. business cycles with the highest productivity growth have also featured the highest growth in hourly compensation.
- Male and female middle-class workers saw faster growth in pay during 1989–2000 and 2000–07 than during 1973–79, when productivity growth was slower.[3]
- Middle-class pay has not stagnated: during 1997–2011, productivity rose by 35 percent, aggregate compensation rose by 32 percent, median hourly compensation increased by 20 percent, median female pay climbed by 25 percent, and median male pay grew by 18 percent.[4]

The strong, ongoing relationship between productivity (the value of the goods and services produced in an hour of work) and compensation (wages and salaries plus benefits) can be seen through several lenses.

"Families are working harder than ever, but paychecks have barely budged."[1]

HILLARY CLINTON

"When CEO income has risen 90 percent above the average worker, when the bottom 90 percent of this country's economy has had stagnant wages for the past 40 years, somebody is taking it in the teeth."[2]

MIKE HUCKABEE

On the Record

"Calls for redistribution and claims that "the game is rigged" are based on badly incorrect analyses of economic data."

Scott Winship, Walter B. Wriston Fellow, Manhattan Institute

On the Record

President Obama's Council of Economic Advisors has it right: strong economic growth is a better strategy for raising middle-class incomes than trying to take down the highest earners. Inaccurate "charts of doom" obscure this basic truth.

Scott Winship, Walter B. Wriston Fellow, Manhattan Institute

Labor's Share of National Income

The best way to understand the allocation of national income between workers and employers ("labor and capital") is to follow the lead of the Bureau of Labor Statistics, which focuses on trends in the nonfarm business sector, thereby excluding the income and output from housing, as well as that of the government and nonprofit sectors. Excluding housing is important: "imputed rent"—what homeowners would have to pay a landlord if they were renting—is a significant and rising share of national income but has nothing to do with the allocation of employer revenues from sales between workers and owners. Omitting the government and nonprofit sectors is also appropriate: output in those sectors is poorly measured.

Other warranted adjustments include ignoring depreciation (income that employers use to repair and replace machines, equipment, and buildings), which increases the income to be divided between workers and owners, and ignoring self-employment income, because proprietors are both owners and workers. Analyzing the data in this way indicates that American workers receive the same slice of the economic pie, relative to employers and shareholders, as they have for more than 85 years.[5]

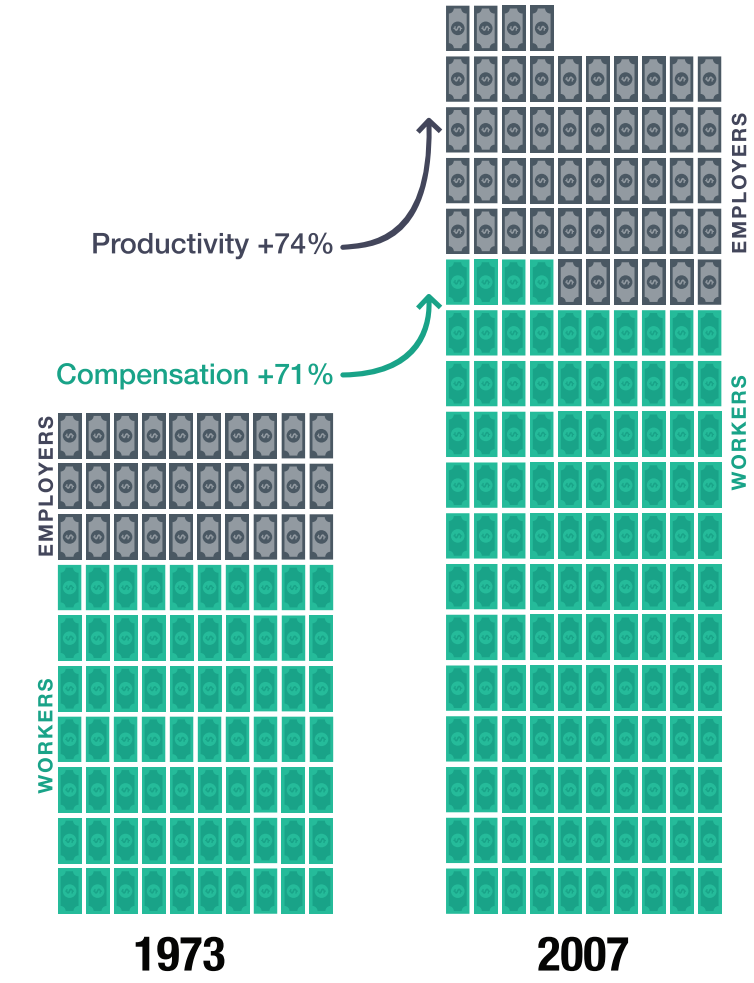
Total Compensation and Productivity Growth

Because labor's share of income is equal to compensation divided by output, the fact that this ratio has held steady indicates that the ratio of hourly compensation to productivity (output per hour) has also held steady—hourly compensation, therefore, has risen at the same rate as productivity. Whether one begins measuring from, say, the early 1930s, late 1940s, or early 1970s, hourly pay has risen as much as productivity, lagging temporarily during recessions and recovering during expansions. From 1973 to 2007, for instance, productivity rose by 74 percent and hourly compensation by 71 percent.[6]

Middle-Class Workers

That total hourly compensation has risen as much as productivity does not mean that the hourly pay of the typical middle-class worker has increased in lockstep. Middle-class pay rises with the productivity of middle-class workers, which may not have risen by as much as overall productivity. However, even the typical worker—at least among women—has had largely good news. Between 1973 and 2007, as net productivity rose by 74 percent, median hourly compensation among all female workers rose by 60–70 percent; even the typical female worker thus made gains similar to economy-wide productivity.[7] While the 1980s were not kind to male workers, their pay has increased more robustly since the mid-1990s.

The fact that female workers have seen strong increases in pay complicates the view that typical American workers are doing poorly because the fruits



of their productivity have been redistributed upward or because of deep-seated structural problems in the economy. While it is surely true that one reason women have seen stronger growth in pay is that they have been catching up from historical discrimination, that explanation implies that middle-class men were beneficiaries of that discrimination. It is therefore not surprising that the pay of the latter has subsequently lagged aggregate productivity growth.

Insofar as the aforementioned gains among women reflect factors other than rising productivity, this indicates that middle-class pay need not track aggregate productivity growth. Regardless, American women and men have seen significant growth in hourly compensation since the mid-1990s.

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Liberal critics draw a different conclusion, based on faulty analysis. The Economic Policy Institute (EPI), for instance, has created a widely cited chart indicating that productivity rose 72 percent during 1973–2014 while median hourly compensation rose by a measly 9 percent.[8] The implication is that rising inequality and declining employer generosity mean that policies that promote economic growth will fail to lift middle-class living standards and that more redistribution is necessary to assist working families.

In arriving at this conclusion, EPI makes numerous faulty methodological decisions. It understates growth in median hourly compensation by using a deficient inflation adjustment and by undervaluing benefits other than health insurance. It overstates the divergence between productivity and median hourly compensation trends by using different inflation adjustments for each. It includes imputed rents in national income, which exerts a downward pull on labor's share of income. It includes the self-employed in its analyses, for whom it makes little sense to distinguish between labor income and capital income. And it includes government and nonprofit workers, whose productivity is not well measured.[9]

Endnotes

1 See https://twitter.com/hillaryclinton/status/648473836719964160.

2 See https://www.washingtonpost.com/news/the-fix/wp/2015/10/28/the-third-republican-debate-annotating-the-transcript.

3 Based on comparing median hourly compensation over time with net value added per hour—see notes below. These comparisons use the implicit price deflator for net value added in the nonfarm business sector to adjust for inflation for both productivity and hourly compensation. Using the Personal Consumption Expenditures (PCE) deflator, median hourly compensation growth among men was higher from 1973 to 1979 than in later business cycles. However, as discussed below, this is not the right way to compare pay and productivity.

4 Using the PCE deflator, total compensation of employees in the nonfarm business sector rose 22 percent, median hourly compensation rose by 11 percent, median female hourly compensation increased by 16 percent, and median male compensation grew by 9 percent. As discussed below, this is not the correct way to compare pay and productivity.

5 Labor's share fell from 69 percent to 67 percent from 2007 to 2014. This reflects the usual tendency of "labor's share" to fall during recessions and rise during recoveries.

All the cited output and productivity estimates look at "net value added" of employees in the nonfarm business sector—output in the sector after deducting depreciation and ignoring the self-employed. Net value added for the nonfarm business sector is from the Bureau of Economic Analysis, National Income and Product Accounts (NIPA), table 1.9.5. Nonfarm proprietor's income is subtracted from this amount (taken from Bureau of Economic Analysis, NIPA, table 6.12). Compensation of employees in the nonfarm business sector subtracts from compensation of employees in domestic industries: farm compensation; federal, state, and local general government compensation; compensation in households; and compensation in institutions. The amount is taken from NIPA, table 6.2, for 1929–2000 and computed for 2001–14 from NIPA, tables 6.2, 6.12, and 1.13. The author thanks James Sherk of the Heritage Foundation, who provided the details of these computations. His forthcoming research on trends in pay and productivity dives more deeply into the challenges of comparing the two trends.

All analyses herein adjust both compensation and net value added for inflation using the implicit price deflator for net value added in the nonfarm business sector (NIPA, table 1.9.4). For reasons discussed elsewhere, it is appropriate to use the same deflator for compensation as for net value added. See Scott Winship, "Has Inequality Driven a Wedge Between Productivity and Compensation Growth?," Forbes.com, 2014, http://www.forbes.com/sites/scottwinship/2014/10/20/has-inequality-driven-a-wedge-between-productivity-and-compensation-growth.

6 From 1948 to 2014, net productivity begins with net value added, estimated as described above, and then divides it by the hours of private nonfarm employees and employees of government enterprises (from www.bls.gov/lpc/special_requests/us_total_hrs_emp.xlsx). Hourly compensation of employees in the nonfarm business sector begins with total compensation of employees in the nonfarm business sector, estimated as described above for 1948–2014, and then divides by the hours of private nonfarm employees and employees of government enterprises, as discussed above. James Sherk of the Heritage Foundation provided details of the compensation calculation and pointed this author to the hours data.

Hours are unavailable from 1929 to 1947, but net value added and total compensation may be compared. Since both would be divided by the same number of hours worked if net productivity and hourly pay were available, comparing the net value added and total compensation trends is equivalent to comparing productivity and hourly pay. Output was 21.9 times higher in 2014 relative to the 1929–34 average; compensation was 21.6 times higher. Using the PCE deflator, the increase in hourly compensation was 58 percent.

7 Median hourly compensation among all women—not merely those in the nonfarm business sector—rose by 59 percent. But pay in the nonfarm service sector rose by more than in the economy as a whole. For instance, while mean hourly compensation among all workers rose by 62 percent between 1973 and 2007, aggregate hourly pay in the nonfarm business sector rose by 71 percent. The median hourly compensation estimates use ratios of nominal compensation to nominal wages and salaries, from NIPA, table 2.1, to inflate median hourly wages and salary to median hourly compensation. The estimates of median hourly wages and salaries are from the Economic Policy Institute (EPI). For 1973–2012, they come from http://www.epi.org/files/2012/data-swa/wage-data/Wage%20deciles.xlsx.

Endnotes (cont.)

The 2013 estimate is from table 1 of http://www.epi.org/publication/raising-americas-pay. The 2014 estimate applies the percentage in table 1 of http://www.epi.org/publication/understanding-the-historic-divergence-between-productivity-and-a-typical-workers-pay-why-it-matters-and-why-its-real to the 2007 estimate. EPI estimates these figures for all workers using the Current Population Survey Outgoing Rotation Group data.

Using the PCE deflator, the increase in median hourly compensation among all women was 48 percent; for men, it was 14 percent.

8 Josh Bivens and Larry Mishel, "Understanding the Historic Divergence Between Productivity and a Typical Worker's Pay: Why It Matters and Why It's Real" (Washington, D.C.: Economic Policy Institute, 2015), http://www.epi.org/publication/understanding-the-historic-divergence-between-productivity-and-a-typical-workers-pay-why-it-matters-and-why-its-real/#growing-together-then-pulling-apart-productivity-and-compensation-in-the-postwar-era.

9 Bivens and Mishel say that the prices of what American workers purchase have increased more rapidly than the prices of what they produce. But this question is irrelevant for the purposes of assessing whether employers are paying workers fairly. Employers are not expected to pay food-service workers more when global energy prices rise if profits from food sales stay constant. In fact, the prices of what consumers purchase have actually not increased more than the prices of what they produce. EPI creates this "fact" out of thin air by using an inflation adjustment for consumer purchases that overstates the rise in the cost of living. The "price deflator" for output that EPI uses shows a 327 percent rise in the cost of the things that American workers produced between 1973 and 2014; the deflator that it uses for American workers' consumption, the CPI-U-RS, indicates that the cost of living rose 376 percent. However, the CPI-U-RS is an inferior indicator of trends in the cost of living. See Scott Winship, "Debunking Disagreement over Cost-of-Living Adjustment," Forbes.com, 2015, http://www.forbes.com/sites/scottwinship/2015/06/15/debunking-disagreement-over-cost-of-living-adjustment.

The PCE deflator is a more appropriate measure that—unlike the CPI-U-RS—accounts for the ability of consumers to make changes in what they buy in order to take advantage of price declines in specific goods and services. The PCE deflator indicates that the cost of living rose by 330 percent.

For the implicit price deflator for net domestic product, see Bureau of Economic Analysis, NIPA, table 1.9.4. For the CPI-U-RS, see Carmen DeNavas-Walt and Bernadette D. Proctor, "Income and Poverty in the United States: 2014" (Washington, D.C.: U.S. Census Bureau, 2015), http://www.census.gov/content/dam/Census/library/publications/2015/demo/p60-252.pdf. For the PCE deflator, Bureau of Economic Analysis, NIPA, table 1.1.9.

All the figures cited here are in 2014 dollars using the implicit price deflator for net value added in the nonfarm business sector. For the implicit price deflator for net value added in the nonfarm business sector, see NIPA, table 1.9.4. Bivens and Mishel also understate the increase in the value of fringe benefits to workers. Since hourly compensation estimates for the median worker are unavailable, analysts must impute the amount from data on median hourly wages and salary earnings. EPI uses NIPA tables to do so, applying a ratio of compensation to wages for all workers in the aggregate to median hourly wages. But the ratio that it uses adjusts compensation and wages for inflation differently, making the real, inflation-adjusted growth in compensation look less than actually occurred. It adjusts health care benefits by the health care component of the PCE but then fails to adjust non–health care benefits by the non–health care components of the PCE. Essentially, health care inflation is counted twice, once adjusting the value of health benefits and again when the value of remaining benefits are adjusted. The author thanks Steve Rose of the Urban Institute for this insight.

Instead, the estimates here use ratios of nominal compensation to nominal wages and salary earnings, from NIPA, table 2.1.