

RESIDUAL PROPERTY RIGHTS IN OFF-SHORE OUTSOURCING: TODAY AND TOMORROW

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ABSTRACT

As a consequence of liberalization and globalization, off-shore outsourcing of routine activities like goods manufacturing or call center services have become a popular option for firms from developed nations. As developing nations progress in terms of university-based scientific research the nature of outsourcing jobs is moving up towards a more knowledge intensive task. We argue that with the changing international economic order the basis of outsourcing will be capabilities of the firms and the skills of knowledge workers than low wage and exchange rates. This will lead to reallocation of residual property rights between the developed and developing nations. In tomorrow's world the power equation between these nations will get equalized.

Keywords: Offshore Outsourcing; Residual Property Rights; International order; Developed and Developing nations

INTRODUCTION

Liberalization of import-export regulations across the globe has encouraged deals with suppliers who can produce at lower costs. Globalization has led to a homogenization of business cultures and practices across the world. Information flows are much better, various business processes have been standardized, and markets are becoming more wide spread and efficient. This has reduced both transactions and production costs. This has facilitated off-shore outsourcing of manufacturing and services to developing nation firms by shifting of activities from within the firm's boundaries to an outside vendor. Economists (Bhagwati et al., 2004) have argued that off-shore outsourcing is nothing but an expansion of international trade. Since the 1990s, off-shore outsourcing of goods and services have become a popular option for firms in developed nations to reduce costs while maintaining operating efficiency.

So far the benefits of outsourcing have been appropriated by developed nations, while creating low end jobs in developing nations. However the future scenario will be very different. The recent developments and financial crisis in the world economy will lead towards a change in the power-balance. As a consequence the current drivers of outsourcing between developed and developing nations (e.g. low wage rate) will fade out, and basis of outsourcing will be specialized knowledge (capabilities of firms and skills of knowledge workers). With the passage of time multiple nodes of economic power will emerge. The existing nature of outsourcing jobs where the "developed world" calls the shots will lessen. The increasing prosperity of developing nations will slowly merge their market and purchasing power parity exchange rates, and in the future, it will not be as cheap to locate routine activity like call centers in India or manufacturing in China. As developing nations move up the skill level the nature of outsourcing tasks will keep on changing. The changing international economic order, a focus on higher education system in developing economies and a move towards more knowledge intensive fundamental research on the part of

developing nations will lead to reallocation of residual property rights in outsourcing jobs between the developed and developing nations. The appropriation of control rights will be further enhanced due to the nature of knowledge intensive tasks where the efforts and intentions of the employee are not easy to measure by the employer. In knowledge intensive work a great deal of effort is required for analyzing and formulating problems. Technical knowledge of the employee is not enough, tacit knowledge which comes through experience and university-based education is required. Moreover in knowledge intensive work a number of individuals (or work units), possessing different skills and practicing different techniques are brought together for a specific period and/or project to come up with the tradable deliverables to the client. As all members act simultaneously with each other there is reciprocal interdependence among individuals (or work units), which requires coordination through mutual adjustment. Due to relative task complexity in knowledge intensive outsourcing jobs monitoring is costly for developed nations.

This paper argues as the developing nations move up the skill and technology level and engage in more and more knowledge intensive services, property rights will get reallocated. The power equation in outsourcing jobs between developed and developing nations will get equalized with changing international social and economic order.

CHANGING NATURE OF OUTSOURCING

A major step towards the integration of some developing countries with the developed nations was Business Process Outsourcing (BPO). BPO can be seen as the expansion of what has been already there for some time, only the mode of delivery has changed due to the development of information and communication technology. A lot of administrative processes which earlier had to take place within the firm can be acquired from outside the firm boundary as well as outside the firm's nation. Low labor costs in developing countries in

terms of market exchange rate has led to a phenomenal growth (Refer table 1) in outsourcing activities and created huge entrepreneurial opportunities for the developed nation's firm in the last decade.

Table 1: Worldwide ITES*-BPO Spending by Segment (in US \$ Million)

Segment	2001	2006	CAGR (%) 2001 -06
Human Resources	7373	25555	28.2
Logistics	140700	308651	17
Purchasing	5288	12185	18.2
Engineering/R & D	69798	123882	12.2
Marketing	76666	108340	7.2
Sales	107412	165736	9.1
Fom	120635	172329	7.4
Administration	36644	53396	7.8
Legal	111273	163962	8.1
Finance & Accounting	36356	64872	12.3
Total	712145	1198908	11

Source: Indiatat.com

*Information Technology-Enabled Service

Success in outsourcing of low skilled jobs has encouraged outsourcing of higher skilled knowledge work labeled as Knowledge Process Outsourcing (KPO) and a shift in value chain from BPO to KPO has taken place in the outsourcing industry of developing economies (Business India, 2005). An interesting example of moving up the value chain will be the changed scenario of pharma outsourcing in Asian countries. Earlier much of the outsourced works were routine tasks like clinical trials and cost-efficient drug manufacturing. But now big pharma companies (like Eli Lilly, GlaxoSmithKline etc.) are investing to step up their research-based partnership. For example, GlaxoSmithKline made an investment of US\$100 million in the first year to setup a neuroscience R&D centre in Shanghai with a plan of employing around 1,000 staff by 2010 (PricewaterhouseCoopers, 2008).

KPO differs from traditional BPO in terms of value proposition. BPOs are essentially process-driven and rule-based routine tasks whereas KPOs involve judgments. The success of KPO model depends on the highly skilled employee with specific domain knowledge with

past experience. For example by its very nature legal process outsourcing or equity analysis is not similar to standard BPO tasks. In the case of BPO the tasks are routine in nature; in knowledge intensive services the tasks are non-routine in nature, characterized by high variety and low task analyzability. KPO sector work ranges from high-end customized business and market research like contract research for investment banks, equity analysis and fixed income research, data analytics and information services, legal services and intellectual property research to education process outsourcing (where India's new generation education company like Career Launcher¹ or TutorVista² is playing the lead role), entertainment industry (animation and graphics design), writing and content development. In recent times Bangalore, the IT hub of India, became the biggest center for data operations for Reuters (Business India, 2005). It can be argued that KPO is knowledge processing within a given framework. Thus it is an intermediate state of knowledge development. In near future the continuum of BPO to KPO will evolve further from KPO to fully knowledge intensive work.

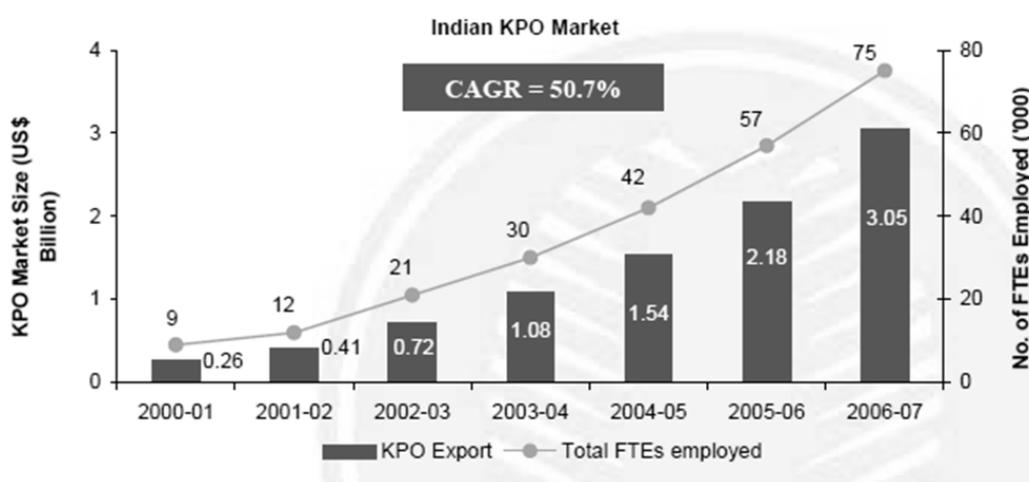


Figure 1: Indian KPO Market

Source: Evalueserve report titled "India's Knowledge Process Outsourcing (KPO) Sector: Origin, Current State, and Future Directions"

Developing nations like India achieved a phenomenal growth (Compound Annual Growth Rate) of 50.7% (i.e. from a 0.26 US\$ billion market in 2001 to 3.05 US\$ billion market in

¹ <http://www.careerlauncher.com/>

² <http://www.tutorvista.co.in/index.php>

2006) in KPO market in this decade. This report further predicted that Indian KPO market will achieve a growth rate (CAGR) of around 40% in the next 5 year. The size of Indian KPO market is around 16-17 US\$ billion in 2010-11 and they further predicted that India's share in the global KPO market can go up to 70% which was around 50-60% in 2003-04 (Evalueserve, 2007).

Undoubtedly KPO is a step ahead of BPO but this does not mean the end of BPO. Both the sector will co-exist and continue to be successful. According to the report of Evalueserve (2007) global BPO market grew from US \$7.7 billion in 2003-04 to US \$15.8 billion in 2006-07(i.e. an annual growth rate of approximately 27%). This report further predicted that BPO industry is expected to grow annually at a steady rate of 26%.

RESIDUAL PROPERTY RIGHTS IN OUTSOURCING

We argue that the changing economic order and a move towards KPO and beyond to more knowledge intensive fundamental research will lead to reallocation of residual rights between the developed and developing nations. In the case of BPO the tasks are routine-based in nature and so employees are easily replaceable; in knowledge intensive services the tasks are non-routine in nature, characterized by high variety and low task analyzability. Here a great deal of effort is required for analyzing and formulating the problems and the standard recipes of call centre type of jobs do not apply. In order to perform the task technical knowledge and domain expertise is required which comes through a world class academic infrastructure and domain-specific experience. So in knowledge intensive outsourcing employees are not easily replaceable. Moreover in knowledge intensive work a number of individuals (or work units), possessing different skills and practicing different techniques are brought together for a specific period and/or project to come up with the tradable deliverables to the client. It requires coordination through mutual adjustments among the members and

enhances the reallocation of control rights. Foss and Foss (1999:19-20) argue that for routine tasks “a small sampling of the agent’s effort or output” throws enough information regarding the “overall performance with respect to taking care in handling the asset.” But in knowledge intensive tasks “it is costly to measure” due to the relative task complexity. In brief, the appropriate governance structure for knowledge intensive outsourcing jobs varies from the standard BPO structure. The task interdependence in knowledge intensive services influences the nature of contracts since it would be difficult to separate the employee from the control rights. For routine tasks the control rests with the management but as we move up to non-routine tasks, control rights shift to the knowledge employees. The Grossman-Hart-Moore (Grossman & Hart, 1986; Hart & Moore, 1990) approach defines ownership as the residual control rights of the non-human assets of the firm, that is, the right to decide the uses of assets under the circumstances of unforeseen contingency. We argue however that in knowledge intensive services human assets are more crucial than the non-human assets in addressing the circumstances that are not specified in a contract. We emphasize the importance of appropriable control rights, which assumes the property rights as “vector of rights, such as use rights, the rights to derive income from assets, and the rights to alienate assets-and not just residual rights to control” (Foss and Foss, 1999:6). In the context of contractual incompleteness for human assets, this refers to reallocation of residual property rights by means of appropriation by one or more of the parties to a contract. Foss and Foss (1999) further argued that appropriation of control rights take place when there are measurement costs and that the pattern of appropriable control rights “directly” influence the behavior of agents and the residual income from the use (human) assets and this is specially so in knowledge intensive areas.

CHANGING INTERNATIONAL ORDER

In the present international economic order developed nations have been at the centre of the world economy. They have defined business procedures and dictated requirements. The developing nations have been in a subordinate position. Resource dependency relations are not balanced. In developing nations there is a connotation of prestige with foreign deals. Thus, so far the benefits of outsourcing like improved productivity, operational efficiencies, cost reduction, option to focus on core business etc. have been mostly enjoyed by the developed nations, whereas it creates huge volume of mere low end jobs for developing nations. However we argue this as a transitory phenomenon. Given the changes in power balance and the recent developments in the world economy, the current system has come under strain and the future scenario will be very different. It is quite possible that some current drivers of international outsourcing between developed and developing nations (e.g. low wage rate) will fade out in the long run; and basis of outsourcing will be specialized knowledge (capabilities of firms and skills of knowledge workers).

The latest study by National Intelligence Council Report (2008) projects a multipolar global landscape, where the United States is merely "one of a number of actors on the world stage" and where the U.S. dollar will lose its relevance in a basket of international currencies. This report predicted that there will be shift in economic and political power equation among nation-states and in general the gaps between developed and developing nations will be narrower. Most importantly the power of non-state actors like "businesses, tribes, religious organizations, and criminal networks" will also increase. In the coming years developing nations like China and India challenge the dominant global position of United States, though United States will remain as single most powerful actor. Two reasons are cited by this report. First, the trends of increasing oil and commodity prices transfer the resources to Gulf States and Russia and some mineral rich countries in Africa. Second, lower costs combined with

export friendly government policies have shifted the locus of manufacturing and some service to Asian regions. The chairman of the National Intelligence Council said that "We're thinking of it as the rise of the rest, rather than as the decline of the United States."³

In near future multiple nodes of economic power will emerge. Increasing prosperity of developing nations will slowly merge their market and purchasing power parity exchange rates. Presently the prices of internationally non traded items are very low in developing countries. This will not be so in the long run and in recent times US Dollar has actually depreciated with respect to Indian rupee. Hence it will not be as cheap to locate routine tasks like call centers in India or goods manufacturing in China.

This change in international order has been further enhanced in recent years due to some massive changes in higher education in developing societies. In this changed scenario countries with large numbers of professionals like engineers, doctors, MBAs, certified financial analysts, accountants, statisticians, lawyers, etc will be the prominent player in the global KPO market (Evalueserve, 2007). The leading nations of Asia have now set their sights on building universities that stand in competition with the finest in the world. China and India are focusing on their higher-education system through world-class universities. Nine universities in China have been identified as C9 - China's Ivy League to compete with their global counterparts and these universities will receive the government's supports and funding. Similarly the Indian government has also planned to build 14 new universities of "world-class" stature (Foreign Affairs, 2010). Government of India has already established five Indian Institutes of Science Education and Research (<http://www.iiserpune.ac.in/>) and a sixth is on the way. India has also established an independent university of space sciences. Similarly other Asian powers like Singapore are also following the same footsteps. According to the World Bank guideline a World Class University should have an

³ <http://www.npr.org/templates/story/story.php?storyId=97295939>

international reputation for its research and teaching. Global leaders in their fields should identify and build research agendas with a strategic vision to generate innovative ideas and produces groundbreaking research output. World Class Universities should be able to attract and retain the high proportion of postgraduate students and most able staffs from an international market (Refer Alden and Lin, 2004 for details). These are tall requirements. Even large countries such as China and India cannot expect to have more than a handful of them and it will take many decades but a beginning is being made.

As the President of Yale Richard Levin says that in the fifties and sixties a literate and well-trained labor force was the key ingredient in transforming Japan and South Korea first from agricultural to manufacturing economies and subsequently from low- to high-skill manufacturing economies. Unfortunately in this period, China and India lagged far behind. In the mid-1990s only 5 percent of college-age Chinese attended college. And this put China on par with much smaller and backward economies. In India, despite a postwar effort to create first a set of national comprehensive universities and the elite and very small Indian Institutes of Technology, the gross enrollment rate stood at 7 percent in the 1990s. However in a decade's time China has built the largest higher education sector in the world. India's achievement has not been nearly so impressive, but it has ambitious aspirations.

The intriguing question raised by Levin⁴ is: Why do these countries aspire so openly to elevating some of their universities to this exalted status? Two reasons are cited by Levin. First, these emerging economies realized that institutional environment of university-based scientific research is essential to maintain the present momentum of economic growth. Second, world-class universities will facilitate the 'intellectual breadth and critical-thinking skills' of the next generation. He argued that competing on the basis of low cost labor is not a sustainable strategy for China and India in the long run. Eventually the wage will rise as it

⁴ <http://opa.yale.edu/president/message.aspx?id=91>

happened in Japan and South Korea, hence Levin emphasized the need of ‘applied research based on underlying scientific advance’ to innovate and lead. The new generation of offshoring is no more outsourcing of low-end manufacturing and back-office task to labor-efficient developing economies but it is about accessing the global innovation activities and emphasis is on product and process innovation (Offshoring Research Network 2006 Survey Report). This report found that the primary driver of offshoring decisions for U.S. companies is accessing better talent than the traditional cost arbitrage argument or in other words offshoring decisions are ‘the emerging global race for talent’. ‘Where you offshore’ decision depends on ‘what you offshore’ for example China is preferred for offshoring procurement and product development projects.

CONCLUSIONS

Off-shore outsourcing of knowledge intensive tasks to major developing nation like India and China will become a popular option for firms from developed nations especially in the context of rapid liberalization and globalization across the world. Developing nations are making conscious efforts to create an environment of university-based scientific research by setting up world class universities. This will lead to an overall improvement of the knowledge workers in the developing nations. We argue as the developing nations move up the skill and technology level and engage in more and more knowledge intensive services, residual property rights will get reallocated. Since the efforts and intentions of the employee are not easy to measure by the employer in knowledge intensive tasks. In recent times the international economic order is under strain. In a multipolar world the basis of outsourcing will be capabilities of the firms and the skills of knowledge workers than low wage and exchange rates. In the long run existing power equation between developed and developing nations will get equalized.

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