

# Wages, productivity, progressive policies, and serial correlation: I weigh in on an important, interesting debate.

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Jared Bernstein, November 20th, 2017

There's an interesting sort of argument going on between [Stansbury/Summers \(SS\)](#) and [Mishel/Bivens \(MB\)](#). My name has been invoked as well, so I'll weigh in. It's a "sort-of" argument because there's less disagreement than first appears.

It all revolves around this chart, which plots the real compensation of mid-wage workers against the growth in productivity. For years they grew together, then they grow apart. The levels of both variables almost double, 1948-73, but since then, productivity has outpaced the real comp of blue-collar, non-managerial workers (mid-wage workers) by a factor of 6.

## The gap between productivity and a typical worker's compensation has increased dramatically since 1973

Productivity growth and hourly compensation growth, 1948–2016

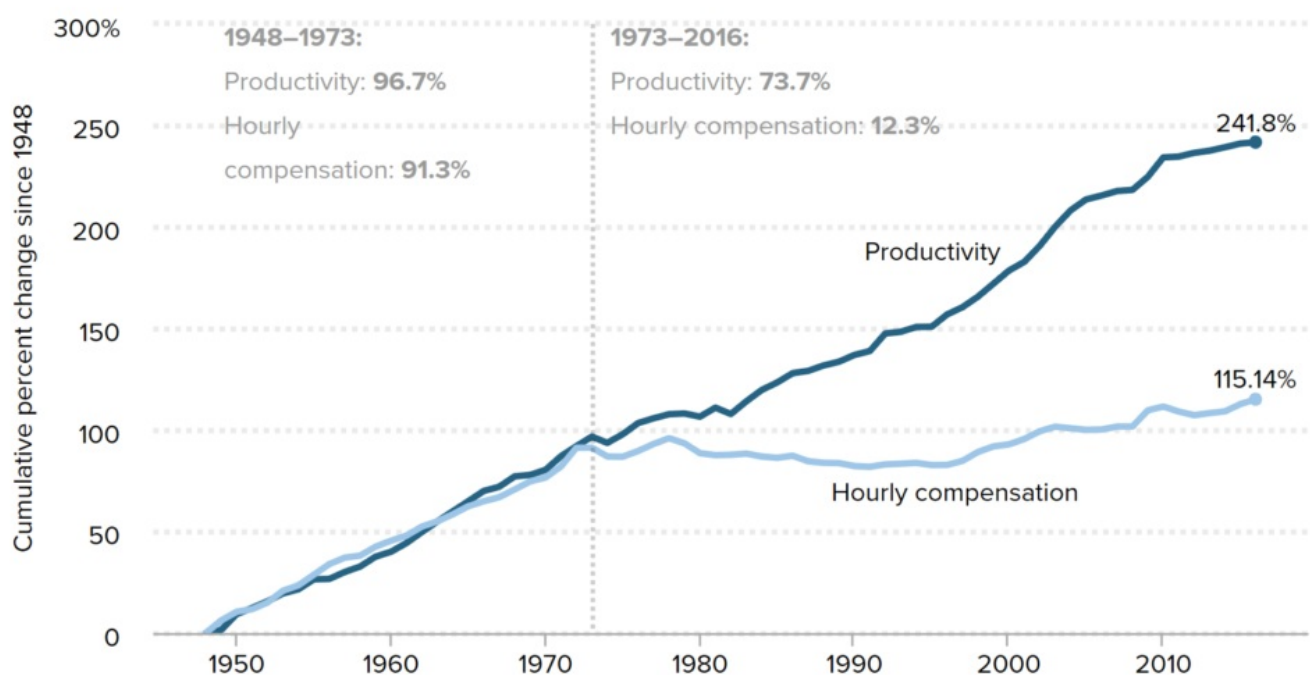


Chart Data

**Note:** Data are for compensation (wages and benefits) of production/nonsupervisory workers in the private sector and net productivity of the total economy. "Net productivity" is the growth of output of goods and services less depreciation per hour worked.

**Source:** EPI analysis of Bureau of Labor Statistics and Bureau of Economic Analysis data

That wedge between productivity and middle-class wage growth has become one of the more important developments in political economy, representing the rise of inequality and the disconnect of paychecks and growth. It's even on a tee-shirt, produced by the group, Fed-Up.

SS agree that the split is real and important, but their motivation appears to be not throwing out the baby with the bathwater. That is, they're concerned—not without reason—that progressives see those two lines and conclude the growth and productivity don't matter. In a follow-up [oped](#), SS cite me as suggesting that in the age of

inequality, we can't count on growth to reach middle-class families: "Faster productivity growth would be great. I'm just not at all sure we can count on it to lift middle-class incomes."

That's true and even axiomatic, as per the figure above, but SS's point is that even so, it doesn't mean productivity growth doesn't raise median wages. It just means there's a bunch of other stuff pushing back in the other direction. That's true too.

[Note: it's very important in this debate to distinguish between median and average compensation. As inequality increases, they diverge. Since this debate is about inequality—i.e., the "other stuff" that's driving the gap—it's important to focus on the median as opposed to the average.]

In a series of regressions of median or middle-wage compensation (the latter is for blue-collar and non-managerial workers, for which there's a longer time-series) on productivity growth and unemployment, SS shows that the coefficient on productivity is often close to 1, meaning a 1 percent increase in productivity maps onto a 1 percent increase in wages. Again, this doesn't deny the gap. But it does say growth matters for wages, even at high levels of inequality, weak worker bargaining power, persistently slack labor markets, etc.

I'm sure that's right and it's one reason why so much of my work in recent years has focused on running full employment, full-growth-potential economies. I've written [extensively](#) and bemoaning-ly about the productivity slowdown, often trying to push back on those arguing its mostly measurement error. I've called it one of the biggest economic problems [we face](#). Just a few weeks ago, I tried to show the critical role slower productivity growth was playing in current wage growth that's slower than it should be at such low unemployment (see 2<sup>nd</sup>-to-last figure [here](#)).

But, as I wrote in one of the links above: "Faster productivity growth is not by itself *sufficient* to raise the living standards of all who help to generate it, but it surely is *necessary*."

SS focus on the "necessary," which is fine and important, but in doing so, they create a bit of a straw man by casting those of us who focus on the "not-sufficient" as inadequately committed to faster productivity growth. That's inconsistent with our writings. FTR, I do think Summers has done a particularly good job in recent years putting equal weight both sides of this equation, lending his heft to not just growth issues, but inequality issues as well (he's also been on a recent and admirable tear against the awful tax cut plan).

I won't belabor this because the [MB response](#) is so thorough and I've little more to add. I will, however, underscore one key policy point they make and add a neat econometric point to which I'd like SS to respond.

MB write:

*Our contention all along has been that this pay deceleration did not just reflect slower productivity growth, but that it in fact reflected a number of intentional policy decisions that undercut typical workers' ability to demand and achieve higher pay. One such policy decision was exactly over how aggressively the Federal Reserve and other macroeconomic policymakers should target low unemployment. Others included decisions about whether or not to protect workers' rights to organize and bargain collectively (the country obviously chose not to) and whether or not to raise the federal minimum wage in line with inflation or productivity growth (again, we chose not to).*

With this in mind, those who would close that gap, which include SS, MB, and JB (that's me), would, I suspect, readily admit that we have a lot more confidence in our knowledge of gap-closing policies in the space MB reference above versus ideas to boost productivity growth. That, I regret to say, remains largely a mystery to economists.

So, pushing for higher minimum wages, full employment (direct job creation), progressive taxation, collective bargaining, overtime rules, gender equity, a robust safety net, more balanced trade, financial market regulation (a complement to full employment—we can't have them blowing up the economy every cycle), and so on are

gap-closing ideas that we know will help. What's more—and this part is important given SS's findings—these measures are not [anti-growth](#).

The punchline is thus twofold. Of course, 1) faster productivity growth is a necessary component of faster wage growth. But so is 2) re-linking wage growth with the ongoing productivity growth we have. And we know more about how to achieve #2 through progressive policies than #1.

Two econometric points:

First, Biven shared the data with me and I replicated one of SS's main findings: a coefficient of 1 on the productivity variable in a simple specification of mid-wage comp on productivity growth and unemployment. But they neglect to mention that the residuals are serially correlated in that regression ( $DW=0.54$ ), implying an omitted variable bias. That's not surprising: you can't explain a complex variable like mid-wage comp with just productivity and unemployment. But it is a problem for their trade-off conclusions if what's missing correlates—shares explanatory power—with productivity growth.

Which appears to be the case: when I add an AR(1) term to whiten the residuals, the productivity coefficient falls by half (to 0.5) and  $DW=1.5$ . To be clear, that doesn't undermine their point. The half-a-percent is an elasticity very much worth tapping! But it's important recognize an omitted variable bias that likely has to do with the "other stuff" in that big gap in figure 1.

Second, MB show that much of the juice in SS's findings come from a period I'm highly obsessed with: the latter 1990s, when true full employment ultimately prevailed, productivity growth was strong, and real pay throughout the wage scale rose quickly, in step with productivity (which is why the correlation drops when you take out that period). This observation does not at all disprove SS's findings, but it did lead me to think about the role of full employment in these dynamics.

I and others have argued that in persistently weak labor markets, employers do not need to uncover efficiency gains to maintain profitability. But in truly tight labor markets, where pressure on labor costs cuts into profit margins, that calculus changes, and in order to avoid higher unit labor costs (comp relative to productivity) and lower unit profits, you've got to find efficiency gains. This is the full-employment-productivity-multiplier about which I've [hypothesized](#).

In this story, the causality goes from full employment to both faster productivity growth and faster wage growth. It also creates non-linearities in the data that complement the missing variable point above. Going for 7 to 6 percent unemployment will do less in the model I'm thinking about here than going from 4 to 3 percent.

BTW, this would imply that the current low unemployment rate should be juicing productivity growth a bit. In fact, averaging the past six months, year-over-year productivity growth has accelerated to 1.4 percent, a nice bump, though with these jumpy numbers, nothing you'd want to read much into. And, as noted, wage growth still hasn't caught as much of a buzz as I'd like to see.

It will take both faster growth *and* much more progressive policy to close the big gap in the figure. On that, I suspect we all agree.