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# **Understanding the Decline of U.S. Manufacturing Employment**

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other analysts  $\hat{o}$  pointing to decades of statistics



Regardless of whether

various mechanisms by which trade and the broader forces of globalization may impact employment, collectively they find that trade has played a significant role in the collapse of U.S. manyemployade



fallen by nearly 5 million, or by over 28 percent. Unlike the declines experienced in the 1980s, the job losses have been broad-based, affecting all industries. Widespread plant closures accompanied the employment declines. As shown in Figure 1, from 2000 to 2014, the number of





employment. Using the fact that labor productivity is defined as output per unit labor, these differential growth rates can be expressed by the following identity:

(1)

demand for manufactured goods is limited and so not very responsive to the declining prices.

Analogies are often made to agriculture

until 1968 and falls thereafter, with particularly steep declines in the 1990s.<sup>5</sup> Without the computer industry, the price indices for the private sector and manufacturing display similar trends. Although price inflation for manufacturing without computers has been somewhat lower than the average for the pr





industry does not necessarily imply that American factories are producing many more

industry and aggregate levels on measured real output and productivity growth, it is an important







productivity will increase if processes are automated  $\hat{\theta}$  i.e., if businesses invest in capital

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bedroom and dining room furniture



also consistent with offshoring and substantial restructuring of the domestic industry.

Automation may well have contributed to job losses in the auto and other industries, but the decompositions in the Hicks and Devaraj report can shed no light on the importance of this factor.

In short, productivity growth does not, per se, cause employment declines. Accounting identities and other descriptive evidence cannot be used to draw inferences about the causes of

technology  $\hat{\theta}$  indeed to some degree developments of the two are interrelated  $\hat{\theta}$  they can provide insights into the relative importance of the two forces.<sup>11</sup>

Motivated by the dramatic decline in manufacturing employment in the 2000s, recent studies have focused on

No study captures all aspects of

saving technology or to shift the mix of products they produced to less labor-intensive ones.

Pierce and Schott find that manufacturing industries in the United States that were more affected by the change in trade policy experienced larger employment losses and that all three channels







manufacturing occupations

Sullivan (1993) find that dislocated workers with high job-tenure experience average long-term earnings losses of 25 percent of their predisplacement income. Using Social Security earnings data, von Wa







## References

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**Table 1 Decomposition of Differences in Private Sector v. Manufacturing Employment Growth Rates, With and Without Computer and Electronic Products Industry, Selected Time Periods**

1977–2016	1979–1989
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