U.S. PRODUCTIVITY

Since the end of the dot-com boom, productivity growth in the U.S. has been modest by post-World War II standards. But in recent years, including 2023 and 2024 Q2, productivity growth has been stronger.

Is it time for more productivity optimism?



WHAT IS PRODUCTIVITY?

Productivity is the average amount of output that a worker produces for each hour of labor. Economists track productivity for a number of reasons. In labor economics, productivity growth is linked to rises in wages and living standards. Relatedly and more broadly, productivity growth may signal greater efficiency (doing more with the same resources) and technological advancement, which could drive further economic growth in the future.

WHAT IS STRONG PRODUCTIVTY GROWTH?

History can help benchmark what "strong" and "weak" productivity growth looks like. In the U.S., economists often focus on nonfarm business productivity. Since 1947, nonfarm productivity has grown at an average rate of 2.1% per year. But this pace hasn't been consistent. Up to 1973, productivity growth averaged 2.7%. From 1973-1995, it slowed to 1.5%. During the dot com boom of 1995-2005, productivity growth surged back up to 3.0% a year on average. Since 2005, it has fallen back to a 1.5% average, though the five-year rolling average has been rising.

Nonfarm Productivity Growth Since 1948



Nonfarm Productivity Growth Since 2022



POST-PANDEMIC PRODUCTIVTY GROWTH

Recent productivity growth in the U.S. has been impressive. Over the four quarters of 2023, nonfarm productivity grew 2.7%, in line with the high pre-1973 U.S. average and well above the rolling five-year average. This strong performance was a major reason U.S. real GDP growth over 2023 so significantly outperformed private forecasts (-0.1% January 2023 Blue Chip forecast versus +2.9% actual). In 2024, Q1 was weak but Q2 growth came in at a 2.3% annualized rate.

VERSUS PRE-PANDEMIC FORECASTS

But it is too soon to conclude the recent strong productivity data will represent a new trend. It may simply represent post-pandemic normalization, Back in January 2020, the nonpartisan Congressional Budget Office (CBO) projected that the level of nonfarm productivity would be roughly 9% higher in mid -2024 than its 2019 average level. Despite the tumultuous pandemic, that is almost exactly what has happened. This suggests that measured nonfarm productivity growth most likely reflects pre-pandemic factors, with less impact so far from newer drivers like artificial intelligence. But it is also perhaps possible that some new technologies have offset the effects of some negative pandemic factors.

Level of Nonfarm Productivity Since 2017 2019 = 100



Top 5 and Bottom 5 Sectors* for Pandemic Productivity Growth

2019-2023 growth minus 2015-2019 growth Average annual percentage points

Support Activities for Mining	6.9
Broadcasting, Except Internet	4.9
Clothing and Clothing Accessories Stores	4.3
Textile Mills	3.9
Nonstore Retailers	3.6
Air Transportation	-6.8
Oil and Gas Extraction	-4.8
Electronic Markets & Agents & Brokers	-4.3
Furniture and Home Furnishings Stores	-3.0
Automotive Repair and Maintenance	-3.0

PANDEMIC INDUSTRY PRODUCTIVTY

Various industries have weathered the pandemic differently and have been exposed to new technologies and factors, like work-from-home, in distinct ways.

The chart to the left looks at productivity growth by industry since prepandemic (2019-23) and subtracts out the four years prior (2015-9) as a simple baseline trend. The result is an idea of which sectors saw the strongest and weakest pandemic productivity gains relative to pre-pandemic norms. What it shows is the biggest pandemic productivity expansion for mining support activities (e.g. exploration), while air transportation—which includes both cargo & passenger air travel—saw the biggest pandemic productivity contraction.

 $Sources: Bureau \, of \, Labor \, Statistics, \, Congressional \, Budget \, Office, \, author's \, calculations.$



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^{*3-}digit NAICS industries.