

# Shaking Up Trade Theory

**For decades economists have insisted that the U.S. wins from globalization. Now they're not so sure.**

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Ever since Americans began fretting about globalization nearly three decades ago, economists have patiently explained why, on balance, it's a boon to the U.S. Yes, some Americans lose their jobs, either to imports or because factories move to cheap-labor countries such as China or India. But the bulk of this work is labor-intensive and lower skilled and can be done more efficiently by countries that have an abundance of less-educated workers. In return, those countries buy more of our higher-value goods made by skilled workers -- for which the U.S. has a comparative advantage. The lost jobs and lower wages in the U.S., economists say, are more than offset when countries specialize like this, leading to more robust exports and lower prices on imported goods.

Now this long-held consensus is beginning to crack. True, China is emerging as a global powerhouse, realigning many economic relationships. But in the long run a more disruptive trend may be the fast-rising tide of white-collar jobs shifting to cheap-labor countries. The fact that programming, engineering, and other high-skilled jobs are jumping to places such as China and India seems to conflict head-on with the 200-year-old doctrine of comparative advantage. With these countries now graduating more college students than the U.S. every year, economists are increasingly uncertain about just where the U.S. has an advantage anymore -- or whether the standard framework for understanding globalization still applies in the face of so-called white-collar offshoring. "Now we've got trade patterns that challenge the common view of trade theory, which might not be so true anymore," says Gary C. Hufbauer, a senior fellow at the Institute for International Economics (IIE), a Washington (D.C.) think tank. A leading advocate of free-trade pacts, he still thinks white-collar job shifts are good for the U.S.

The great debate percolating among the country's top trade economists gained new prominence with a recent article by Nobel laureate Paul A. Samuelson in the *Journal of Economic Perspectives* (JEP). In the piece, the 89-year-old professor emeritus at Massachusetts Institute of Technology, who largely invented much of modern-day economics, questions whether rising skills in China and India necessarily will benefit the U.S.

The reaction was swift. Experts such as Columbia University trade economist Jagdish N. Bhagwati, who countered Samuelson in the next JEP issue, resist the notion that the new offshoring could lower U.S. wages or slow growth of gross domestic product. After all, these economists have spent their professional lives ridiculing such conclusions as so much protectionist nonsense. Nevertheless, they aren't yet able to reconcile what's happening on the ground with the ideas they have so passionately defended. "This is a whole unexplored question that is very controversial, and nobody has a clue about what the numbers are," says Robert C. Feenstra, a prominent trade economist at the University of California at Davis.

## Global Labor Pool

The central question Samuelson and others raise is whether unfettered trade is always still as good for the U.S. as they have long believed. Ever since British economist David Ricardo spelled out the theory of comparative advantage in the early 1800s, most economists have concluded that countries gain more than they lose when they trade with each other and specialize in what they do best. Today, however, advances in telecommunications such as broadband and the Internet have led to a new type of trade that doesn't fit neatly into the theory. Now that brainpower can zip around the world at low cost, a global labor market for skilled workers seems to be emerging for the first time -- and has the potential to upset traditional notions of national specialization.

There are three ways this new development could disrupt the U.S. economy. If enough cheap, high-skilled workers become available around the world, competition may drive down U.S. wages for a wide swath of white-collar workers. Even economists who still see overall net gains agree that this is a potential problem. "For the first time, high-skilled U.S. workers are going to be exposed to international competition, though it's not clear how much it will hurt their wages," says Bhagwati.

A second concern is how much of the gains from trade will flow through to U.S. consumers. Until now the pain of globalization has been borne by less than a quarter of the workforce, mostly lower-skilled workers, whose wage cuts outweighed the cheaper-priced goods globalization brings. But the other three-quarters of American workers still came out ahead, since they weren't affected by foreign wage competition. If blue- and white-collar employees alike are thrown into the global labor pool, a majority of workers could end up losing more than they gain in lower prices. Then the benefits of increased trade would go primarily to employers. "It's entirely possible that all workers will lose and shareholders will gain; you have to be concerned about that," says Harvard University trade economist Dani Rodrik.

Even that wouldn't be enough to completely derail comparative-advantage theory, which holds that higher profits from trade should more than offset the lower wages. But again, for the first time, economists see another factor at play. As skill levels improve in cheap-labor countries -- for example, the new engineering class in India -- competition is coming on in the very products for which the U.S. has had a global advantage, such as software. If the new competition drives down prices too much, U.S. export earnings will suffer, and the entire U.S. economy could end up worse off.

While experts such as Hufbauer and Bhagwati doubt it will ever come to this, the fact that they're even entertaining such concepts is an intellectual sea change on a subject long considered settled. When countries such as China can perform tasks in which the U.S. previously had a clear edge, "comparative advantage cannot be counted on to create...net gains greater than the net losses," Samuelson asserts in his new paper.

The rethinking among economists could soon spill over into the policy arena. No one is advocating new trade barriers, which could be a cure that's worse than the disease. Nonetheless, the shaken views of so many prominent economists could prove to be critical. Throughout the 1990s, Washington embraced new trade deals in large part because of the virtual unanimity

among experts that trade always benefits the U.S. If they're not so sure anymore, the public consensus that was unsteady to begin with could start to unravel.

Two tests will come next year when U.S. membership in the World Trade Organization comes up for review, as does the President's so-called fast-track authority to negotiate trade agreements. "I'm worried that rising anxiety among higher-skilled workers will erode support for continued globalization in the U.S.," says Dartmouth University economics professor Matthew J. Slaughter.

### "A Right to Be Scared"

How large might the white-collar offshoring trend become? The more jobs that go, the greater the impact on U.S. wages. Consultant Forrester Research Inc. in Cambridge, Mass., was among the first to spot the white-collar job shifts and has done the most detailed projections so far. It sees the pace of U.S. job flows abroad averaging 300,000 a year through 2015. This is probably conservative since Forrester has also found that the number of U.S. companies among the 1,000 largest that engage in some level of white-collar offshoring will rise sharply -- from 37% today to 54% by 2008. Already, some 14 million white-collar jobs involve work that can be shipped electronically and thus in theory could be moved offshore, according to a study by economists Ashok D. Bardhan and Cynthia A. Kroll at the University of California at Berkeley's Haas School of Business.

The hit to wages could be powerful if that happens. Forrester analyst John C. McCarthy identified 242 service jobs as likely to be affected among the 500-plus major occupations tracked by the Bureau of Labor Statistics (BLS). He ranked each by the share of jobs employers are likely to shift abroad by 2015. His conclusion: The cumulative job outflow will total 3.4 million over that period. That comes to 6% of the 57 million people who work in these 242 occupations today.

If that's in the ballpark, U.S. white-collar wages would get whacked, says Harvard University labor economist Lawrence F. Katz. Every 1% drop in employment due to imports or factories gone abroad shaves 0.5% off pay for remaining workers, he found in a study with Harvard colleagues Richard B. Freeman and George J. Borjas. So if job losses rise to 6% of the white-collar total, these workers' pay could be depressed by 2% to 3% through 2015, figures Katz. While a few percentage points over a decade or so may not sound dire, it's roughly as much as blue-collar workers lost to globalization in recent decades. "White-collar workers have a right to be scared," says Katz.

Another way economists gauge the potential wage impact is to look at examples of how people fare when they lose a job and extrapolate for those who might get displaced by offshoring. Turns out that just 30% of laid-off workers earn the same or more after three years, according to a study of 22 years of BLS data by economics professor Lori G. Kletzer of the University of California at Santa Cruz. Only 68% even hold a job at that point, while the rest are unemployed, retired, or perhaps at home with children. On average, those reemployed earn 10% less than before, Kletzer found. "Clearly, offshoring will be bad for U.S. wages, given what the job displacement numbers tell us," says Princeton University economics professor Henry S. Farber, who has written extensively about displaced workers.

But even if the incomes of more U.S. workers fall, won't the rest of American consumers benefit from the lower-priced goods and services globalization brings? Not necessarily, some economists now believe. Most studies of trade's impact on pay, including Katz's, assume that factory-job losses simply shift the demand for labor from one kind of worker to another higher up the value chain. So higher-educated workers gained much of what the less-schooled lost.

But if white-collar offshoring swells enough, the resulting job losses could undercut a large swath of U.S. consumers. In part, this is a question of scale. There's little doubt that globalization is likely to continue to cut into the country's 14.5 million factory hands. Add in 57 million white-collar workers suddenly facing global competition, too, and more than half the U.S. workforce of 130 million could feel the impact. Then, economists conclude, the benefits of globalization would flow mostly to companies and shareholders who profit from the cheaper labor, with little pass-through to workers and consumers. "If a majority of Americans have lower wages from outsourcing, then capital would be the prime beneficiary, even if U.S. GDP goes up," says Harvard's Freeman.

### Domestic Disturbance

Could the offshore phenomenon even dent America's overall GDP? Standard theory suggests not, but it's now another question nagging economists. Ricardo's insight that all countries come out ahead when they trade more with each other was updated in the early 1900s by two Swedish economists, Eli F. Hecksher and Bertil Olin. They showed that Ricardo's idea holds even if high-skilled countries such as the U.S. trade more with low-skilled ones such as India, with each country specializing in products in which they have a relative advantage. Thus, it's more efficient for the U.S., where about 60% of the workforce has some college education, to export products that use their skills and import low-end ones from cheap-labor countries. Conversely, India, where just a fraction of its 400 million-plus workers have gone to college, should grab the low-skilled work and leave higher-end products to the U.S.

This theory doesn't square with today's outflows of programming and other higher-skilled jobs. "According to the Heck-scher-Olin model, we shouldn't be sending these jobs to countries with [so few skilled workers]," says University of California at Los Angeles trade economist Edward E. Leamer. But U.S. companies are doing just that because labor is cheaper and the Net makes it feasible to transport work done abroad back to the U.S.

Still, most economists think the new offshoring is an overall plus. For one thing, they say, employers' cost savings should more than compensate for any wage damage. And by slashing the price of software and other goods, offshoring could power a new wave of U.S. productivity gains similar to those triggered by falling computer-hardware prices in the '90s, says a study by Hufbauer's colleague, IIE senior fellow Catherine L. Mann.

She and others argue that countries will continue to specialize in what they do best. Sure, India or China are taking high-skilled jobs in programming, but the U.S. will still outperform them in, perhaps, drug research or nanotechnology. Instead of thinking about comparative advantage in broad strokes such as high-skilled and low-skilled, they say, it makes more sense to make finer

distinctions and look at areas in which countries have industry- or occupation-specific advantages. "There will be specialization within industries, [which will bring] a lot of demand from India for our higher skills," says Bhagwati.

Other economists, however, such as Leamer and Rodrik, believe that in the new global economy, advantages from these kind of micro-level specialties will be fleeting. After all, if the U.S. is better at aerospace research, there's no reason why China couldn't quickly ramp up college grads in that area, too. It's already doing that in telecom and servers.

Leamer and other trade experts say the resulting price competition from rising stars such as China and India could overpower any economywide gains companies get from global sourcing. They point to a famous 1968 paper by, of all people, Bhagwati, who argued that a country can be made worse off if trade lowers the price of products in which it has a comparative advantage. Bhagwati called it the "immiserating" effects of trade. In discussing the idea with BusinessWeek, Leamer wrote a short proof showing how a downward spiral of lower labor costs leads to lower export prices, causing immiseration. Even Bhagwati concedes that his insight could apply to the U.S. today, though he thinks the chances are slim that it will. "Bhagwati showed back then that a country can grow and get poorer, which might be this story, though I doubt it," says Hufbauer.

Indeed, it's possible that the U.S. already has suffered immiseration. Mann's study found that the offshore exodus of U.S. chip factories accounted for 10% to 30% of the decline in the prices of personal computers and memory chips in the early 1990s. These savings boosted U.S. multinationals' net exports of these products, and by 2000 the companies saw a \$10 billion trade surplus in them.

But did the U.S. as a whole come out ahead? Mann's study also shows that the country's overall trade deficit in these products plunged into negative territory in 1992 and has remained there ever since. So while large U.S. companies gained from moving chip factories abroad, the overall U.S. economy may have lost. "This looks like immiseration to me," says Leamer.

Globalization, say most trade economists, ultimately should benefit the U.S. more than it hurts. But they can't yet show that to be true. Until someone comes up with a convincing explanation for what happens when the highest-skilled jobs move offshore, battles over globalization are likely to rage even hotter.

By Aaron Bernstein