

## *Show Me the Productivity!*

“The Computer and the Economy” by Alan S. Blinder and Richard E. Quandt, in *The Atlantic Monthly* (Dec. 1997), 77 N. Washington St., Boston, Mass. 02114;  
“Where’s the Productivity Growth (from the Information Technology Revolution)?” by Donald S. Allen, in *Review* (Mar.–Apr. 1997), Federal Reserve Bank of Saint Louis, Public Affairs Dept., P.O. Box 442, St. Louis, Mo. 63166-0442.

The supposedly oh-so-efficient information age is here, with all its many marvels, from desktop and laptop computers to cell phones and pagers. Oh yes, the Internet, too. Between 1970 and 1995, investment in information-processing equipment increased 12.5 percent a year—but business’s output per hour rose only 1.5 percent annually. Where’s the payoff? Economists Blinder and Quandt, of Princeton University, and Allen, of the Federal Reserve Bank of Saint Louis, serve up some answers.

Yes, the official figures understate the growth in productivity, especially in the service sector, they say. But that is not the whole problem. While investment in computing and related equipment is rapidly growing, it still accounted for less than 10 percent of gross business fixed investment in 1996—not enough, say Blinder and Quandt, to “revolutionize economy-wide productivity—although it could well have dramatic effects in some sectors.”

In some industries that have invested heavily in information technology, productivity

has mushroomed in recent decades, rising an average of between 4.2 percent (steel) and 6.3 percent (railroads) a year. But, notes Allen, automotive repair shops increased investment in information technology by a whopping 24.4 percent a year between 1972 and 1994—but reaped annual productivity growth of only 0.1 percent!

Some factors cited by Blinder and Quandt may help to explain such disappointing results. New, more powerful computing machines keep appearing, as do new and updated versions of software programs. Just keeping up demands vast amounts of money and training time—which diminishes productivity. Moreover, they note, some activities made possible by computers—such as playing electronic solitaire, surfing the Web, and endless e-mailing—themselves reduce productivity.

It may well be decades, the authors say, before all the economic benefits of information technology are realized. “The presence of a computer on a desk,” Allen observes, “does not mean that it is used to its full potential.”

## *NAFTA-Action Report*

“Has NAFTA Changed North American Trade?” by David M. Gould, in *Economic Review* (First Quarter, 1998), Federal Reserve Bank of Dallas, P.O. Box 655906, Dallas, Texas 75265-5906.

Debate about the North American Free Trade Agreement (NAFTA) usually focuses on how many jobs it has sent speeding down to Mexico, where the average wage is one-fifth that in the United States. But the more basic question, argues Gould, an economist at the Federal Reserve Bank of Dallas, concerns the agreement’s effect on the total volume of trade. That is what ultimately determines the impact on American employment and living standards.

In 1994, the year the accord took effect, U.S. trade with Mexico grew nearly 10 percent. But with the 1995 peso crisis, U.S. imports from Mexico increased nearly 25 percent and exports dropped 11 percent. U.S. exports have since resumed their rapid growth.

But this sort of superficial look at the ups and downs of U.S.-Mexico trade is misleading, Gould says. Factors other than NAFTA—such as changes in national income, exchange rates, and trade with other countries—also influence commerce. Trying to control for those other factors, he calculates that NAFTA hiked U.S. exports an average of about 16 percentage points a year between 1994 and 1996, for a cumulative benefit of about \$21 billion. The agreement also appears to have increased U.S. imports, he says, though this is far from certain.

Shouldn’t Americans hope that trade agreements boost exports and cut imports, thus presumably expanding jobs at home?