

## PREPARING AMERICA'S WORKFORCE: Are We Looking in the Rearview Mirror?

The great conservative political philosopher Edmund Burke once observed, “You can never plan the future by the past.” But when it comes to preparing the American workforce for the jobs of the future, Alan Blinder, Gordon S. Rentschler Memorial Professor in Economics at Princeton University and codirector of Princeton’s Center for Economic Policy Studies, believes we may be doing just that. In assessing the impact of offshoring, Blinder distinguishes between services that require personal delivery (such as driving a taxi or brain surgery) and those that can be delivered impersonally (such as data entry and radiology). He notes that it is difficult, if not impossible, to offshore personal services and that there seems to be little correlation between educational requirements and how “offshorable” jobs may or may not be. Blinder suggests a transformation of America’s educational system to move from traditional educational requirements to training a creative and flexible workforce prepared for high-end jobs that are unlikely to move offshore as the global economy expands.

**NOTEBOOK** The greatest problem for the next generation of American workers may not be lack of education but rather offshoring—the movement of jobs overseas, especially to countries with much lower wages, such as India and China.

Offshoring is no longer limited to low-end service jobs. Required level of skill and education are no longer the crucial distinctions between jobs that can be offshored and those that cannot be.

In terms of offshoring, the crucial distinction is between services that require personal delivery (such as taxi rides and brain surgery) and those that do not.

Higher education should focus on developing a creative and innovative workforce that develops new processes, products, and industries. Offshoring is, after all, mostly about following and copying.

## Service Sector Offshoring

For about a quarter century, demand for labor appears to have shifted toward the college educated and away from high school graduates and dropouts. This shift, most economists believe, is the primary (though not the sole) reason for rising income inequality, and there is no end in sight. Economists refer to this phenomenon by an antiseptic name: skill-biased technical progress. In plain English, it means that the labor market has turned ferociously against the low skilled and the uneducated.

In a progressive society, such a worrisome social phenomenon might elicit some strong policy responses, such as more compensatory education, stepped-up efforts at retraining, reinforcement (rather than shredding) of the social safety net, and so on. That is, don't fight the market's valuation of skills; rather, try to mitigate its more deleterious effects. The United States took this approach to some extent in the 1990s by raising the minimum wage and expanding the Earned Income Tax Credit (EITC). Combined with tight labor markets, these measures improved things for the average worker. But in this decade, little or no mitigation has been attempted. Social Darwinism has come roaring back.

With one key exception: the United States has expended considerable efforts to keep more young people in school longer (e.g., reducing high school dropouts and sending more kids to college) and to improve the quality of schooling (e.g., via charter schools and No Child Left Behind). Success in these domains may have been modest but not for lack of trying. No one has to remind Americans that education is important; the need for educational reform is etched into the public consciousness. Indeed, many people view education as the silver bullet. On hearing the question "How do we best prepare the American workforce of the future?" many Americans react reflexively with "Get more kids to study science and math and send more of them to college."

The greatest problem for the next generation of American workers may not be lack of education but rather "offshoring"—the movement of jobs overseas, especially to countries with much lower wages, such as India and China. Manufacturing jobs have been migrating overseas for decades. But the new wave of offshoring of *service* jobs is something different.

Traditionally, we think of service jobs as being largely immune to foreign competition. After all, you can't get your hair cut by a barber or your broken arm set by a doctor who is living in a distant land. But stunning advances in communication technology, plus the emergence of a vast

new labor pool in Asia and Eastern Europe, are changing that picture radically, subjecting millions of presumed-safe domestic service jobs to foreign competition. And it is not necessary actually to move jobs to low-wage countries in order to restrain wage increases; the mere threat of offshoring can put a damper on wages.

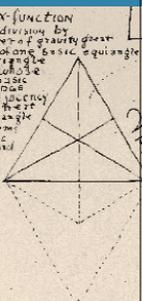
Service-sector offshoring is a minor phenomenon so far; probably well under 1 percent of U.S. service jobs have been outsourced to date. But I believe that service-sector offshoring will eventually exceed manufacturing-sector offshoring by a hefty margin for three main reasons. The first is simple arithmetic: there are vastly more service jobs than manufacturing jobs in the United States (and in other rich countries). Second, the technological advances that have made service-sector offshoring possible will continue and accelerate, so that the range of services that can be moved offshore will increase ineluctably. Third, the number of foreign workers capable of performing service jobs offshore seems certain to grow, perhaps exponentially (think of India and China).

I do not mean to paint a bleak picture here. Ever since Adam Smith and David Ricardo, economists have explained and extolled the gains in living standards that derive from international trade. Those arguments are just as valid for trade in services as for trade in goods. There really are net gains to the United States from expanding service-sector trade with India, China, and the rest. The offshoring problem is not about the adverse nature of what economists call the economy's *eventual equilibrium*. Rather, it is about the so-called *transition*—the ride from here to there. That ride, which could take a generation or more, may be bumpy. And during the long adjustment period, many U.S. wages could face downward pressure.

Thus far, only American manufacturing workers and a few low-end service workers (e.g., call-center operators) have been competing, at least potentially, with millions of people in faraway lands who are eager to work for what seems a pittance by U.S. standards. But offshoring is no longer limited to low-end service jobs. Computer code can be written overseas and e-mailed back to the United States. So can your tax return and lots of legal work, provided you do not insist on face-to-face contact with the accountant or the lawyer. The possibilities are, if not endless, at least vast.

## Personal vs. Impersonal Services

What distinguishes the jobs that cannot be offshored from the ones that can be? The crucial distinction is *not* the required levels of skill and education. These attributes have been critical to labor market success in the past, but may



be less so in the future. Instead, the new critical distinction may be that some services either require personal delivery (e.g., driving a taxi and brain surgery) or are seriously degraded when delivered electronically (e.g., most college-level teaching—I hope!), while other jobs (e.g., call centers and keyboard data entry) do not or are not. Call the first category *personal services* and the second category *impersonal services*. Three main points about preparing our workforce for the brave, new world of the future flow from this key distinction.

First, we need to think about, plan, and redesign our educational system with the crucial distinction between personal service jobs and impersonal service jobs in mind. Many of the impersonal service jobs will migrate offshore, whereas the personal service jobs will stay here.

Second, the line that divides personal services from impersonal services will move in only one direction over time, as technological progress makes it possible to deliver an ever-increasing array of services electronically.

Third, the novel distinction between personal and impersonal jobs is quite different from, and appears to be essentially unrelated to, the traditional distinction between jobs that do and do not require high levels of education.

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may be in greater demand in the United States than computer engineers (who don't need to be physically present). Similarly, there might be more divorce lawyers (not offshorable) than tax lawyers (partly offshorable). More imaginatively, electricians might earn more than computer programmers. Specific predictions are risky, but in general, it does seem highly likely that the relative demand for labor in the United States will shift away from impersonal services and toward personal services, and this shift will look quite different from the familiar story of skill-biased technical progress. Clearly, Burke's warning is worth heeding.

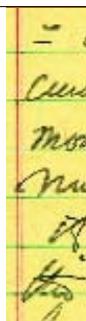
### Implications for Education

One should *not* conclude that education will become a handicap in the job market of the future. On the contrary, to the extent that education raises productivity and that better-educated workers are more adaptable and/or more creative, a wage premium for higher education should remain. Thus, it still makes sense to send more of America's youth to college. But, over the next generation, the *kind of education* our young people receive may prove to be more important than *how much education* they receive. In that sense, a college degree may lose its exalted "silver bullet" status.

Looking back over the past 25 years, "stay in school longer" was excellent advice for success in the labor market. But looking forward to the next 25 years, subtler occupational advice may be needed. "Prepare yourself for a high-end personal service occupation that is not offshorable" is a more nuanced message than "stay in school." And it may prove to be more useful. Further, many non-offshorable jobs—such as carpenters, electricians, and plumbers—do not require a college education.

The hard question is how to make this subtler advice concrete and actionable. The children entering America's educational system today at age 5 will emerge into a very different labor market when they leave it. Given gestation periods of 13–17 years and more, educators and policy makers need to be thinking now about the kinds of training and skills that will best prepare these children for their future working lives. Specifically, it is essential to educate America's youth for the jobs that will actually be available in America 20 to 30 years from now, not for the jobs that will have moved offshore.

Some of the personal service jobs that will remain in the United States will be high end (doctors), others will be less glamorous though well paid (plumbers), and some will



To illustrate: it is easy to offshore working in a call center, typing transcripts, writing computer code, and reading X-rays. The first two require little education; the last two require a good bit. (It is true, however, that some call-center operators must have high levels of skill and education—for example, the person you speak to by phone when your computer malfunctions.) On the other hand, it is either impossible or very difficult to offshore janitorial services, working in a fast-food restaurant, college-level teaching, and open-heart surgery. Again, the first two occupations require little or no education, whereas the last two require a great deal. There seems to be little or no correlation between educational requirements (the old concern) and how "offshorable" jobs are (the new one).

If so, the implications could be startling. A generation from now, civil engineers (who must be physically present)

