

a staff member of the Institute for National Strategic Studies at the National Defense University, in Washington, and Keohane, a Visiting Research Fellow at the Western European Union Institute for Security Studies, in Paris. However, theater missile defense systems are able to shield only relatively small areas from short-range missiles.

Nor has Europe failed to grasp the rogue states' growing military capabilities. In a report last year, for instance, Germany's Federal Intelligence Service warned that nuclear, bacteriological, and chemical weapons, in combination with long-range missiles, constitute "a direct threat . . . to Germany and NATO [the North Atlantic Treaty Organization] in the medium and long term." By 2005, the report said, Iraq will possess a medium-range missile capable of threatening parts of Europe. However, Bernier and Keohane

point out, European governments, unlike that of the United States, see no intent or will on the part of rogue states to employ such weapons.

"While Europe has significant economic and political interests in the Middle East and Far East," the authors write, "these interests are not backed by military commitments comparable to those of the United States." The Europeans count on "their growing, and relatively strong, political and economic ties with 'the rogues'" to deter attack.

But if Europe's opposition to the U.S. effort stems to a significant degree from a strategic calculation that Europe, unlike the world's lone superpower, has little to fear from the rogue states, the authors warn, that could have "profound" implications for NATO. Its members, after all, are pledged to regard an attack on one as an attack on all.

ECONOMICS, LABOR & BUSINESS

Is the New Economy History?

"Does the 'New Economy' Measure up to the Great Inventions of the Past?" by Robert J. Gordon, in *Journal of Economic Perspectives* (Fall 2000), American Economic Assn., 2014 Broadway, Ste. 305, Nashville, Tenn. 37203-2418.

The celebrated "New Economy" has run into difficulties lately, with dot.com woes now almost a regular feature of business news coverage. Are these just minor bumps in the road leading to an economy fundamentally transformed by the computer and the Internet? Gordon, a Northwestern University economist, doubts it. The computer's greatest benefits may well lie "a decade or more in the past, not in the future."

While the late 1990s were very good years for the U.S. economy, awash in computer investment, the recent productivity revival, he says, "appears to have occurred primarily within the production of computer hardware, peripherals, and telecommunications equipment, with substantial spillover to the 12 percent of the economy involved in manufacturing durable goods." In more than 80 percent of the economy, however, computerization has

had virtually no impact on productivity. "This is surprising," he says, since more than three-fourths of all computer investment has been in wholesale and retail trade, finance, insurance, real estate, and other service industries.

When, from the 1970s through the early 1990s, investment in computers failed to yield productivity gains, many economists predicted that they would arrive eventually. But unlike the electric light and the electric motor, which, once invented, "took time to diffuse [because] initially they were very expensive and didn't work very well," computers "provided powerful benefits early on," Gordon writes. "Many of the industries that are the heaviest users of computer technology—[such as] airlines, banks, and insurance companies—began in the 1960s and 1970s with mainframe technology and still perform the most computation-intensive activities on mainframes,

often using personal computers as smart terminals to access the mainframe database. . . . In this sense, computers have been around for almost 50 years. Instead of waiting for the productivity boost to arrive, it is more plausible that the main productivity gains of computers have already been achieved.”

Another reason computers have yielded diminishing returns, he observes, is the continuing need for human beings to perform many jobs—to pilot aircraft, drive trucks, provide medical care, teach classes, and cut hair. “No matter how powerful the computer hardware and how user-friendly the software, most functions provided by personal computers . . . still require hands-

on human contact to be productive,” writes Gordon, and that limits potential productivity gains.

Nor has the rapid diffusion of the Internet since 1995 given productivity more than “moderate” boosts. Humans’ time is limited, Gordon points out, and much Internet use “represents a substitution [of] one type of entertainment or information-gathering for another. . . . Internet surfing may be fun and even informational,” but its contribution to the American standard of living is no match for the improvements made by many past inventions, including the electric light, the electric motor, and the internal combustion engine.

Making Sense of Labor

“The Development of the Neoclassical Tradition in Labor Economics” by George R. Boyer and Robert S. Smith, in *Industrial and Labor Relations Review* (Jan. 2001), Cornell Univ., Ithaca, N.Y. 14853–3901.

During the 1950s and 1960s, theory-minded neoclassical economists came to dominate the field of labor economics, pushing their more fact-oriented colleagues to the margins. But in more recent years, the theorists have become interested in just the sort of quotidian issues whose study they once disdained, report Cornell University economists Boyer and Smith.

Prior to World War II, the field was dominated by “institutionalists” such as John R. Commons of the University of Wisconsin at Madison. They generally did “intensive, often historical” studies of particular cases or events, producing “detailed *descriptions* of various labor-market institutions or outcomes,” Boyer and Smith note. They might, for instance, detail the history of a labor union in a particular steel factory, and show how it affected workers’ pay and benefits.

The rival neoclassical approach better satisfied “the scholarly yearning for general principles that can organize ‘mere’ facts,” the authors note. These economists used mathematical models to test theoretical propositions about such things as the “price” of labor under various conditions of supply and demand.

After the war, leading “neoinstitutionalist” labor economists, such as John Dunlop, Clark Kerr, Richard Lester, and Lloyd Reynolds, remained “deeply skeptical of [neoclassical theory’s] relevance to the real world,” say Boyer and Smith. But the neoclassical economists prevailed. As the Nobel laureate Paul Samuelson once wrote, “In economics it takes a theory to kill a theory; facts can only dent the theorist’s hide.”

By the early 1970s, the trend toward neoclassical economics was clear. Reynolds revised his classic textbook, putting economics to the front and relegating the discussion of unions to the rear. Albert Rees sniffed in his neoclassical *Economics of Work and Pay* (1973) that economists trained in the “institutional tradition . . . have tended to move into industrial relations . . . and [become] somewhat isolated from the main stream of economics.”

Yet a kind of convergence was also underway. Econometrics—which uses sophisticated statistical techniques to test theoretical propositions in various “realistic” contexts—became popular in economics, especially after the advent of the computer. In the field of labor econom-