

Structural Changes in Global Labor Markets

Nobumichi Mutoh

Introduction

The purpose of this research is to examine whether or not there are signs of the same structural changes in the Japanese labor market as are said to be occurring in the United States and European countries. The first step is to introduce some important conceptual tools to the analysis. This paper primarily describes the observations of Alan S. Blinder concerning the relative portability, and therefore tradability, of various types of service jobs and the work of William J. Baumol in examining the differential increase, or lack of increase, in productivity of certain categories of services. As we have seen from the observations of William Petty and Colin Clark, labor markets have changed over time from primary industry (agriculture, fishery, forestry) to secondary industry (manufacturing), to tertiary industry (service) with changes in the industrial structure. Blinder, a Princeton professor, calls these changes major industrial structural changes and has coined the phrases

“information age” and “Third Industrial Revolution” to characterize the significance of the current changes occurring in international economics and labor markets.

Blinder foresees the Third Industrial Revolution as being as significant as the previous two. The reason why he assesses the third one as equally important is that he expects the ability to send information cheaply and almost instantaneously anywhere on earth will have the result of making large numbers of services suddenly tradable, a change which he expects to have major societal repercussions. Just as the first two industrial revolutions caused major upheavals in the kind of work people did, Blinder sees the Third Industrial Revolution as requiring similarly large-scale and unsettling adjustments in the way the populations of developed countries work, live, and educate their children. He disagrees with economists who see offshore outsourcing as simply one aspect of international trade. Blinder expects offshore outsourcing to spark a significant transformation in many areas of the economy and society. The governments and societies of the developed world, he urges, must immediately and seriously start preparing.

Section I

“Personal” and “impersonal” service sector jobs

When we consider the Third Industrial Revolution, there is a tendency to believe that the offshoring of jobs affects non-professional or less-skilled jobs such as factory workers, call center operators and, more

Structural Changes in Global Labor Markets

recently, computer programmers. Professionals such as R&D scientists and engineers, accountants and bankers have not felt that offshoring concerned them directly. These feelings approximate the conventional divide felt to exist between jobs that require high levels of education and jobs that do not.

Blinder asserts that as improvements in technology make it feasible to deliver an increasing number of services via the Internet and telecommunications, these jobs become exportable, and a large number of them will in fact go abroad. Many more service workers, including professional workers, will discover that they too will need to compete with workers in other countries. This is likely to affect an unexpectedly large number of people as there are many more people currently employed by the service sector than the manufacturing sector. It will be the age of personally delivered services, or simply personal services, which can only be done face to face, and so are safe from offshoring, and the impersonally delivered services, or impersonal services many of which can be delivered online, without direct contact. It is from this group of impersonal service jobs that the offshoring will occur.

There has been a migration of jobs from the United States to so-called developing countries such as China and India, but not an accompanying migration of Americans who followed their jobs from the U.S. to foreign shores. This phenomenon is described as “offshoring,” or “offshore outsourcing”.

N. Gregory Mankiw, a Harvard professor then serving as chairman of the White House Council of Economic Advisers, commented in 2004 that a

natural part of the expanding scope of international trade, increasingly including services as well as goods, was the loss of some service sector jobs, which would be exported to countries with lower labor costs. His comment caused great anger among elected politicians sensitive to the public's concern about job loss, but of course economists generally agreed with him. Offshoring, Mankiw said, is only "the latest manifestation of the gains from trade that economists have talked about at least since Adam Smith." Presently more things are tradable than were tradable in the past, as economics textbooks on international trade teach. The result is the well-known principle of comparative advantage, which states that trade in new kinds of products will bring overall improvements in productivity and well-being.

While agreeing with Mankiw's basic observation about the inevitability of service jobs being exported, Blinder said that Mankiw had seriously understated, or failed to understand, how huge the number of exported service jobs would likely be. This number, Blinder said, would be large enough to cause economic disruption in wealthy countries. He said that sometimes a quantitative change is so large that it brings about qualitative changes, and that he expects offshoring of jobs to be such a case. For this reason, it is necessary to accurately track current labor market developments and devise timely strategies to cope with forecasted changes. Blinder said that based on fragmentary studies, due to a lack of reliable national data, it appears that less than 1,000,000 service-sector jobs in the United States have been lost to offshoring to date. He expects the numbers to grow dramatically as telecommunications technology appears set for more years of increased speed and capacity at relatively lower costs. This will in turn make the

Structural Changes in Global Labor Markets

offshoring of even more “impersonal services,” that is, services that can be delivered electronically over long distances without significant loss of quality, increasingly cost effective, and therefore attractive, for businesses.

Although many economists and businessmen in the United States, according to Blinder, see this sea change as potentially disastrous, they should not. Based on past experiences with changes in international trade patterns, the United States and other industrial countries have more often been winners than losers in spite of short term worry and economic adjustments. Blinder’s concern, and message, is that successful social and economic adjustment to these upcoming changes in labor markets require skillful and prompt planning in advance in order to turn the short term disruption into long term gain. Governments and societies in the developed world must recognize the scope of the transition, which will be “massive, complex, and multifaceted.” Developed countries must examine how to reform their national data systems, trade policies, educational systems, social welfare programs and politics in order to create an orderly and manageable transition. Blinder worries that none of this preparation seems to be occurring yet. Therefore there is urgent for Japan to investigate what is happening now in the Japanese labor market and the markets of other countries such as Russia, India, China and Brazil.

Section II

Ever-changing comparative advantage and tradability

Comparative advantage in trade has always existed, usually based on the possession of natural resources that a trading partner lacked. Countries could not change their natural endowment, unfortunately or, therefore, overcome their comparative disadvantage based on lack of natural resources. Now, however, comparative advantage is increasingly being created by people. High tech industrial parks, for example, can be created in many places, but will choose to locate in those places where local human resources, land supply and tax policies create attractive environments for them.

Just as such man-made comparable advantages can be grabbed, they can also be grabbed away by other countries offering yet better environments, including lower labor costs. Jagdish Bhagwati coined the term “kaleidoscopic comparative advantage” to describe the fact that comparative advantage is every-changing, easily shifting from one locale to another and from one country to another. He described how the movements of the British textile industry, which at first found favorable circumstances in England, followed the comparative advantage as it shifted to the U.S. northeastern states, then the southern Atlantic states and more recently has moved to China and other countries offering the powerful comparative advantage of low wages. The Japanese textile industry has of course experienced a similar loss of comparative advantage, leading to the move of textile plants from places such as Gifu to China and Southeast Asia.

Just as comparative advantage is not fixed in one place, so the notion of what is tradable and what is not does not have a fixed boundary. At any given time, there are certain goods and services that cannot be traded.

Structural Changes in Global Labor Markets

Before the information age, only physical objects that could be boxed and carried could be traded. Services could not, because they were not physical objects so could not be carried. Houses were physical objects, but were too big to handle. Now a number of services, many of the impersonal service jobs, can be done across time and space digitally. They have become movable and, so, tradable. The boundary between tradable and non-tradable depends largely on transportation and communications technology. Unlike comparative advantage, which moves first in one direction then another, the boundary delimiting tradability moves only one direction—toward greater inclusiveness. The group of non-tradable goods and services is steadily shrinking.

Packets of digital data are to services what boxes are to goods. They make services tradable and service jobs movable. Beginning in this information age, the boundary between offshorable and non-offshorable service jobs will depend on the extent to which any given job can be accomplished by transmission of digital data.

Section III

European and American case of the three industrial revolutions versus Japanese case.

The first Industrial Revolution dramatically changed both where many people lived and the kind of work they did, as farming families moved to cities to work in factories. As Gerschon Kron explained in his textbook, whole societies were literally transformed. Even Adam Smith, in his classic work of 1776, *The Wealth of Nations*, did not foresee the nature

and extent of the approaching shift. At that time, farms offered virtually an unlimited supply of workers who could move to factory jobs with a small premium over the agricultural sector. It has been estimated that in 1810, 84 percent of the U.S. work force was on the farm, compared to an insignificant 3 percent in manufacturing. By 1960, manufacturing's share had risen to almost 25 percent and agriculture's had shrunk to just 8 percent. Since then it has further decreased to under 2 percent. All aspects of society were affected-not only where families lived and the kinds of work people did, but also the educational system, the organization of businesses, the parts of the organization and function of government.

The second Industrial Revolution brought another reshaping of the labor market, as many workers moved from manufacturing jobs to jobs in the service sector. This redistribution of labor and the loss of many manufacturing jobs is still seen as dangerous or unfortunate in most developed countries. Employment statistics, however, show that the service sector has created many more jobs than the manufacturing sector has lost. In 1960, about 35 percent of nonagricultural workers in the United States produced goods and 65 percent produced services. By 2004, only about one-sixth of the United States' nonagricultural jobs were in goods-producing industries, while five-sixths produced services. This trend is world-wide and continuing. The same trend is seen in Japan which has just barely entered a higher economic growth period. Between 1967 and 2003, according to the Organization for Economic Cooperation and Development, the service sector's share of total jobs increased by about 19 percentage points in the United States, 21 points in Japan, and roughly 25 percentage points in France, Italy, and the United Kingdom.

Structural Changes in Global Labor Markets

Now we are in the early stages of a third Industrial Revolution - the information age. There are many drastic changes beginning to appear already. Just as in the previous two, the third Industrial Revolution will require huge and unsettling adjustments.

Again, these changes are causes great for concern. However, taking a longer-term perspective allows these recent events, particularly the offshoring of jobs, to be seen with more understanding. As we know, the first Industrial Revolution did not mean the end of agriculture, or even the end of food production in a lot of countries. It just meant that fewer workers were needed on farms to do the job of feeding the population. The main reason for this shift was not international trade at all, but a dramatic increase in farm productivity resulting from new agricultural technologies in developed countries like the United States. The most important fact to bear in mind is that this major movement of labor off the farms did not result in mass unemployment. Rather, it led to a larger scale reallocation of labor to factories.

Similarly, the second Industrial Revolution has not meant the end of manufacturing, even in the United States, which is running ahead of the rest of the world in the shift toward services. According to the U.S. statistical data, the share of the U.S. work force engaged in manufacturing has fallen dramatically since 1960, but the number of manufacturing workers has declined only modestly. Three main forces have driven this change. First, rising productivity in the manufacturing sector has enabled the production of more and more goods with less and less labor. Second, as people around the world have gotten richer, consumer tastes have changed, with consumers choosing to spend a

greater share of their incomes on services (such as restaurants and vacations). Third, the United States now imports a much larger share of the manufactured goods it consumes than it did 50 years ago. All told, the share of manufacturing U.S. G.D.P. declined from a peak near 30 percent in 1953 to under 13 percent in 2004. That may be the simplest quantitative indicator of the massive extent of the second Industrial Revolution to date. But as with the first Industrial Revolution, the shift has not caused widespread unemployment.

The third Industrial Revolution is most likely to follow the same patterns as the first two. The dislocation of workers will not, in most cases, cause permanent economic decline, but lead to relocation of workers, from certain types of service jobs to new kinds of work. Even the kinds of jobs that can be moved offshore will not disappear entirely from the United States or other rich countries, but their proportion of the work force will shrink dramatically. And this reduction will transform societies in many ways, most of them hard to foresee, as workers in rich countries find other things to do. But just as with the first two industrial revolutions, massive offshoring will not lead to massive unemployment. In fact, the world gained enormously from the first two industrial revolutions, and it is likely to do so from the third, as long as it makes the necessary economic and social adjustments.

What sort of jobs are at risk of being transferred offshore? In the old days, when tradable goods were things that could be put in a box, the key distinction was between manufacturing and non-manufacturing jobs. Consistent with that, manufacturing workers in the rich countries have grown accustomed to the idea that they compete with foreign labor. But as

Structural Changes in Global Labor Markets

the domain of tradable services expands, many service workers will also have to accept the new, and not very pleasant, reality that they too must compete with workers in other countries. And there are many more service than manufacturing workers.

According to a recently published book titled "How We Compete: What Companies Around The World Are Doing To Make It In Today's Global Economy" written by Prof. Suzanne Berger of MIT, Japanese firms may have better odds of competing successfully against their US rivals in the global market in the coming years, thanks to their reluctance to ship jobs overseas. In the 80's and 90's, many Japanese manufacturers looked for cheap labor and shipped jobs overseas in order to compete with other developed countries in terms of cost and prices of manufactured products. So did other U.S. and European countries. Since the year 2000, the managerial posture and attitude of Japanese and US firms have increasingly differed from each other in terms of their use of offshore or overseas labor. In the short run, many companies believed that somehow or other cheap labor could be a solution that would save them. As a matter of fact, they were mistaken in the long run. Cheap labor is really not a solution, according to Berger's investigation. Berger conducted a study of 500 companies worldwide over the past five years, in search of a model for success in today's global economy. She found that, compared to U.S. companies, restructuring efforts by Japanese companies involved far fewer layoffs and less offshoring. For example, Sony Corp. manufactures half of its top-of-the-line computers in Nagano Prefecture, whereas Dell Inc. makes none of its computer components in the United States. By keeping high tech, skilled labor in their homeland, Japanese companies retained a "capability that they could use in re-creating themselves",

Berger concluded. She also pointed out that, although many companies in Japan and the United States have shifted manufacturing operations to China, the Japanese firms tended to build their own plants in China, whereas U.S. firms generally turned to outside (that is, local Chinese) contractors. On the one hand, in using Chinese companies for U.S. production in China, Americans are failing to take advantage of the opportunity to learn about the Chinese market. They give that learning experience to Chinese firms. On the other hand, Japanese firms are in a much better position to learn about the preferences and methods of the Chinese market by getting involved in the details of daily operations and sales. Berger concludes that learning about a new market is a source of innovation and by missing that opportunity U.S. companies are failing to develop the capability, in terms of knowledge and experience, for future innovations in the Chinese market.

Section IV

Current Problems in the Japanese Labor Market

There are several problems visible now in the Japanese labor market. Due to the aging society and low birth rate, there will be a general labor shortage in the long run. In addition, it is expected that the mass retirement of baby boomers in a year or so, will mean an acute shortage of experienced workers with specialized skills who cannot be easily replaced by younger, less-experienced, less-skilled labor. In other words, the Japanese labor market in both the near and longer term future will need to deal with major challenges.

Structural Changes in Global Labor Markets

The future Japanese work force, especially young workers already express a negative attitude to working in what are labeled the “3K industries” (kitui meaning hard work, kitanai meaning dirty work, and kiken meaning dangerous work). The country will have to find new workers for these industries, to fill the jobs that don’t require high levels of education or technical skills. Contrary to general expectations, the government recently implemented a new law to prevent foreign workers from taking jobs in the 3 K industries so that Japanese workers won’t lose their job opportunities. In the meantime, there have been discussions about importing labor in the nursing care sector. This is a result of technical and human needs which are well recognized by the people in the welfare and nursing care fields. Since there has been a shortage of nurses in Japan, the government has been considering how Filipino nurses with Philippine licenses might be invited to work in Japan. This, of course, contradicts current Japanese licensing regulations. Nursing is a very personal, hands-on profession and patients need high quality service of course. Most personal services have attributes that cannot be transmitted through a wire. Nursing is an important case of the group of service jobs called personal service or face to face service. Others include child care (requiring face to face contact), psychotherapy (requiring the building up of trust), and lobbying, which depends on being in the place where the people to be lobbied live and work.

However, the dividing line between personal and impersonal services will move over time. As information technology improves, more and more personal services will become impersonal services. No one knows how far this process will go. In American cases this is more serious than Japan. So

far we have observed that most of the items in manufacturing jobs were potentially movable offshore. Even though people working in construction and mining produced goods, not services, their jobs were not in danger of moving offshore. (You can't hammer a nail over the Internet.) Local, town, city and national government jobs provide impersonal services that need not be delivered face to face, but hardly any are candidates for offshoring—for obvious political reasons. Retail trade jobs require physical presence, although online retailing is increasing its share of the market, making a growing share of retail jobs vulnerable to offshoring as well.

Those are the easy cases. But the classification so far leaves out the majority of personal service jobs. This extremely heterogeneous group breaks down into educational and health services, professional and business services, leisure and hospitality services, financial services, wholesale trade, transportation, information services, utilities, and "other services". It is hard to divide such broad job categories into personal and impersonal services, and it is even more difficult to know what possibilities for long-distance electronic delivery the future will bring. Still, it is possible to get a rough sense of which of these jobs may be vulnerable to offshoring.

The health sector, which is expected to be an increasingly large employer in the future, is currently as large as the educational sector, and the vast majority of services in the health sector seem destined to be delivered in person for a very long time (if not forever). But there are exceptions, such as radiology. More generally, in the United States, laboratory tests are already outsourced by most physicians, as they are in

Structural Changes in Global Labor Markets

Japan. Why not out of the country rather than just out of town? One can envision other medical procedures being performed by doctors who are thousands of miles away. Indeed, some surgery has already been performed by robots controlled by doctors via fiber—optic links.

Educational services are also best delivered face to face, but they are becoming increasingly expensive. Electronic delivery will probably never replace personal contact in kindergarten through high school education, which is where the vast majority of the educational jobs are. But college teaching is more vulnerable. In the United States it is relatively more vulnerable to offshoring than in Japan simply for linguistic reasons. Skilled university teachers in India or the Philippines are more likely to be fluent in English than in Japanese. As college tuition grows evermore expensive, cheap electronic delivery will start looking more and more sensible, if not imperative.

Service jobs in the professions and business are a large and diverse group that includes the most highly skilled, such as heart surgeons and company presidents to data handlers and custodial staff. An examination of this group reveals that a large number of these jobs, or certain areas within some jobs, can be delivered on line and are, therefore, candidates for partial or complete off—shoring. One example in the United States is accounting. How many of the tasks done by accountants will remain in the U.S. and how many will be sent abroad will be in proportion to technological developments. Fewer jobs in the leisure and hospitality industries seem to be in danger. Reservations are already being taken and recorded by clerks who happen to live very far away from the caller. But most of the jobs in this area, such as food service, ski instructor and maid

service can only be delivered personally. On balance, only a few of these jobs can be moved offshore. Financial services, with its many highly paid jobs, is another area where advance communications technology might be expected to cause major changes in the employment environment through offshoring. In India and China, increasingly well-educated workforces are adding another major comparative advantage to draw companies looking for offshore job destinations. India's English advantage allows a relatively smoother relocation.

Compared to retailing, wholesale trade has somewhat less personal contact, meaning that more jobs may have some possibility of being exported. The same can be said of transportation and utilities. However, the area of information-service jobs is highly vulnerable to offshoring as it is in essence a digital and non-personal type of service. The broad area of jobs labeled as services has many more jobs that fall outside of the above categories. In all cases, an entire job or some aspects of it may be liable to offshoring to the extent that the service can be provided at a distance. Workers who go to customers to install or repair electrical, heating/air-conditioning and plumbing systems have secure jobs for the time being, for example, as do any jobs providing such personal delivery of service. Blinder estimates that the total number of current U.S. service-sector jobs at risk of being offshored may be two to three times the number of American manufacturing jobs, which is about 14 million.

Section V

U.S and Japanese service jobs and Baumol's Cost Disease

Structural Changes in Global Labor Markets

There are a number of similarities in the service sector of the labor markets of the two countries. However there is a basic difference in terms of labor law and flexibility of the labor market. The first is mentioned below and the second is the problem of legal labor market and government intervention. On the one hand the U.S. labor market is relatively easy to enter, while the Japanese labor market is legally protected by immigration laws and the ministry of Justice.

William Baumol described what he called the “cost disease” of personal services. Baumol's Cost Disease describes the fact that labor-intensive jobs like the arts, health care and education experience an unavoidable increase in relative labor costs. The labor costs in these industries generally increase at the same rate as other industries, but they are much less able to make use of labor-saving technical progress. The reason for this is that, in many of these personal services, productivity improvements are impossible to carry out or, if carried out have negative effects. For example, school teachers’ “productivity” in a numerical sense can be increased by changing the student-teacher ratio, having more students per teacher. It would take fewer teachers to service the students in one school, but would be seen as causing a decline in the quality of the educational service. Research on educational outcomes supports this; when labor costs are cut in this way, productivity increases but learning deteriorates. So in the field of education, such productivity increases are undesirable. In the performing arts and fine arts, productivity increases are generally impossible. For example there can be no significant decrease in the number of work hours needed for musicians to prepare to perform or to perform a musical composition. A piece by Chopin performed in 1840 compared to one performed in 2000 requires about the

same number of hours. Also in the group of service jobs in which increased productivity is impossible are jobs such as school bus drivers. The driver-hours needed to transport children to and from school does not significantly change over time. As real wages steadily rise, personal service jobs in which improved productivity is either undesirable or impossible become ever more costly relative to those in which great savings can be realized through labor-saving increases in productivity. This is the phenomenon that Baumol described.

Manufacturing does not suffer from Baumol's disease. Auto makers, for example, have been spectacularly successful in cutting the number of labor hours needed to build cars. This great increase has been achieved without any sacrifice in quality. In the area of impersonal services, telephony has seen as spectacular changes as has manufacturing. The increase in productivity in telephone service has been accompanied by a dramatic increase in speed and efficiency with simultaneous decreases in costs to customers. As the number of people employed as telephone operators has fallen enormously, through the introduction of technology, the calling capacity has mushroomed and the sound quality has risen as much as the price of service has fallen. Retrospectively, history proves Baumol's prediction of rising service prices in fields such as the arts and education and falling prices in manufacturing and some services such as telephony. Baumol's disease also accounts for the steady rise in health care costs and college tuition, both of which have risen faster than the consumer price index for decades.

The second prediction of the Baumol effect is that demand for services is negatively affected by steadily rising relative prices. Demand curves

Structural Changes in Global Labor Markets

slope downward—meaning that the demand for an item declines as its relative price rises. In general there is a decrease in relative demand for those services, personal services, whose prices steadily increase relative to the general level of prices for services, especially impersonal services. There are a few exceptions, the main one being personal services that are luxury goods. This is because, as people get richer, they want and can afford relatively more of them.

Baumol's disease has an important connection to the offshoring problem. Changing trade patterns will keep most personal service jobs at home while many jobs producing goods and impersonal services migrate to the developing world. When you add to that the likelihood that the demand for many of the increasingly costly personal services is destined to shrink relative to the demand for ever-cheaper impersonal services and manufactured goods, rich countries are likely to have some major readjustments to make. One of the adjustments will involve reallocating labor from one industry to another. But another will show up in real wages. As more and more rich-country workers seek employment in personal services, real wages for those jobs are likely to decline, unless the offset from rising demand is strong enough. Thus, the wage prognosis is brighter for luxury personal-service jobs (such as plastic surgery and chauffeuring) than for ordinary personal-service jobs (such as cutting hair and teaching elementary school).

What is to be done about all of this? It is easier to describe the general outline of a solution than to prescribe specific remedies. Most obvious is what to avoid: protectionist barriers against offshoring. Building walls against conventional trade in physical goods is hard enough. What are

some more constructive—and promising—approaches to limiting the disruption?

In the first place, Japan and other rich nations like the U.S. will have to transform their educational systems so as to prepare workers for the jobs that will actually exist in their societies. Basically, that requires training more workers for personal services and fewer for many impersonal services and manufacturing. But what does that mean, concretely, for how children should be educated? Simply providing more education is probably a good thing on balance, especially if a more educated labor force is a more flexible labor force, one that can cope more readily with non-routine tasks and occupational change. However, education is far from a panacea, and the examples given here show that the rich countries will retain many jobs that require little education. In the future, how children are educated may prove to be more important than how much. But educational specialists have not even begun to think about this problem.

Contrary to what many have come to believe in recent years, people skills may become more valuable than computer skills. The geeks may not inherit the earth after all—at least not the highly paid geeks in the rich countries. Creativity will be prized.

Conclusion

So far we have observed the emerging situation of labor markets in developed countries during the opening of the Third Industrial Revolution.

Structural Changes in Global Labor Markets

Offshore outsourcing is the main issue of this paper with particular regard to personal and impersonal labor in the service industry. We reviewed the world's economic development through several stages. As Petty and Clark described, during times of structural change in industries, there has been a shifting in the content of the jobs along with the migration of labor from primary industry to secondary industry and then from secondary industry to tertiary industry or sometimes vice versa. Offshore outsourcing is mainly treated with regard to the service industry and examined in terms of the type of labor - personal or impersonal. The recent growth in the offshoring of service jobs has depended on the pre-condition of advanced telecommunications that make possible the fast, reliable and cheap movement of digital information over great distances. It was noted that it is a number of the impersonal service jobs that are liable to be sent offshore due to the growth of advanced telecommunications. Most personal service jobs depend on face to face, real time interaction between people who are physically in the same place.

We introduced the work of Baumol, who described the "cost disease" of personal service jobs. These jobs do not experience the productivity increases that manufacturing jobs have experienced or the cost cutting that offshore outsourcing of impersonal service jobs produces. As a result, their labor cost relative to other jobs increases. Educators, health caretakers and artists are examples of jobs in this category. Pertaining to comparative studies between U.S. and Japanese labor markets, we made several observations and explained distinguishing characteristics of the current situation in both countries.

References

- Baumol, William J. 1997 "Baumol's Cost Disease" The Arts and Other Victims,
Edward Elgar Publishing; 1 edition December 1997
- Berger, Suzanne. 2005 "How We Compete": What Companies Around The World
Are Doing To Make It In Today's Global Economy
- Blinder, Alan S. 2005 "Fear of Offshoring," CEPS Working Paper No. 119, December 2005
2006 "Offshoring: The Next Industrial Revolution? " Foreign Affairs, March/April 2006
- Clark C.G . 1951 The Conditions of Economic Progress, 2 Ed.
- Farrell, Diana. June 2006 Harvard Business Review [Smarter Offshoring]
- Gerashchenko, A. 1962, Economic Backwardness in Historical Perspective: A Book
of Essays, Frederick A. Praeger
- Krugman, Paul, 1994. "Ricardo's Difficult Idea, "Essay available on
<http://web.mit.edu/krugman/www/ricardo.htm>
- Landefeld, J. Steven, and Raymond Mataloni, 2004. "Offshore Outsourcing and
Multinational Companies, "BEA working paper WP2004-06, July 16, 2004.
- Lawrence, Robert Z., 2005. "Offshoring white collar work: exploring the empirics, "from
Brookings Trade Forum.
- Markusen, James, 2005. "Modeling the Offshoring of White-Collar Services: From
Comparative Advantage to the New Theories of Trade and FDI, "University of Colorado,
Boulder mimeo from Brookings Trade Forum.
- Marm, Catherine, 2005. "Globalization, Information Technology, and U.S. Economic
Performance,"January mimeo.
- Mataloni, Raymond J., Jr., 2005."U.S. Multinational Companies Operations in
2003, "Survey of Current Business, July, pp. 9-29.
- McKinsey Global Institute, 2003. "Offshoring: Is it a Win-Win Game? " August.
- Meshcheryakova, Yuliya, 2005. "Macroeconomic Effects of International Outsourcing, "

Structural Changes in Global Labor Markets

Victoria University of Wellington, mimeo.

Samuelson, Paul A., 2004. "Where Ricardo and Mill Rebut and Confirm Arguments of Mainstream Economists Supporting Globalization," *Journal of Economic Perspectives*, Vol. 18 No. 3 Summer 2004, pp. 135-146.

Schultze, Charles L., 2004. "Offshoring, Import Competition, and the Jobless Recovery," *Brookings Institution Policy Brief* number 136.

Spencer, Barbara, 2005, "International Outsourcing and Incomplete Contracts," NBER Working paper 11418, June.

Trefler, Daniel, 2005. "Offshoring: Threats and Opportunities," paper presented at May 2005 Brookings Trade Forum.