

The mirage of a return to manufacturing greatness

By Eduardo Porter

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Half a century ago, harvesting California's 2.2 million tons of tomatoes for ketchup required as many as 45,000 workers. In the 1960s, though, scientists and engineers at the University of California, Davis, developed an oblong tomato that lent itself to being machine-picked and an efficient mechanical harvester to do the job in one pass through a field.

The battle to save jobs was on.

How could a publicly funded university invest in research that cut farmworker jobs only to help large-scale growers? That was the question raised in a lawsuit filed by a farmworker advocacy group against U.C. Davis in 1979.

César Chavez's United Farm Workers union made stopping mechanization its No. 1 legislative priority. In 1980, President Jimmy Carter's agriculture secretary, Robert Bergland, declared that the federal government would no longer finance research that could lead to the "replacing of an adequate and willing work force with machines."

These days, the battle to save American jobs has a different flavor. It echoes in Hillary Clinton's promise "to win the global competition for manufacturing jobs and production." It lives in Donald Trump's call to break Nafta and impose a 45 percent tariff against Chinese imports, and in Bernie Sanders's rallying cry against trade agreements.

Its outcome, however, will probably be similar. The freeze on research may have slowed the mechanization of California's harvests, but by the year 2000, only 5,000 harvest workers were employed in California to pick and sort what was by then a 12-million-ton crop of tomatoes.

In America's factories, jobs are inevitably disappearing, too. But despite the political

rhetoric, the problem is not mainly globalization. Manufacturing jobs are on the decline in factories around the world.

"The observation is uncontroversial," said Joseph Stiglitz, the Nobel-winning economist at Columbia University. "Global employment in manufacturing is going down because productivity increases are exceeding increases in demand for manufactured products by a significant amount."

The consequences of this dynamic are often misunderstood, not least by politicians offering slogans to fix them.

No matter how high the tariffs Mr. Trump wants to raise to encircle the American economy, he will not be able to produce a manufacturing renaissance at home. Neither would changing tax rules to limit corporate flight from the United States, as Mrs. Clinton proposes.

"The likelihood that we will get a manufacturing recovery is close to nil," Professor Stiglitz said. "We are more likely to have a smaller share of a shrinking pie."

Look at it this way: Over the course of the 20th century, farm employment in the United States dropped to 2 percent of the work force from 41 percent, even as output soared. Since 1950, manufacturing's share has shrunk to 8.5 percent of nonfarm jobs, from 24 percent. It still has a ways to go.

The shrinking of manufacturing employment is global. In other words, strategies to restore manufacturing jobs in one country will amount to destroying them in another, in a worldwide zero-sum game.

The loss of such jobs has created plenty of problems in the United States. For the countless workers living in less developed

reaches of the world, though, it adds up to a potential disaster.

Japan's long stagnation can be read as a consequence of a decades-long development strategy that left the nation overly dependent on manufacturing. "They are focused on a dead-end business," said Bruce Greenwald, an expert on investment strategy at Columbia Business School. "They are not eliminating hours of work in manufacturing fast enough to keep pace with the reduction in work needed."

The richest countries today started deindustrializing when they were already well off and benefited from fairly skilled and productive work forces that could make the transition into well-paid service jobs, as increasingly affluent consumers devoted less of their incomes to physical goods and more to leisure, advanced health care and other services.

Poorer countries have more limited options. If the demise of manufacturing jobs in the United States forced many workers into low-paid retail jobs and the like, imagine the challenge in a country like India, where factory employment has already topped out, yet income per person is only one twenty-fifth of what it was in the United States at its peak.

"Developing countries are suffering premature deindustrialization," said Dani Rodrik, a leading expert on the international economy who teaches at Harvard's Kennedy School. "Both employment and output deindustrialization is setting in at much lower levels of income."

This is even happening in a manufacturing behemoth like China — which appears to have maxed out the industrial export strategy at a much lower income level than its successful Asian predecessors, like Japan and Taiwan.

For poorer countries in Asia, Africa and Latin America, the decline of manufacturing as a bountiful source of jobs puts an end to the prime path to riches that the modern world has followed.

Manufacturing, Professor Rodrik points out, has unique advantages. For one thing, it can quickly employ lots of unskilled workers. "Setting up a factory to make toys puts you on a productivity escalator in a way that traditional agriculture and services didn't do," he said.

Moreover, production isn't constrained by a small domestic market: Exports of goods can easily flow around the world, allowing industry room to grow and giving developing countries time to ride up the ladder of income, skills and sophistication.

The natural resources that dominate the exports of many poor countries don't have these features. They employ few workers and offer little added value. They do not encourage acquiring skills, and they expose countries to violent swings in commodity prices.

High-end services such as finance and programming do pay well. But these aren't the service sectors most poor countries build. A majority of service jobs in most poor countries are generally limited to housework, mom and pop retail and the like. Since these sectors offer little productivity growth and are generally isolated from foreign competition, they cannot pull a nation out of poverty.

The first large transition from agriculture to industry in the early 20th century — well lubricated by public spending on world wars — liberated workers from their chains far more effectively than Karl Marx's revolution ever did.

The current transition, from manufacturing to services, is more problematic. In poor countries, Mr. Rodrik says, workers may have to pare back their aspirations of development. Who knows "how will political systems manage?" he asks.

In the United States, the political challenge is no less daunting. Low pay married to high profits in much of the service economy are contributing to a widening income chasm that is rending society in all sorts of ways. Used to

the prosperity once delivered by manufacturing, American workers are rebelling against the changing tide.

Note to Mrs. Clinton, Mr. Sanders and Mr. Trump: A grab at the world's manufacturing jobs is the wrong answer. Walls will damage prosperity, not enhance it. Promises to recapture industrial-era greatness ring hollow.

The United States, though, does have options: health care, education and clean energy, just to

name a few. They present big economic and political challenges, of course — not least the enormous inefficiency of private American medicine and Republicans' blanket opposition to more public spending.

Yet just as the federal government once provided a critical push to move the economy from its agricultural past into its industrial future, so, too, could it help build a postindustrial tomorrow.