
Outsourcing and Offshoring: Key Trends and Issues

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Executive Summary

This paper provides a discussion of key issues, which emerged from a review of the debate on offshoring and outsourcing. Although offshoring is not a new phenomenon, the current phase of offshoring is marked by the increased tradability of services enabled by ICT. The paper puts forward a clear definition of offshoring – defined as a combination of trade flows, FDI, and employment shifts - before doing three things. First, official statistics on international trade and FDI were examined to gauge the extent of offshoring in services. Second, the paper analyses the causes and consequences of different types of outsourcing seen as strategies for corporate restructuring. Third, the impact of outsourcing on jobs and professions is assessed in terms of the repackaging of tasks, skills and knowledge.

Our challenge in having an informed debate about offshoring is (a) to articulate the benefits and costs of offshoring by linking the three areas, namely trade and FDI, corporate strategy, and employment; and (b) to collect better data – both official statistics and private surveys – that enable us to link micro-level business decisions on outsourcing and offshoring to sectoral and economy-wide outcomes. Even with inadequate data, however, this paper provides pointers to answer such questions as:

- Why is outsourcing and offshoring happening now?
- What is the impact of outsourcing/offshoring on home and host economies?
- What policies should be devised to address the causes and consequences of offshoring?

The key points raised in this paper are as follows.

1. **Definitions:** Offshoring happens when private firms or governments decide to import *intermediate* goods or services from overseas that they had previously obtained domestically. It is therefore about sourcing decisions which involve (a) imports, (b) displacement of domestic production and associated jobs, and sometimes (c) foreign direct investment (FDI) outflows if sourcing happens from overseas affiliates. It is difficult to combine three separate sources of data to measure the precise extent of offshoring defined in this way.
2. **Trade and FDI:** Bearing in mind the limitations to official statistics, they indicate that offshoring of services is quite small, relative to that in manufacturing. In particular:
 - World trade in services, valued at \$1.8 trillion in 2003, is still only a fifth of that in manufacturing.
 - Only 10% of services output enters international trade, whereas 50% of manufacturing does, indicating that offshoring of services is small relative to outsourcing within national borders.

- Despite this small size, the tradability of services is expected to grow, especially in business services (including IT and professional services) that make use of ICT.
 - The top two exporters of computer services are Ireland and India, but the top two exporters of other business services are the US and the UK. Unlike in manufacturing, the US and the UK maintain a trade surplus in business services.
 - In part because of such trade surplus, job loss embodied in offshoring is quite small, at 2.4% of total employment in the US in 2003.
 - For emerging markets, the Indian model of promoting export-platform FDI in software and business services provides one, but not the only, template for promoting them as offshore locations.
3. **Corporate Strategies:** Growth in outsourcing and offshoring of business services depends on the nature of corporate strategy and business models.
- Corporate strategies to outsource business services became established only in the late 1990s, driven primarily by the ICT revolution and the Anglo-American shareholder value business model, in which CEO/CFO takes a lead to reduce costs and improve return on assets. Asset sales are therefore just as important as relocating to low-cost areas.
 - The current phase of outsourcing and offshoring is marked by two distinct types of outsourcing: first, the unbundling and re-centralisation of corporate functions, and second, vertical dis-integration of inputs. The former affects all sectors of the economy, including manufacturing and the public sector.
 - These two distinct types of outsourcing offer emerging market suppliers different opportunities to upgrade their capabilities and to create higher value added. In particular, these suppliers that entered markets via the provision of low value added standardized services may move up the supply chain (e.g. in software) or deepen their functional knowledge in business services.
4. **Jobs and Professions:** The movement of service jobs from developed economies to low cost emerging market locations is being accompanied by significant repackaging of tasks, skills, and knowledge into a job, occupation, or profession. This is leading to changes in occupational and professional identity, and is creating new challenges for governments formulating their policies for education and training, and for professional associations thinking about the upgrading of capabilities.

Introduction

Offshoring is the migration of productive economic activity and the associated employment from a home country – normally a developed nation such as the United States – to other parts of the world, especially low-wage countries such as India and China. Now is not the first time that this has become a major political issue. In the 1980s, political backlash in the United States was directed at the import of Japanese automobiles displacing jobs in Detroit. Many Americans have come to accept the inevitability of manufacturing jobs migrating to low cost locations, but offshoring is now hitting sectors in which the US should have comparative advantage.¹ Starting with low value-added activities such as back office transactions and call centres, offshoring has expanded to include knowledge work embodied in software programming, design and development, accounting, law and other professional services. If a good university degree in computer science or professional training is not a ticket to good white-collar jobs, what is? Some might react with an intellectual reflex that the unfettered market always works out for the best, so that offshoring would in the long run be best for the home country. But they would miss the point of the offshoring debate, unless they appreciate the political nerve that is touched by concerns for such job losses.²

There is now an astounding amount of analysts' and consultants' reports, academic research papers and books, as well as newspaper and trade journal articles about outsourcing and offshoring. This background paper is an attempt to inject intelligence into the debate by establishing definitions, analytical frameworks, and empirical evidence in a field driven often by pious generalisations and ideological reflexes. The aim of this paper is not merely to provide an objective picture of what is going on in the outsourcing and offshoring field, but to sharpen our vision so as to be able to, for example, formulate better policies as home and host country governments, professional bodies, and business firms.

Before we proceed, the terms 'outsourcing' and 'offshoring' require clear definitions. Every business firm (or public sector organization) must make two separate decisions, one concerning the boundary of the organization and the other concerning the location of its activities. Firms may opt to 'buy' rather than 'make' inputs and services in-house. **Outsourcing** involves greater specialisation as firms switch from sourcing inputs internally to sourcing them from separately owned suppliers (indicated by the green downward arrows in Figure 1). **Offshoring** occurs when firms move production overseas (indicated by the red arrows in Figure 1).

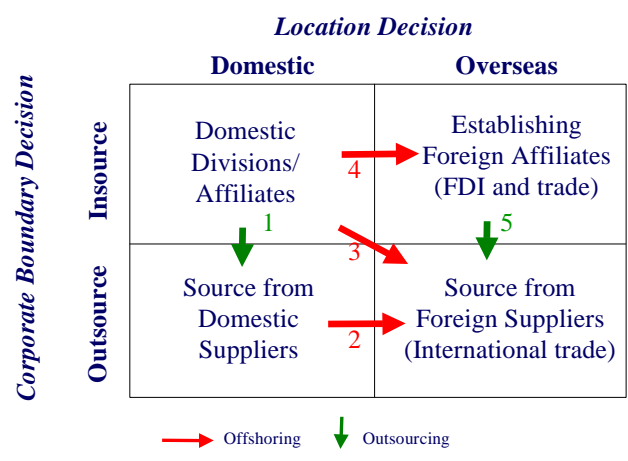
¹ The US is used as a major example for expositional convenience, but there are plenty of replays of similar scenes in the UK and other OECD countries.

² Such concerns provoked a flurry of legislative proposals in 34 US states, all intended to restrict offshoring in state contracted work (UNCTAD 2004).

There are three different trajectories towards offshoring, as shown in Figure 1. First, firms may already be outsourcing (Arrow 1), but decide to switch from a domestic supplier to a foreign supplier (Arrow 2). Second, firms may make the decision to outsource and to offshore to a foreign supplier simultaneously (Arrow 3). Third, firms may source from overseas locations by establishing a foreign affiliate (Arrow 5); this is sometimes called 'captive offshoring'. Lastly, switching the source from an overseas affiliate to a foreign-owned supplier (Arrow 5) may occur, often involving the sale of foreign affiliates to local firms.³ In this process of switching from 'captive offshoring' to 'offshore outsourcing', host economies are likely to benefit from greater beneficial spillovers in terms of technology and higher skilled jobs.

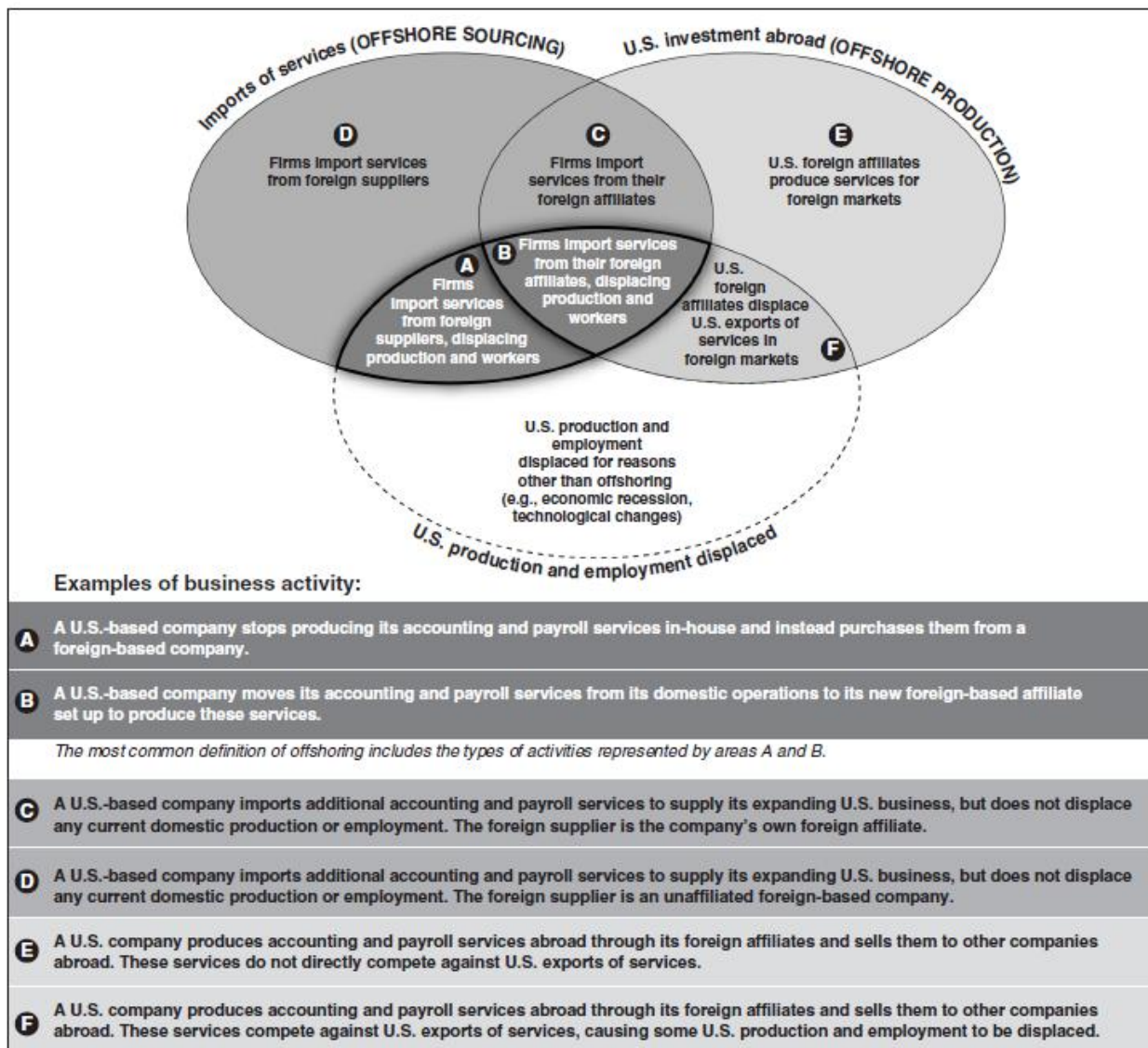
One further complication to the definition of offshoring is the associated displacement of production and jobs in the home country. As Figure 2 shows, offshoring may be defined as a combination of three things, namely imports, outward foreign direct investment (FDI), and displacement of jobs at home. In the Figure, the strongest definition of offshoring involves areas A and B only, i.e. when firms import services from a foreign affiliate or a foreign supplier, displacing production and workers at home. In the rest of this report, these definitions are used in so far as is possible to interpret international and national official statistics. But in many cases, the other areas (C, D and E) are often included in offshoring discussion, not least because the available data are not adequate to distinguish between imports that do, and those that do not, displace domestic production activities. Thus, in the case of offshoring, a key challenge is to gauge the underlying micro-level decisions of firms from official statistics collected at the sectoral and national levels.

Figure 1: Defining Outsourcing and Offshoring



³ For example, Gecis Global, General Electric's captive outsourcing operation in India, was sold and is known as Genpact, with 19,000 employees and \$500 million annual revenue.

Figure 2: Defining Offshoring by Combining International Trade, FDI, and Employment Displacement



Source: GAO.

Source: GAO 2004, p.57.

This paper is structured as follows. In Section 1, international and national statistics are used to gauge the magnitude of the phenomenon called offshoring. Section 2 discusses corporate strategies and business models that account for the growth of outsourcing and offshoring. Section 3 discusses the impact of outsourcing and offshoring for jobs and professions. Lastly, Section 4 provides a summary of the economic balance sheet of the impact of outsourcing on emerging market economies, before drawing implications for public policy and management practice.

1 Offshoring as International Trade and FDI

Offshoring in manufacturing – the practice of sourcing components and contract assembly around the world – has existed for some time. But offshoring in services – particularly in business services – is a relatively recent phenomenon since the 1990s. Because of the latter’s novelty, headline news tend to be more about offshoring of call centres, back office data processing, software development, and R&D than about the displacement of jobs in apparel, toy-making, electronic assembly, or automobile components manufacturing. But what is the relative magnitude of offshoring in services, as compared to offshoring in manufacturing? Establishing this benchmark appears to be a good starting point, before we examine the reasons why services may, or may not, follow the manufacturing trajectory.

Capturing offshoring trends necessitates combining three sources of official statistics: namely, on international trade, foreign direct investment (FDI), and employment. As discussed in the Introduction, the strongest definition of offshoring involves a home country company or government replacing services produced domestically with imported services, leading to the displacement of jobs at home (GAO 2004, p.1) (see Figure 2). In this Section, we examine international trade and FDI data, whilst leaving the discussion on employment until Section 3.

There are difficulties in matching definitions to official statistics even when we restrict ourselves to examining international trade and foreign direct investment (FDI) data only. In international trade, from a UK perspective, services purchased by a UK-based company from overseas are considered UK imports. Although a service (e.g. data processing or a telephone call) may be supplied digitally through telecommunication lines, rather than physically crossing the national border as for manufactured goods, it is still supplied by a foreign-based producer and paid for by a UK-based importer. Offshoring is therefore nothing more than the importing of intermediate goods and services. There are, however, two problems with relying just on international trade data to gauge the extent of offshoring. One problem is that the data show that UK-based entities have purchased services offshore, but they do not indicate whether these entities had previously been purchasing the same services from domestic UK sources. The other problem is the inability to distinguish between goods and services used by producers as intermediate inputs – as offshoring is currently defined – and those sold directly to households. Due to this problem, the inclusion of the latter in imports leads to exaggerating the extent of offshoring as a *sourcing* decision.⁴

⁴ It is possible to use the input-output table to separate out intermediate use and final consumption in international trade. For example, in the UK in 1995, 97 per cent of business services were accounted for by intermediate imports used by business firms. The share for manufacturing sectors was much lower, at

Further, we would ideally like to combine FDI data and international trade statistics to obtain a precise picture of the relative importance of captive offshoring (i.e. sourcing from an overseas affiliate) and offshore outsourcing (i.e. sourcing from an independent foreign supplier). Captive offshoring involves a company establishing or acquiring an operation overseas, from which services are imported back home. But not all outward FDI would lead to offshoring. Companies may decide to invest abroad for a variety of reasons. At one extreme, FDI may be market seeking, resulting in no international trade if the output is sold entirely within the host country. At the other extreme, FDI may be in an export-processing zone, resulting in 100% of the output re-exported back to the home country. Intermediate cases also exist, with some output consumed at home and some overseas. There is therefore no way of sizing up how much FDI leads to how much international trade.

Bearing the above limitations in mind, this Section first establishes a global picture of the shift towards services in international trade and FDI, before exploring reasons why this shift is happening. The Section then identifies some patterns in the regional distribution of trade and FDI in services around the world.

1.1 International Trade and FDI in Services and Manufacturing

Services constitute over 70% of most OECD economies, and over 50% in many emerging market economies also. In 2001, services accounted, on average, for 72% of GDP in developed countries, 52% in developing and 57% in CEE countries (UNCTAD 2004, p.xxi and p.97). In the US, 78% of its GDP was in services in 2002.

Although the services sector is much larger than the manufacturing sector, only some 10% of its output enters international trade, compared with over 50% for manufacturing (World Bank 2003a as cited in UNCTAD 2004, p.97). This largely reflects the fact that most services have been non-storable and hence have to be produced when and where they are consumed. This attribute is responsible for the non-tradability (i.e. absence of scope for cross-border trade) of many services. Consequently, even with information and communication technology (ICT) making services more tradable, world trade in services was \$1.8 trillion in 2003, very small compared to \$7.4 trillion in manufacturing (WTO 2005). Services therefore account for a mere 20% of world trade in 2003.

In part to cope with the limited tradability of services, the structure of FDI has shifted towards services. In the early 1970s, this sector accounted for only one quarter of the world FDI stock, but it had risen to 60% by 2002 (UNCTAD 2004, p.xx). In line with the growing importance of services in GDP, the world's inward stock of services FDI quadrupled between 1990 and 2002, from an estimated \$950 billion to over \$4 trillion (UNCTAD 2004, p.97; see also annex table A.I.18). Services FDI is one proximate way of gauging the magnitude of 'captive offshoring',

55 per cent (Abramovsky, Griffith and Sako 2004, p.11). Thus, comparing the extent of offshoring in business services and manufacturing just by examining international trade data requires caution.

i.e. sourcing from overseas affiliates. It is proximate because only the portion of FDI that results in cross-border trade is captive offshoring.

Despite this growth in services FDI, the services sector is less transnationalized than the manufacturing sector, whether it is measured in home countries or in host countries. Thus, shares of value added, employment, and sales of foreign affiliates relative to total national value added, employment, and sales are significantly higher in manufacturing than in services (UNCTAD 2004, pp.101). Within the eleven service categories studied by OECD (2001), transportation, telecommunications, real estate, and hotels and restaurants (in that order) were the sectors in which inward FDI played the smallest role in developed countries. Perhaps not surprisingly, business services, and especially computer and related services, were at the other end of the spectrum (UNCTAD 2004, p.101).

The development of transnational corporations has been associated with the growth of integrated international production networks. As the cross-border tradability of ICT-enabled services increases, transnational corporations in all sectors may locate one or more activities along the value chain in affiliates abroad, and integrate them with activities elsewhere within their production systems. This implies a growth in not only parent-to-affiliate trading, but also affiliate-to-affiliate trading in the context of intra-firm trade. For example, if a global services company has shared service centres in Mumbai and Manila, these two centres may source from each other as part of a global sourcing network. 'Captive offshoring' is an aspect of this complex intra-firm trade, and there is evidence that this is increasing in importance in services.

It is possible to assess the relative importance of intra-firm trade and external trade in services for the United States (UNCTAD 2004, pp.123). The share of intra-firm imports (i.e. captive offshoring) in total United State imports of 'other private services' rose from 30% in 1986 to 47% in 2002. It was particularly high in 'business, professional and technical services' (71%) and in financial services (60%) (See Table 1). On the export side, the share of intra-firm trade remained more modest, at 35%. In 2002, the United States maintained a trade surplus of \$54 billion in 'other private services', and a surplus of \$27 billion in 'business, professional and technical services'.

These data need to be interpreted with the context and proportions in mind. In particular, 90% of global services output does not cross national borders. However, there are grounds for projecting future growth in international trade in services. 'While the offshoring of services is still in its infancy, the tipping point may be approaching rapidly. Offshoring represents the cutting edge of the global shift in production activity, giving rise to a new international division of labour in the production of services.' (UNCTAD 2004, p.xxiv).

Table 1: Share of Intra-Firm Trade in Selected Services, United States

Unit: US \$billion, of which % intra-firm in brackets

Trade in selected services	1997	2002
Imports		
Other private services	42 (42%)	69 (47%)
Financial services	6 (46%)	9 (60%)
Business, professional and technical services	21 (70%)	38 (71%)
Exports		
Other private services	83 (33%)	123 (35%)
Financial services	13 (18%)	20 (20%)
Business, professional and technical services	44 (51%)	65 (56%)

Source: UNCTAD 2004, p.128.

Note: Figures in brackets indicate the % of intra-firm trade.

1.2 'Tradability Revolution' in Services

The UNCTAD World Investment Report (2004) stated that 'offshoring reflects nothing less than a revolution in the tradability of services' (p.148). Services used to be non-tradable because consumption had to happen at the point of production, i.e. consumers and producers had to be co-located. There are, of course, personal services that retain this essential characteristic of services, such as restaurant waitressing, haircuts, and nursing care.

However, ICT has transformed a considerable portion of services in a number of ways. First, with dramatic falls in telecommunication costs, geographical distance is not a barrier to the simultaneous production and consumption of customer services; European consumers can contact a centre in India to have their insurance claims processed, for instance. Second, ICT enables the separation of production and consumption through data processing and storage; the offshoring of medical diagnosis, patent filing, and payroll and benefits administration take advantage of this feature of ICT. Third, services are becoming more like manufacturing as processes for service delivery can be standardized, and the infrastructure and assets (e.g. software platforms) that enable such service delivery benefit from economies of scale. Thus, 'information today can be standardized, built to order, assembled from components, picked, packed, stored and shipped, all using processes resembling manufacturing's' (Karmarkar 2004).

This trend towards 'productizing' services is happening at the same time as a trend towards 'servicizing' manufacturing. A key driver of outsourcing in manufacturing as well as in services has been to drive down costs and to increase flexibility by turning fixed costs into variable ones. One way of achieving this objective is to outsource the ownership of fixed assets tied up in manufacturing. Microelectronic

service and contract assembly firms, such as Solectron and Celestica, in effect, offer brand-owning client firms a 'manufacturing service' on demand (Sturgeon 2002). The rapid growth of temporary labour agencies, such as Adecco and Manpower, is due to the associated demand for flexible labour services without employing labour directly.

As a result of these factors promoting the tradability of services, the composition of the services sector has changed over time with tradable types of services growing more rapidly than non-tradable types. Moreover, businesses have demanded tradable services, outstripping consumer demand for such services. In the process, some received wisdom about services that we all learned in Economics 101 has been turned upside down. In particular, not all services are more labour intensive than manufacturing, as the use of ICT requires a considerable initial outlay before service can be delivered. Also, technical and professional services have grown in importance relative to personal and other low skilled services.

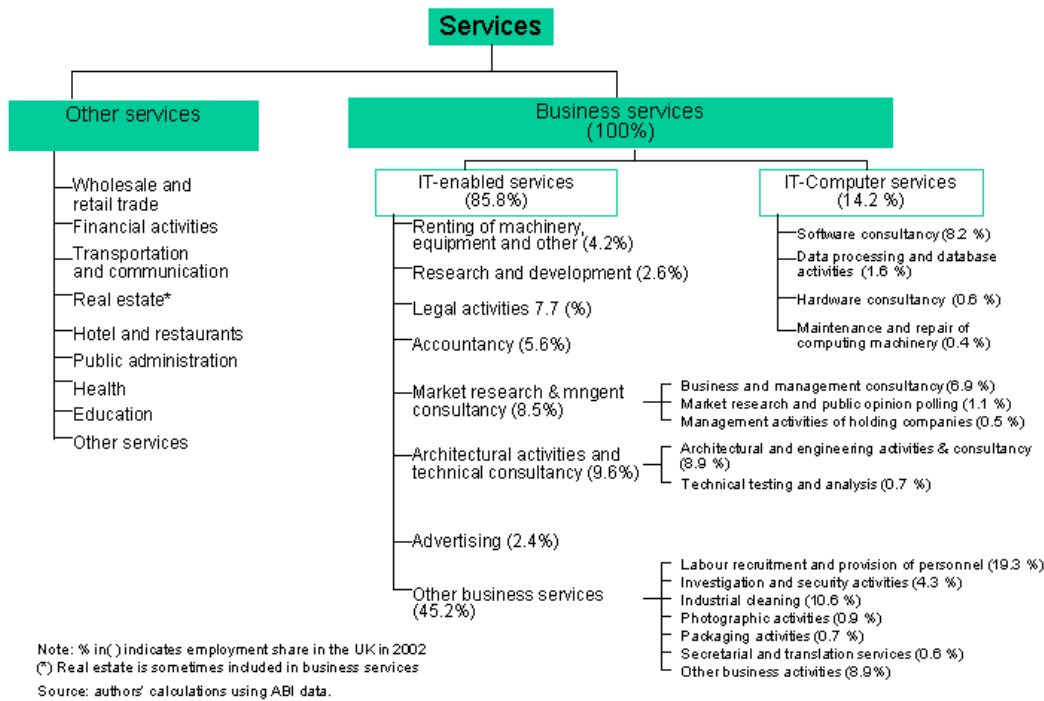
A national economy's activities may be divided into the goods-producing sector (including agriculture, mining, and manufacturing) and the service-producing sector. The latter may further be classified into consumer-oriented services (notably retail distribution and financial services) and business services, i.e. services used by business firms and governments. A significant proportion of business services are IT services, but there is an even bigger segment of services which are IT-enabled, mainly in professional services such as market research, consulting, legal services, and accountancy.

One consequence of the above changes is that the Standard Industrial Classifications (SICs) used in collecting official statistics are increasingly inadequate to cope with the changing nature of services. For instance, the US Department of Commerce's Bureau of Economic Analysis (BEA) collects data on international trade in private services between the US and foreign entities. BEA includes in 'Total Private Services' five subcategories: travel, passenger fares, other transportation (e.g. freight and shipping), royalties and license fees, and 'Other Private Services'. The category 'Other Private Services' consist of six items: education; financial services; insurance services; telecommunications; business, professional and technical (BPT) services; and other services. BPT services are those that are generally associated with offshoring, such as computer programming services, accounting, and legal services. In 2002, total BPT services imports accounted for \$37.5 billion, or 54% of 'Other Private Services', which was bigger than royalties and license fees, or passenger fares (GAO 2004, p.16-17)

Similarly, the UK government's Office of National Statistics (ONS) collects ABI data using its SIC, which has a category called 'Business Services'. This sector employed 4 million people in the UK in 2002, of whom 14.2% were in IT services, whilst the rest were in other types of business services, including R&D, legal services, accountancy, market research and consultancy, and advertising. However, as much as 45.2% of employment in 'Business Services' was in a category called 'Other Business Services', and around a fifth of that in turn was in 'Labour recruitment and the provision of personnel' (see Figure 3).

Figure 3: UK Classification of Business Services

Figure 1: What is business services?



Source: Abramovsky, Griffith and Sako (2004)

It is evident that in both the US and UK cases, the residual 'other' category contains an amorphous collection of services, some of which are associated more with offshoring than others.

1.3 Global Patterns in Services Trade and FDI

Which countries and regions are leading the offshoring phenomenon? In order to answer this question, we need to examine the combination of trade and FDI data. In international trade, the top two exporters of 'computer and information services' are Ireland and India. However, if a broader category that combines 'other professional services' and 'computer and information services' is considered, the top two exporters are the US and the UK. Judging from news about job displacements in the US and the UK, one might be forgiven for thinking that these two service-oriented economies are heading towards trade deficits in business services. However, both countries have had sustained trade surplus. By contrast, although in a minor league, many of the emerging economies face a trade deficit in business services. The majority of the FDI flows occur amongst developed countries. But there is evidence of greater importance of emerging markets as FDI destinations.

MAJOR TRADERS IN BUSINESS SERVICES

World exports of 'computer and information services' were estimated at \$75 billion in 2003 (WTO 2005, p.276). However, business process services such as

accounting, auditing, call centres, and R&D are included in 'other professional services', which are estimated to amount to at least \$420 billion in 2003 (WTO 2005, p.276). Here, we examine major traders in these two categories, 'computer and information services' (CIS) and 'other professional services'.

The two top exporters of 'computer and information services' in 2003 are Ireland and India, which are generally known as the main destinations for offshoring of IT services. The US, the UK, and Germany followed these two in ranking. All the top five, except Germany, have sustained a trade surplus, nearly \$14 billion and \$10.9 billion in the case of Ireland and India respectively, and \$2.4 billion in the US and \$4.1 billion in the case of the UK (WTO 2005, p.278).

If a broader category that combine 'other professional services' and 'computer and information services' is considered, the top two exporters are the US and the UK, with a trade surplus of \$19 billion and \$28.8 billion respectively in 2003. The UK's trade surplus is larger than the US in absolute terms, which makes its relative significance even bigger given that the US economy is ten times as large as the UK economy. Germany, France, and the Netherlands follow these top two in ranking of exports, with Germany and Netherlands having sizeable deficit, and France also a small deficit (WTO 2005, p.278). Ireland is ranked sixth, and India eighth.

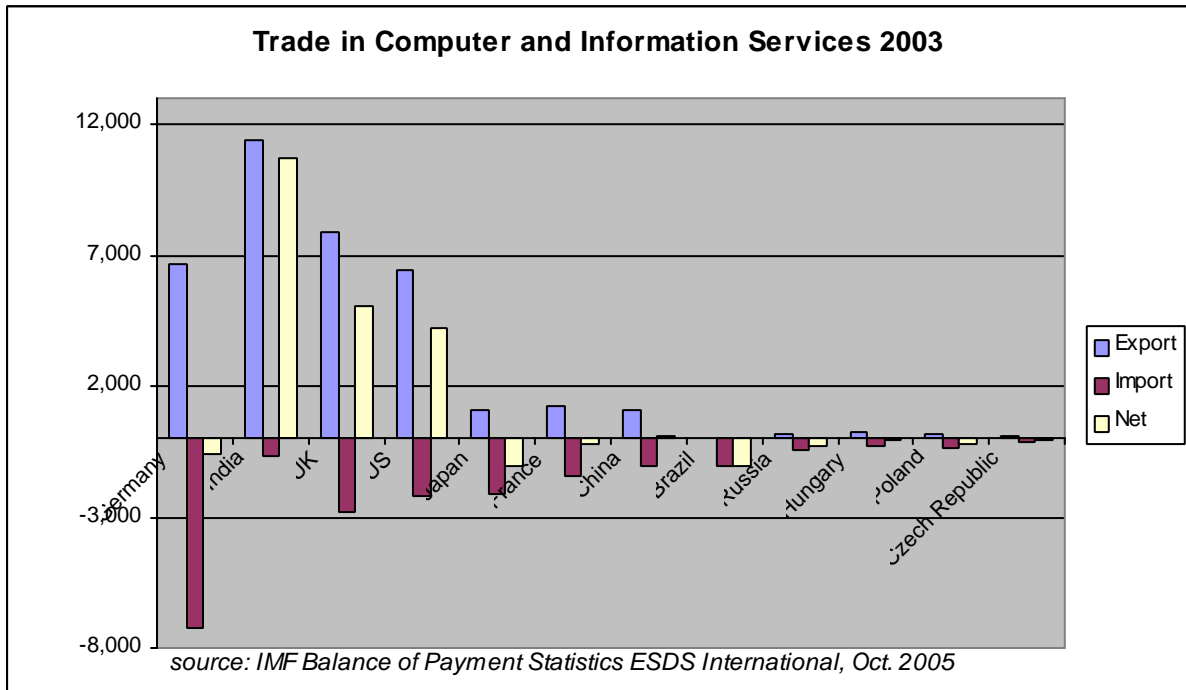
Most trade in business services is between developed countries. For example, in 2002, almost 70% of exports of other commercial services were accounted for by thirteen developed economies. While sourcing business services from developing countries has undoubtedly increased, it is still relatively small. Nevertheless, we can examine the relative magnitude of exports and imports of some emerging economies. In computer and information services, in 2003, China imports nearly as much as it exports with a small trade surplus, whereas Brazil, Russia, Poland and Czech Republic have a trade deficit (see Figure 4a). In business, professional and technical services, Brazil has a trade surplus, but India, Russia, China, and the three CCE countries (Hungary, Czech Republic, and Poland) have a trade deficit (see Figure 4b). Thus, despite the emergent phenomenon of these countries as offshoring locations, on balance, many of them purchase more services abroad than they provide to the rest of the world.

FDI DISTRIBUTION

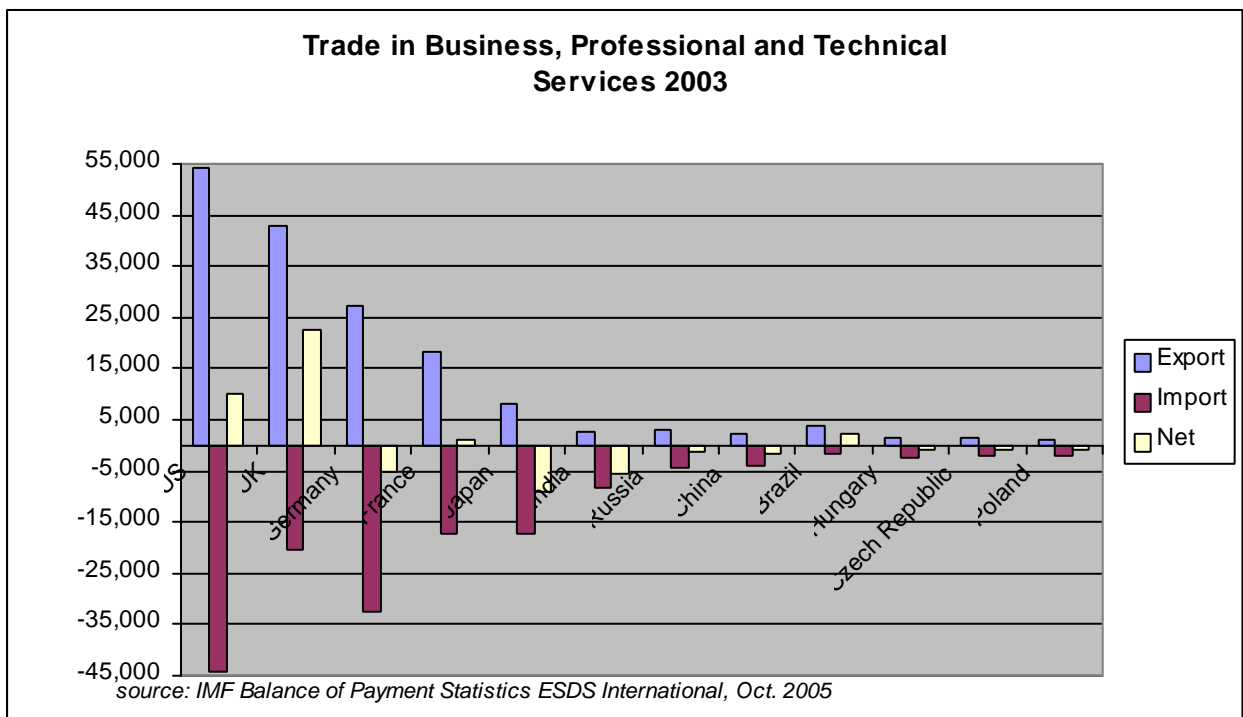
Some three decades ago, transnational corporations from developed countries held almost the entire outward stock of services FDI. The United States alone accounted for two-thirds of the stock of the nine principal home countries. By the beginning of the 1990s, however, the US's share had fallen to around one quarter in terms of stock (UNCTAD 2004, p.99). Many other countries, including some emerging economies, have become outward investors during the 1990s. Developing countries' share in outward FDI stock in services rose from 1% in 1990 to 10% in 2002. Developing countries also increased its share in inward FDI stock, from 17% in 1990 to 25% in 2002.

Figure 4: Trade Balance in Services, 2003

a. Computer and Information Services



b. Business, Professional and Technical Services



Despite this seeming geographical dispersion in FDI, most offshore services to date are concentrated in a relatively small number of countries. In software development and other IT services, four countries – namely Ireland, India, Canada and Israel – accounted for over 70% of the total market for offshore services in 2001 (McKinsey & Co. 2001 as quoted in UNCTAD 2004, p.159). Defining offshore business services more broadly, A.T. Kearney found, in their assessment of the attractiveness of leading destinations for offshoring, that India topped the list, followed by China, Malaysia, the Czech Republic, and Singapore (A.T. Kearney 2004).

EMERGING MARKETS AS OFFSHORING LOCATIONS

In order to assess emerging markets as offshoring locations, it is instructive to look at the case of India with the lens of the theories of FDI and transnational corporations (TNCs). TNCs invest generally either to seek local markets and/or to use those locations as export platforms with access to local resources such as low cost labour or natural resources. The offshoring of IT and other business services mainly falls under the export-platform FDI category. The availability of low-cost English-speaking IT specialists is the key local resource used by TNCs. The key export destination has been the US. However, the ways in which trade and FDI were sequenced differ in the case of software development on the one hand and the more recent case of IT-enabled business services on the other.

Overseas demand has played a role in India's success as an offshore location for software development. In this sector, US TNCs initially demanded Indian engineers to work on site in the US – the so-called practice of 'body shopping' – before offshoring tasks to India in the 1990s. Out of this process were born Indian-owned IT services companies, such as TCS (Tata Consulting Services), Infosys, Wipro, and Satyam Computer, all of which are rapidly globalizing, engaging in FDI themselves to serve global clients. They are also diversifying into providing IT solutions and business services more broadly defined.

By contrast, TNCs have played a more direct role in investing in India to provide IT-enabled services (ITES). For example, General Electric had established a captive outsourcing operation in India, which was subsequently sold to an Indian firm, and now employs 19,000 globally as Genpact. According to NASSCOM, the Indian trade association for software and service providers, foreign affiliates accounted for 58% of exports of offshore business processes in 2003 (UNCTAD 2004, p.170). However, the balance between 'captive offshoring' and 'offshore outsourcing' remains fluid, as some TNCs (e.g. GE, BT) divest their captive offshoring base, whilst others (e.g. IBM) are acquiring Indian companies to enter the market for global delivery of business services.

The following gains accrue to India for being an offshoring location (these categories are adapted from WTO 2005, p. 288). The differential impacts of software development and IT-enabled services (ITES) are noted.

- (a) Earnings from exports: the value of exports of software and other services from India rose from less than \$0.5 billion in 1993/4 to \$12 billion in 2003/4. This is a spectacular growth in a decade. Part of this growth is due to the switch from on-site software development in the US, which may not be recorded as exports, towards providing services from within India.

- (b) Employment creation, especially in cases of underemployment: according to NASSCOM, the Indian IT industry employed 284,000 in 1999-2000, expanding to 813,000, sustaining an annual job growth of over 20%. Prior to 1999-2000, 'body shopping' meant that the location of employment was as much in the US as within India.
- (c) Increase in total investment, especially in capital-constrained host countries: this probably applied to India, because investments in the IT services exporting sector are likely to be net additions to total Indian investment. However, crowding out may become an issue if TNCs' acquisition of Indian firms outweighs TNCs divesting their captive offshoring operations.
- (d) Technology spillovers and other linkages to the local economy: spillovers and linkages are generally found to be small for export-platform FDI. Nevertheless, a shift from 'body shopping' to offshoring in India would have provided more incentives to invest in infrastructure to attract FDI, to promote locally based entrepreneurship, and greater transfer of both technical skills and managerial capabilities.

The experience of export-led growth in the newly industrialised Asian countries (NICs) in the 1960s indicates that rapid growth from export processing zones does not generate sustained development unless the exporting industries become integrated into the local economy over time. In India, domestic sales in the software and services industry accounted for only \$3.4 billion out of a total of \$15.9 billion sales in 2003/04 (NASSCOM 2005). This, in itself, is not surprising given the Indian government's promotion of software exports through the establishment of Software Technology Parks. The challenge is to leverage the greater possibilities of creating linkages to the local economies as India-based operations diversify from software development to IT-enabled services and solutions.

For other emerging markets, there is a choice between modelling themselves after India (and Ireland) as export-processing zones, and alternatives that enable them to retain greater linkages to the local economy.

This Section focused only on offshoring, i.e. economic activities that cross national borders. However, offshoring is only a small part of a more general trend towards outsourcing that is happening within national borders. We will turn to this from the perspective of corporate strategy in the next Section.

2 Corporate Strategies and Business Models

National governments play a part in affecting the climate for outsourcing and offshoring, through their macroeconomic policies, trade policies, industrial policy, and education and training policies. Moreover, a significant proportion of outsourcing and offshoring in services may come from the public sector – national and local governments, and public services (such as healthcare in some countries).⁵ However, unless we understand the criteria by which executives of these public and private organizations are making outsourcing decisions, we are unlikely to be able to make sense of the extent of future growth in outsourcing and offshoring.⁶

How do firms create and capture value in ever-globalising production networks? What activities and functions should be kept in-house? And what activities and functions should be kept at home (i.e. within national borders)? What is the likely impact of these decisions on home and host societies, and in what ways should corporations take those likely impacts into account when they make the decisions? These are questions at the heart of Strategy, to define core competence (Prahalad and Hamel 1990).

Many writers have focused on the ways ICT has enabled centralized large corporate hierarchies to become flatter hierarchies or even decentralized networks. Thus, 'taken to its limits, outsourcing can render large companies obsolete' (Malone 2004, p.7). However, as Malone (2004) and others have correctly noted, ICT may be utilized to enable centralization (to exploit economies of scale) just as much as decentralisation. This implies that in order to understand the impact of outsourcing

⁵ It is government offshoring that has encountered the strongest opposition in the US, during the months leading up to the November 2004 presidential election. See UNCTAD (2004, pp.210) for a list of proposed state legislation restricting government offshoring.

⁶ This section focuses primarily on strategic decision-making by business corporations. To the extent that public sector organizations and private business firms are driven by similar considerations for efficiency and cost reduction, the same analysis would apply to public sector organizations. Moreover, offshoring is a political issue, requiring not only governments but also business corporations to integrate their market and non-market strategies (Baron 1995). For instance, Nike initially considered labour standards at their suppliers they did not own as none of their business. But in reaction to pressures from consumers and NGOs, Nike came to formulate a non-market strategy to monitor, and to be accountable for, their suppliers' labour standards (Locke 2004). Perhaps there will be a time in the future when similar pressures might be brought to bear on unsocial shift patterns and long hours at call centres and R&D labs in emerging markets. But employees whose labour standards would be addressed would not be your typical child labourers from remote villages living on subsistence wage, but well-educated college graduates. A question mark also remains as to the extent to which consumers and NGOs would be able to leverage BPO offshoring operations in the same way that they had done with branded retailers. Consumers would be in direct contact with employees of these operations in the process of purchasing some business services, and retail banking and insurance companies certainly have powerful brands to defend.

strategies on corporate structure, we must analyse the content of corporate strategy, rather than the mere enabling power of ICT to lower communication and coordination costs.

This Section discusses corporate strategies that promote outsourcing and offshoring. We have already noted in the previous Section that only 10% of services output crosses national borders. Offshoring is therefore the tip of the iceberg, a part of a more general trend towards greater specialisation through outsourcing. Thus far, outsourcing that does not cross national borders is bigger in magnitude than offshoring (see Abramovsky, Griffith and Sako 2004 for UK evidence using input-output tables). In analysing why outsourcing is taking place, I highlight three points that are often under-appreciated.

- (a) Outsourcing is happening, in order to **vertically dis-integrate** the production of inputs that go into a company's final products or services. Outsourcing is also happening in order to **unbundle and re-centralize processes in corporate functions**. Whilst the former can be an operational decision made at the factory or divisional level, the latter is made by corporate executives and chief finance officers at the corporate headquarter.
- (b) These two types of outsourcing give differential implications for suppliers' growth and upgrading of capabilities. In vertical disintegration, such upgrading is by moving upstream and downstream in the supply chain, ultimately facing direct competition with client firms in their final markets. In corporate function unbundling, suppliers may deepen their functional expertise without such head-to-head competition.
- (c) Companies engage in both domestic outsourcing (e.g. from London to Glasgow) and offshoring (e.g. from Newcastle to Mumbai) in order to take advantage of 'global labour arbitrage' (Roach 2004). Whilst this focus on wage is understandable for political debates as it affects livelihood, business decisions are made by taking account of many other ways of reducing costs, including selling assets and exploiting greater efficiency through scale economies and process standardization. Outsourcing is often driven by the shareholder value business model, which gives the justification to make outsourcing decisions at the corporate headquarters.

The Section is structured as follows. First, we explain the distinction between vertical disintegration and corporate function unbundling. Second, we explore the implications of each type of outsourcing for entry and growth strategies of vendors operating in both developed and emerging markets.

2.1 Vertical Disintegration vs Corporate Function Unbundling

Outsourcing is one form of restructuring by the large modern corporation with complex production networks that cross national borders. Here, we make a distinction between two types of outsourcing, namely 'vertical disintegration' and 'corporate function unbundling'. This distinction is often ignored or fudged, as we shift our empirical focus from manufacturing (e.g. automakers divesting their components division and sourcing seats from it) to business services (e.g. consumer

products firms sourcing human resource services from an independent supplier). However, business services outsourcing is as much about corporate function unbundling as vertical disintegration. Whilst companies engage in both types of outsourcing in order to reduce costs, each has differential impact on (a) how 'core competence' of the corporation is redefined, and (b) the nature of competition and incentives created for suppliers to diversify and upgrade their capabilities.

Vertical Disintegration

Through international trade and FDI, transnational corporations have come to build complex global networks of geographically dispersed production activities. The resulting global value chains may be producer-driven, as in the case of capital-intensive automobile manufacturing. Alternatively, they may be buyer-driven, as in the case of production processes for brand-owning retailers (such as Gap) and 'manufacturers without factories' (e.g. Nike). The 1990s saw the rise of contract manufacturing in U.S. electronics, with companies such as Dell and Cisco Systems outsourcing the entire manufacturing and assembly processes to contract manufacturers. Solectron, one such contractor, is a global powerhouse, employing 80,000 employees in 50 locations, with \$20 billion sales revenue in 2000 (Gereffi, Humphrey, and Sturgeon 2004). Contract manufacturing also exists in automotive assembly, for instance Magna Steyr in Graz, Austria, which builds seven car models employing 9000 employees on site.

In manufacturing, the 'make or buy' decision is about whether or not inputs that go into the firm's final product should be produced in-house or outsourced to an independent supplier. For example, General Motors used to make many car components in-house at their parts divisions. But by spinning out the parts divisions as Delphi Corporation, GM now sources major chunks of the car, including cockpits, seats, front end modules, etc. from independent suppliers. This is 'vertical disintegration', which happens when sourcing components through markets is cheaper than sourcing them within the firm. Operational costs, such as lower non-union wage at suppliers, are relevant here, as are what economists call 'transaction costs' which are the costs of searching, negotiation, monitoring, coordination, and dispute settlement in business transactions. Transaction costs in market relative to hierarchy (i.e. within-firm) are lowered with greater standardisation of products and less customised investments ('asset specificity' in economics jargon). This is why outsourcing of components and final assembly in industries such as automobiles and electronics is associated with the rise of open product architectures and standardised modules that can be mixed and matched. Dell Computers typifies this approach to outsourcing.

Vertical disintegration in manufacturing gathered pace in the 1980s, in part in response to the rise of 'lean production' and 'lean supply', a paradigm developed by looking at the Japanese example of 'just-in-time' production and delivery. In practice, outsourcing in this context implied the development of long-term committed supplier relations, which were governed neither entirely by market nor by hierarchy. Even if product specifications were not standardised, and transactions complex in the sense of involving frequent adjustments and joint problem-solving, firms may choose to 'buy' rather than 'make' as long as it is possible to develop 'relational contracting' with suppliers. Thus, ownership may be separated, but

transactions are governed by mutual dependence, commitment, intense information exchange, and trust.

A similar process of vertical disintegration is happening in non-manufacturing settings, such as financial services. For example, an insurance company outsources its claims handling process to a third party provider that operates the contact centre and the associated back-office infrastructure. What such a supplier provides is an input into the final service that the insurance company sells, and can be analysed in the same way as a component supplier (in Figure 5 below). Much of so-called BPO (business process outsourcing) refers to the *vertical* dis-aggregation of the value chain.

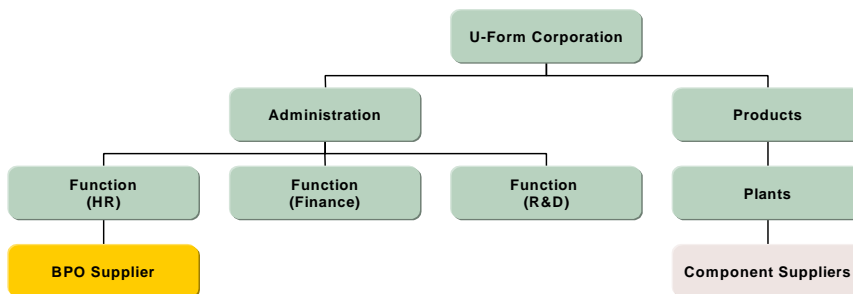


Figure 5: Vertical Disintegration

Corporate Function Unbundling and Re-centralization

However, there is also a different sort of BPO which is not at all 'vertical'. This other type concerns the outsourcing of business processes within corporate functions, rather than of inputs that go into the final product or service of a company. For example, every modern firm has corporate functions, such as Finance and Accounting, Human Resources, Sales and Marketing, Purchasing and Supply, and Research and Development. As the focus of outsourcing shifts from manufacturing to services, outsourcing of business processes within these corporate functions has become just as important as outsourcing of inputs. This distinction is often not made, at the risk of overlooking some of the important causes and consequences of the current phase of outsourcing.

To home in on an important cause of outsourcing, the Chandlerian modern corporation is a better starting point. In the twentieth century, single-product corporations with a functional organisation structure (known as U-Form) came to

develop specialised corporate functions manned by professional managers. These functions had been regarded as 'overhead', hitherto untouched in previous rounds of cost-cutting efforts including through vertical disintegration. However, as the marginal returns from retrenchment involving blue-collar workers and clerical workers become smaller and smaller, firms have now turned to efficiency-enhancing efforts by peeling away at the administrative structure of professional managers. Business process outsourcing, of processes in corporate functions, therefore involves 'corporate function unbundling' in this way, and may affect organisations in the whole economy, both public and private, and in manufacturing and services.

However, the potential for cost saving does not end there. In many cases, corporations have grown to provide multiple products, and had adopted a multidivisional structure (so-called M-Form). In this semi-decentralised structure, each production division has its own set of administrative functions. Divisions have each developed their own processes and ways of doing things, duplicating some tasks that could be made more efficient if standardised and centralised. In order to cut costs and to improve the quality of service delivery, the same function in different divisions can be bundled together, in a shared services centre (see Figure 6). For example, multi-divisional firms such as Proctor & Gamble and Unilever have created such a centre to carry out processes in Finance and Accounting and Human Resources (e.g. payroll administration). It is evident, therefore, that the scope for efficiency gain is greater for a multidivisional firm (M-Form) than for a single-product firm (U-Form). In some cases, such a shared services centre is kept in-house, to exploit economies of scale internal to a global corporation. In other cases, a centre is sold to an independent business services provider, in order to further enhance the efficiency and the quality of service delivery. In sum, corporate function unbundling – taking away functional processes from product divisions – is also simultaneously an act of re-centralisation by the corporate headquarters.

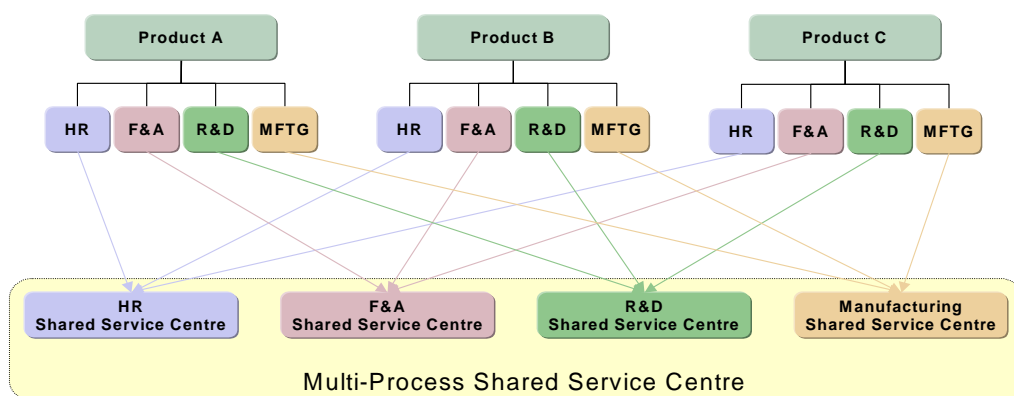


Figure 6: Shared Services Centre Rebundles Unbundled Corporate Functions of Multi-divisional Corporations

The Rise of the Shareholder Value Model and Landmark Outsourcing Deals

Curiously, most activities in 'corporate function unbundling and re-centralisation' have happened since the late 1990s, mainly in the Anglo-American world. Why should this be the case? It seems to be because the current phase of outsourcing is associated with the ICT revolution and the rise of shareholder value. First, ICT enabled real economies of scale to be exploited in services. Second, large outsourcing deals have enabled global companies to simultaneously reduce head count and shift a cost centre to a third party to manage as a profit centre.

The rise of the shareholder value model of corporate governance played a part in promoting this type of corporate restructuring. With vertical disintegration, it is possible for the outsourcing decision to be made at various levels of the corporate hierarchy, including at the decentralized level of a product division or at the factory. However, with corporate function rebundling, the decision must, by the very nature of the decision, always be more strategic and can only be taken at the corporate headquarter level. Chief Finance Officers' and other executives' bonuses are often linked to the achievement of target cost savings and improved return on assets (ROA) through outsourcing. Divesting and outsourcing internal shared services centres help achieve these targets, and improving stock prices becomes a reason for outsourcing.

Thus, large landmark outsourcing deals typically include the sale of an internal piece of asset in the form of a shared services centre. Such asset sale is important for improving return on assets and for stock market performance. Pioneering business services outsourcing deals include those in the human resource field, including BP's outsourcing to Exult (a Californian start-up) (see Adler 2003), BT's outsourcing to Accenture HR Services, and Proctor & Gamble's deal with IBM Global Services (Sako and Tierney 2005).

2.2 Suppliers' Entry and Growth Strategies

In both vertical disintegration and corporate function unbundling, the extent of outsourcing depends in part on the capabilities of actual and potential suppliers in relation to the requirements of the transaction. As new market space opens up, fresh start-ups and existing firms enter. Over time, these suppliers come to change the nature of their relationship with client firms. However, the over-time trajectory and incentives built into upgrading their capabilities are quite different, depending on whether we are in a vertical disintegration setting or a corporate function unbundling setting.

For example, the global production network for the apparel industry underwent transformation from the 1950s to the 1990s. Not only has the epicentre of export-oriented clothing manufacturers shifted from Japan to South Korea, Taiwan, Hong Kong, and now China. The type of tasks undertaken by Asian suppliers also changed enormously. They were initially subcontractors, undertaking simple 'cut,

trim, and sew' tasks based on detailed instruction and fabrics supplied by client firms. But by the 1990s, some became full-package suppliers, capable of designing clothes, making samples, sourcing the needed inputs including fabrics, and even developing retail outlets with their own brands. The upgrading of local suppliers' capabilities by 'insertion' into the global value chain generates substantial backward linkages to emerging market economies.

At the same time, when suppliers in vertically disintegrated markets develop new capabilities, they are likely to engage in an invasive strategy to go upstream and downstream, in direct competition with the client companies' business. In electronic assembly, for instance, assembly contractors in Taiwan, such as ACER, may come to compete directly with their clients once the former starts selling branded electronic goods.

By contrast, in markets for corporate function unbundling, providers of business services do not compete in the same final market as client firms. For example, IBM is in the business of providing IT and other business services, and is totally unrelated to the business of providing intermediate inputs or final goods in its client, P&G's market for consumer products such as soap and toothpaste. Consequently, suppliers may grow over time, to occupy higher value added processes, but they are not in the same market space as the client firm's final markets. This puts suppliers in a relatively strong position vis-à-vis buyers, which cannot exercise monopsonistic power. If Johnson Controls fails to make and deliver seats on time for General Motors, GM's assembly lines would stop. However, if IBM were to fail to process payroll or travel expenses on time, P&G's productive activities would not be affected so directly. Table 2 provides a summary of the consequences of making the distinction between vertical disintegration and corporate function unbundling.

Table 2: Distinction between Vertical Disintegration and Corporate Function Unbundling

Vertical Disintegration	Corporate Function Unbundling
Suppliers make inputs that go into clients' final products or services	Suppliers provide services in corporate functions, such as Finance, HR, Marketing, Purchasing
Upgrading (moving up the supply chain) may involve invasive strategy, competing in the same market as client firms	Deepening functional expertise operates in a different market from client firms' final market
Bilateral monopoly is a possibility, with suppliers engaging in hold-up and buyers exercising monopsonistic power	Client firms are in a weak position, with no monopsonistic power vis-à-vis suppliers.

In vertical markets, suppliers typically attempt to create higher value added by moving on from simple assembly to component manufacturing, design, and marketing. In markets for business services, suppliers also operate on the notion of climbing the value added ladder, by moving from simple to more complex

transactions. The complexity of transactions is increased by shifting, to use industry jargon, from *transactional* to *transformational* outsourcing. Transactional outsourcing is defined as outsourcing that focuses on efficiency gains through the application of standardized solutions to automate previously labour intensive processes, one by one. Transformational outsourcing, by contrast, is defined as outsourcing that focuses on improving the effectiveness of an entire corporate function such as Human Resources. It builds on the transactional efficiency improvement efforts, and further integrates multiple processes. This releases resources for the retained organisation to focus on strategy formulation. Suppliers then derive higher value added by providing more customised solutions (at a higher price therefore), and by providing services that are closer to the advisory and consulting end of the spectrum.

From a global perspective, there are four market entry points for outsourcing of business services. The first is deep domain expertise in one corporate function. 'Pure play' firms, e.g. Exult, SynHRG, and Xchanging, were created from scratch by private equity firms such as General Atlantic Partners, around an anchor client. These anchor clients are typically brownfield operations of large corporations that are looking to sell their assets. The second entry point is through a single process in a corporate function, such as payroll or benefits administration (e.g. Hewitt) or recruiting (e.g. Manpower, Adecco). These firms have diversified into offering services in multiple processes mainly through M&A. The third entry point is through IT technology, where firms such as EDS, IBM, ACS, and HP are leveraging their technological expertise to build so-called asset-based model of business process outsourcing. Lastly, the fourth entry point is consulting, with firms such as Accenture, offering business services in multiple functions (e.g. HR, Finance and Accounting, etc.) on which they give strategy consulting advice.

2.4 Implications for Upgrading Firms in Emerging Markets

From the perspective of suppliers in emerging markets, the above discussion implies the following. First, the characteristics of the transaction are important in identifying opportunities for market entry. Offshoring – i.e. outsourcing at a geographical distance – is made possible because ICT has enabled (a) information content to be digitised, (b) processes to be separated and standardised, and (c) face-to-face contact to be replaced by contact centre customer service. If any one of these three features cannot be achieved easily, then offshoring is less likely. Thus, software development is more difficult to break up into processes, than payroll administration. At the same time, suppliers may find that in the process of moving up the value chain, from standardized services to customized services, distance becomes a barrier. This would promote the globalisation of Indian BPO providers, as they engage in FDI activities to be close to their clients, over and above 'body shopping', in the US and Europe.

Second, opportunities for broadening and deepening supplier capabilities depend in part on the point of market entry, and in part on whether client firms are disintegrating vertically or unbundling their corporate functions. Indian software firms therefore may 'move up the supply chain' by developing more complex and higher-value added software; they may instead or also diversify into providing

services for unbundled corporate functions. Each corporate strategy requires acquiring a different set of skills and capabilities.

For now, it is often stated that the division of labour is between Indian BPO suppliers that provide low-cost efficiency in transactional outsourcing, and US and European-owned global suppliers that provide higher value added transformational outsourcing. Over time, however, the nature of specialisation might change as some emerging market suppliers become more capable, global, and compete head-to-head with the likes of GE, IBM, and Accenture.

3 Impact on Jobs and Professions

One major muddle over offshoring lies in relating it to job losses and gains. This Section attempts to eliminate this muddle by examining what assumptions are made by four categories of experts that link offshoring to jobs: (a) journalists and others that rely on announcements of offshoring by individual firms; (b) market analysts who aggregate future projections by companies; (c) consultancies that take a simplified version of 'gains from international trade' to project an overall welfare gain from offshoring; and (d) economists who are aware of 'the usual theoretical caveats' in examining the impact of offshoring as trade on welfare, including jobs and wages.

To this, I would add a fifth category, namely (e) other social scientists who see the main impact of offshoring as the repackaging of tasks within job categories, and the redrawing of boundaries in the system of professions. This is an important phenomenon requiring attention by businesses, professional associations, and public policy makers. It is just as important as the commonly made call for policy to deal with the fact that job displacements are concentrated on a relatively few people in comparison to the more dispersed benefit of increased international trade.

This Section examines each of the five categories of analysis in turn.

3.1 Companies and Market Analysts Project 'Job Exports', and Hence Job Gains for Emerging Markets

As shown in Figure 2 (in the Introduction), the strongest notion of offshoring incorporates immediate job displacement as part of the definition. Here, offshoring is indeed about 'shipping jobs abroad'. Announcements by individual companies are the most direct source of information. Major examples include Aviva transferring 7000 jobs from Britain to India by 2004; HSBC creating 4000 back-office jobs in India, China and Malaysia by the end of 2003; BT creating 2200 call centre jobs in India by 2004; and British Rail creating 600 National Rail inquiries jobs in India (UNCTAD 2004, p.168, confirmed by FACTIVA search). Unfortunately, in this growth market for business services, it is not always clear if 100% of the jobs created in a new overseas operation, say in India, are displacing, or are in addition to, home country jobs.

Next, market analysts such as Forrester Research and Gartner have made future projections that are primarily based on intelligence gathered from talking to major companies about their outsourcing and offshoring intentions. Some examples of

such projections are listed in Table 3. Unfortunately, these studies are not directly comparable due to differences in the coverage of sectors and occupations, and in the time frame used for analysis. Perhaps the best cited amongst the studies has been Forrester’s projection that 3.3 million services jobs will be shifted outside the United States by 2015. Of the 3.3 million, Forrester estimated that about 600,000 would move between 2000 and 2005.

Typically, experts with economics training react to these figures by pointing to the small magnitude of the analysts’ projections in the context of the whole economy. For example, Bureau of Labour Statistic’s Business Employment Dynamics (BED) series shows that the US economy creates and destroys millions of jobs each year; 7.9 million job gains and 8 million job losses in 2002.

Table 3: Estimated Impact of Offshoring on Jobs

Source	Scope and methodology	Findings
Bardhan & Kroll ^a (University of California, Berkeley)	Scope: All services occupations. Methodology: Identifies factors associated with offshoring, applies them to all occupations to determine which may be affected, and sums total 2001 employment in these “at-risk” occupations. Does not identify the extent to which offshoring occurs in any particular occupation.	Finds fourteen million jobs in “at-risk” occupations in 2001, or 11 percent of U.S. workforce. These occupations include both IT and other occupations. Describes this as the “outer limit” of potential direct job loss, not actual number of jobs that will be offshored. Study does not provide a lower limit of potential job losses.
Deloitte Research ^b	Scope: Global and U.S. financial services industry and employment. Methodology: Surveys major financial services firms and applies estimates of the value of planned offshoring to industry costs and employment. Uses an estimate of U.S. financial services labor based on the industry size in Germany. Note: Deloitte provides consulting services to companies.	In the financial services sector, 850,000 jobs may move offshore (15 percent of industry employment).
Forrester Research ^c	Scope: Examines 18 different occupational categories in the services sector of the U.S. economy. Methodology: Ranks each occupation by four factors related to offshoring, then applies a growing percentage share of jobs offshored (depending on the rank) for 2000, 2005, 2010, and 2015. Employment is based on 2000. Note: Forrester provides consulting services to companies.	Across all services occupations, 3.3 million jobs are projected to move offshore by 2015. About 600,000 jobs may be offshored by 2005.
Gartner, Inc. ^d	Scope: IT industry and employment (IT vendors, IT services providers, and IT jobs within non-IT enterprises). Methodology: Bases estimate on professional discussions with IT suppliers and purchasers about their offshoring plans and knowledge of industry. Uses Information Technology Association of America estimate of 10.3 million IT practitioners in the U.S. in 2003 as the employment base. Note: Gartner provides consulting services to companies.	By the end of 2004, 500,000 IT jobs may be displaced. One out of every 10 jobs within U.S.-based IT vendors and IT service providers may move to emerging markets, as may 1 of every 20 IT jobs within user enterprises (non-IT companies that employ IT workers).

(Continued From Previous Page)

Source	Scope and methodology	Findings
Goldman Sachs ^a	<p>Scope: Examines both services and manufacturing industry offshoring.</p> <p>Methodology: For services occupations, bases estimates of offshoring on two approaches: 1) estimated the share of jobs that could be relocated abroad on a sector-by-sector basis, based on conversations with industry experts and 2) estimated the share of each occupation that could be offshored.</p> <p>Note: Goldman Sachs provides consulting services to companies.</p>	<p>Estimates that U.S. producers have cumulatively moved fewer than 200,000 jobs to overseas affiliates but could increase the number of jobs overseas to a few hundred thousand per year over the next 2 to 3 years. Up to six million jobs could be affected by offshoring over the next decade.</p>
Global Insight, Inc. ^f	<p>Scope: Examines offshoring in IT sector only (software and other IT services), but estimates economywide effects.</p> <p>Methodology: Forecasts 2004 to 2008 based on an assumed 40 percent savings to baseline cost associated with IT software and service offshore outsourcing. Model forecasts the economy with offshore outsourcing and without to compare the impact on key variables.</p> <p>Note: The Information Technology Association of America, a business group, funded the study. Global Insight provides consulting services to companies.</p>	<p>About 104,000 of the 372,000 IT jobs were lost from 2000 to 2003 owing to offshoring (or 2.8 percent of total core IT jobs in 2000). After initial higher unemployment (2000 to 2002) primarily due to displaced IT jobs, net employment rebounded with jobs being created in both the IT sector (though more slowly than if there were no offshoring) and in other sectors of the economy. Other effects include higher real earnings (due to lower inflation and higher productivity), increased spending on IT (diffusion through the economy), higher gross domestic product, and increased exports.</p>
McKinsey Consulting ^g	<p>Scope: Focuses on IT and Business Process Offshoring (BPO) costs.</p> <p>Methodology: Case study of BPO in India. Estimates costs and cost savings for steps in a re-engineered business process. Case study may not be representative of other offshoring cases.</p> <p>Note: McKinsey Consulting provides consulting services to companies.</p>	<p>Of the \$1.45 to \$1.47 of value created globally by offshoring \$1.00 of U.S. labor costs, the United States captures \$1.12 to \$1.14, while receiving countries capture about \$0.33. This effect is due to new revenue (U.S. exports), repatriated earnings, and redeployed labor.</p>

Source: GAO presentation of information from private sector studies.

^aBardhan and Kroll, "The New Wave of Outsourcing," (University of California, Berkeley, Fall 2003).

^bDeloitte Research, "The Cusp of a Revolution: How Offshoring Will Transform the Financial Services Industry" (2003).

^cForrester Research, "3.3 Million U.S. Services Jobs to Go Offshore" by John McCarthy (Nov. 11, 2002).

^dGartner, "U.S. Offshore Outsourcing: Structural Changes, Big Impact" by Diane Morello (July 15, 2003).

^eGoldman Sachs, "Offshoring: Where Have All The Jobs Gone?" (Sept. 19, 2003).

^fGlobal Insight, "The Impact of Offshore IT Software and Services Outsourcing on the U.S. Economy and the IT Industry" (March 2004).

^gMcKinsey Consulting, "Offshoring: Is It a Win-Win Game?" (August 2003).

Source: GAO 2004, pp.44-45.

Moreover, the MLS data show that 'overseas relocation' was given as a reason for mass-layoff job losses for only a small fraction of workers laid off during 1996-2003, just 13,000 or 0.9% of total layoffs. Preliminary data for the first quarter of 2004 showed that 1.9% of total layoffs were attributable to 'overseas relocation' (GAO 2004, p.34).

Once we move away from data that capture companies' intent to offshore to official statistics, there is a difficulty in not being able to distinguish between job losses due to recession and losses due to offshoring. Nevertheless, at least in the US, offshoring has been blamed for the sluggish recovery of the labour market in the years following the 2001 recession (so-called 'job-less recovery'). Groshen et al (2005), however, demonstrates otherwise. They first arrive at a measure of 'US jobs embodied in net imports', i.e. an estimate of the number of jobs needed to

produce US net imports domestically. In 2003, 2.6 million jobs were such jobs, or 2.4% of total employment in the US, which is quite small. Moreover, such jobs lost to net trade flows began to accelerate in 1997, at a time when the US labour market was quite tight, whilst they fell from 2001 to 2003, during the post-recession period.

Offshoring is associated with loss of jobs for developed economies, and therefore job gains for emerging economies. However, it appears that such job gains are significant but not overwhelming as proportion in the total labour force. It is the rate of growth, however, that is very rapid. For example, data from the software industry in India show that software workers in India serving foreign clients doubled from 235,000 in 1999-2000 to 530,000 in 2003-04 (NASSCOM, as referred to in WTO 2005, p.301). Employment growth in business services (ITES) was even faster, from 42,000 in 1999-2000 to 245,000 in 2003-04.

This sub-section demonstrated that different experts make different assumptions about what are the most appropriate ways of counting job shifts due to offshoring. Individual companies make announcements about 'jobs shipped abroad', meaning jobs created in emerging markets that directly displace jobs at home. Market analysts aggregate future projections by companies. These are perfectly relevant information for business decision-making. For the well-being of the national economy, however, economists are right in pointing out that we should look at the net effect, by taking account of jobs embodied in exports as much as jobs embodied in imports. At this different level of analysis, the net job losses embodied in international trade is quite small relative to job losses in the whole US economy. Thus, the assertion that the woes of job losses since the late 1990s can be laid at the feet of offshoring is not correct.

3.2 Use of International Trade Theory by Consultants and Economists

According to a well-cited study by McKinsey (2003), every dollar spent on offshoring to India leads to \$1.12 - \$1.14 in benefits back home in the US. The benefits are in terms of lower consumer prices and lower costs for businesses. The same study also projects a much smaller gain for a country like Germany, which has more rigid labour markets. Thus, as long as resources are mobile, offshoring is understood to be a positive sum game, as economies specialise in activities in which they have comparative advantage. Of course, shifts in comparative advantage entails some people losing jobs, and the short-term challenge is to facilitate these displaced workers' search for new jobs in higher value added sectors. The discussion in McKinsey and other similar studies that sing the praise of long-term benefits of offshoring thus assumes that those benefits are always 'win-win', i.e. distributed to both home and host countries.

This is the point at which it would be wise to listen to academic economists. Offshoring leads to gains from trade, but 'subject to the usual theoretical caveats and practical response' (Bhagwati et al 2004, p.94). Two papers in the 2004 issue of the Journal of Economic Perspectives have discussed this issue in the context of US policy. They discuss the fact that increasing trade in services may change the price of exports relative to imports. This means that there may be a reduction in

how much the US can get from abroad for every product it sells to foreigners. This can offset the overall income gains from trade, leading to lower overall welfare.

Moreover, more international trade in services is likely to be a good thing, since it means lower consumer prices if cost savings are passed onto consumers, and devoting resources to more efficient and high value added activities at home. These gains, however, depend critically on the ability of the economy to react by introducing new products and processes that generate new jobs. In manufacturing, a simple product lifecycle applied, with a developed economy (notably the US) specialising in product innovation. This meant that as products became mature and commoditised, production shifted to lower-cost locations. Without understanding more about the process of innovation in services, it is difficult to project whether a similar product lifecycle indeed applies to business services, and the extent to which developed economies continue to retain their current comparative advantage in innovation.

3.3 Impact on Jobs and the System of Professions

A different kind of exercise in understanding job shifts is by examining the nature of labour markets and occupations more directly. McKinsey (2005) engaged in such exercise by examining service jobs in eight sectors (namely packaged software, IT services, banking, insurance, pharmaceutical, automotive, healthcare, and retailing). The study calculated that 18.3 million jobs in these sectors could be done by people located anywhere in the world in 2003. They estimate that by 2008, 160 million jobs, or about 11% of total global service jobs, could be carried out remotely, but only 4.1 million of those would actually be offshored. This modest projected take-up is attributed to company-specific barriers rather than regulatory barriers. Such barriers were said to include operational issues, hostile management attitudes to offshoring, and insufficient scale.

The McKinsey study seems to assume that the nature of jobs that exist in the sectors they examined remain unchanged as a result of outsourcing and offshoring. The same limitation is reflected in any analysis that is based on official employment statistics. However, task changes do occur *within* jobs. There are many examples that show that task changes within jobs have been quite large (Levy and Murnane 2004, p.52). For example, a shift from mass production and lean production changed the nature of work for shop floor workers, whose job scope was enhanced to include quality self-check and problem solving. In financial services, exceptions processing clerks in banks might have specialised in handling a single kind of exception, e.g. overdrafts. With digitisation of cheques, clerks' task scope expands to hand all types of exception – overdrafts, stop payments, address changes, etc.

Outsourcing and offshoring, alongside technological change, are having a direct impact on the way jobs and professions are packaged. For example, as IT services became outsourced, IT professionals are expected to have the 'front-office' managerial skills in procurement, finance and accounting, etc. as well as their technical IT knowledge (British Computing Society 2004). Similarly, as HR services are outsourced, the boundary of the skill set that is necessary for the HR profession

is being redefined. Not only do HR professionals have to have 'change management' expertise. They may focus on developing process expertise by working in shared services centres. They may also develop greater subject matter expertise in compensation, training, or recruitment. The days of generalist HR managers are said to be over, as points of entry into an HR career become more varied, with non-traditional entrants with a background in operational efficiency, procurement, consulting, or financial management.

These changes in the content of jobs and professions are driven by a combination of technological change and corporate strategy for outsourcing. Public policy, as well as business practice, would do well to take account of this dimension of job shift.

4 Conclusions and Implications for Emerging Markets

This background paper provided an overview of key issues in the debate on outsourcing and offshoring. It put forward a clear definition of offshoring – defined as a combination of trade flows, FDI, and employment shifts -- before doing three things. First, official statistics on international trade and FDI were examined to gauge the extent of offshoring in services. Second, the paper analysed the causes and consequences of different types of outsourcing seen as strategies for corporate restructuring. Third, the impact of outsourcing on jobs and professions was assessed in terms of the repackaging of tasks, skills and knowledge.

These three pertinent areas – trade and FDI, corporate strategy, employment and labour markets – were examined separately. The challenge in having an informed debate is to articulate the links among the three. This Conclusion section draws a balance sheet of the benefits and costs of offshoring to explore (but not empirically establish) these links, before raising some action points and further questions.

4.1 Economic Balance Sheet of Offshoring for Home and Host Countries

For the developed economies that offshore to emerging market economies, the balance sheet items are as follows.

(a) Benefits include:

- ① Consumers face lower prices for services produced offshore
- ② Firms may retain higher profits due to lower costs and economies of scale, particularly if firms avoid passing cost savings onto consumers
- ③ Productivity may improve due to greater specialization from outsourcing and offshoring
- ④ Workers may move from low wage-low skilled jobs to high wage-high skilled jobs over time, as long as labour markets are flexible.
- ⑤ Country specialisation in innovation in the form of the development of new goods, services and processes.

(b) Costs are mainly distributive, and include:

- ① Dislocation and unemployment of workers who had worked for operations that are offshored
- ② Slow pace of adjustment particularly in coordinated economies such as Germany and Japan

Next, the balance sheet for the emerging market host economies are as follows.

- (a) Benefits include:
- ① Creation of employment generally and of specialist jobs, particularly in countries with unemployment and underemployment
 - ② Increased export earnings due to providing offshoring services
 - ③ Increase in total investment in capital-constrained host countries
 - ④ Technology spillovers
 - ⑤ Linkages to the local economy, through promoting better infrastructure, entrepreneurship, and provision of better quality goods and services.
- (b) Costs include:
- ① Possible weak linkages to the host economy if export-platform FDI is confined to export processing zones
 - ② Greater wage inequality if offshoring increases demand for skills that are relatively high within the host economy.

4.2 Things We Need to Do

There is a small list of things that we can do to improve the quality of discussion concerning offshoring and outsourcing. Some points of action are evident in the course of the discussion in the paper. Nothing is worse than having a blind debate about an ill-defined issue, for which we do not have reliable facts and figures at hand. In particular,

- (a) We should agree on definitions of what is meant by outsourcing and offshoring, and to seek to collect data that correspond to the chosen definitions.
- (b) We should improve the way we collect official statistics at the national and international levels. At a minimum, the classifications of services may be revised to reflect the growth of ICT-enabled business services. Also, making the quality of services data approach that for goods would be desirable, especially on intra-firm trade and information of destination of exports and origins of imports.

4.3 Questions for Policy and Practice

In order to inform policy debate and management practice in this area, we also need to be able to answer the following questions.

- (a) What factors are likely to account for the speed with which services will become even more tradable than now? To what extent is this a matter of ICT technology, management practice, a shift in the mindset of end users, and commitments made under the GATS Agreement?
- (b) How likely is it that the primarily Anglo-American business model of outsourcing of corporate functions would spread to other more coordinated developed economies such as Germany?

- (c) What are the criteria for corporations choosing between captive offshoring and offshore outsourcing?
- (d) What policies should the state provide to ease the cost of offshoring in terms of job displacements? Should the state play a role in redefining the boundary of job skills and professions, or should they be left to private associations?
- (e) What is different, if any, in the role of the state in promoting innovation in business services as compared to in manufacturing?
- (f) What should emerging market governments do to attract FDI in business services to an offshore base, whilst enhancing spillover effects to the rest of the host economy?

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