
would have showed up as a change in teenage employment rates in other states relative to the rates in California and New England. But, according to Card, Current Population Survey data show no indication of any such negative impact in those states.

Card hurls his second challenge to the conventional wisdom from California, which raised its minimum wage to \$4.25 an hour in July 1988, long before the federal minimum reached that level. He contrasts the changes in teenage employment there with changes in certain states that did not increase their minimum wages then. Once again, the dog does not bark. "I find no empirical support for the conventional prediction," Card declares. The minimum-wage increase boosted the earnings of low-wage workers in the Golden State but "does not seem to have significantly reduced employment."

The challengers, however, do not have the last word on the subject. University of Pennsylvania economist David Neumark and William Wascher of the National Bureau of Economic Research step forward in *Industrial and Labor Relations Review* to present some new research of their own (and to fault Card for flaws they see in his statistical approach). Analyzing state data for the years 1973–89, they conclude: A 10-percent increase in the minimum wage cuts teenagers' employment by one to two percent.

There is plenty to quibble with in all of these studies. How well, for example, do they adjust for other factors that affect teenage employment, such as the varying economic health of different states? Questions like that suggest that the new debate on the effects of the minimum wage will not be much more conclusive than earlier ones.

No More Number Ones?

"The Rise and Fall of American Technological Leadership: The Postwar Era in Historical Perspective" by Richard R. Nelson and Gavin Wright, in *Journal of Economic Literature* (Dec. 1992), American Economic Assoc., 2014 Broadway, Ste. 305, Nashville, Tenn. 37203.

For more than a decade, more and more voices have been heard bemoaning the loss of U.S. leadership in high technology and calling for a government-led industrial policy to set things right. What such analysts fail to understand, contend economists Nelson of Columbia and Wright of Stanford, is why the United States had its big technological edge in the first place—and why no nation will be able to gain such an advantage again.

After World War II, U.S. firms did seem to own the future. They dominated high-tech fields, particularly computers, transistors, and other semiconductors, and claimed a big share of world markets. At home, technology helped to make U.S. industry the most productive in the world.

This technological lead had two sources, according to Nelson and Wright. The first was America's long-standing dominance in mass-production industries, built on the twin pillars of vast natural resources—coal, iron ore, copper, petroleum, and others—and a vast domestic market. Ample re-

sources and markets spurred technological innovation. The other source of American technological dominance was new: massive postwar investments, both private and public, in research and development (R&D) and in scientific and technical education. The number of U.S. scientists and engineers in industrial research soared from fewer than 50,000 in 1946 to roughly 300,000 in 1962. Total U.S. expenditures on R&D more than doubled between 1953 and 1960. Other nations lagged far behind.

But these advantages were bound to fade. Other nations learned the importance of investing in education, training, and R&D. Falling trade barriers created international markets in both raw materials and finished goods, erasing the advantages America enjoyed in a simpler time. The world's advanced economies have converged and, to an extent, intertwined. There is no sense trying to put Humpty-Dumpty back together again, the authors believe. In this environment, a moment's technological advantage is quickly lost, as other nations adopt the new technology.

Now, the authors speculate, national advantage may be based on "social capabilities," which are the product of the subtle social and political processes that shape savings, investment, and productivity. But in the new world economy, even these advantages are bound to be fleeting.