Slow Boiling the Economic Frog: 
A Historical Perspective on Offshoring

by

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The “Theory of Comparative Advantage” has been used to justify international trade and offshoring. However, the theory is predicated on the immobility of factors of production, and that no longer is the case. The world-wide fiber optic network creates a superhighway to all the workforces of the world for all jobs or parts of jobs that can be digitized. While consumers, some investors, and some executives profit from offshoring, many jobs, especially manufacturing, are lost, and they will not be replaced by high tech jobs created by an innovative and flexible economy. Hence, recommendations have been advanced to create greater import/export parity, even if it means higher prices and more inflation.

Introduction

Stanislaw Ulam, the redoubtable Polish American mathematician, once challenged the Nobel Laureate economist, Paul Samuelson, to name one theory in all of the social sciences which is both true and nontrivial. Several years later, Samuelson responded with the “Theory of Comparative Advantage.” While Robert Torrens was the first to describe it in 1815 in his essay on corn trade, it is usually attributed to David Ricardo because he explained it so well in 1817 in his book, The Principles of Political Economy and Taxation. What does all this have to do with offshoring?

Theoretical Justification for Offshoring

The standard defence of offshoring happens to be the same as the justification for international trade, namely the “Theory of Comparative Advantage.” The theory states that if each nation specializes in the goods and services in which it enjoys a “comparative” advantage rather than an “absolute” advantage and then trades with other nations, the world will be much better off in economic terms. Let us use Ricardo’s example involving England and Portugal. Portugal can produce wine and cloth cheaper than England. Hence it enjoys an “absolute” advantage in both. However, the relative costs of producing those goods are different in the two countries. In England it is very hard to produce wine, and only moderately difficult to produce cloth. In Portugal both are easy to produce. Therefore, while it is cheaper to produce cloth in Portugal than in England, it is cheaper still for Portugal to produce excess wine, and trade for English cloth. Conversely, England benefits...
from this trade because while it’s cost for producing cloth has not changed, it now can get wine for less than if it produced it at home.

Invalid assumptions for contemporary international trade. Every theory is based on certain assumptions, and the extent to which the theory is valid depends on how well the assumptions hold up; and the “Theory of Comparative Advantage” is no exception. David Ricardo understood that the theory that he espoused depended on the immobility of factors of production, such as capital and labor, which was largely the case in 1817, but no longer. For example, the fiber optic network constitutes a highway to all the workforces of the world for all jobs or parts of jobs that can be digitized; thereby creating the functional equivalent of extreme labor mobility.

While most people appreciate the vulnerability of manufacturing jobs to offshoring, they often fail to realize that digitization coupled with the fiber optic highway exposes many service jobs to offshoring as well. Princeton economist Alan Blinder, a former vice chairman of the Federal Reserve Board, estimates that between 42 and 56 million U.S. jobs are susceptible to offshoring (Dorgan 2006). It appears that the only jobs that are somewhat immune to offshoring are the ones that require the worker to be in the U.S. Even those jobs, however, can be performed by immigrants, legal or otherwise.

Furthermore, “Theory of Comparative Advantage” assumes that all economic facilities in the trading nations are fully and efficiently employed. In technical terms, this is called operating at the production possibility frontier. Clearly, that is not the case in many nations, especially China and India with approximately 40% of the world’s population.

The “Theory of Comparative Advantage” also rests on natural advantages created by geographical location, transportation networks, climate, quality of soil, availability of resources, and industriousness of people, not on barriers created by governments practicing neo-mercantilism, as is often the case today (Dorgan 2006).

Lastly, “Free Trade” assumes a level playing field, and that is little more than a distant dream. More will be said about this later in the article.

In years bygone, countries such as Columbia with a comparative advantage in coffee, whose price was volatile from year to year, suffered greatly whenever the price of coffee plummeted. Ditto for Chile when the price of copper, Chile’s comparative advantage, dropped. Brazil felt the pain when the British in the 1880s took stolen rubber plants to Malaya.

It became clear to the policy makers in these nations that they had to diversify their economies as the only insurance against the vagaries of commodity prices. Most often, the diversification was into manufacturing since Europe and the U.S. had demonstrated to the world that not only was the greatest value added through
this strategy but also the greatest economic rewards. Manufacturing now accounts for approximately 10% of non-farm employment, and about 12% of U.S. GDP (it was 26% in 1965); and offshoring is a major contributor to this decline, although not the only one. New technology takes its toll as well. U.S. recessions hit manufacturing jobs the hardest. Between 2000 and May 2006, 2,951,000 manufacturing jobs were lost, and unlike other jobs, they do not return when recessions end (U.S. Bureau of Labor Statistics, 2005). Obviously, the more productive is the American workforce, the weaker the motive to engage in offshoring. Hence, without an adequate theoretical justification for offshoring at the level of the economy, we must look to facts on the ground.

The Boiling Frog Analogy

As we know from experimentation, a frog will jump out if dropped into a pot of scalding water. However, if it is put in a container of tepid water whose temperature is gradually increased, the frog will permit itself to be boiled. There is an equivalent in human affairs. It is likely that the principal reason policy makers fail to detect an emerging problem is when it takes the form of a gradual trend disguised by up and down variations, as is the case with real wages of the American worker and the gap between the rich and everyone else (Solomon 2006). While median household income adjusted for inflation climbed 1.1% to $46,326 in 2005 and per capita income rose 1.5% to $25,036, this was made possible by families and individuals working at more jobs that paid less money. These figures, in turn, obscured the fact that men working full time had their earnings decline 1.8% and for women employed full time the reduction was 1.3% (Cauchon 2006). This phenomenon has been dubbed “creeping normalcy,” and it is more likely to occur when the problem, if permitted to be recognized, appears to be an overwhelming task. Global warming is a case in point.

Another reason for ignoring a problem is when it is masked by other factors. An excellent example is the thirty-year trade deficit that the U.S has had with the rest of the world, with practically each month setting a record, and with no end in sight. This ominous decline is being masked by capital flows. However, woe is to the U.S. when foreigners elect to invest outside the U.S. Unemployment figures also are deceiving because they too are masked by lower paying jobs with fewer benefits.

Experiences of Other Societies

Arab experience. For many centuries the Arab world was at the vanguard of military prowess, economic prosperity, as well as leadership in the arts and sciences. Now it lags the industrialized world across the board. Why? Because Arabs let others do for them what they did for themselves in the past. In other words, the Arab world became a consuming society rather than a producing one. Bernard Lewis (2002), the preeminent scholar of the Middle East, offers a telling example: Coffee originally came from Ethiopia. It was brought up both shores of the Red Sea
, through Arabia and Egypt, to Syria and to Turkey, and then exported to Europe. Sugar came from Persia and India. For a long time, both coffee and sugar were imports either through or from the Middle East. But then the colonial powers found that they could grow coffee and sugar more abundantly and more cheaply in their new colonies. By the end of the 18th century, if a Turk or Arab took the traditional indulgence, a cup of sweetened coffee, in all probability the coffee came from Dutch Java or Spanish America, the sugar from the British or French West Indies; only the hot water was local. In the 19th and early 20th centuries, even that ceased to be true, as European concessionary companies took over the water supply and gas supply in Middle Eastern cities.

China’s experience. For most of history China, in all likelihood, had the world’s largest economy. When the West industrialized, China and other Asian nations\(^5\) de-industrialized. However, the reindustrialization of China appears to be ushering in the historical pattern. China, like the Arab world, became a consuming society rather than a producing one. Arabs have not learned this important lesson, but China has. The Question is: Which of the two roads will the U.S. take? (Huntington 1996).

America’s choice. Two-thirds of U.S. GDP is accounted for by consumer spending. The already anaemic savings rate fell from 2.3% in 2005 to 1.8% in 2006 (Kirchhoff 2006). These indicators demonstrate that the U.S. clearly has become a consuming society as well. The U. S. should select the path of China redux because the theology that certain economists and politicians are preaching is faith based and not grounded in evidence. Jobs that are offshored will not be replaced by jobs invented by a creative and flexible society. Texas Instruments, GE, Microsoft, IBM, Dell, and every Silicon Valley venture firm are spending billions of dollars in Asia to take advantage of cheap, educated, and motivated labor. Mind you, these are high tech jobs created in the U.S. Offshoring is little more than boiling the economic frog by exporting our wealth a little at a time (Dobbs 2004).

The Bureau of Labor Statistics projects that the following jobs will experience the fastest growth (Dobbs 2004):
- Waiters and waitresses
- Janitors and cleaners
- Food preparation
- Nursing aides, orderlies, and attendants
- Cashiers
- Customer service representatives
- Retail salespersons
- Registered nurses
- General and operational managers
- Postsecondary teachers\(^6\)

Notice that only three of these job classifications require a college education. If anything belies the claim that jobs lost to offshoring will be replaced by high tech jobs, this data does.
Central Issues

Tax incentives for offshoring. By establishing manufacturing operations in low tax countries and deftly manipulating transfer pricing, companies avoid paying U.S. taxes. The tax incentive in conjunction with the power of “absolute” advantage frequently constitutes an irresistible force.

The power of “absolute” advantage. In the short-run, attrition programs and union concessions will help. In the longer-run, U.S. needs to produce more engineers, scientists, and mathematicians, and improve the way it teaches science and mathematics to elementary and secondary students. While the U.S. yearly graduates 90,000 engineers, China alone graduates 350,000 (Dobbs 2004). Ireland’s economic miracle is instructive. An excellent education system coupled with motivated workers willing to work for less than their western European confederates constitutes a winning formula.

But this by itself will not overcome the “absolute” advantage that Asian nations have vis-a-vis wages and salaries. Most Chinese workers earn less than $4,000 per year, while minimum wage in the U.S. is $10,712 per year, average manufacturing compensation is $64,854 per annum, and auto workers have total annual compensation in excess of $90,000 (U.S. Bureau of Labor Statistics). This is the reason GM has elected to buy parts made in India. Executive compensation adds to the higher cost of doing business in the U.S. CEO pay at major corporations rose from 42 times average production worker pay in 1980, to 85 times in 1990 and to a multiple of 419 times by 1998 (Azevedo & Scoville 2001). I will not even bother to report U.S. executive retirement and severance packages, which have run into hundreds of millions of dollars, since that subject has already received a great deal of attention.

Also, we need to be mindful that countries such as China and India keep wages low by ignoring the welfare of workers and neglecting environmental protections; thereby creating unsustainable ecological disasters with global implications (Diamond 2005).

Neo-Mercantilism or State Sponsored Capitalism. An essential characteristic of mercantilism is generating a surplus of exports over imports achieved largely through exporting manufactured goods at high prices while importing raw materials at low prices, with a consequent accumulation of bullion. Japan reintroduced neo-mercantilism into international trade by every gimmick and stalling tactic that can be conceived. For example, the Japanese government promulgated ski-equipment standards for “unique” Japanese snow that excluded U.S. made skis (Davis 1993). Former Japanese prime minister, Tsutomu Hata, informed U.S. congressional leaders in 1987 that Japan could not increase consumption of U.S.-grown beef because Japanese people have longer intestines than Americans (The Plain Dealer, April 9, 1994). Furthermore, in the absence of specific targets or goals enforced by the Japanese government, foreign goods simply will not be purchased by Japanese consumers in proportion to their competitive advantage or, for that matter, even
carried by Japanese middle men and retailers. The Japanese have taught the rest of the world an important lesson: That state sponsored capitalism practiced deftly can skew the trade balance in favor of the nation practicing it.

When other nations followed Japan’s lead, the U.S. inevitably became the world’s largest debtor nation, with our trading partners holding U.S. dollars instead of bullion. Experience dictates that major creditors by virtue of being bankers can gain considerable leverage over the policies of the borrowers, and the relationship exists between nations as well (Dorgan 2006). Border tariff adjustments constitute another mechanism for attaining the same end. Furthermore, it is commonplace in many countries not to honor intellectual property rights.

Flawed Logic

Assuming that the U.S. will compensate for loss of manufacturing by exporting something else is not supported by facts. Manufacturing accounts for nearly two-thirds of total exports (U.S Bureau of Labor Statistics 2006). As the U.S. loses its manufacturing base, by definition it loses exports, thereby exacerbating the trade imbalance with its trading partners. Let us not forget that what farmers export in one year, manufacturers export in one month. Moreover, the average U.S. manufacturing job pays $12,301 more than the average U.S. job. It stands to reason then that as we lose manufacturing jobs, there is less money to be spent on goods and services in the U.S.

True Intentions

As Thomas Friedman (2005) observed in his book, The World Is Flat, China and India are not racing the U.S. to the bottom but to the top of the economic food chain. Being at the bottom is only a temporary expedient. They are purchasing machine tools so that eventually they could produce the high value products by themselves. Japan sold South Korea state-of-the-art steel making equipment. In short order, Japan found itself with a potent competitor.

Relying on WTO for Guaranteeing Fair Trade

We should be aware that in its present form WTO like NAFTA at bottom is a managed trade agreement. It lowers some barriers to trade, keeps others high, and contains vast and lucrative loopholes that benefit interest groups. While an international bureaucracy charged with imposing equity to the relationships between member nations appears to be good idea in theory, in practice the respective national and regional bureaucrats tend to pursue self-interest rather than a level playing field. The U.N. and NATO are cases in point. NATO was created to protect Western Europe from Soviet invasion, but the burden of financing NATO and providing the military deterrent, however, fell on the U.S. The U.N. votes in opposition to U.S. interests as a matter of course. Moreover, not all countries are WTO members. Perhaps it is high time to reform both organizations.
Political motives for maintaining trade deficits. It has been estimated that between 12 and 20 million illegal immigrants have entered the U.S. The argument goes that they come to the U.S. to work because there are no decent job opportunities in their home countries. Since our trade deficits create jobs in those countries, it is hoped that this strategy will help to stem illegal immigration. This was one of the principal reasons offered by the Bush administration for passing the Central American Free Trade Agreement (CAFTA). While superpowers have greater obligations to poor countries than do ordinary nations, Congress should not honor those obligations at the expense of U.S. workers.

A good deal of the U.S. trade policy is dictated by the U.S. State Department whose philosophy is to make our trade partners happy irrespective of the impact on the U.S. economy and U.S. workers. While such an attitude made some sense while the Cold War was in effect, ignoring the economic self-interest of the U.S. during the post Cold War era exacerbates our trade deficit and increases the loss of U.S. jobs for little or no political gain (Dorgan 2006). Appointing U.S. Trade Representatives who are concerned about the impact on the U.S. manufacturing base and on U.S. workers of the trade agreements that they negotiate is also vital.

What Needs to be Done

We can become a producing society again by insisting that products sold in the U.S. are made in the U.S., and/or that the exporting countries import from the U.S. about as much as they export to the U.S. President Reagan showed the way with regard to Japanese automobiles (Dobbs 2004). South Korean car companies are starting to emulate The Japanese model by building U.S. plants, but not the Chinese, Indian, Indonesian, Malaysian, and Philippine companies. Warren Buffett’s plan of Import Certificates presents the viable mechanics for managing such a scheme (Dorgan 2006). Today, not even Mexico can compete with China, India, and the other Asian countries (Dorgan 2006). Companies such as Intel, when offshoring jobs, argue that they are just following customers. Well that argument cuts both ways. Germany, whose economy is very dependent on exports, should also be following customers to a greater degree than is currently the case.

We should not be concerned that foreign plants are operating on U.S. soil. They increase U.S. productivity by putting competitive pressure in other domestic producers and transfer knowledge of the best practices to other domestic producers (Lewis 1993).

The Downside

There is a price to be paid in the immediate future for keeping the economic frog alive. Prices of many manufactured products will be higher, as will be inflation. On the other hand, the addiction to high wages and low prices is a straight path to more offshoring. Wal-Mart is the best example of this. It imports about $15 billion per year from China, making it China’s fifth largest export market in the world (Dobbs 2004). What we have here is people making U.S. wages buying
products made at Chinese wages. Moreover, there will be fewer job opportunities in the countries exporting to the U.S. I believe that the price should be paid in order to preserve the U.S. manufacturing base. Furthermore, I do not think that the U.S. consumer has the obligation to create jobs around the world at the expense of his own. That is the responsibility of the governments of the exporting countries.\textsuperscript{12}

\textbf{Conclusion}

While there may not be a theoretical justification for offshoring at the level of the economy, there are practical justifications at the level of the firm. Lowering the cost structure helps U.S. companies compete in a global economy, increases profits, and benefits shareholders as well as executives. Moreover, consumers benefit by paying less for their products. But many consumers also hold jobs that can be offshored, and companies on U.S. soil pay taxes, as do their employees. When those jobs disappear, what then?

NAFTA as a job creation engine has been a major disappointment. It has been estimated that between 750,000 (Dobbs 2004) and 879,280 (Dorgan 2006) U.S. jobs have been lost as the direct result of NAFTA. Mexico’s top three exports to the U.S. are: automobiles, automotive parts, and electronics. Ironically, the supporters of the passage of NAFTA argued that Mexico would be importing these products from the U.S. (Dorgan 2006). Ross Perot knew what would happen even though most economists did not. Government stability largely depends on citizens having decent jobs and the existence of a significant middle class. Our trading partners know the score better than we do. We must come to terms with the reality that self-interest trumps eleemosynary motives most of the time. That is why they will do whatever they can to continue using the American consumer as their job creation engine -- the WTO notwithstanding.

If the U.S. cannot generate a trade surplus while the U.S. economy is weak, oil prices are low, and the U.S. dollar is also weak vis-à-vis the currencies of our trading partners, then traditional economic explanations are not adequate to the task.\textsuperscript{13} Consequently, the U.S. needs to protect American workers by demanding a level playing field, and recent history has demonstrated that the only strategy that works is an unequivocal requirement that products sold in the U.S. be made in the U.S. and/or our trading partners import from the U.S. about as much as they export to the U.S. All the sophistry bandied about regarding the wonders of offshoring needs to be critically examined against the facts on the ground. Our economy is still huge (approx. $12.5 trillion per annum, U.S. Bureau of Labor Statistics, 2006 ), and we still have some time to reverse the large imbalance of trade. But if we do not start soon, many of us should be prepared to live at a much reduced standard of living.

However, great care must be exercised when managing trade, and trade should be managed only as much as is necessary either to encourage major trading partners to create a level playing field or to preserve a semblance of import-export parity in the face of unreasonable trade barriers. We must be mindful of the fact
that in general global competition increases productivity while protection induces stagnation.

Also, we must be vigilant so that lobbyists in the proverbial smoke-filled rooms lining the corridors of power will not do whatever they need to in order to limit competition at the expense of the consumer.

References


Kirchhoff S. (2006). Rate of Savings Among Americans Continues to Fall. *USA Today*, October 6, p.3B.


Norwald E. (2007). USA Falls to 6th in Competitiveness. *USA Today*, September 27, pp. 1B.
