

# High-tech workers can increase their earnings sixfold by coming to the United States. We should let them.

By [Matthew Yglesias](#) | Posted Thursday, Jan. 10, 2013, at 12:21 PM ET

Software developers in the United States earn more than software developers in India. A lot more. One 2008 study showed that U.S. developers earned about \$71,000 more per year on average than Indians. Adjust for the purchasing power gap differential and the gap narrows a bit but remains large at \$62,240. This differential could, in principle, arise for all sorts of different reasons. But a paper presented by Michael Clemens of the Center for Global Development at this year's American Economic Association conference offers provocative evidence that the main reason is inherently tied to place: The exact same high-tech workers could be creating much more value if they were allowed to relocate to the United States.

This should be a bit surprising. In many fields, it's clear why migrants can increase their earnings by coming to the United States. A maid or a dishwasher has higher productivity in the United States than in Mexico or El Salvador because U.S. consumers are richer and can afford to pay more. Immigrants don't get any better at cleaning stuff—they become more effective in selling their skills to clients with money to pay.

But we would expect to see those effects overwhelmingly concentrated in what economists call nontradable sectors. People earn more by crossing borders when the stuff they produce—haircuts, health care, restaurant meals—can't travel. But computer work is a quintessential tradable good. Easy as it is to ship many classes of physical goods across continents, it's much easier to move software. So you might think the difference in compensation between American and Indian programmers overwhelmingly reflects differences in skills. Even if Indian-born programmers in the United States earn more, that might simply reflect the shortage of [H-1B visas](#). Perhaps it's just that India's best programmers are disproportionately likely to come here.

Clemens discovered a crucial natural experiment that lets us test that hypothesis and provides evidence that it's badly wrong. In his paper, "[Why Do High-Tech Workers Earn More in Houston Than Hyderabad?](#)" Clemens explains that, thanks to a quirk in the process, H-1B visas for engineers were handed out based on a pure lottery system in 2007 and 2008. No selection effect whatsoever was at work. Indeed, working with a company he calls "Anaamika Systems" that provides IT services for other businesses, Clemens verifies that there are no identifiable differences between the workers they sponsored for visas who didn't get them and those who won the lottery. No difference, that is, except in terms of how much money they made. Anaamika's clients were willing to pay a \$55,000 to \$58,000 premium to have work performed on-site in the United States rather than remotely in India, leading to a roughly sixfold increase in earnings. That's an enormous premium for statistically identical workers doing work for the same client working for the same subcontractor. This premium is actually [slightly smaller than an earlier 1999 study found](#) but similar in magnitude.

The implication is that place matters a lot for productivity in high-tech fields. The exact reasons why are difficult to discern, but what economists call “agglomeration externalities” do arise frequently. That’s why financial firms cluster in New York (and London and Tokyo) while computer companies are in the Bay Area and medical research is in Boston. This international data is striking simply because the magnitudes are so large. Companies that could easily save money by outsourcing work to India prefer instead to “insource” it to U.S.-located Indian labor at a large additional cost. That’s a strong indication that American tech companies’ desire for more high-skill visas is about securing real pie-expanding gains in American productivity and not just undercutting the wages of American engineers.

It’s possible that some of this is simply prejudice on the part of American companies that are irrationally averse to foreign-based labor. But unless the companies are grossly mismanaged, the work of U.S.-based, Indian-born high-tech workers must be at least as valuable to their employers as what they’re willing to pay. In other words, Indian workers in India might be underpaid, but it’s very unlikely that American firms are just overpaying Indian migrants for no reason.

Indeed, the productivity bonus is substantially larger than the direct gains to the Indian workers themselves. The higher cost of living in the United States claws back about 30 percent of the wage gains associated with migration. So even in a true open-borders paradigm for computer programmers, probably fewer would come to America than would be optimal for overall global output.

Either way, the implication is that even as lip service is paid to the desirability of allowing more skilled workers to move to the United States, Americans are wildly underestimating the potential benefits. At issue is not simply shifting the location of work—more jobs in Houston rather than Hyderabad—but drastically increasing the value of each individual’s labor. What’s more, if Indian engineers could earn substantially higher average wages through easier immigration to the United States, that would be a powerful stimulus for more Indians to study engineering. The upshot is that while capping the number of visas and allocating them semirandomly has been good for economic research, it also appears to be incredibly costly. Letting in an extra 1,000 workers could easily lead to \$50 million or more in increased global output.

Members of Congress looking for a way to reduce the deficit that doesn’t involve any “tough choices” might want to look at taking advantage of this fact. If firms will pay such a large wage premium to import foreign high-tech workers rather than outsourcing to them, why not allow for such imports in unlimited quantities but charge \$5,000 per person per year? The revenue would count toward cutting the deficit without raising taxes on anyone or cutting any beloved programs. Over and above the revenue, we’d see a significant boost in both American and global growth as workers gain productivity from moving to the United States. It’s hardly a panacea, but compared to alternatives on the table, it’s remarkably easy and pain free. A country that discovers new mineral wealth takes it for granted that to maximize the gains it needs to let more people move to where the oil is. America’s existing high-tech clusters are, in their own way, one of the most valuable resources on the planet. And as far as we know, they’re not exhaustible. But to take full advantage of them, we need to let people come here and work.

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