

An Overview of the Economics of Outsourcing

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INTRODUCTION

Rapid advancements in Information and Communications Technologies (ICT), along with reductions in barriers to cross-border trade and factor flows, have worked in tandem to promote cross-border production sharing. This slicing of the value added chain in manufactured goods has been going on for several decades in Asia and elsewhere. However, many services activities and processes are also becoming fragmented from the actual production process and are taking place in different geographical locations, both within and outside a country. The phenomenon whereby an entity located in one country might disperse some of its service activities (or parts thereof) to one or more other countries has been broadly termed “offshoring” or “outsourcing”.¹

There is a small but growing body of analytical work indicating that both industrial and developing countries stand to reap substantial gains because of global outsourcing in services. Specifically, outsourcing ought to lead to efficiency gains for industrial countries by allowing them the opportunity to specialize in areas of their core competencies. It also presents significant benefits for developing countries by opening up new export, growth and employment opportunities in various tradable service activities. Nonetheless, there has been widespread negative media coverage in industrial countries about the offshoring of service sector jobs. This in turn has given rise to considerable anxiety among policymakers and the general public that outsourcing could lead to massive redistribution, *on a net basis*, of both blue and white collar jobs from industrial to developing countries.

This policy brief offers an initial exploration of the phenomenon of outsourcing with particular reference to the Asia-Pacific region. It has three objectives. First, it

¹ We use the terms offshoring and outsourcing interchangeably in this policy brief. As we note later, we refer to this term only in the international context, i.e. we focus on cross-border transactions rather than domestic offshoring.

seeks to bring greater conceptual clarity to the phenomenon of outsourcing, focusing on definitions and measurement issues, as well as the scope of such activities. Second, it offers a broad overview of the economics of outsourcing, assessing its economic implications for both developed and developing countries. Third, it considers the role that services trade liberalization can play in facilitating the process of outsourcing.

OUTSOURCING OF SERVICES: AN OVERVIEW

The World Trade Organization (WTO) describes four types of outsourcing using location and organization control as distinguishing criteria. With regard to international trade flows, what is important is not so much organizational control – i.e. intrafirm versus arms-length – but rather, location of economic activity. What we are concerned with here is all forms of international outsourcing as opposed to any type of domestic offshoring. International outsourcing involving arms-length transaction, with no direct interface between consumer and producer comes under the rubric of Mode 1 services trade. This category needs to be distinguished from captive offshoring that involves establishing a commercial presence by foreign providers in another country, as represented under Mode 3 of GATS.

Offshored service activities have typically been highly commoditizable and labour-intensive (semi-skilled) in nature. The most commonly outsourced activities are IT-enabled “Business Processing Outsourcing” (BPO) services. Activities under this category have included call centre support and other back-end business process operations such as data entry and handling, coding, medical and legal transcriptions and testing. However, outsourcing is also increasingly taking place in higher end activities or so-called “Knowledge Process Outsourcing” (KPO) that include valuation and investment analysis, market research, consulting, legal and insurance claims processing, software design, architecture, drafting and filing of patent applications, drug discovery and other types of R&D activities, chip design and embedded

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systems, analytics and inventory management. The KPO business is only at its infancy and is set to take off in the next few years, just as the BPO business has done in the last few. According to one recent estimate, the global KPO market is expected to grow at a cumulative annual growth rate of 46 per cent, from \$1.2 billion in 2003 to \$17 billion in 2010. In contrast, the low-end BPO market is expected to grow at about half that rate over the same period (though this would still be a very robust and seeming sustainable rate of growth) (Majumdar, 2004).

Measuring the extent of outsourcing activity is an extremely difficult task in view of the acute lack of comprehensive and internationally harmonized data. Although data on computer and information services and other business services reported in the *IMF Balance of Payments* provides some broad indication of the magnitude of international cross-border trade in some services, not all such service transactions can necessarily be characterized as being of the outsourcing variety.

As an indication of the severe measurement difficulties noted above, the OECD has estimated the global volume of the offshoring market (excluding domestic outsourcing) in 2003 to have been anywhere between US\$ 10 billion on the low end to US\$ 50 billion on the high end (OECD, 2004). Many of the countries that are witnessing an offshoring wave viz. India and China in the Asia-Pacific region as well as the Republic of Ireland, Brazil and many smaller Eastern European countries (such as Estonia and Latvia), have inevitably experienced rapid growth in exports of Business Services and Computer & Information Services (Amiti and Wei, 2004).

According to AT Kearney's 2004 index, India ranks as the most attractive service offshore location and is expected

to capture more than half of the global BPO market, with China and the Russian Federation also among the more attractive destinations (AT Kearney, 2004). Other attractive destinations include Singapore, the Philippines and Malaysia. Interestingly, while the industrial countries like the United States of America, Germany and Japan are the top outsourcers in Business Services, these countries also dominate the list of top destination countries, with India and China respectively ranking only 6th and 14th among the top "insourcing" countries (see Table 1). In other words, outsourcing is not a one-way street from developed to developing countries. For instance, a number of Indian outsourcing operations have left mid and higher margin activities in India and have moved some lower end activities to China and some Southeast Asian countries such as the Philippines (due to costs), while others have chosen to set up parallel bases in countries like Singapore, partly as an insurance policy (for instance, in the event that operations in India or other places are disrupted).

IMPLICATIONS FOR DEVELOPED AND DEVELOPING COUNTRIES

As noted, the offshoring of services is a relatively new phenomenon that has generated significant debate in the popular press and among policymakers. The analytical literature on the subject is still sparse but growing. By and large, the literature analyzes the impact of outsourcing on output, trade, wages and distribution of income (Bhagwati et al., 2004; Brainard and Litan, 2004). In a nutshell – but at the risk of oversimplification – the literature argues that efficiency and productivity gains achieved via offshoring should enhance growth and employment opportunities for both industrial and developing countries.

Table 1
Business Services: Largest Insourcers and Outsourcers (in absolute value terms), 2002

Rank	Country	Insourcers (US\$ mn.)	Rank	Country	Outsourcers (US\$ mn.)
1	United States of America	58 794	1	United States of America	40 929
2	United Kingdom	36 740	2	Germany	39 113
3	Germany	27 907	3	Japan	24 714
4	France	20 864	4	Netherlands	21 038
5	Netherlands	20 074	5	Italy	20 370
6	India	18 630	6	France	19 111
8	Japan	17 401	9	United Kingdom	16 184
14	China	10 419	11	India	11 817
29	Russian Federation	2 012	18	China	7 957
			20	Russian Federation	4 583

Source: M. Amiti and S.J. Wei (2004) "Fear of Service Outsourcing: Is it Justified?," *IMF Working Paper*, WPI/04/186, October.

For developing countries, offshoring seems to be unequivocally beneficial for employment, exports and economic growth. For instance, a number of countries in the Asia-Pacific region with a large English speaking population, an adequate ICT infrastructure and a large pool of IT professionals have been reaping significant employment and income gains from these new possibilities and expect to continue to do so.

What about industrial countries? Outsourcing allows for the relocation of inefficient parts of the production process to another country where they can be produced cheaply, freeing up resources so that the industrial country can specialize in the product and in which it has a comparative advantage. In this way, outsourcing leads to gains from trade and improves economic welfare for all countries involved in the global division of labour. Indeed, since a country's comparative advantage in a final product is a weighted average of its relative efficiency across constituent activities, the country can improve its overall competitive edge by obtaining from abroad the components in which the country is less efficient at producing/processing. The long-run gains are also potentially mutual and significant since jobs created offshore in developing countries generate demand for goods and services exports from industrial countries, not to mention enhancing tourism and FDI inflows. It is the age-old global wealth creation story, a win-win situation for all countries involved (i.e. insourcers and outsourcers).

That said, there will invariably be some short-term adjustment costs in terms of job losses in certain sectors or industries. However, this is not unique to outsourcing; it is an inevitable consequence of any form of reallocation of resources to their most productive uses. This is an important point worth emphasizing. As with all types of trade, outsourcing will lead to winners and losers. The pertinent issue is that the winners (including consumers, shareholders etc.) will exceed the losers as resources are optimally deployed across countries. In fact, before lamenting about the evils of using offshore service providers, one must ask the question – what is the viable alternative? If companies do not outsource to reduce costs, while their competitors do so aggressively, they stand to lose global and local market share to their foreign rivals. The resulting adverse impact on corporate profit growth will limit the creation of new capital and re-investment in domestic technology. In the worst-case scenario, companies that do not outsource are weighed down by ever-increasing costs, leading to eventual bankruptcy or a bail-out by taxpayers. Attempting to save jobs in a particular segment of the workforce could have far-reaching and costlier repercussions elsewhere.

As noted, there is a move from BPO to KPO, at least with regard to some of the outsourcing to India. This has

fuelled concerns that conventional trade theory is no longer relevant and an industrial country like the US will end up outsourcing *all* its service activities, both high and low end (Business Week, 2004). However, such concerns are exaggerated, to say the least. For example, there are several types of services such as tourism, restaurant and catering that cannot be outsourced as they require Mode 2 of service provision (i.e. movement of consumers to the service providers).

The most widely quoted estimate of future job losses due to movement of jobs offshore is that of the consulting company Forrester Research, which predicted that 3.3 million US services jobs were likely to be offshored by 2015 (McCarthy, et al., 2002). However, a subsequent report by McKinsey, using US Bureau of Labour statistics data, found that about 70 per cent of workers losing jobs due to outsourcing were re-employed (McKinsey, 2003). In other words, services outsourcing should not lead to a fall in aggregate employment, as enough new – and often higher value added – jobs are created in other sectors. As such, the perceived fears that services outsourcing may lead to massive job losses *on a net basis* in the industrial countries may be unfounded. While none of the empirical studies should be taken as being authoritative at this stage, they are indicative that one should not rush to pass negative judgment on outsourcing just by virtue of the fact that there are *gross* job losses (Amiti and Wei, 2004; Mann, 2003). All this being said, it is a fact that outsourcing is disrupting usual job patterns and assumptions regarding job security and has raised the overall level of anxiety of blue and white collar workers worldwide. It is imperative that these anxieties be appropriately managed if support for globalization is to remain intact.

CONCLUDING REMARKS

It is clear that changes in technology are enabling an increasing number of activities to be traded internationally. Outsourcing wisely and taking advantage of the new division of labour should be an integral part of continued corporate and economic restructuring if a country – industrial or developing – is to remain globally competitive in the longer-term. Myopic protectionist tendencies and simplistic arguments that prevent the optimal allocation of resources (i.e. global division of labour) should be refuted. The focus of well-meaning unions and policy makers should instead be on relieving anxieties and helping displaced workers develop new skills so that they remain relevant and employable, rather than lamenting the loss of some existing jobs in areas in which the country is no longer competitive. Governments and multilateral agencies should also work towards improving the quality of services trade data and the official statistics on outsourcing, as this would help mitigate any false perceptions arising from outsourcing.

Many developing countries in the Asia-Pacific and elsewhere stand to gain significantly from the outsourcing phenomenon, just as East Asia benefited from the fragmentation and offshore dispersion of manufactured goods (such as electronics). It is therefore in the best interests of developing countries to strongly lobby for more extensive and faster global services liberalization. Services liberalization can benefit offshoring activities in two ways (Mattoo and Wunsch, 2004). One is by way of liberalization of services through Mode 4 (temporary movement of natural persons) which facilitates movement of skilled professionals across developed and developing countries having a direct impact on offshore outsourcing. The other is by way of Mode 3 (commercial presence), especially in higher-end outsourcing activities such as research and development and product design.

However, promotion of higher-end outsourcing activities in developing countries also requires liberalization of supporting services related to infrastructure (viz. transportation and logistics), as well as enhancing domestic legislation and provisions relating to data privacy, tax treatment, data protection and security, and protection of intellectual property rights. Thus, it is imperative that external liberalization be accompanied by appropriate domestic policy reforms if a country is to maximize its net benefits from integrating with the global economy.

REFERENCES

- Amiti, M. and S.J. Wei (2004), "Fear of Service Outsourcing: Is it Justified?", *IMF Working Paper, WP/04/186*, October.
- AT Kearney (2004), "Making Offshore Decisions 2004: Offshore Location Attractiveness Index" (http://www.atkearney.com/shared_res/pdf/Making_Offshore_S.pdf).
- Bhagwati, J.N., A. Panagariya and T.N. Srinivasan (2004), "The Muddles over Outsourcing", *Journal of Economic Perspectives*, 18, pp. 93-114.
- Brainard, L. and R.E. Litan (2004), "Offshoring Service Jobs: Bane or Boon – and What to Do?", *Policy Brief 132*, The Brookings Institution, Washington, DC (April).
- Business Week* (2004), "Shaking up Trade Theory", December 6.
- Majumdar, S. (2004), "KPO: The Next Big Opportunity", *Rediff*, December 31 (<http://www.rediff.com/money/2004/dec/31guest2.htm>).
- Mann, C.L. (2003), "Globalization of IT Services and White Collar Jobs: The Next Wave of Productivity Growth", Institute for International Economics, *International Economics Brief No. PB03-11*, December.
- Mattoo, A. and Q. Wunsch (2004), "Pre-empting Protectionism in Services: The WTO and Outsourcing", *Policy Research Working Paper 3237*, The World Bank, March.
- McCarthy, J.C. with A. Dash, H. Liddell, C.F. Ross and D. Bruce (2002), "3.3 Million US Services Jobs To Go Offshore", *TechStrategy Brief*, Forrester Research, November.
- McKinsey Global Institute (2003), "Offshoring: Is it a Win-Win Game?", McKinsey Global Institute, San Francisco (<http://www.mckinsey.com/knowledge/mgi/offshore>).
- Organization for Economic Co-operation and Development (OECD) (2004), *Economic Outlook of the OECD*, OECD: Paris, Chapter 2.

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