On Justifying Outsourcing and Offshoring

Dr. William H. Friedman
University of Central Arkansas
Dept. of Management Information Systems
College of Business
ROOM 305-E
201 Donaghey Ave., USA.

Abstract

The practices of outsourcing information technology work domestically and offshoring it internationally call for both ethical and economic justifications. Ethically, each company displacing workers needs to consider the effects on the workers displaced, those remaining employed in the company, and the community in which this happens. Not often considered is whether the recipient of offshored work as well as the recipient's country receives unalloyed benefits. Economically, long- range considerations as well as immediate advantage need to be weighed against one another. This paper also considers how well Ricardo's law of comparative advantage supports offshoring. Further, mathematical considerations adduced from game theory and the economic analyses of Gomory and Baumol suggest a somewhat different perspective on these difficult issues. The paper also treats the consequences of current practice for an entire country where numerous, if not yet all, companies engage in offshore outsourcing. The conclusion suggests various means of dealing with this problem constructively.

Keywords: Offshoring, outsourcing, law of comparative advantage, law of comparative advantage/costs, Ricardo, jobs

Introduction

Terms and Distinctions

It would be helpful to define terms that appear in this and other discussions of the present topic.
Law of "comparative advantage/costs – [Intercountry] "trade will take place where cost differences exist" (Bannock, Baxter and Rees, 1972). If a country benefits from having a cost ratio of commodity X to commodity Y, more favorable than the ratio in some country elsewhere, commodity trade in X and Y should take place and be mutually advantageous.

Offshoree – employee or company in a country different from the offshorer
Offshorer – a company that procures the services of employees abroad often after training them
Offshoring – the practice training and or hiring employees in another country to perform work traditionally done in one's own company
Outsourcee – domestic company from whom goods and services are obtained
Outsourcer – domestic company contracting to have services performed by an outsourcee
Praxeology – the study of how humans actually behave
Value added – "difference between cost … and eventual selling price; features that differentiate one product or service from another and thus create value for the customer" (Business, the Ultimate Resource, 2002)
Zero sum game – "A game in which players make payments only to each other. One player's loss is the other player's gain, so the total amount of "money" available remains constant." (Weisstein, 2004)

The Main Issues

Normally the populace in a free-market country would accept the notion that companies should seek to lower costs in the pursuit of higher profits, even though some jobs would be eliminated. For instance there might be understandable reasons to outsource: the outsourcee might have more expertise and "the infrastructure to provide the reliability …needed." (Biggs, 2004) However, there has been much more opposition when the cost reduction involved offshoring rather than intracountry outsourcing of highly paid IT and other knowledge industry jobs.

Just when consternation over intercountry manufacturing and free trade has subsided a bit, a new complaint has arisen over a more recent trend of offshoring jobs that were previously immune to export; after all, diligent work backed up by a high level of education was supposed to guarantee job security and a just reward for all aspiring employees. Perhaps the extent of the publicity given to the resentment of outsourcing is as much due to the nature of the victims as to the political ramifications of this trend: "As long as the American jobs going offshore were blue-collar jobs, the political issue did not attain the heat it has now that white-collar job losses frighten a more articulate, assertive social class." (Will, 2004) The decimation of the middle class is often predicted. In fact, "Forrester Research estimates that 3.3 million American white-collar jobs will leave the U.S. by 2015." (Tapper, 2004) Clearly, the United States will be not the only nation to feel the brunt of outsourcing; any country with a strong service economy will also feel the effects of this development--on top of the still smarting loss of many manufacturing jobs.

Former President George W. Bush's chief economic adviser and highly respected economist, N. Gregory Mankiw, far from bemoaning the trend, very bravely (though some would say foolhardily and insensitively) remarked: "It's something that we should realize is probably a plus for the economy in the long run …. Outsourcing [is] just a new way of doing international trade." Mankiw went on to say:

> "We're very used to goods being produced abroad and being shipped here on ships or planes; what we're not used to is services being produced abroad and being sent here over the Internet or telephone wires….But does it matter from an economic standpoint whether values of items produced abroad come on planes and ships or over fiber-optic cables? Well, no, the economics is basically the same." (Tapper, 2004)

An executive at Goldman Sachs Asia, Ken Courtis, further endorsed the idea that offshoring jobs makes good economic sense: "We pay hundreds of thousands of dollars a year to hire a good engineer…. You can hire 10 engineers for that price in India. And much of their work can be transferred back and forth over the Internet."
Thus the very telecommunications networks built by American engineers are now being used to make these same engineers obsolete. Moreover, they are urged to feel okay about offshoring, according to George Will: "For the highly competent workforce of this wealthy nation, the loss of jobs is not a zero-sum game, it is trading up in social rewards." (2004) A zero-sum game is an encounter in which a gain by one party or side generates a loss by another party or side. So Will evidently believes that at least everybody who is competent is a winner in the offshoring game—a conclusion that certainly invites further investigation.

Now the term game implies "a conflict involving gains and losses between two or more opponents who follow formal rules." (Weisstein, 2004) The invocation of game theoretic terms is particularly inappropriate (unless we grant poetic license), since offshoring is not a game in this technical sense: there are no formal rules, hence no "players" who follow definite rules. One also needs to specify who all the players are. On the one side we have companies, foreign workers, and perhaps world-wide customers; on the other side we have displaced domestic workers. Nor is offshoring a non-zero sum game (by the definition given earlier), even if we permit the metaphor of "game." This is because the "players" do not make payments only to each other, and the total amount of money is not constant. The social rewards mentioned by Will can only be construed as lower prices, but the lower prices achieved by offshoring are not guaranteed for those goods normally purchased by the workers who are displaced by their company's offshoring. If software is cheaper as a result of offshoring, that price reduction does not benefit the displaced workers or their families very much. Even if the lower prices due to offshoring did benefit the displaced workers somewhat, would their likely reduction in income from that of a technical professional's salary to that of unemployment compensation or the wages of an unskilled job be a fair trade-off? The psychic cost might be enormous as well. One could perhaps justify offshoring by the lights of a rudimentary utilitarianism: as conducing to the greatest good (actually, pleasure) for the greatest number. After all the grand total of the company stockholders, the customers, and the offshore workers exceeds the number of displaced workers. However, there are two objections to that claim, namely,

(1) The widely dispersed benefits achieved through the practice of offshoring are so diluted among these beneficiaries (constituting the greater number), that it does not compensate for the magnitude of pain felt by the displaced workers. With regard to the general issue of dilution of a dispersed good: would forcible confiscation of a person's money and distributing a penny from these funds to as many different individuals as possible, make up for the injustice of totally impoverishing the deprived individual?

The point is that intensity of one sacrificial individual's pain must be considered along with the number of beneficiaries/victims in any utilitarian calculation. This factor of intensity of pain or pleasure is here offered as an amendment to utilitarianism and also points out its inability to justify offshoring at the great expense of a few. It will be argued later how the few in pain will multiply.

(2) If the practice of offshoring is generalized (so that the present offshore workers will in turn lose their jobs to yet another country with even lower wages) the workers in both countries might fall to the same level of misery. There would always be the threat that some other country's workers would work for even less money, and so on. Consequentialism is the ethical position that (long term) consequences matter most, or that an action is to be evaluated solely by its consequences. What is lacking in both varieties of consequentialism, however, is a metric by which to compare consequences. If we offer intensity of pain and pleasure as the metric, where intense pain trumps more widespread pleasure, a deontological (or duty-based) ethical framework might offer just the resolution needed: desirable goals (like lower prices) can never justify causing the intense pain of unethical actions.

Is Economic Justification by the "Law of Comparative Advantage/Costs" Valid?

Classical economists posit that whichever country can do a type of work X and carry out the requisite production most efficiently should be accorded the job producing X, even if X is something another less efficient country wishes to do. This much follows from the doctrine of the specialized division of labor, perhaps first enunciated in Plato's Republic. Note, however, that Plato considered a division of labor only within the state and not between states. Economists, like Adam Smith and David Ricardo, however, have generated an intercountry corollary of this doctrine that could be stated as follows:

Ricardo proposed the following scenario and conclusion: Suppose England and Portugal could both produce two types of product, say cloth and wine. Now if England could make cloth more efficiently than it could make wine, and Portugal could make wine more efficiently than it could make cloth, a mutually beneficial trade between England and Portugal is advisable. In that case, he advises, England should make cloth and export it to Portugal, while Portugal should engage in wine-making and export it to England. This specialization arrangement is thought to arise naturally—barring governmental interference—and would be mutually advantageous to both England and Portugal. The upper part of the chart below (Specialized Economy) provides for equal production rate and equal hours in each country for producing just one product, the one it produces most efficiently. Portugal comes out ahead, contrary to Ricardo. This part of the chart shows that the law should be modified to allow for differential domestic needs for the two products.

In contrast, the lower part of the table shows what happens if each country produces both wine and cloth and splits its production time equally on both products: while the results are not as beneficial for the two countries as predicted, lack of specialization does confirm Ricardo in that both results are not as good as those for specialization.

	England		Portugal	
Work-Time Available:	100 Ours/Week		100 Hours/Week	
Product Names:	Cloth	Wine	Cloth	Wine
Production Rate ($-Value/Hour)	12	10	10	12
Type Of Economy:				
1. Specialized Economy	In Cloth		In Wine	
Hours Devoted To Making Each Product	100	0	0	100
Total $-Value Produced	$1,200	$0	$0	$1,200
$-Value Needed To Be Imported	$0	$1,200	$100	$0
Excess $-Value To Keep Or Export	$1,050	$0	$0	$700
Surplus $-Value As Profit Or (Loss)	($150)		$600	
2. Unspecialized Economy	Produces Both		Produces Both	
Hours Devoted To Making Each Product	50	50	50	50
Total $-Value (Value) Produced	$600	$500	$500	$600
$-Value Needed To Be Imported	$0	$700	$0	$0
Excess $-Value To Keep Or Export	$450	$0	$400	$100
Surplus $-Value As Profit Or (Loss)	($250)		$500	

It is little noted that Ricardo also presented a scenario for abandoning specialization, somewhat similar to the indications of the UNSPECIALIZED ECONOMY in the lower half of the table.

> "Now suppose England to discover a process for making wine [our proxy for software], so that it should become her interest rather to grow it than import it; she would naturally divert a portion of her capital from the foreign trade to the home trade; she would cease to manufacture cloth for exportation, and would grow wine [software} for herself." (1817)

Thus, if the offshoring country ever develops the technique of producing software cheaply, it should reinstate its software industry—to the detriment of the offshoree country, with all the harm that would cause for the offshoree.

How well does the Law Apply to Offshoring?

Now the advantages in the above tables do not always obtain—different numerical assumptions might yield the reverse results, but the lesson to be learned is that Ricardo's results also do not always obtain either. Another point I would like to make with respect to offshoring software/services production is that, for the law of comparative advantage to apply, there should be some comparable exchange of (at least remotely) similar goods or services. When an offshoring country A exports jobs to an offshoree country B, the offshoring country is getting goods (say software) in return. Ricardo considered only cases in which labor and capital to stay put (i.e., are immobile) in his analyses. These items are not in the same category. This is not the type of exchange Ricardo discussed. An offshoree country is not depending on the offshoring country to supply some non-monetary good/service that it needs or may then safely stop producing. An offshoree country is getting only money.

The offshorer A might hope that an offshoree country would use its newly gained funds to buy products from A; but the offshoree might use the money it receives from A to buy goods exclusively from other countries C and D, in which case the offshoring country does not realize all the benefits it anticipated. Furthermore, an offshoree country, once it got the knack of producing original software, could then market the software on its own, thus cutting A out of the picture altogether. In that case, the original offshoring country would have enjoyed only a temporary advantage and would soon be out in the cold with respect to obtaining cheap software, in addition to having one less industry to employ its populace. One could, of course, retort that new industries in an offshoring country could take its place, but then they too would fall victim to offshoring. Even so the displaced programmers are not necessarily going to be suitable for work in the new industries.

Incidentally, it is unprecedented that when one country contracts with another country for trade, that the first country would create the expertise that will displace its own workforce, as Microsoft and IBM have done in building computer centers from scratch in India.

Frequently, persons justifying offshoring propound an overly general version of what the law of comparative advantage is, and then conclude without intervening logical steps, that it applies as stated to our issue. What follows below is a very clear explanation, which enables us to see how this law does not tell the whole story about offshoring—albeit offshoring was not the author's interest.

> "Here's one real-world example. I can walk faster than my secretary. She's a good deal older than I am and has unusually short legs. And yet, whenever I need papers hand-delivered across campus to the office of the Dean or the Provost, I send my secretary on these missions.
>
> "The reason I send my secretary, rather than deliver the papers myself, is that the value of what I can accomplish at my computer in the time that I otherwise would spend walking across campus is higher than is the value of what my secretary could accomplish at her computer in the time that it takes her to walk across campus and back.
>
> "This case is a perfect ... example of comparative advantage at work. I specialize in department-chairing tasks in my office while among my secretary's specialized tasks is the hand-delivering of documents. This specialization occurs (and is worthwhile) despite the fact that I have what textbooks would call an absolute advantage both in department-chairing tasks and in hand-delivering documents." (Boudreaux, 2004)

Unintentionally, of course, some additional disanalogies with offshoring are brought to light, thanks to Prof. Boudreaux's amusing example: he is not training his secretary to be department chair, that is, to displace him, unlike the offshorers who are training replacement programmers. Thus his actions are not harming anyone. Furthermore, the job he is exporting is neither his mainstay nor one that the secretary might one day take over.

Benefits to the Offshore-Outsourcer

Outsourcing, whether intercountry or intracountry, takes place to reduce costs and fulfill the obligation of management to its stockholders. It sometimes is the only way to obtain skilled employees who may not be available locally. In that case, there is no ethical or economics problem. Offshoring, on the other hand, involving as it does, training workers who will accept a lower wage, is merely designed to lower costs--still something good management is expected to do, but maybe not the most moral way to achieve lower costs. A former American Express Co. employee recently put it straightforwardly: "I was the guy training these [offshore-worker] greenhorns. They're asking me to transfer my skills to someone making $4 an hour." (Mearian, 2004)

Not only are wage costs reduced in the outsourcee country, but fringe benefits can be lower (and even non-existent). The offshorer also expects a grateful, more docile work force in the foreign land and one that will cause fewer labor problems.

George Will is even more sanguine; for him, it is not just a matter of cost savings, because, he says, there is a concomitant benefit of new job creation: “How many of the 4,500 U.S. jobs that IBM is planning to create this year will be made possible by sending 3,000 jobs overseas?” (Will, 2004) What he does not clarify is whether the newly created local jobs will be as highly remunerative as the ones lost or whether there wouldn’t be an even more numerous workforce at IBM, if so many jobs had not been sent offshore.

Costs and Benefits to the Outsourcee

Clearly, the country in which new jobs are created would seem to be a beneficiary of offshoring. If, however, presently employed workers are hired away from other jobs, the net effect will be to cause inflation in the outsourcee country. But as a rule additional job opportunities would be created. More jobs can certainly boost the economy and raise the standard of living, but again inflation in the outsourcee may result.

Offshoring companies could think of themselves as exporting not only production-type jobs but management skills; thus they are helping to develop a class of executives in the outsourcee country who will someday run the entire operation. There is no charge for this training, a fact that makes it even more valuable to the outsourcee.

Harms to the Outsourcing Company

Offshoring not only lowers the morale of existing employees in an outsourcer/offshorer company, but also lowers the desire of potential job candidates to seek work in a company that aggressively outsources/offshores. If it ever becomes widely known that the company continually intends to replace present and newly hired employees with others outside the company (whether by intercountry outsourcing or intracountry outsourcing), the relatively competent employees will leave. Undeniably, software programmers are at risk, Aviva Litan, an analyst with Gartner Inc. reports: "[regarding] the IT development and maintenance staff for [Amex’s] credit card stuff, including risk management, chargeback and all the applications associated with that…. It's going to make everyone [in Amex's IT department] really nervous. It's very scary to the employees.” (Mearian, 2004)

The companies are also worried about the local consequences of offshore plans, again, according to Litan: "The reason people at American Express are so scared to tell the IT employees that they may lose their job is those employees can wreak havoc with the systems…." (Mearian, 2004)

Although companies like Amex want to maintain quality in the workforce, probably only the most desperate job applicants, those having the most trouble obtaining jobs, would apply to American Express, given the publicity about its plans.

There are those like Overby (2003) who claim that offshoring does not really save money.

> The current stampede toward offshore outsourcing should come as no surprise. For months now, the business press has been regurgitating claims from offshore vendors that IT works costing $100 an hour in the United States can be done for $20 an hour in Bangalore or Beijing. If those figures sound too good to be true, that's because they are. In fact, such bargain-basement labor rates tell only a fraction of the story about offshore outsourcing costs. The truth is, no one saves 80 percent by shipping IT work to India or any other country. Few can say they save even half that. As just one example, United Technologies, an acknowledged leader in developing offshore best practices, is saving just over 20 percent by outsourcing to India.

A not unlikely scenario is that with a great enough reduction in the number of employees and hence consumers at home of the products made by all the outsourcers abroad, profits would go down despite the cost savings in production.

Harms to the Offshoring Country

Unless George Will is correct, there will be a net loss of jobs in the foreseeable short run, if not the long run as well. In fact, offshoring might change the whole nature of the domestic economy, leaving as the only home-industries, those which for physical reasons cannot be exported, e.g., emergency medical care! Further, the domestic economy would be in ruins as the severed employees become unable to keep up payments on mortgages and other loans or buy as many products.

There are also foreseeable harms as the offshoree develops enough efficiency to compete in the industry involved. As Gomory and Baumol suggest:

> It is often true that improvement in one country's productive capabilities is attainable only at the expense of another country's general welfare. An improvement in the productive capability of a trading partner that allows it to compete effectively with a home country industry, instead of benefiting the public as a whole, may come at the expense of that home country overall. And this harm is not … localized damage …, loss of jobs in the immediately affected industry, but an adverse effect that is felt throughout the home country. (2000)

Further Ethical Considerations

There is a surprising altruistic result stemming from the division of labor among nations. Ricardo's law seems "to demonstrate what the consequences of the division of labor are when an individual or a group, more efficient in every regard, cooperates with an individual or a group less efficient in every regard." (Anonymous, 2004) Praxeology may reveal how it happened that, even in humankind's early history, ostensibly self-serving acts like offshoring can bear wholesome social fruit:

> "If and as far as labor under the division of labor is more productive than isolated labor, and if and as far as man is able to realize this fact, human action itself tends toward cooperation and association; man becomes a social being not in sacrificing his own concerns for the sake of a mythical Moloch, [namely] society, but in aiming at an improvement in his own welfare." (Anonymous, 2004)

Although there is normally no written contract specifying company loyalty to employees, it is probably implicit. Companies would only fire employees for cause or exigency. So there is a desire of companies for loyalty from their employees, but they treat the employees as disposable commodities whenever lucrative company contracts are terminated or the pressure to increase the bottom line transcends expected reciprocal obligations. Offshoring is not undertaken as a result of some fault of the severed employee or even of harsh business conditions, but rather to strive for profit at all costs. While there are few career guarantees in life, one would expect that promises of diligent and continuing knowledge acquisition, as long as the knowledge is not obsolete, would lead to a degree of job security. Companies might offer their employees options other than being severed.

As was stipulated earlier, companies have an obligation to their stockholders to increase company revenues and drive down costs. At first the stockholders may outnumber the number of displaced employees, a circumstance that is perhaps justified by the utilitarian dictum of always acting to achieve "the greatest good for the greatest number." But eventually, as the practice of intercountry outsourcing spreads in a society, the numerical balance will shift towards more displaced employees. Such a state of affairs suggests that we (further) revise the philosophical dictum of always acting to achieve the immediate greatest good for the greatest number to read "the greatest good for the greatest number in the foreseeable future, without doing evil." Additionally, one might proffer a new law in economics, the "law of long-term disadvantage": "What appears to be an unalloyed immediate advantage can become a long-term disadvantage." Gomory (2004) reported that an analysis of his economic model showed that initially the outsourcee enjoyed a great advantage in relation to the outsourcer, but over time both suffered, even as the world as a whole profited from their arrangement. Can this practice of intercountry outsourcing be defended by saying that new inventions will always appear to give birth to new industries, and new products will be demanded in the outsourcing country, which will absorb the ("temporarily") unemployed? What is to stop these new industries from offshoring in turn, shortly after they form?

Topics for Future Research

1. To what extent does intercountry outsourcing help the outsourcee country by [a] alleviating poverty, [b] improving the political and social climate, and [c] inculcating sound management techniques (sounds condescending but the intention is good) in place of antiquated ways.
2. Is there any early indication that eventually some outsourcee countries are reversing the process and becoming outsourcer countries?
3. Has any outsourcee country eventually become an equal trading partner with the original outsourcer?
4. There is a need to investigate these phenomena: [a] cultural and linguistic barriers that can cause problems, such as serious omissions, defects, and sabotage; [b] language barriers may mean that important project details are not understood; [c] there are different ideas of customer service and work ethos. How have these issues been treated so far? How significant are these issues?
5. Is there any tendency of labor exploitation practiced by the offshorer?
6. Will environmental conscientiousness and product quality control suffer as a result of offshoring?

Conclusion

Companies should not look to offshoring IT as a way of solving their major financial problems, though it could alleviate staffing problems. IT does not constitute that great a part of a company's expenses. Studies have shown that poorly run companies do not gain much by intercountry outsourcing. (Strassman, 2004)

The final accounting of whether offshoring is beneficial or detrimental, and to whom, has yet to be tallied; but George Will (2004) suggests a way out of a critical ethical dilemma:

It is sound social policy, and simple justice that the party who benefits from free trade—the nation as a whole—should be taxed to ameliorate the discomforts of those who pay the short-term price of progress.

Of course, this solution may not be especially gratifying to the self-esteem of ex-employees, nor does it cover the possibility that, in the long run, there may not be enough employed taxpayers to handle the proposed additional burden. On the other hand, if instead of offshoring, if domestic employers encouraged cooperative competition in quality of production with the foreign workers—in other words a fair game--it might yield better products, something not realized by the present state of affairs. If, in addition, education of present and prospective workers were enhanced both domestically and abroad, the "game" might turn out to be win-win.

References

Anonymous. The Ricardian Law of Association, Chapter VIII, Human Society, 4, February 21, 2004 http://www.mises.org/humanaction/chap8sec4.asp

Anonymous (2002). Business, the Ultimate Resource, Perseus Publishing, Cambridge.

Bannock, G. Baxter, R. E. and Rees, R. (1972) The Penguin Dictionary of Economics, Penguin Books, New York, 391.

Briggs, L. Should we outsource IT?, Campus Technology, November, 2005, p. 24.

Boudreaux, D. (2004) Revisiting the Law of Comparative Advantage, Mises Economics Blog, February 22, http://www.mises.org/blogDetail.asp?control=1383.

Gomory, R.(2004) Keynote speech at CORS/INFORMS (Canadian Operations Research Society/Institute for Operations Research and the Management Sciences), Banff.

Gomory, R. and Baumol, W. Global Trade and conflicting National Interest, MIT Press, Cambridge, p. 4.

Mearian, L. (2004). Amex on the defensive about offshore plans, Computerworld, http://www.computerworld.com/managementtopics/outsourcing/story/0,10801,89944,00.html

Overby, S. (2003) The Hidden Costs of Offshore Outsourcing, CIO Magazine, Sep. 1, 2003. http://www.cio.com/archive/090103/money.html. Ricardo, D, On the Principles of Political Economy and Taxation, 1817.

Strassman, P. Most Outsourcing Is Still for Losers, Computerworld, Feb. 2, http://www.computerworld.com/managementtopics/outsourcing/story/0,10801,89533,00.html

Tapper, J. (2004) Exporting American Jobs; Bush Adviser's Comments Ignite Firestorm, Bring Attention to Trend, Feb. 13, http://abcnews.go.com/sections/GMA/WorldNewsTonight/outsourcing_firestorm_040213.html.

Weisstein, E. W. MathWorld--A Wolfram Web Resource. http://mathworld.wolfram.com/Zero-SumGame.html

Will, G. (2004) Dennis Hastert Is Confused, Arkansas Democrat Gazette, Feb. 20, 10B.