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Many New Causes for Old Problem of Jobs Lost Abroad

By STEVE LOHR

The chairman of President Bush's Council of Economic Advisers, N. Gregory Mankiw, stepped forcefully last week into an issue that has touched off an escalating, often strident, political debate: the migration of jobs, ranging from call center operators to computer programmers, to lower-cost countries like China and India.

The movement, known as offshore outsourcing, is growing, Mr. Mankiw acknowledged. But he said it was "just a new way of doing international trade" and "a good thing" that would make the American economy more efficient and would free American workers to eventually get better jobs.

History suggests that Mr. Mankiw may be right. The American economy has adapted to unsettling new waves of competition in the past.

Still, many industry executives, analysts and academics — not distraught American workers alone — say the nature of the economic challenge appears to be fundamentally different this time.

The differences, they say, include the kinds of jobs affected by outsourcing, the number of jobs potentially at risk and the politics of developing an effective policy response.

Globalization and technology are amplifying the impact of outsourcing. For decades, American foreign policy has been to urge developing nations and Communist countries to join the global economy in earnest. Now they have, and vast numbers of skilled workers have joined the world labor force, seemingly overnight. Countries like China, India and

Russia educate large numbers of engineers. Add the low-cost, nearly instantaneous communication afforded by the Internet, and an Indian computer programmer making \$20,000 a year or less can replace an American programmer making \$80,000 a year or more.

"The structure of the world has changed," said Craig R. Barrett, chief executive of [Intel](#), the Silicon Valley company that is the world's leading computer chip maker. "The U.S. no longer has a lock on high-tech, white-collar jobs."

But that does not mean that such jobs are about to disappear from the United States. Statistics on the current job flight are estimates. [Forrester Research](#) in a frequently cited study, predicted in late 2002 that 3.3 million services jobs in America would move offshore by 2015, about 500,000 of them in computer software and services.

For all the alarm that report generated, a shift of that size over the next 11 years would be small, given that the American labor force has more than 130 million workers and normally creates and destroys millions of jobs every few months.

Many American workers are worried that outsourcing is just beginning, and they fear that in an information-age economy all kinds of jobs are potentially at risk. Not only anxious workers in the United States take that view. Nandan Nilekani, chief executive of [Infosys Technologies](#), an Indian outsourcing company, declared at the World Economic Forum last month, "Everything you can send down a wire is up for grabs."

Another difference, some analysts say, is that during the 1980's, the interests of American workers and companies were more closely linked than they are today. From 1984 to 1986, the American semiconductor industry lost \$4 billion and shed 50,000 jobs in the United States.

"But now, it is the workers who are suffering and not the companies," said Ronil Hira, an assistant professor for public policy at the Rochester Institute of Technology. "The companies outsourcing jobs overseas are profitable and mostly gaining market share. There's no gun to their head this time, no real motivation to address the issue."

Beyond jobs shifted, the broader impact may be to put pressure on the wages of many technical workers in the United States, who increasingly live under the shadow of foreign competition.

Chris Neustrup, a software engineer from Walnut Creek, Calif., has seen every boom and bust in Silicon Valley since he graduated from the University of California at Berkeley in 1969. As a seasoned programmer-for-hire, who constantly

kept adding to his portfolio of skills, Mr. Neustrup was never out of work for long, and in good years he routinely made \$100,000 or more.

But this time, he said, it was different. After 25 months without work, Mr. Neustrup was hired two weeks ago by Emanio, a private software company in Berkeley. The pay is less than he used to make, but he counts himself lucky in this job market. His experience is part of a picture that puzzles economists and policy makers. The economy is growing nicely, corporate profits are rising, and yet job growth remains frustratingly sluggish, even among skilled workers. Some politicians and labor advocates say offshore outsourcing is a betrayal of American workers and support bills to curb it.

Mr. Neustrup, who lives with the turmoil in the high-tech job market, takes a more balanced view. "It's great for these developing countries to move up and adopt this technology," he said. "The trouble for us in the U.S. is that we're at the top of the ladder getting squeezed. And I'm not sure there is a good answer."

The heat of the political debate over outsourcing keeps rising. State and federal bills that would limit the flow of jobs abroad have proliferated. Senator John Kerry, the front-runner for the Democratic presidential nomination, castigates "Benedict Arnold companies and C.E.O.'s" for moving jobs overseas. Last November, Indiana pulled out of a \$15 million contract with an Indian company to provide technology services because of objections to outsourcing. The National Foundation for American Policy, a research group, says 30 bills are pending in 20 states to curb the use of offshore contractors by state and local governments.

Senator Kerry introduced federal legislation last November that would require call center operators to disclose where they are located.

The Senate recently passed a bill sponsored by Republican Senators Craig Thomas of Wyoming and George V. Voinovich of Ohio, that prohibits the use of offshore workers on some government jobs. The House has not voted on any similar bill.

These steps, some economists warn, are part of a misguided drift toward protectionism that would increase costs to consumers, make American businesses less competitive and risk more trade conflict.

"This anxiety about outsourcing is not a bad thing, as long as it forces you to make the right choices," said Jagdish N. Bhagwati, a professor of economics at Columbia University. "You have to move on and upgrade your skills. We have no

choice. And America, as probably the most innovative society in the world, does a pretty good job of it."

That process has begun, as companies and people enhance their skills. The result is new hiring, even as other jobs move offshore. Intel has added 1,000 software engineers in China and India in the last two years, but it has added even greater numbers in the United States.

I.B.M., the world's largest computer company, is also doing both. The company says it plans to transfer 3,000 jobs overseas, many of them white-collar jobs like computer programmer. But I.B.M. also says it intends to add 4,500 employees this year in the United States, including programmers and software designers with specialized skills.

The people in demand, says Hershel Harris, vice president for strategy in I.B.M.'s software unit, are those who are fluent in technology and in how technology can be applied to solve problems in particular fields of business or science.

Mary Trombley, 27, was hired last year by the I.B.M. software group as an engineer in San Jose, Calif. She was an English major at the University of Michigan, which she attended from 1994 to 1998, making her part of the first generation of college students with wide-open access to the Internet. She got enough of a taste for technology that she decided to change course. "It looked exciting and I jumped in," she said.

At I.B.M., she is a "human factors engineer" who helps tailor software tools for companies in the life sciences, retailing and financial services industries so they can more easily sift through vast databases to quickly mine useful nuggets of information. She works with programming languages, C++ and Java, but her main focus is a level above the code itself. "It's understanding a customer's needs and business strategy, and then translating that into solutions," Ms. Trombley explained.

After two years of slight declines, the number of professional software developers rose in the United States last year to 2.35 million, according to IDC, a research company. Today, America has more than four times as many software developers as India, and nearly seven times as many as China. But the recent growth rate, and projected growth, is far higher in those well-educated, developing nations. The United States is continuing to add high-skill jobs, like Ms. Trombley's, but others are being lost.

Maintaining and upgrading older software on mainframe computers is the kind of job at risk from offshore outsourcing. James Fusco, a mainframe programmer from East Brunswick N.J., worked for AT&T for 13 years. In 1999, seeking to

cut costs, the company farmed out much of its data center operations to I.B.M.'s global services unit. Mr. Fusco and his coworkers showed up at the same offices in New Jersey, but suddenly they were I.B.M. employees. Their work, improving and updating mainframe billing and marketing applications, was the same, but one project after another was handed off to programmers in India and Canada. In May 2002, Mr. Fusco and many of his colleagues were laid off, their jobs casualties of outsourcing.

"We were not treated like real I.B.M. employees," Mr. Fusco said. "No attempt was made to retrain us to help us get other jobs."

Mr. Fusco is one of the plaintiffs in a class-action suit against the Department of Labor that seeks to extend the government's trade adjustment assistance program, dating to the 1960's and most recently revised in 2002, to software programmers. The plaintiffs have been told by the Labor Department that, because software is not a tangible "article," they do not qualify for financial assistance and retraining for jobs lost to foreign competition, as manufacturing workers do. Efforts are under way in Congress to change the law.

But even those who joined the class-action suit do not seem to resent the foreign workers who are doing their jobs. "I loved my job and I was good at it," said Ron Beyer, 54, a senior programmer from near Gun Barrel, Tex., who made \$80,000 a year. "But it's time to move on, and find something else, something that can't move offshore."

Mr. Fusco, 50, found a job last November as a systems administrator at a small company in New Jersey, at a pay cut from the \$65,000 salary he earned at I.B.M. With the federal assistance and retraining he is seeking, Mr. Fusco said he might consider training for another field.

"A year ago, I would have gone for newer computer skills," he explained. "But I'm not sure that programming is a smart thing to get back into. It can be done remotely."