

Offshoring Reality and Responsibilities

by James M. Vinoski, Tennessee Delta '87

I believe protectionist lobbying to be the wrong answer for several reasons....

WE'VE BEEN EXHORTED in these very pages to lobby the U.S. Congress for protection for engineering jobs at risk of being offshored.¹ It's true that eager, low-cost, and talented engineers in developing nations, ever-improving computer and communications technologies, and the competitive pressures on U.S. firms to cut costs can combine in a perfect storm to send technical jobs overseas.

However, I believe protectionist lobbying to be the wrong answer for several reasons: the offshoring problem itself is a chimera, misunderstood and overblown; all parties benefit mutually from such trade in services, which should therefore be welcomed, despite its downsides; and we must look to ourselves to address any negative impacts, rather than asking taxpayers to foot the bill for our protection.

The real story

We've been told that by 2015, 3.3 million U.S. jobs will be offshored, for a loss of \$136 billion in wages.² That sounds staggering, and it can be for anyone personally affected. But let's put the problem in perspective. First, the claim seems to assume erroneously that jobs are a zero-sum game—that a U.S. company creating a job in India or China means that the firm is eliminating a job here. That's not always the case; the lower costs of employment in developing nations often allow companies to create extra jobs they otherwise would have done without.

Second, the figures imply a rather static national job situation. The reality is anything but static. Offshoring can work both ways; just as U.S. companies create jobs in other nations, foreign companies also create jobs in the U.S., offsetting our own job losses. But much more importantly, the U.S. economy is constantly creating and destroying jobs. Even though the offshoring of those 3.3 million U.S. jobs is ostensibly even now an ongoing phenomenon, as of November 2005 our economy had averaged 172,000 new jobs created per month—net of any losses—for the previous two years.³ Clearly our economy can adjust.

Is this any surprise from our technical point of view? The mentioned job losses would occur during the next decade—but how many thousands of engineers today work on Internet-related

technology that scarcely existed 10 years ago? How many new engineering jobs have been created in the U.S. by cell phones, by the exploding use of servomotors and robotics in industrial applications, by genomics breakthroughs, or by DVDs, plasma displays, etc.? Yes, indeed, those technologies create jobs in developing nations—but they're truly a rising tide that lifts our boat as well.⁴

Mutual benefits of trade

Offshoring certainly results in real job losses in the U.S. But let me now say something bold: *the job losses not only aren't a cataclysm—they're a good thing, beneficial both to the other nations that receive the offshored work and to the U.S. as well!*

Actually, I haven't said anything bold at all; the concept is less than revolutionary, because it dates back to the eighteenth century. It was Scottish economist Adam Smith who first formulated the notion that nations benefit by specializing in what work they'll undertake.⁵ The concept was refined in the early 1800s by British economist David Ricardo into his well-known principle of comparative costs,⁶ today called comparative advantage. The concept is that just because we in the U.S. can do something doesn't mean we should do it—even if we're better at it than anyone else.

Economist Thomas Sowell explains quite succinctly: "Each country's economic well being—and the world's economic well-being—will be greatest if it devotes its scarce resources to producing those things in which it has the greater *comparative advantage* and trades with another country to get the rest of what it wants."⁷ As an example, Sowell tells an interesting story about the United Kingdom: "It has been more than a century since Great Britain produced enough food to feed itself. Britons have been able to eat only because the country has concentrated its efforts on producing those things in which it has had a comparative advantage, such as manufacturing, shipping, and financial services—and using the proceeds to buy food from other countries."⁸

That's not to say we should sit back while all U.S. engineering is sent offshore (which isn't practical anyway), but it should certainly calm any panic



In the Spring 2006 issue of THE BENT, Dr. Joel Cuello wrote his viewpoint on offshoring. In this issue, James Vinoski adds his own perspective to the debate.

about threats to our national survival.

The technological progress that has allowed increasing trade in services (including engineering) and that is so often decried by those who see offshoring as an unvarnished evil has actually opened whole new sectors to the benefits of comparative advantage. So while we may send rote engineering design work offshore, that doesn't mean it leaves someone idle here at home. Most often, it means our highly capable engineers are employed doing more productive work instead, so that output rises not only in India and China and other developing nations to which we offshore lower-level engineering functions, but here in America as well. Boeing, for example, has used offshoring in this manner, "focusing its intellectual talent on what its engineers do best."⁹

American unemployment statistics bear the point: even as offshoring has garnered ever greater and more febrile media attention, the U.S. unemployment rate has remained at historically low levels for a record number of years. In the past decade, it has exceeded six percent for a grand total of merely eight months in 2002 and 2003.¹⁰ Because five percent is considered full employment, we assuredly aren't facing a galloping problem here.

"Physician, heal thyself"

Individuals are certainly being affected as jobs long done domestically are sent elsewhere. Surely they deserve protection, many would doubtless think, and surely our government has a part to play in protecting those people and the institution of engineering as a whole! There's nothing wrong with such genuine concern for those affected, but is lobbying for job protection really the right thing to do?

That strikes me—and would doubtless strike many less fortunate taxpayers who would foot the bill—as both immoral and arrogant. Immoral, because what we're really asking for is the government to forbid companies and their shareholders from seeking better deals, while depriving individuals in developing nations opportunities to compete for their business and denying those nations the opportunities for the economic growth such business would drive. Arrogant, because asking for such protection means we're admitting we really can't compete, and that we—engineers, who are some of the most highly compensated professionals in business—are refusing to adapt and better ourselves while asking others to pick up the tab for our salaries. That seems shaky political ground, and I, for one, want no part of it.

All that being said, individuals do deserve assistance when the local dislocations of our global economy are felt. Much help exists already, in the form of government-funded unemployment assistance and job retraining. Rather than ask taxpayers for more than this fundamental level of assistance, however, we in the professional community should provide for our own futures. Individually, we bear the bur-

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den of effectively planning our own careers, of keeping our fingers on the pulse of the businesses we're in, and anticipating what experience and training we'll need to stay ahead of the inevitable changes the marketplace brings. We can employ whatever philosophical rationales we want to argue otherwise,¹¹ but it's highly unlikely the taxpaying public will swallow the underlying claim that they owe us high-paying work in any field and location of our choosing.

Collectively, too, through institutions such as Tau Beta Pi, ASME, IEEE, and other professional societies, we can work both to keep ourselves apprised of current and probable future market conditions in our own areas of concentration and to design and provide technical training and professional development that will help those adversely affected to adapt to changes in the engineering marketplace. Companies play a part in this as well; many employers offer various opportunities for ongoing individual development, including internal training courses, external seminars, and support for graduate education. We should take full advantage of such offerings.

Globalization and trade in services aren't new. The market forces they represent are impacting us in new and different ways, however, and such changes seem inevitably to raise calls for government protection. This is not the right answer, and I know that we engineers are wiser and better than that. As individuals and as a group, we bear the responsibility for anticipating changes in our career marketplace and adapting effectively to them.

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