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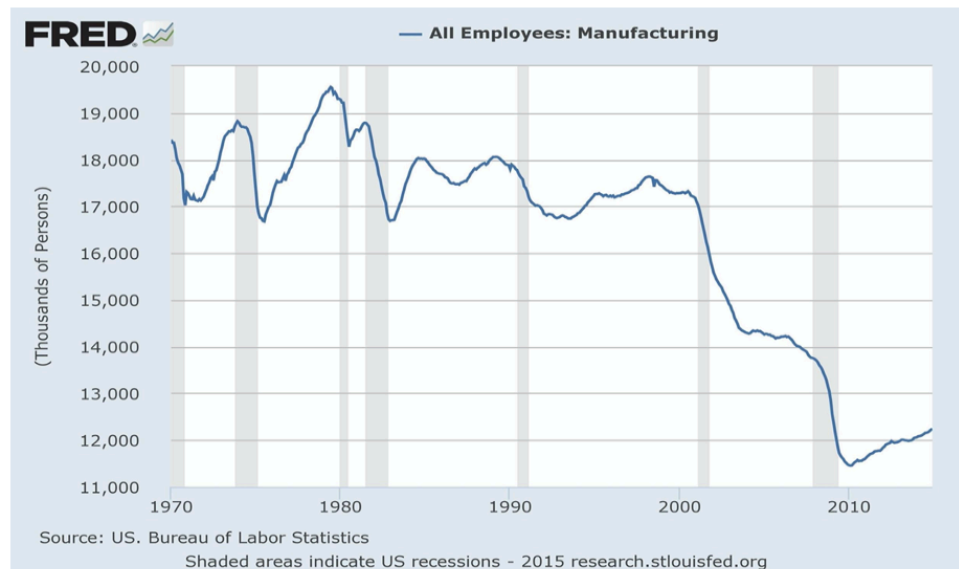
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The Persistence of Manufacturing in Deindustrialized America

By Masoud Movahed

Over the past three decades, the American manufacturing has been characterized by a marked decline in employment rates. We hear much about deindustrialization and the outsourcing of production leading to an almost wholesale relocation of American labor-intensive industries to lower-wage areas in the developing world. By the end of 2012, the sector had lost approximately 8 million jobs since its 1979 peak, leaving manufacturing in a series of deep crisis (see figure 1). Record numbers of job loss in manufacturing, numerous incidents of factory closures, and most importantly, persistent U.S. trade deficit since the late 1975, all have aggravated the well-being of ordinary American working-class families. The large scale of employment shrinkage in manufacturing has rendered it as a vanishing sector of the U.S. economy in social imaginary. The economy of complex mechanical machinery and manufacturing (the Old Economy) is deemed to have been replaced by the economy of services, finance, and information technology (the New Economy). Manufacturing, we are told, is outsourced to those areas of the world where not only entrepreneurs can access cheap labors but also spur economic development where it sorely needed. The tectonic decline in the rates of manufacturing employment—the phenomenon that economists commonly refer to as “deindustrialization,”—compounded with the surge of service-based jobs have become the twin trajectories of U.S. economy since the late 1970s.

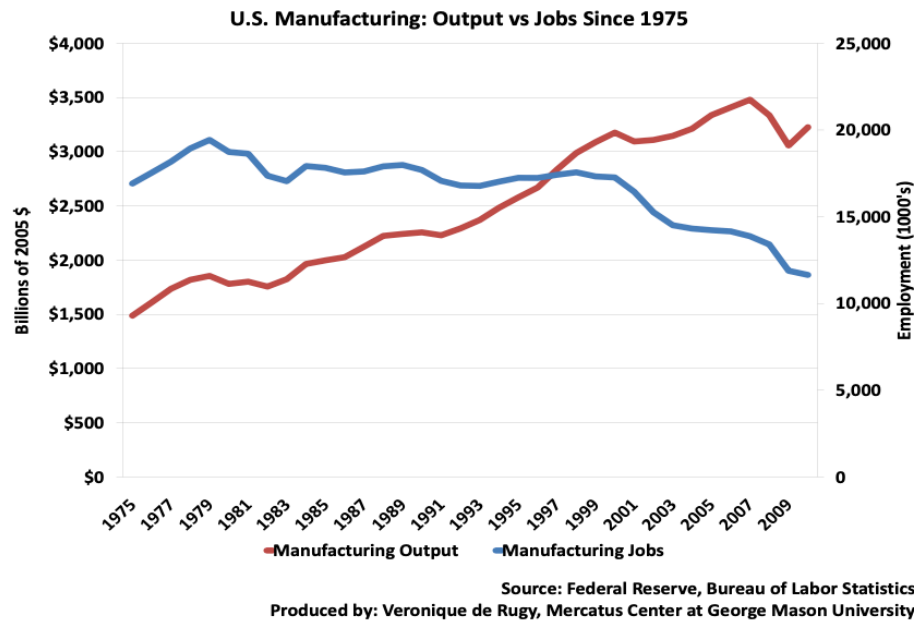
Figure 1



Writing for the International Monetary Fund in 1997, Rowthorn and Ramaswamy [1] note that the ubiquitous fall in the manufacturing employment across the advanced economies of the World including the United States 'is not a negative phenomenon, but a natural consequence of further growth in advanced economies.' On the contrary, observing the employment trends in the U.S. economy more than a decade since the report was published, it becomes clear that such a rapid decline in manufacturing employment could barely be more pernicious to the welfare of American working class. It is true, as they note, that such a decline in manufacturing employment is "a natural consequence" of a mature industrialized economy.

Due to its crisis-ridden past, the manufacturing sector has become, quite understandably, an undermined portion in characterization of U.S. economy. There are, of course, good reasons for economists' frequent underestimation of U.S. manufacturing. Perhaps the most conspicuous evidence given to the deindustrialization argument is the rapidly declining rates of manufacturing employment. Adding to this fall of manufacturing employment is the fact that the share of manufacturing in the U.S. GDP has shrunk over the last half a century dropping from 25 percent in 1950s to only approximately 12 percent today. Quite Paradoxically, however, the absolute volume of manufacturing has consistently grown in the U.S. economy. It is striking that the U.S. manufacturing output, which accounts for \$2.08 trillion is larger today than it has ever been (see figure 2). Most strikingly, the U.S. manufacturing output is still so large that the National Association of Manufacturers has declared that if the sector were its own country, it would have been the world's eighth largest economy. Even with the rise of East Asian Tigers namely, South Korea and Taiwan as well as the Chinese leviathan in global manufacturing, the United States continues to maintain its share of world's total manufacturing exports: 25 % in 1982 and 25% in 2012. Manufacturing has neither vanished nor died in the U.S. economy. As a matter of fact, the United States still stands out among the advanced economies as a leading manufacturer even in terms of traditional industries such as auto, steel and machinery. Germany and Japan, and later, in Deindustrialized America, to write better in terms of style and aesthetics our sentences are But if manufacturing has continued to grow, why then, has the employment in the sector shrunk so drastically? To answer this question, one should examine more carefully the characteristics of capitalism as an economic system.

Figure 2



Decline in manufacturing employment and capitalist development

In a competitive global marketplace where firms ceaselessly seek to hunt profits, there is no way for them to survive and maintain market shares if they do not cut costs to reinvest in machinery and technology. Manufacturing firms cut costs mainly by increasing the productivity of the labor through automation and mechanization of the production process. Economists have tried to accommodate this rapid decline in manufacturing employment in mature capitalist economies. Harry Braverman in his influential book *Labor and Monopoly Capital* shows in great details that firms' managers, in order to minimize costs and to sustain the firm against the juggernauts of capitalist competition, automates the production process and thereby, not only deskills the labor, but also obviates the need for recruiting more labor in labor-intensive industries. Through automation and mechanization, not only can the firms' managers easily replace labor—given that they become replaceable as they are deskilled—but they can also reduce their dependence on labor.

Hence, employment in manufacturing in a capitalist mode of production tends to shrink in the long term. Capitalism is characterized, Braverman further notes, by the incessant drive to enlarge and perfect machinery on the one hand, and to diminish workers on the other. Acquisition of new technologies, new machinery and workplace reorganization are a few strategies which firms undertake to increase the productivity of the labor. While labor becomes productive through mechanization, the production process becomes less dependent on labor. Hence, employment in manufacturing will shrink in the long term as productivity increases. There are also a number of structural changes in U.S. industrial organization, which has precipitated a decline in manufacturing employment. Many believe that those structural transformations in U.S. economy have led to a rapid decline of the sector's employment.

Decentralization of U.S. Industrial Organization: a search for flexibility

The landscape of U.S. manufacturing and industrial organization has undergone reconstruction since 1970s. The halcyon days of **Fordism**—the mass production of standardized products in huge volumes using special-purpose machinery and unskilled labor—eventually came to an end with changes sweeping all over the U.S. industrial organization in favor of a more flexible production paradigm. By the early 1970s, a series of forces were at work within the world economy, which would call Fordism into question more fundamentally than before. Throughout the advanced economies of the West, the heydays of postwar boom were about to lose momentum. Inspired by the famous Japanese '**Lean Production Model**', which was based on the notions of flexibility, automation and long-term relationships with suppliers and subcontractors, the American industrial organization shifted towards decentralization and heavy reliance

on subcontractor suppliers.

The Japanese 'Lean Production Model' has ever since been diffused in the U.S. manufacturing firms pushing the sector away from the Fordist principles of mass production, low-costs, and high wages. This tectonic shift in the U.S. industrial organization—as more sober observers believe, precipitated a fall in the rates of manufacturing employment. Firms also increasingly rely on subcontractors as a strategy to avoid unions. It should not go unnoticed that with the meteoric international competition led by the impressive industrial growth rates of, first, Germany and Japan, and later, by the Tigers in East Asia, and recently China, the U.S. manufacturing had to go through a deep crisis of profitability: decline in the rates of profits. Indeed, the fall in the rates of profits in manufacturing was another obstacle to boosting employment in the [sector](#).

In short, it is misleading to postulate, as the cliché goes, that 'the U.S. economy has deindustrialized' while the industrial output of the economy today is larger than it has ever been. The contradiction of growth in output and decline in employment in the manufacturing sector is nothing new in capitalism. Developed high-wage economies can hardly sustain those low-tech industries while their technical know-hows are diffused globally. High-wage economies of the world can largely maintain the "cutting edge" industries supplemented by the ever-expanding IT sector. This exacerbates the well-being of low-skilled laborers across the advanced economies more than any other times. Without the state's assistance and protection for low-tech industries, there would be no hope to generate employment in manufacturing to levels commensurate with its output, even though the industrial sector in terms of output will continue to grow.

Masoud Movahed is a Researcher in development economics at New York University. He contributes to, among others, Harvard International Review, Foreign Affairs, World Economic Forum, and Al Jazeera English.