

VOLUME 14

NUMBER 2

AUGUST 2005

TRANSNATIONAL CORPORATIONS

**Went for cost, priced at cost? An economic
approach to the transfer pricing
of offshored business services**

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United Nations
New York and Geneva, 2005
United Nations Conference on Trade and Development
Division on Investment, Technology and Enterprise Development

Went for cost, priced at cost? An economic approach to the transfer pricing of offshored business services

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What are the implications of the rapid growth in offshored business services for transfer pricing, the pricing of products traded between affiliated firms? I explore these implications through a case study of transnational corporations in the teleservices industry. Teleservices firms own foreign affiliates that provide inbound and outbound call services to third party clients. Economic analysis, applied to the facts and circumstances of the industry, is used to develop pricing rules for offshored call centres, including the implications for location savings. Even though the catchphrase “Went for cost, stayed for quality” does apply to teleservices as it does in other offshored business services, I conclude that “Went for cost, priced at cost” is the appropriate transfer-pricing maxim for tax authorities and firms to follow.

Key words: offshoring, outsourcing, transfer pricing, business services, teleservices, international taxation

1. Introduction

International trade and foreign direct investment (FDI) patterns are increasingly shifting from manufacturing to services (UNCTAD, 2004). The reasons for the rapid growth in services trade and FDI are straightforward. First, transnational corporations (TNCs) in service industries such as airlines, banking, accounting and consulting are rapidly becoming

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transnationalized. The privatization of State-owned enterprises in service industries such as telecommunications, electricity and postal services has encouraged inward FDI, particularly in Latin America and Central and Eastern Europe. Second, TNCs in the manufacturing sector are setting up foreign affiliates to provide support functions for the corporate group; financial, trading and marketing affiliates are common examples. Information technology enabled services (ITES), providing back office and support functions (payroll, order fulfillment) and front office functions (customer care), are being relocated to developing countries such as India and the Philippines. Information technology has enabled the disassembly of service processes into a number of relatively separable activities; codifiable interfaces between these activities enable them to be allocated to legally independent organizations and placed in physically distant locations. While the original move offshore for most TNCs was caused by the availability of low-cost labour, both quality and cost are now key drivers of services FDI, as reflected in the maxim: “Went for cost, stayed for quality” (Dossani and Kenney, 2003, 2004).

The research question I address in this article is: what are the implications for transfer pricing of the rapid growth of FDI in business services? *Transfer pricing* is the pricing of products traded among affiliated units of a TNC. Because the prices are set in-house, there are opportunities for TNCs to manipulate them and avoid or evade Government regulations such as customs duties and corporate income taxes. In order to curtail these opportunities, most Governments have adopted transfer-pricing regulations based on the OECD guidelines (OECD, 1995). These guidelines require TNCs to follow the arm’s length principle, i.e. firms must price each intracompany transaction as if it had occurred between two unrelated parties negotiating for the same product under the same circumstances as the related party firms (Eden, 1998, 2001; IRS, 1994; OECD, 1995). Transfer pricing is, and has been for many years, the most contentious issue in international taxation due to the difficulties involved in setting arm’s length prices acceptable to both tax authorities and TNCs (Ernst & Young, 2003; UNCTAD, 1999). Comparable transactions between unrelated parties are often not

available for intrafirm transactions in goods, much less for intangibles and services. Thus, transfer pricing is an area fraught with difficulties and pitfalls for the unwary.

This article explores the implications for transfer pricing of the new trend in offshoring of business functions. As TNCs move business services offshore, they must develop transfer-pricing policies for pricing these intracompany transactions. At the same time, both home and host Governments must apply the arm's length standard to these transactions. However, transfer-pricing regulations for services are much less developed than for goods and raw materials (Feinschreiber, 2004; Eden, 1998). TNCs are expected to follow the benefit-cost principle, with little explicit guidance as to acceptable methodologies compared to the detailed guidelines available for goods transactions (OECD, 1995; IRS, 1994).

Despite, or perhaps because of, the lack of regulation, transfer pricing of services has been a particularly controversial area of transfer pricing regulation. Ernst & Young (2003, p. 12), for example, found that 43% of parent TNCs believed their transfer-pricing policies for administrative/managerial services were vulnerable to Government audit; 30% believed their pricing of technical services were also vulnerable. Ernst & Young argued that audits of services were increasing as a share of all transfer-pricing audits, partly because few TNCs documented transfer-pricing policies for administrative or managerial services. With no or minimal documentation, these transactions "appear to be the 'weakest link' in an MNE's transfer pricing armor" (Ernst & Young, 2003, p. 12). The rapid growth in offshoring business services should therefore exacerbate already high tensions in this area of transfer-pricing regulation. Aliff Fazelbhoj (2005, p. 33), for example, states: "The tax treatment of outsourcing in India has been a source of heated debate and stand-offs between industry and tax authorities".

This raises the following issue: can the existing transfer pricing rules for services, as outlined in OECD (1995) and IRS (1994), continue to apply, or are new rules needed for pricing

intrafirm transactions in offshored business services? Some tax authorities clearly believe that the issues are sufficiently different that new rules are needed. For example, the Central Board of Direct Taxes in India, which adopted its first transfer pricing regulations in 2001, recently issued two circulars on outsourced business services (Fazelbhoj, 2005). The United States Treasury has proposed new transfer pricing regulations designed to harmonize transfer-pricing methodologies for pricing intragroup services with already existing rules for goods (IRS, 2003). Both policy changes appear to be motivated by the rapid expansion of international intrafirm trade in business services, and the rising knowledge intensity of production (UNCTAD, 2003).

Because individual facts and circumstances are highly important in determining the most appropriate (“best method”) transfer pricing methodology, I explore the transfer pricing of offshored business services through a case study of one of the most commonly offshored business services: teleservices. The typical teleservices TNC (e.g. Convergys, EDS) provides a full range of inbound and outbound call services to third party clients (e.g. Dell, UPS). The firm owns one or more foreign affiliates that deliver call centre services to customers of these third party clients. This article explores the facts and circumstances of this rapidly growing industry and uses economic analysis to develop transfer-pricing rules for the offshored call centres. We compare the methods proposed in the new United States transfer-pricing regulations (IRS, 2003), and discuss the implications for location savings.

2. Offshoring of business services

Although the terms “offshoring” and “outsourcing” are well understood by the international business community (Eden, 2004; UNCTAD, 2004), they are often confused in the public press and elsewhere. Since I use both terms in this article, to avoid any confusion, explicit definitions are provided in table 1. “Outsourcing” is the relocation of one or more stages of production from within the firm to an external party, i.e. the

firm shifts from “make” (cells 1 and 3) to “buy” (cells 2 and 4). When a production stage is moved from inside to outside the firm’s boundaries, its level of vertical integration falls. The externalized production can be sold off to an arm’s length party in the same country as the TNC (the home country) or to an arm’s length party in a foreign country. When the transaction involves a domestic firm, the activity is called “domestic outsourcing”; when the activity involves a foreign firm, the term used is “foreign”, “international” or “cross-border” outsourcing. During the 1990s, many firms attempted to restructure their value chains by outsourcing their low-value stages of production and concentrating on their core, high-value-adding activities.

“Offshoring” is the relocation of one or more stages of production from the home country (cells 1 and 2) to a foreign country (cells 3 and 4). Production can be shifted to a wholly- or partly-owned foreign affiliate in a foreign country (the host country); this is termed “intrafirm or captive offshoring” or, more simply, FDI (cell 3). Production can also be shifted to an arm’s length party in a foreign country, where that firm could be either a domestic firm or another TNC – which can be referred to as “arm’s length or outsourced (external) offshoring”. An outsourced offshored activity is one that has both moved outside the firm (externalized) and outside the home country (internationalized); this is cell 4 in table 1.

Table 1. Comparing in/off-shoring and in/out-sourcing

Location of production	Ownership of production	
	Inourced (internalized)	Outsourced (externalized)
Onshore production (home country)	1 Production kept in-house at home	2 Production outsourced to third-parties at home
Offshore production (foreign country)	3 Production by foreign affiliates in a host country	4 Production outsourced to third-parties abroad

Source: Eden (2004), revision of GAO (2004, p. 58).

Firms have been outsourcing and offshoring manufacturing operations for many years, typically to export processing zones and more recently to China and other developing countries (UNCTAD, 2004). A critical change in the business strategies of OECD-based TNCs over the past five years has been the rapid growth in outsourcing and offshoring of services. White collar, skilled jobs in service industries are now following blue collar jobs in manufacturing, in areas such as basic data entry, telemarketing and claims processing (Mann, 2003; McKinsey, 2003). Large companies are outsourcing both their upstream back office functions and downstream customer relations functions to arm's length services providers (Alvarez, Couto and Disher, 2003; Kearney, 2004; McKinsey, 2003; UNCTAD, 2004).

In addition, business service operations in industries such as telecommunications, transportation and health care, and business process operations such as human resources management, call centres and cheque processing, are moving offshore. Ashok Bardhan and Cynthia Kroll (2003, p. 4) suggest, "Any job that involves mostly '...sitting at a desk, talking on the phone and working on a computer...' is a job under potential threat" of being offshored. They argue that the types of jobs that have been and are likely to be offshored have the following characteristics (ibid, p. 4): no face-to-face customer servicing requirements; high information content; work process is telecommutable and internet enabled; high wage differential with similar occupation in the destination country; low setup barriers; and low social networking requirements. Bardhan and Kroll (2003, p. 6) conclude that the occupations at risk of international outsourcing from the United States include office support, business and financial support, computer and math professionals, paralegals and legal assistants, diagnostic support services and medical transcriptionists, which represent 11% of the United States work force in 2001.

The movement offshore is primarily driven by the location savings that countries like Ireland, Canada and India can offer relative to costs in the United States (Read, 2002; UNCTAD,

2004). Critical factors encouraging offshoring from the United States are cost savings, availability of English-speaking graduates, good information technology (IT) infrastructure, and a favourable Government attitude towards FDI and international trade. In e-services such as call centres, data entry and software engineering, physical proximity is not necessary for efficient and effective delivery. The recent movement to international offshoring of such activities, initially to Canada (e.g. call centres to New Brunswick in the 1990s) and more recently to India, is a new version of the old-style offshoring of low-skilled manufacturing jobs to export processing zones. Scholars now distinguish between “first phase offshoring” when low-skilled manufacturing jobs shifted offshore to developing countries, and “second phase offshoring” of information technology enabled services jobs to countries like Canada and India (UNCTAD, 2004; Dossani and Kenny, 2003, 2004).

How fast is this second phase of offshoring growing? While the actual statistics are difficult to determine,¹ Nobuo Tanaka (2005, p. 23) says that rule-of-thumb estimates suggest that one-third of business services are outsourced and one-third offshored. Thus, captive offshoring (cell 3) represents about 2/9 or 22%, and international outsourcing (cell 4) about 1/9 or 11%, of all business services. Perhaps the fastest growth is occurring in the Indian IT-ITES industry. India’s National Association of Software and Service Companies (NASSCOM) estimates that total revenues of the IT-ITES industry in India grew fivefold over the 1998-2005 period, reaching \$28 billion in 2004-2005, while the IT-ITES share of Indian GDP rose from 1.2% in 1997-1998 to 4.1% in 2004-2005 (<http://www.nasscom.org>).

A.T. Kearney has done an exhaustive study of the factors affecting offshoring across several industries (Kearney, 2004a). The firm repeated this study separately for the IT industry

¹ WTO (2005, pp. 274-284) provides perhaps the best set of summary data on offshoring, collected from several recent industry-level studies and national balance-of-payments statistics.

(Kearney, 2004c) and for business process functions (Kearney, 2004d); the latter is most relevant for the teleservices industry. Offshore locations are evaluated on three factors: cost (40% of the total), environment (30%) and people (30%). Table 2 below amalgamates the 11 country scores from Kearney's BPO report. The order of the columns reflects the overall score for each country. The last two columns of the table report the scores for India and Canada, two key offshore locations for business process services, as a ratio of the average score. These two columns show the areas in which each country is above the average (ratio higher than 1) and below the average (ratio below 1).

The highest country on the list is India with an overall score of 7.3. India ranks first on cost and people, but only seventh on environment. Canada and Mexico are tied with an overall score of 6.2, almost a full point below India. Canada ranks the lowest of the 11 countries on cost, but is first on environment and second on people. Mexico's tied score with Canada is driven by a much better score on cost, but worse performances on environment and people. Immediately behind Canada and Mexico is Brazil, with an overall score of 6.1. This difference is probably not statistically significant, suggesting that Mexico and Brazil are in the same overall category as Canada and should be seen as close competitors. In the next tier are countries clustered in the 5.6 to 5.8 range (Hungary, Ireland, Australia, the Czech Republic, the Philippines, the Russian Federation). China is last with an overall score of 5.2, a significant drop from the previous tier. A.T. Kearney's country comparisons for offshoring in business processing suggest that there are multiple competitors as offshoring locations for United States TNCs.

3. A case study: captive offshoring of teleservices

Since transfer pricing is all about the facts and circumstances of the case, in order to develop useful insights into the appropriate transfer pricing policy for cell 3 in table 1 (captive offshoring), I provide a case study of offshored services in one particular industry rather than examining business services as a whole. *Teleservices* is a new industry that is rapidly

Table 2. Country scores for offshoring business processing functions, 2004
(Numerical scores)

	India	Canada	Mexico	Brazil	Hungary	Ireland	Australia	Czech Rep	Philippines	Russian Federation	China	India /AVG	Canada /AVG
COST (40%)	3.4	1.5	3.0	3.1	3.1	1.8	2.0	3.1	2.9	3.1	3.1	2.74	1.24
COST RANK	1	7	3	2	2	6	5	2	4	2	2		
Labour cost	2.9	0.8	2.2	2.5	2.4	1.0	1.3	2.4	2.5	2.7	2.6	2.12	1.37
MGMT & infrastructure costs	0.2	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.28	0.71
Tax/treasury impact	0.3	0.3	0.4	0.3	0.4	0.5	0.4	0.4	0.2	0.2	0.3	0.34	0.88
ENVIRONMENT (30%)	1.6	2.6	1.9	1.8	1.6	2.5	2.3	1.6	1.7	1.4	1.1	1.83	1.42
ENV RANK	7	1	4	5	7	2	3	7	6	8	9		
Intellectual property	0.3	0.4	0.3	0.3	0.2	0.4	0.4	0.2	0.4	0.3	0.1	0.30	1.00
Geographic proximity	0.2	0.5	0.5	0.4	0.3	0.3	0.2	0.3	0.2	0.3	0.2	0.31	0.65
Cultural compatibility	0.3	0.5	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.2	0.2	0.32	0.94
Country infrastructure	0.3	0.4	0.2	0.3	0.2	0.5	0.5	0.2	0.3	0.2	0.2	0.30	1.00
Risk (economic, political, government support)	0.5	0.8	0.6	0.5	0.6	0.9	0.8	0.6	0.5	0.4	0.4	0.60	0.83
PEOPLE (30%)	2.3	2.1	1.3	1.2	1.1	1.5	1.4	1.0	1.1	1.1	1.0	1.37	1.53
PEOPLE RANK	1	2	5	6	7	3	4	8	7	7	8		
Employee retention	0.3	0.4	0.4	0.5	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.24	1.25
Language barriers & literacy rates	0.4	0.5	0.4	0.3	0.4	0.5	0.5	0.4	0.4	0.3	0.2	0.39	1.03
Education level	0.4	0.5	0.1	0.1	0.2	0.3	0.4	0.2	0.1	0.2	0.1	0.24	1.67
Size of labour market	0.4	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.17	2.35
Outsourcing experience	0.8	0.6	0.2	0.2	0.3	0.4	0.3	0.2	0.3	0.2	0.2	0.34	2.35
TOTAL (100%)	7.3	6.2	6.2	6.1	5.8	5.8	5.7	5.7	5.7	5.6	5.2	5.94	1.23
TOTAL RANK	1	2	2	3	4	4	5	5	5	6	7		

Source: author's calculations, using data from Kearney (2004d, pp. 2, 3, 4, 6 and 8).

setting up captive affiliates offshore.² It may therefore be a bellwether for other business services.

There are two basic types of teleservices: inbound and outbound. Inbound teleservices typically include product service and support, response to customer inquiries and order processing. Outbound teleservices may include direct sales, product inquiry and lead generation and appointment setting. These services are designed to improve the overall customer experience and build closer relationships between companies and their customers. Outbound services are shrinking relative to inbound, as Government “no call” regulations that prohibit firms from making unsolicited calls have spread within the United States.

The typical teleservices TNC provides a full range of inbound and outbound call services to third party clients and owns several affiliates that deliver call centre services to customers of these third party clients. The parent firm’s activities are of two types: support activities, and activities both upstream and downstream from the call centre stage of production. The activities of the call centre affiliates are determined by the teleservices parent firm, with all risks (credit, market, foreign exchange) and responsibilities typically being assumed by the parent firm.

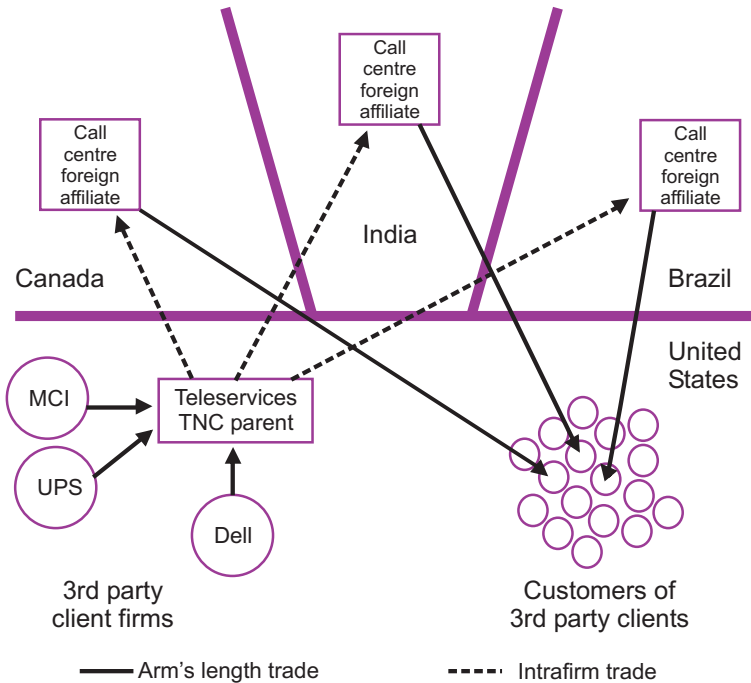
The teleservices industry was created by Fortune 500 firms downsizing and outsourcing their customer relationship management functions, starting in the late 1980s. The industry provides a broad range of customer interface services including service agreement management, internet customer service, warranty management, call centre service, problem/resolution management, customer enquiries, sales channel management, inventory management, and service fulfillment. Mark Plakias (2003) estimates that worldwide revenues in the North American teleservices industry were \$18.5 billion in 2002, of which \$16.9

² For a more detailed analysis of the teleservices industry, see Datamonitor (2003), Gans, Koole and Mandelbaum (2003), 24-7 INtouch (2004), Knowledge@Wharton (2004) and Plakias (2003).

billion were generated by live agents and \$890 million through automated telephone and internet. The top three firms in the industry are Convergys, EDS and Teletch, followed by Teletch, West Corporation, Sitel and Sykes. Teleservices revenues from offshore operations totaled \$3.4 billion in 2002, about 18% of total revenues, which is expected to grow to 25% by 2008 (Plakias, 2003).

An example of a typical teleservices TNC is illustrated in figure 1. Suppose several Fortune 500 firms (Dell, UPS, MCI) decide to outsource their inbound and outbound teleservices activities to one of the big teleservices firms, such as Convergys

Figure 1. Modeling a teleservices TNC



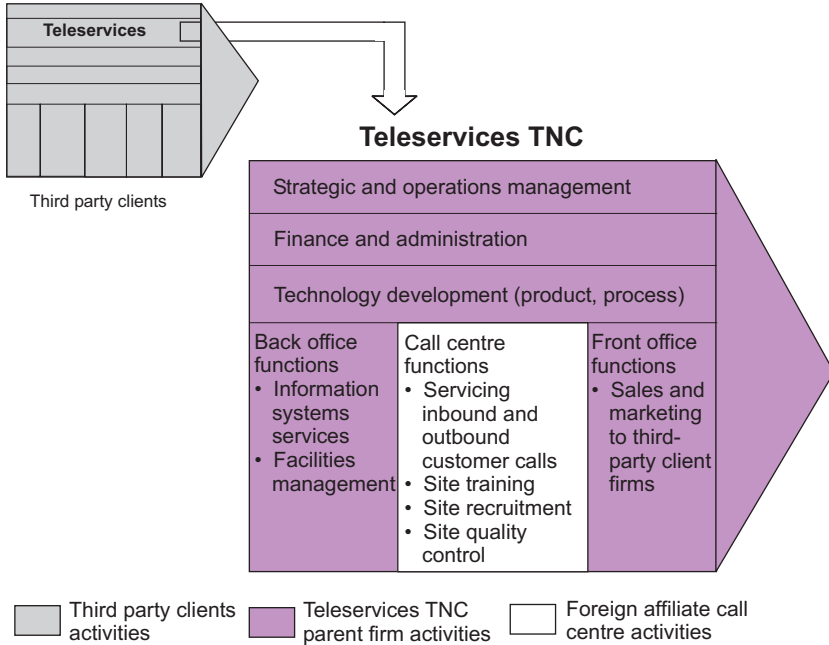
Source: the author.

³The value chain shows the primary and support activities involved in creating, producing and selling a product to a customer (Eden, 1998). Originally developed by Michael Porter for manufacturing (Porter, 1985), the concept can also be applied to service industries.

or Sitel. What would the activities look like? Figure 1 maps the likely transactions between a teleservices TNC (e.g. Convergys or Sitel) and its third party clients (e.g. Dell, UPS and MCI). The figure assumes that the teleservices firm is performing services that have been outsourced from Dell, UPS and MCI, and that the firm has located all of its call centres offshore, in Canada, India and Brazil. These offshore call centres are responsible for providing inbound and outbound teleservices to customers of MCI, Dell and UPS.

Which activities of the teleservices TNC are performed where? Figure 2 shows the TNC's value chain,³ created by third party clients outsourcing their teleservices function to the TNC. There are two types of value chain activities: support and primary (Porter, 1985). Support activities are provided to the teleservices TNC as a whole. Figure 2 shows three support activities: strategic management (at the corporate and business strategy levels), finance and administration (e.g. all forms of overhead administration and finance, including foreign exchange transactions) and technology development. In terms of technology development, while there may be little R&D done in the teleservices industry, it is clear that firms must either develop their own proprietary software (a production intangible) or purchase it from other firms. In addition, there are in-house process technologies that are also likely to be proprietary but not protected by patents. Teleservices firms, for example, would normally have their own information technology enabled systems involving designing of programmes and scripts, network management, call routing and data retrieval, and quality control. These intangibles are sources of competitive advantage, along with reputation and brand name. Primary activities, for a teleservices provider, are of three types: back office functions that are directly upstream from the call centres (e.g. information systems services provided to the call centres, facilities management), the call centre stage, and front office functions that are downstream from the call centres (e.g. sales and marketing to third party clients). Since the front and back office functions are well understood, I focus on call centres.

Figure 2. Outsourcing of value chain activities to a teleservices TNC



Source: the author.

At the call centre stage, the typical site⁴ has telephone sales representatives and customer service associates handling inbound and outbound “1-800” telephone calls from workstations (Gans, Koole and Mandelbaum, 2003). Some call centres now include not only telephone services but also email, fax, webpages and online chat with customers. A telling description is provided by Gans, Koole and Mandelbaum (2003, p. 3): “The working environment of a large call centre... can be envisioned as an endless room, with numerous open-space cubicles, in which people with earphones sit in front of computer terminals, providing tele-services to phantom customers”. Local management in these centres typically hire, train and supervise

⁴ In manufacturing, an individual location is called a plant; in services, a centre or site.

workers and negotiate contracts with local suppliers of, for example, long distance telephone services, but normally do not have any responsibility vis à vis the overall management of the teleservices TNC as a whole. Since each site would normally focus on providing services to one major client or several smaller clients, local management is also responsible for tailoring services (e.g. in terms of training and quality control) to the demands of third party client firms.

If third party client firms outsource their customer relationship management functions to teleservices firms, do the teleservices firms also outsource parts of their value chains? In particular, is the call centre stage of the teleservices value chain typically in-house or outsourced? I argue that all stages in the teleservices value chain are typically performed in-house, even though one might expect the call centre stage to be outsourced given that it appears to be a low-tech, low-value added stage of the value chain. For example, UNCTAD (2004, p. 151) places call centres in the low-skill services category:⁵

“Low-skill services. These are services with the lowest entry barriers in terms of skills, scale and technology. They include data entry or call centres (although some call centres require higher skills, computer or technical support). They tend to need general – but not very high – levels of formal education, a working knowledge of the relevant language and/or basic computer skills. There are generally few economies of scale or agglomeration: a call centre may be viable with 30

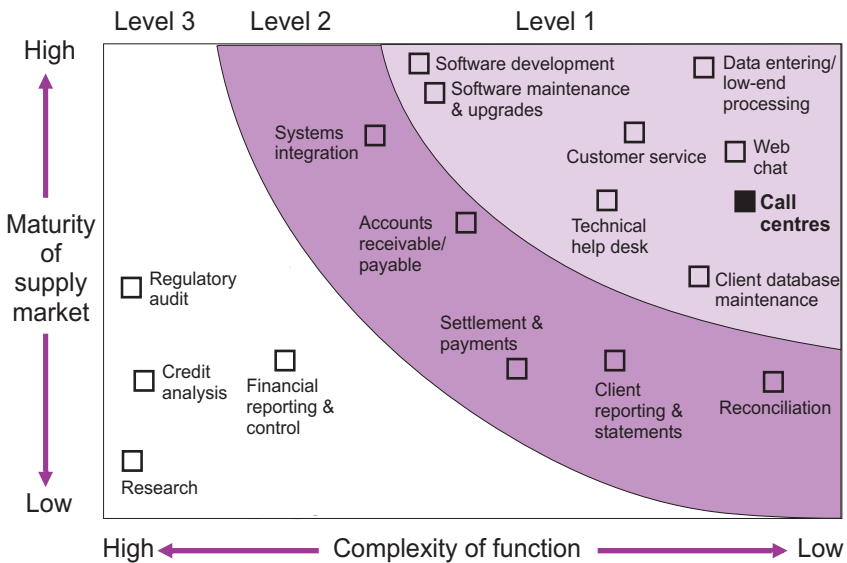
⁵ UNCTAD (2004, p. 151) states, “medium-skill services...are complex services that require more advanced skills, and may offer considerable scale economies and agglomeration effects. Examples include financial and accounting services, standardized programming work, routine data analysis and processing or back-office services such as ticketing and billing. Specialized training would generally be required (and so also the necessary training institutions). The building of competitive capabilities may also call for a large local market where the skills accumulate over time. Some services may require a minimum critical mass of different skills in one location to provide the whole package.” Call centres clearly cannot be considered medium-skilled services.

operatives in a site where there are no similar centres or knowledge institutions. The level of development of other services or manufacturing is not necessarily important for competitiveness in such activities. For this reason, there are likely to be few positive spillovers in terms of supplier linkages or skills creation.”

Figure 3 below, adapted from A.T. Kearney (2004b), illustrates this point by comparing the maturity and complexity of offshore information technology and business process services. Level 1 services have low functional complexity and high maturity of the supply market (that is, a high degree of competition). Call centres (the black square), web chat and data entry are examples of level 1 services.

Why are call centres typically not outsourced? I hypothesize that, despite their low-level of complexity and skill, quality control of call centres is a critical factor in the overall

Figure 3. Maturity and complexity of offshore IT and business process services



Source: author’s interpretation of Kearney (2004b).

success of a teleservices firm.⁶ Mark Casson (1982) argued that the high transaction costs associated with ensuring quality control of arm's length suppliers were the major reason for vertical integration in perishable fruit industries such as bananas. According to internalization theory, the greater the need for quality control, the more likely that the activity is internalized within a TNC. A reputation for high quality enabled firms like Dole and Chiquita to charge significantly more for perishable fruit, thus making insourcing profitable. Quality control has also been a critical factor in determining which functions manufacturing firms have kept in-house rather than outsourced. Similarly, I argue that in business services such as teleservices, brand reputation is based on a firm's ability to deliver consistently high-quality services. The need to monitor for quality requires insourcing of the teleservices firm's activities, including the low-skilled call centre stage – i.e. third party clients are willing to outsource their inbound and outbound call activities if the teleservices firm can guarantee a high-quality product tailored to the needs of the specific client. This means the call centre stage must be internalized within the teleservices firm.

A related issue is the level of general services provided at the call centre stage of production. 24-7 INtouch (2004, p. 3) separates call centre activities into three levels. Level 1 includes straightforward (several minutes in length) telephone calls that can be answered through simple queries, scripts, or frequently asked question lists and only require basic product knowledge. Level 2 includes longer (several minutes to several hours in length) telephone calls involving detailed questions that require significant depth of knowledge to answer. Level 3 includes very long (several hours to day long) calls that require multiple

⁶ Service quality can be measured in several ways (Gans, Koole and Mandelbaum, 2003, p. 12): (1) accessibility of agents (How long did the wait time on the telephone before speaking to an agent? How many callers abandoned the queue before reaching an agent?); (2) service effectiveness (Was the customer's problem resolved or was additional work required?); (3) content of the agent-customer interaction (Did the agent manage the conversation flow in the prescribed manner?); and (4) output of the interaction (Was the customer satisfied?).

people, multiple systems and an expert level of product knowledge.

Now I turn to analyzing which stage or stages of the teleservices value chain have been offshored, and why and where they have gone. Typically, it is only the call centre stage of the value chain that has been offshored to a foreign affiliate (Gans, Koole and Mandelbaum, 2003; A.T. Kearney, 2004c; Plakias, 2003), with the other stages performed by the TNC parent in the home country (shaded in purple in figure 2). Since most of the TNCs in this industry are United States firms, this suggests that the teleservices industry today consists of United States parent firms performing the purple-shaded functions and their wholly-owned foreign affiliates performing the call centre stage of the value chain.

UNCTAD (2004, p. 158) notes that, “In the call centre industry, the largest contract services providers include Convergys, ITC Group, Sitel and Sykes – all from the United States”. These firms have call centres in Argentina, Brazil, Canada, Colombia, India, Indonesia, Jamaica, Mexico, Morocco, Panama, the Philippines, the Republic of Korea, Singapore, Sri Lanka, Taiwan Province of China and Thailand – a veritable “alphabet soup” of economies. *WIR04* (ibid., p. 161) also states: “more than half the 500 FDI projects in call centres recorded in 2002 and 2003 went to developed countries, notably Canada, Ireland and the United Kingdom”; but the “preferred locations for call centres in the near future include India, the Philippines, China, South Africa, Mauritius and the United Arab Emirates”. Table 3 below shows the country distribution of new call centre FDI projects in 2002-2003.

What are the main factors attracting call centres to particular locations? UNCTAD (2004, p. 161) argues that “geographical and psychic distance to markets matters, as do linguistic, cultural and other affinities – and that costs are not the only determining factor”. *WIR04* states that labour costs account for 50-70% of total costs for call centres located in developed countries (e.g. Canada, Ireland), and that cost savings

in the range of 30-40% can be achieved by moving to India (ibid., p. 165). However, cost savings are not the only factor determining FDI location. Quality of services, quality of telecommunications infrastructure, availability of labour skills, language skills, staff attrition and turnover, cultural affinity, and the time zone also matter. Moreover, Government policies – in particular, location subsidies – can be important when choosing between otherwise similar locations.

Therefore, the call centre stage of the value chain for the teleservices industry tends to be insourced and offshored (cell 3 in table 1). By wholly owning this stage of the value chain, a teleservices TNC can enforce similar quality and standards of performance across all its call centres. A TNC can monitor performance and ensure that the needs of third party clients are met at a consistently high level of quality – economies of scale and scope can be exploited at the firm level. By locating the call centres overseas, a teleservices TNC benefits from abundant semi-skilled labour and good ITES infrastructure in countries such as India and the Philippines.

I now turn to an economic analysis of transfer pricing in this industry, based on the facts and circumstances presented above.

Table 3. Export-oriented FDI projects in call centres, 2002-2003
(Number and percentage share)

Country	No of FDI projects	% share of FDI projects
Canada	56	11
European Union	169	33
United States	15	3
All developed countries	279	54
China	30	6
India	60	12
Philippines	12	2
Singapore	16	3
All developing countries	203	40
Central and Eastern Europe	31	6
World	513	100

Source: UNCTAD (2004, p. 162).

4. Transfer pricing of teleservices in theory

Firms in the teleservices industry are vertically integrated TNCs where the upstream stage provides the full range of teleservices (the parent firm) and the downstream stage (the affiliates) provide call centre services. Moreover, these TNCs are also horizontally integrated since there are several call centres, all offering basically the same or similar services (inbound and outbound call activities) to the same or similar customers (customers of third party clients). As such, I can apply traditional microeconomic theory of the TNC (Eden, 1998) to analyze a firm's activities.

I assume, for simplicity, that a teleservices TNC consists of a parent firm (PAR) located in the United States and two wholly-owned call centre affiliates, one in the home country (USCO) and one in Canada (CANCO), both providing identical services to customers of the third party clients.⁷ The TNC parent is assumed to have some price setting ability in terms of its negotiations with third party firms, and therefore its demand curve, D_{PAR} , is downward sloping. D_{PAR} shows the actual price paid by third party clients for the services provided by the TNC's affiliates. For simplicity, I assume that all third party clients are charged the same price per unit of service, P_X , regardless of which call centre provides the services and the nature of the services provided.⁸ The volume of these services, X , equals the sum of the services provided by each of its call centres, i.e. $X = X_{US} + X_{CA}$. Thus, total revenues received by the TNC equal the revenues generated by the call centres, i.e. total revenues equal $P_X (X_{US} + X_{CA})$.

From previous work on this topic (Eden, 1998), for profit maximization (ignoring tariffs, corporate taxes and other market

⁷ I assume one affiliate is located in the home country in order to explore location savings (see below).

⁸ Obviously, a more sophisticated analysis would incorporate differential pricing for different types of services provided to different clients from different locations, which would be the norm in practice. This complication is ignored here because the extension is straightforward.

barriers), a vertically and horizontally integrated TNC will set:

$$MR_{PAR} - MC_{PAR} = NMR_{PAR} = MC_{US} = MC_{CA} = p \quad (1)$$

where $MR_{PAR} - MC_{PAR}$ is the net marginal revenue (NMR_{PAR}) that the parent firm receives on its own activities, i.e. NMR_{PAR} equals the marginal revenues that the TNC parent receives from third party clients, MR_{PAR} , minus the costs of its own activities, MC_{PAR} (management, marketing, business services, process technology development, and so on). Because the TNC is vertically integrated, it maximizes profit by equating the net marginal revenues from the parent firm's activities to the marginal cost of each foreign affiliate's activities; i.e. $NMR_{PAR} = MC_i$ (where $i = US$ or CA). Note that the parent firm's activities can be either upstream or downstream from foreign affiliates activities. Because the TNC is horizontally integrated, it allocates production between the sites such that the marginal cost of production is the same across all the call centres; i.e. $MC_{US} = MC_{CA}$. Putting these two requirements for profit maximization together gives us equation (1).

The efficient transfer price p is the Lagrangian on the constraint that all output is sold (Eden, 1998). This is the opportunity cost of producing Q_x . In the absence of an external market price, the efficient transfer price is the transfer price that equates NMR_{PAR} to the marginal cost of each of the affiliates. Thus, each affiliate receives a transfer price that just covers its marginal production costs. This price is clearly lower than the price charged by the TNC to third party clients, P_x , because that price must cover not only the call centres' expenses but also those of the parent firm. The efficient transfer price is also the profit-maximizing transfer price in the absence of an external market price in a world without tariffs and nontariff barriers (Eden, 1998). However, if an external market does exist for this product (i.e. if there are other producers of call centre services willing and able to supply this market), then the Hirshleifer Rule (Eden, 1998) says that, barring interdependencies, the efficient (and profit-maximizing) transfer price is the external, or arm's length, market price.

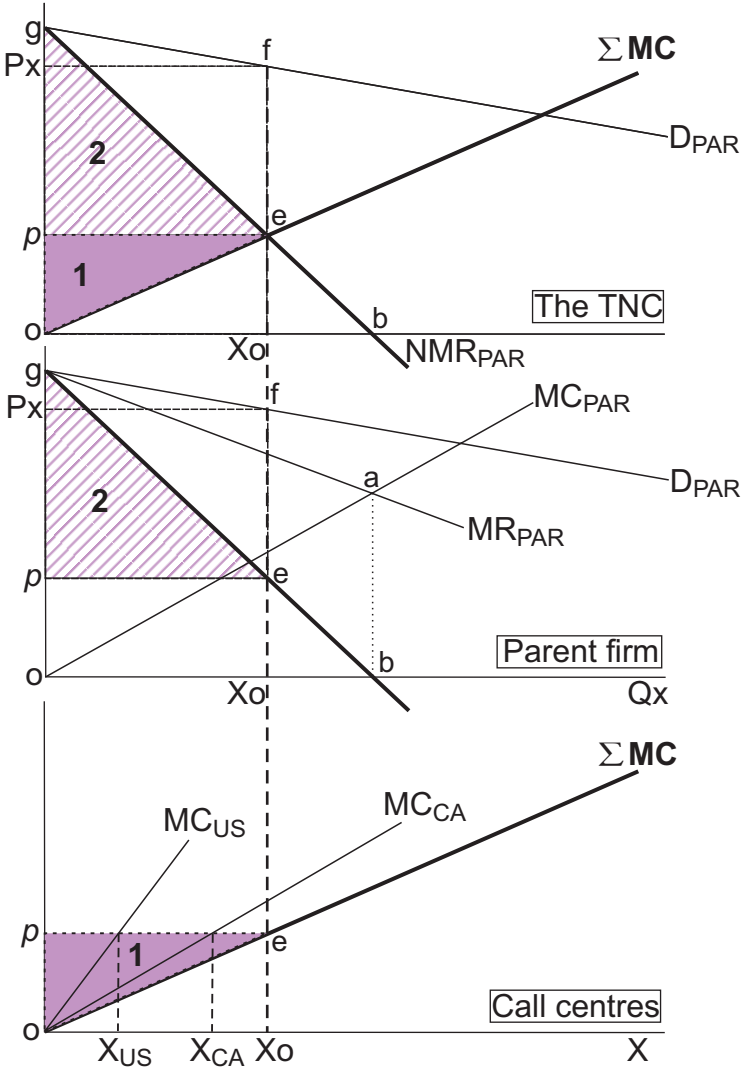
The above arguments are illustrated in figure 4, which consists of three graphs. All three graphs have the same vertical axis (price) and horizontal axis (quantity). Starting in the middle graph, with the TNC parent firm, the net marginal revenue (NMR_{PAR}) is the vertical distance between the MR_{PAR} and MC_{PAR} curves. Thus, NMR_{PAR} intersects the horizontal axis at point b, which is directly below the point at which $MR_{PAR} = MC_{PAR}$. The net marginal revenue curve is then plotted in the top graph. The bottom graph shows the marginal cost curves for the two call centres, with MC_{US} being higher than MC_{CA} reflecting the assumed lower costs of production in Canada than in the United States. The two marginal cost curves are horizontally summed as the ΣMC curve; this curve is reproduced in the top graph. The point at which ΣMC intersects NMR_{PAR} satisfies equation (1) and maximizes profits for the TNC as a whole. This is point e with output X_0 in total, X_{US} from the United States site and X_{CA} from the Canadian site.

The efficient transfer price is p (directly across from point e) and the arm's length price to the third party clients is P_x (point f on the demand curve, which is directly above point e). The transfer price p divides the total profit of the TNC between the two call centres and the parent firm. Total profit (in the absence of fixed costs, which would have to be deducted here) is measured by triangle Oge in the top graph (the area under the net marginal revenue curve for the parent firm and over the summed marginal cost curve for the affiliates). Total profit is therefore the sum of area 2 (which goes to the parent firm) and area 1 (which is split between the two affiliates depending on their cost curves; the affiliate with the lower cost receives a higher share of the profits). Area 2 (the parent firm's profit) is shown in the top two graphs, and area 1 (the affiliates' profits) in the top and bottom graphs.

It should be clear from the graph that the transfer price, and therefore the split in profits, is determined by the elasticity of the NMR_{PAR} and ΣMC curves. Making either curve flatter or steeper shifts the allocation of profits. For example, the more elastic (flatter) is NMR_{PAR} , the smaller is area 2. Elasticity is

primarily driven by the availability of substitutes and degree of competition in the marketplace (and by time, since elasticity rises over time as the availability of substitutes increases and contracts can be rewritten). Thus, the better the substitutes, and

Figure 4. Profit maximization by a teleservices TNC



Source: the author.

the greater the degree of competition the TNC faces in the output market for teleservices, the more elastic NMR_{PAR} will be and the smaller will be area 2.

Similarly, the more elastic is the ΣMC curve, the smaller is area 1. The elasticity of the call centres' supply (marginal cost) curves depends primarily on the costs incurred in purchasing factor inputs, primarily labour costs. The better the substitutes and the greater the degree of competition in factor and input markets in each of the call centre locations, the flatter will be the marginal cost curves for the affiliates, and the smaller will be area 1. Since call centres are a labour-intensive activity and are typically located in areas where labour costs are low and low skilled labor is in plentiful supply, marginal cost curves for call centres should be relatively elastic. Moreover, because the skill level of labour is not high (Grade 12 education plus training), closing down a site to shift production to a lower cost location is relatively easy activity in this industry compared to, for example, a manufacturing industry like automobiles. This also increases the elasticity of the marginal cost curve, particularly over the longer term when capital mobility is high.⁹

I have assumed so far that there are no other arm's length suppliers of call centre services in the places in which the TNC's affiliates are located. If an external market in call centre services exists, the TNC could simply have contracted out for these services to an arm's length provider. The Hirshleifer Rule (Eden, 1998) says that, if an arm's length price exists, a profit maximizing TNC will accept this price as the efficient (and profit maximizing) transfer price. This market price, called the comparable uncontrolled price (CUP), may arise in one of two ways: either from transactions between other unrelated firms in

⁹ Changes in the business environment can affect a TNC's decision-making and profitability. If costs should change between the sites (e.g. the value of the Canadian dollar falls, causing MC_{CA} to shift downwards relative to MC_{US}), the TNC will shift production from the higher to the lower cost site. This would cause a downward shift in MC_{CA} , for example, which would then cause the summed marginal cost curve to shift to the right, intersecting the NMR_{PAR} curve somewhere between points e and b. The TNC would expand production and the transfer price would fall.

the open marketplace (called an “external comparable”), or from the teleservices TNC transacting (either selling or buying) the same service under the same circumstances with one or more unrelated firms (called an “internal comparable”). Internal comparables are normally preferred to external comparables because comparability is expected to be higher (Eden, 1998).

Hirshleifer’s Rule normally applies, except where (1) the service provided by independent firms is not comparable with the related party service (note, however, that, if differences are minor, or can be quantified, the transfer price can be adjusted for these differences under the OECD transfer-pricing guidelines) and/or (2) there are interdependencies on the supply or demand side that are not taken into account by the external market price (such as intrafirm economies of scale or scope or other synergies that accrue to related parties). In these situations, the external market price is neither economically efficient nor profit maximizing, although it may be the best available price and therefore selected because it is administratively feasible (Diewert, Alterman and Eden, forthcoming).

5. Transfer pricing of teleservices in practice

Moving from economic theory to current practice: what is the appropriate transfer pricing methodology for a TNC to use in intrafirm transactions with its foreign affiliates, viewed from both the TNC and Government perspectives? Two sets of Government regulations come into play here: the home country’s regulations, which apply to the TNC’s overall corporate profits, and the host Government’s regulations, which apply to its foreign affiliates. Both Governments probably adhere to the arm’s length standard under the OECD transfer-pricing guidelines (OECD, 1995), but there are often differences between national regulations. Moreover, where more than one transfer pricing method can be used in a particular situation, each Government is likely to choose the method that shifts income into its jurisdiction and therefore makes it taxable. This causes tax disputes between Governments, where the TNC is caught in the middle (Eden, 2001).

The OECD transfer-pricing guidelines were developed for a world in which intrafirm transactions typically involved manufactured goods and natural resources. As a result, the rules for intrafirm transactions in services are much less developed than for raw materials and intermediate and finished goods. The original OECD guidelines allowed payment for intrafirm services only if a real benefit was actually received by the foreign affiliate that was charged for the service (OECD, 1979). In effect, the benefit-cost principle, applied to the individual TNC subunit, was used to determine the arm's length price for services (Eden, 1998; Liebman and De Boeck, 1988). A mark-up over costs could be included if provision of the service was the related party's primary activity; in all other cases, no profit element was permitted.

The current guidelines (OECD, 1995) are short (14 pages) and follow the outline laid down in OECD (1979). The guidelines recommend that services provided to a TNC group as a whole (for example, group purchasing) use indirect charge methods with an allocation key (e.g. sales, turnover, employment). The guidelines note that services are often difficult to untangle from intangible assets, compounding the pricing difficulties since intangibles are notoriously difficult to value (Boos, 2003; Eden, 1998).

Still, compared to the detailed methodologies developed for intrafirm transactions in goods, the transfer pricing of services has received much less attention from regulators. Until recently, the United States Internal Revenue Service (IRS) section 482 regulations on services had little changed since they were developed in 1968. These regulations require the arm's length price for intragroup services to be the amount that was charged or would have been charged for the same or similar services in independent transactions with or between unrelated parties under similar circumstances, considering the relevant facts and circumstances of the transaction. Moreover, "the body of law applicable to the transfer pricing of services is quite small" (Feinschreiber, 2004, p. 138). Despite (or perhaps because

of) the lack of detailed regulations, Ernst & Young (2003, p. 17), in its biennial survey of TNC transfer-pricing policies, found that three-quarters of its respondents used some form of cost-based pricing to value intrafirm transfers of services, and another 20% used external market-based prices.

That has now changed since the IRS and the United States Treasury issued proposed new regulations for intercompany services (IRS, 2003). The proposed regulations follow the existing set of methods for pricing intrafirm transactions in goods (IRS, 1994), but adapt them to services and to services bundled with intangibles. TNCs are to select the best method based on comparability of functions performed, risks assumed, contractual terms, economic conditions, and the nature of the property or service. The core methods are the comparable uncontrolled services price (CUSP), which is based on the comparable uncontrolled price method; the gross services margin method based on the resale price method; the cost of services plus method based on the cost plus method; and versions of the comparable profit method and the profit split method that replace their goods counterparts. A simplified cost-based method is provided for “routine back-office functions” considered “low-margin services”. The application of the arm’s length standard to intrafirm transactions in services therefore depends on finding internal or external comparables to the intragroup services. The reaction to the proposed regulations has been generally favourable, although opinions differ (see, for example, Anwar *et al.*, 2004; Lewis, 2003; Ossi *et al.*, 2003; Warner, 2004; Zollo, Bowers and Cowan, 2004).

Since United States transfer pricing practice has typically been a bellwether for other countries’ legislation in this area (Eden, 2000; Eden, Dacin and Wan, 2001), the proposed IRS regulations are being closely watched by other Governments. Applying each of the proposed transfer pricing methods to my teleservices TNC case should therefore provide a useful test of the applicability of the proposed regulations for offshored business services.

A. *CUSP or CUP*

For goods transactions, Government tax authorities prefer the use of the CUP method to other methods, when there exists either an exact (fully comparable) CUP or an inexact CUP with quantifiable differences in functions, assets and risks. The CUSP method follows the same logic, looking for a comparable arm's length transaction in business services. If I apply the CUP/CUSP method to my case study, there may be a few possible CUPs at the call centre stage of the teleservices value chain. First, the call centre affiliates may be selling call centre services (inbound and outbound transactions) on an external market, and if the transactions exist and are sufficiently similar in type, size and market characteristics, this external price could be considered an internal comparable, suitable for a CUP. Second, there may be available contractual providers of call centre services willing to contract with the parent firm to provide only call centre activities. A third possibility would be to look at contractual providers of call centre activities (if such firms exist) in another country in which there is public information available, and attempt to quantify the geographic market differences.

As I have argued above, however, quality control issues and the need to tailor activities closely to the demands of third party clients, have led teleservices TNCs to internalize the call centre stage of the value chain; thus, there are not many external firms offering to contract for these services. As a result, an external market in call centre services does not exist, and none of these approaches to determining a CUP appears to be likely. To the extent that teleservices TNCs all insource their call centre activities, there are no exact or inexact arm's length prices.

Interestingly, there are CUPs, but not at the call centre stage. Each contract between a teleservices TNC and a third party client is a CUP, so each teleservices TNC will have several CUPs. Moreover, the teleservices industry is competitive, with large numbers of both suppliers and buyers (Plakias, 2003), so that there are also multiple good arm's length prices available for the teleservices industry as a whole. However, this CUP represents all the costs of the services provided by a TNC to its

clients, not just the services at the call centre stage, and therefore rewards all the functions performed, intangibles held and risks borne by a TNC as a whole. It is therefore an inappropriate transfer price.

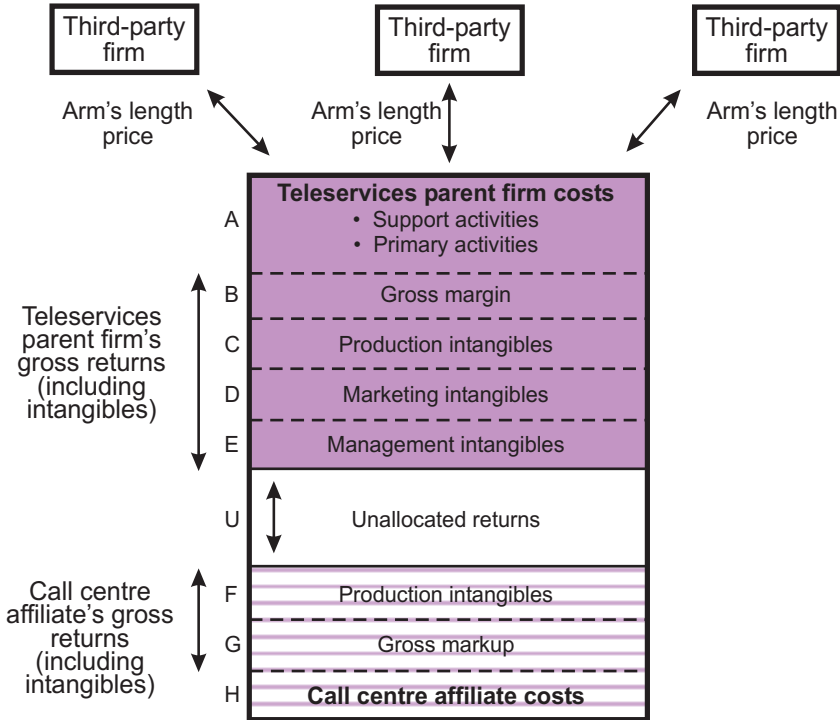
The problem is illustrated in figure 5 below, which shows a teleservices parent firm undertaking the activities outlined in the value chain (figure 3), its call centre foreign affiliate, and their third party clients. The parent firm undertakes the functions, assets and risks associated with box A (parent costs) on which it earns a gross margin (area B) commensurate with other teleservices firms in the industry. In addition, the parent firm owns production intangibles (area C) based on process and/or product technologies that it has developed through in-house capabilities. These may or may not be protected by patents. The firm also owns marketing intangibles, such as its brand name and reputation (box D). Another possibility, if the firm has superior management routines developed over time that are tacit in nature, is management intangibles (box E).¹⁰ From the call centre perspective, the call centre has its own production costs associated with its functions, assets and possibly some risks (box H), and should therefore earn a gross markup commensurate with what other call centres are receiving (area G). The call centre may also have some production intangibles associated with superior quality production, process technologies developed in-house at the foreign affiliate level, and so on. These may or may not be patented.¹¹

The transfer pricing issue is to split the total (boxes A through H) between the parent TNC and its call centre affiliates. The problem is that there are no CUPs for valuing the call centre's activities. There are CUPs that can be used to value the *sum* of boxes A through H, but not to *split* the profit between the teleservices parent firm and its affiliates.

¹⁰ For a recent analysis of intangibles from a transfer pricing perspective, see Przysuski, Lalapet and Swaneveld (2004).

¹¹ The OECD transfer-pricing guidelines refer to these as manufacturing intangibles, which seems an inappropriate term for a service provider; so I use production intangibles (a more general term).

Figure 5. The transfer pricing problem for a teleservices TNC



Source: the author.

B. Gross services margin method or resale price method

The fact that the only CUPs are likely to be the prices negotiated by teleservices TNCs and their third party clients suggests that one method for determining the arm's length price might be to use the resale price method, renamed the gross services margin method in IRS (2003). In the resale price method, the distributor is designated as the tested party, and a gross profit margin is allocated to the affiliate based on the gross margins earned by distributors providing comparable functions to the tested party. The residual return goes to the other related party. The economic intuition behind the resale price method is to ask what a manufacturer would have to pay to outsource the

distribution function to a contract distributor. Applying this to our call centre case, the “manufacturer” is the call centre affiliate and the “distributor” the TNC parent firm. One therefore need to determine the gross margin that the call centre affiliate would have to pay to an independent contractor for the sales and marketing activities needed to market the call centre activities to third party clients.

Clearly, there are serious difficulties in implementing this method. First, the resale price method works best when the tested party has few or no intangible assets (Eden, 1998). The equivalent would be to assume that the parent teleservices firm’s activities in figure 5 involve only area A so that all that must be valued is the gross margin (area B). However, as I argued above, the value chain of a typical teleservices TNC places all the core activities with the parent firm (the shaded areas in figure 2). Thus, the parent firm is the only unit with significant intangibles and the resale price method is inappropriate.

Moreover, there is a second problem that affects both the resale price method and the cost plus method because they each focus only on one side of the transaction. Because of the continuum price problem, one-sided methods lead to quite different splits of the profits between the related parties: the resale price method shifts the unallocated profits to the upstream manufacturer; the cost plus method shifts the unallocated profits to the downstream distributor (Eden, 1998). The proposed 2003 United States transfer-pricing regulations for intragroup services do not solve this problem. Allocating a market-based return to a manufacturing unit (in this case, the call centre foreign affiliate) and a market-based return to the distributor (in this case, the parent firm), typically leaves an unallocated amount of profit (area U) between the related parties. This can occur even after accounting for all known and measurable intangibles. The “leftover profit” occurs because each method is one-sided, looking only from the perspective of one party to the transaction and treating it as a contractual provider of services. The resale price method treats the parent firm as a contractual provider of teleservices to the call centre, and allocates all residual profits to the call centre stage of production. The cost plus method, on

the other hand, treats the call centre as a contractual provider of call centre services, and allocates all residual profits to the parent firm.

C. Cost of services plus or cost plus method

A third possibility is the cost plus method. Since call centres are in the business of providing incoming and outgoing call services, one can expect that a profit margin is attached to their activities (OECD, 1995). The affiliates would not price their services at cost. The call centre stage is a service provider that should be rewarded with a gross margin based on its functions performed, assets (real and intangible) owned,¹² and risks assumed. The gross margin should not be large since this activity is not sophisticated and the typical call centre assumes little risk and owns few intangibles.

From the perspective of a TNC parent firm, the question is what gross markup the TNC would have to pay an arm's length contractor to provide the call centre stage of the value chain rather than use its own in-house affiliates. If there is an external market with several possible outside suppliers of call centre services, the opportunity cost to the TNC of an in-house supplier is the markup over costs that would be charged by an arm's length call centre. While the cost plus method (cost of services plus method), like the resale price method, suffers from the continuum price problem, this is much less problematic in teleservices because the call centre stage has few intangibles attached. Moreover, the call centre is the appropriate tested party since it has the simplest activities with the least intangibles. The key issue is determining the appropriate gross markup. The simplified cost-based method (IRS, 2003), which is intended for low-end offshored business processes, might well apply to this situation, which would limit the gross return to a maximum of 10%.

¹² A major transfer-pricing controversy has been who should receive the rents from intangible assets when the developer and the owner are related but different parties (Przysuski, Lalapet and Swaneveld, 2004). IRS (2003) attempts to solve this problem for services with intangibles. I do not address this issue here.

Since call centres are typically in-house operations, it is impossible to use transfer-pricing resources, such as COMPUSTAT or WORLDSCOPE, for example, to determine a gross markup for comparable service providers.¹³ The only metric available would be the gross margins of other teleservices TNCs, defeating the purpose of allocating profits between a parent firm and its foreign affiliate.

Another possibility might be to focus on the comparability of functions, in terms of the quality of labour services and technological sophistication, as illustrated in figure 3. Web chat, client database management and data entry all share the same low level of complexity of functions as do call centres, although they vary in terms of market maturity. To the extent that arm's length suppliers exist for these services, their gross markups might provide a benchmark for comparison purposes with call centres.

Under the cost plus method, all remaining returns would be allocated to the parent firm. In terms of figure 5, the parent firm receives its normal return for the functions, assets and risks on behalf of its foreign affiliate (areas A + B + C + D + E) plus any residual profits (area U); the call centre foreign affiliate receives its normal return for its functions, assets and risks (areas F + G + H).

D. Other methods

Another possibility is to use the comparable profits method (CPM) or its "OECD cousin", the transactional net margin method (TNMM). Under CPM and TNMM, one of the two related parties (either the seller or the buyer) is designated as the tested party. A net return is allocated to the tested party based on average returns earned by unrelated firms on comparable transactions or functions. Unallocated profits are then assigned to the other related party. In the teleservices case, the tested

¹³ See Eden and Smith (2001) for an analysis of the availability and quality of transfer pricing resources.

party should be the call centre unit because it has the fewest and the simplest functions. CPM and TNMM, however, suffer from the same problems as the gross margin methods: a one-sided method and a lack of arm's length firms providing similar services. Moreover, CPM (and to a lesser extent, TNMM) “uses *industry-wide* rates of return to value the activities of *individual affiliates* of a multinational enterprise as they transact in *specific products*” (Eden, 1998, p. 625). This encourages simplistic, formulaic and misleading applications of the arm's length standard that ignore the facts and circumstances of these transactions. Thus, we do not expect CPM or TNMM to be very useful for transfer pricing of teleservices.

Profit splits are the last method considered here. Under the residual profit split (similar to the old BALRM, basic arm's length rate of return method), both parties would be given a normal return (using either a gross margin method or TNMM) for their own activities, and then a valuation is placed on each of their intangibles. However, that still leaves a remainder (area U in figure 5) to be allocated between a parent firm and its foreign affiliate, which I argue belongs to the parent firm. Few call centre affiliates own and/or have developed intangible assets of their own (area F) and, therefore, a residual profit split seems an extraordinary amount of work here. A residual profit split would involve having to put an arm's length valuation on each of the intangibles held by the parent firm, a tricky business at best, in addition to valuing the primary activities performed by each party and the support activities performed by the parent firm. This is far more effort than would be involved in the cost plus method. However, for offshored business services that are knowledge-intensive services (level 3 services in figure 3), the residual profit split is probably the best approach.

6. Additional complications

A. Three-tiered TNC structures

I have assumed so far that the TNC consists of a parent firm and one or more call centres, providing arm's length teleservices to third party clients. A second possibility is a two-

tier structure whereby a Fortune 500 firm sets up its own foreign affiliate to provide offshored business services (possibly in a tax haven) and the first-tier affiliate sets up one or more second-tier affiliates elsewhere (low-labour cost countries) to perform these offshored services. For example, suppose Dell Computers established a teleservices affiliate (“TeleDell”) in the Cayman Islands to provide teleservices for all its affiliates worldwide, and TeleDell sets up a call centre in India (“CallDell”). In this situation, transfer prices must be determined for the intrafirm transactions between Dell and TeleDell and between TeleDell and CallDell. The cost plus method should continue to be the best method for pricing the call centre stage of the value chain. Since there are many independent suppliers of teleservices, it should also be possible to calculate an arm’s length transfer price between Dell and TeleDell by using either internal or external comparables to value TeleDell’s functions, risks and assets. Still, the complications are clearly greater. Moreover, as the number of offshored locations rises, so does the number of Governments involved in regulating these intrafirm transactions, increasing the benefits from a coordinated, multi-Government approach such as a Multilateral Advanced Pricing Agreement (MAPA).

B. Location savings

The primary motivation for offshoring business services is the potential location savings of moving from a high-cost to a low-cost location. A key transfer pricing issue is therefore likely to be the question of location savings, and their allocation (if the savings exist) between a parent firm and its foreign affiliates (and, thus, between the tax authorities in the home and host countries). Location savings are the “cost savings that an MNC realizes as a result of locating from a high-cost to a low-cost jurisdiction” (Allen *et al.*, 2004, p. 158) or, more succinctly, “the cost savings from operating in a cheaper location” (Eden, 1998, p. 245).

The location savings from moving business services offshore can be substantial. Rafiq Dossani and Martin Kenny (2004, p. 49) compare the cost of a typical call centre in Mumbai, India, with one in Kansas City, United States. They find costs

per hour of \$2.08 in India, compared to \$10.39 in the United States, for a location savings of \$8.31 per hour.

Location savings become a transfer pricing issue when the foreign site is owned or controlled by a TNC since the transfer price determines how much of the location savings remain with the call centre in the host country compared to the parent firm in the home country. Thinking about location savings from a transfer pricing perspective suggests several extensions. First, location savings apply to an affiliate owned or controlled by a TNC where the affiliate produces outside its home country. Second, location savings are relative measures as they are defined for one particular location relative to another. This means that the location must be defined as specifically as possible since the measure applies to a particular producer in a particular location at a particular point in time. A different producer in the same location at the same point in time could well produce at a higher or lower cost. A different location within the same host country could also easily involve different amounts of cost savings. In addition, the cost savings could easily vary over time as, for example, wage rates or productivity levels change. Moreover, the two locations do not have to be the home and host locations, but could involve two host countries (e.g. Canada, India), where the issue is the amount of cost savings from relocating from one host location to another.

Third, location savings are measured as net savings since most locations involve some costs that are lower and others that are higher, when two jurisdictions are compared. Labour costs may be lower in location X, but energy costs lower in location Y. Therefore, net savings must be computed between the two locations. Fourth, exchange rates matter in determining location savings since these must be measured in a common currency. Most TNCs probably use the local currency in their affiliates, and consolidate financial statements on an annual basis in their home currencies. Who bears the foreign exchange risk therefore becomes an issue in determining the arm's length transfer price.

Fifth, location savings ignore the revenue side of the balance sheet and concentrate only on the difference in

production costs in the two locations. However, revenues can also vary between locations. Microeconomic theory (Eden, 1998) tells us that a TNC allocates production between two locations based on their relative marginal costs, and allocates sales between two locations based on their relative marginal revenues. Therefore, the volume of intrafirm transactions is affected by both marginal costs and marginal revenues. This implies that, because all firms (including TNCs) respond to price signals, the volumes of production and sales are likely to be different in the two locations. It is therefore important to distinguish between location savings measured on an *ex ante* or *ex post* basis.

The *ex ante* calculation of location savings involves asking how much a TNC would save simply from the drop in costs, holding all other things constant (production levels, factor intensity, product price). In effect, the *ex ante* calculation measures the location savings from the original location's perspective. For example, assume production currently takes place in the United States by the United States parent firm and that the parent firm shifts production to Canada, creating a new foreign affiliate. The *ex ante* calculation of location savings is based on the parent firm's point of view (assuming the alternative location was production in the home country), comparing costs in Canada to costs in the United States, using the original United States information (price, quantity, costs). The *ex post* calculation, on the other hand, measures location savings after a TNC has closed its domestic location and opened operations in the host country; thus, the location savings are measured from the *new* location's perspective.

Which of the two approaches – *ex ante* or *ex post* – is better? There is no unambiguous answer to this question, but three observations can be made. First, from a TNC's point of view, the strategic issue is the determination of where to produce, so the *ex ante* figures are the critical perspective. The firm must compare its current location with other possible locations, so the initial location is the appropriate base case. Second, from the tax authority's perspective, when it seeks to determine the

arm's length transfer price, the available information is the current, that is, the *ex post*, situation. The output, price, costs and so on of the current producer are known. The hypothetical situation, for comparison, is with the original location, which may or may not still be in production. Third, from an economist's perspective, the issue is similar to the construction of price indexes. The Laspeyres index is based on the original price $((P1 - P0)/P0)$; the Paasche index on the new price $((P1 - P0)/P1)$. The preferable measure is a blend of the two: $((P1 - P0)/(P1 + P0)/2)$. Price index professionals, like transfer pricing professionals, understand the problem, but go ahead and use that which is most readily available (Diewert, Alterman and Eden, forthcoming).

Lastly, a key issue in location savings is not simply measuring the total size of the savings. From a transfer pricing perspective, the key issue is allocating the savings between the buyer and the seller, i.e. how much of the location savings belong to the buyer (who gets a price break) and how much to the seller (who gets to keep some of the location savings).

Economic theory tells us that the allocation of gains between two parties depends on their relative bargaining power, which depends on the goals, resources and constraints on each of the parties (Allen *et al.*, 2004: Eden, Lenway and Schuler, forthcoming). The stronger the resources or core competencies (e.g. tangible and intangible assets) held by one party, the greater is its bargaining power. The strength of one's resource base, in bargaining theory, is always measured from the other party's perspective. For example, suppose a distributor and a manufacturer are engaged in bargaining. The manufacturer owns product intangibles that produce a unique product that the manufacturer wants to sell in a local market; the distributor owns access to all the distribution channels in that market. Relative bargaining power depends on the valuation each party places on the other party's resources. The stronger the valuation that the manufacturer places on the distribution channels owned by the distributor, the greater is the distributor's bargaining power. The stronger the valuation the distributor places on the product

(and thus on the product intangibles) owned by the manufacturer, the greater is the manufacturer's bargaining power. Therefore, the intangibles held by each party are an important factor in allocating location savings between buyers and sellers.

In teleservices, the parent firm normally has developed and owns valuable intangibles (production, marketing and managerial assets) that are essential to its competitive advantage as a teleservices firm. These intangibles are what distinguishes one teleservices firm from other teleservices providers, and what leads third party firms such as MCI and UPS to outsource their customer relationship management activities to one particular teleservices firm rather than another. On the other hand, call centre affiliates typically have few or no intangible assets of their own nor hold any unique assets that are not available through other channels. For example, call centre affiliates normally do not own a unique distribution channel, control only the labour supply available for a particular activity, or own the only raw material (e.g., bauxite) that can be used in a particular refinery (e.g. alumina). This suggests that a larger share of the profit should go to the parent firm, reflecting its greater share in the activities, intangibles and risks. Moreover, economists tell us that the elasticity of demand and supply is also critical here. The elasticity of supply is determined by the number of alternative sellers (suppliers) and the degree of competition among the suppliers. If there is strong competition (large numbers of sellers), the price elasticity of supply is high and the supply (marginal cost) curve is quite flat. If there are few suppliers and/or competition is weak, then the supply curve is inelastic and quite steep.

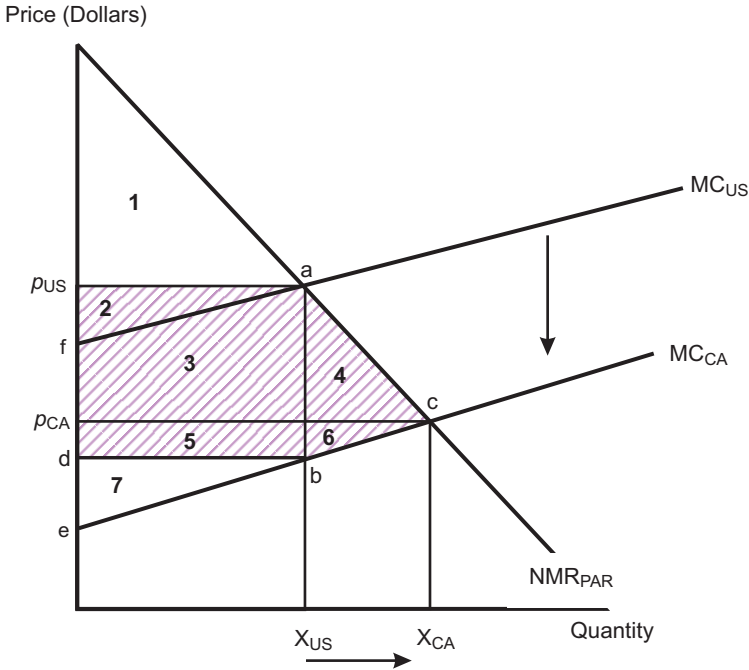
Figure 3, in which the value chain graph shows the activities (primary and support) performed by each of the parties, can be used to explore these arguments. Relative bargaining power depends on how critical each party views the other's activities. If one party were to replace its in-house partner with an arm's length partner, how easy is it to do that? Elasticity of demand and supply tells us which party is easier to replace. In the absence of the call centre foreign affiliate, the parent firm

could either provide the call centre stage itself (and may well do so) or shift its operations to another country (e.g. India, the Philippines) or, if it were willing, contract out the call centre stage to an arm's length supplier in the host country. The number of alternatives is high for the parent firm in terms of its choices for the call centre stage of the value chain. Moreover, the elasticity of factor supply to the call centre stage is also high since the work involves typically only a high school education. On the other hand, in the absence of the parent firm, the call centre would have to either scale up and perform all the activities that its parent firm currently provides (the purple shaded areas in figure 3) or contract with another teleservices TNC to provide these activities. Elasticity therefore implies that relative bargaining power remains with the parent firm.

Note that, as time passes, the supply and demand elasticities will both rise. In the short run, the number of available alternatives is limited, so price elasticity is lower. However, unless there are strong barriers to entry in this industry, high profits (rents) attract new firms and elasticity rises. The teleservices industry is clearly labour intensive and mobile; thus, firms can move sites from one location to another relatively easily. This mobility increases in the long run when all costs are variable costs.

Figures 6 and 7 explore the allocation of the location savings from an *ex ante* perspective from a TNC's viewpoint. Assume that the teleservices firm consists initially of a United States parent firm and a domestic affiliate. The parent firm is contemplating closing its domestic site and opening a new site in Canada to take advantage of location savings. The per-unit location savings is shown by the vertical downward shift in the marginal cost curve, i.e. $MC_{US} - MC_{CA}$ measures the per-unit location savings, between Canada and the United States, at the call centre stage of the value chain. The issue, therefore, is the total amount of the location savings and their allocation between the buyer (the United States parent) and the seller (the Canadian affiliate CANCO). The figures do not tell us the reason behind the location savings, just that they exist and can be measured.

Figure 6. Location savings for a teleservices TNC in the short run



Source: the author.

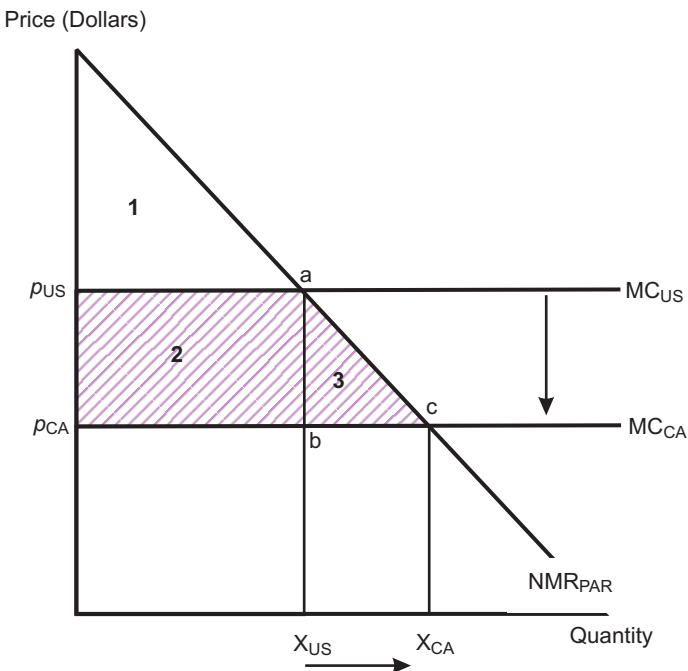
Note that all prices and costs in figure 6 are in a common currency, assumed to be the United States dollar. There are several possibilities, depending on the elasticities of demand and supply. Two cases are illustrated below, one short run (figure 6) and a second longer term (figure 7).

In figure 6, the marginal cost curve for the call centres is assumed to be quite flat, reflecting the high substitutability and dearth of intangibles at this stage of the value chain. With some simplifying assumptions, it is possible to do a quick analysis of how the location savings are distributed in figure 6. Point a represents the base case (the call centre is located at home). The TNC's total profit is represented by the area under the NMR_{PAR} curve and over the MC_{US} curve, that is, by area 1 plus area 2. The transfer price, p , splits the profits between the

buyer and seller, with the parent firm (the buyer) getting area 1 and the seller (the domestic affiliate) getting area 2.

Assume MC_{CA} is parallel to, and lies below, MC_{US} by the distance ab . This distance represents the per-unit location savings that the firm could earn if it closed the United States affiliate and shifted production to Canada. Suppose this occurs. The resulting lower costs encourage expansion of output, and the new equilibrium is at point c . Total profits of the TNC have now expanded to the area under NMR_{PAR} and over MC_{CA} , that is, to areas $1 + 2 + 3 + 4 + 5 + 6 + 7$. The net gain in the TNC's profit is areas $3 + 4 + 5 + 6 + 7$. Because I assumed the two MC curves were parallel to one another, by construction, areas $3 + 5 + 7$ must equal areas $2 + 3 + 5$, which means area 2 equals area 7. Thus, the overall gain in the TNC's profits due to location

Figure 7. Location savings for a teleservices TNC in the long run



Source: the author.

savings is areas 2 + 3 + 4 + 5 + 6, which equals rectangle $p_{us}abd$ plus triangle abc . The efficient, and profit-maximizing, transfer price p_{CA} is determined by the intersection of NMR_{PAR} with MC_{CA} at point c . Thus, the parent firm receives areas 3 + 4, while the Canadian affiliate receives areas 5 + 6. The flatter the marginal cost for the call centre, the greater is the share of profit going to the parent firm.

In the long run (five years say), looking ahead to the competition from India and the other countries included in table 2, one might expect the foreign affiliate's cost curve to be almost horizontal, implying all or almost all location savings should accrue to the United States parent firm. This situation is illustrated in figure 7. Assume, again, that the teleservices TNC consists of a United States parent firm and its domestic affiliate. The original equilibrium is at point a . Because MC_{US} is flat, all the profit (area 1) goes to the parent firm. If the parent firm closes the United States affiliate and shifts production to Canada, substantial location savings are made (area 2). The TNC expands production based on these savings, so the new equilibrium is at point c . Total profits are now areas 1 + 2 + 3; but because MC_{CA} is flat, all the location savings accrue to the United States parent firm. The foreign affiliate receives a normal rate of return for its services, but no more.

One last issue related to location savings is the question of whether they remain with the TNC (parent firm plus affiliates) or are moved downstream to third party clients. This issue also depends on the goals and resources of, and constraints on, the two parties, where the parties are now the teleservices firm and its third party clients. Since the client firms are typically Fortune 500 firms and there are large numbers of teleservices firms, this suggests that bargaining power is more likely to be on the side of the Fortune 500 client firms. In that case, the net marginal revenue curve of the parent firm, NMR_{PAR} , will be quite flat, reflecting the high degree of competition in the market for teleservices and the teleservices firm's relatively low bargaining power vis à vis its third party clients. In this situation, the location savings are likely to be passed to third party client firms.

Dossani and Kenny's (2004) example comparing Kansas City with Mumbai illustrates this situation. In their example, a 20% markup over costs at the United States site results in a price to third party clients of \$12.47 per hour; a 100% markup over costs at the Indian site yields a price of \$4.12 per hour. Implicit here is the assumption that most of the location savings were passed downstream to third party clients. If both sites were owned by one TNC and both offered identical services priced at \$12.47 per hour, the Indian site would have made \$10.39 ($\$12.47 - \2.08) as a gross markup instead of \$2.08. This suggests that about four-fifths ($2.08/10.39$) of the location savings were passed downstream to third party clients, with the remaining one-fifth allocated between the TNC parent firm and its Indian affiliate, depending on the transfer price.

In sum, because teleservices TNCs “went for cost”, there are usually location savings involved in offshored business services. Economic theory tells us that location savings are allocated between the parent firm and its foreign affiliate based on relative bargaining power. Relative bargaining power in this situation lies with the party that has the greatest resources and the least constraints on its activities. This is clearly the parent firm because it owns the production, marketing and management intangibles associated with this TNC, assumes most or all of the risks, and performs most of the functions. Relative bargaining power therefore favours allocating any residual profits to the parent firm. In addition, given the low tech nature of call centre activities and the ready availability of low skilled labour willing to perform these activities, the economics of the call centre stage also support the shift of location savings (to the extent they exist) to the parent firm. The high elasticity of supply for the call centre foreign affiliate implies that location savings go primarily to the TNC parent firm in the short run.

7. Policy recommendations and conclusions

All indicators suggest that the world economy is at the beginning of a major shift in business services, from in-house

onshore activities to outsourced offshored activities. Some argue that this is a “second wave”, following the “first wave” of movement of manufacturing activities offshore in the 1960s and 1970s (Dossani and Kenny, 2004; UNCTAD, 2004). Understanding the implications of this new trend is a fundamental issue for international business scholars and policy makers in the 21st century.

The teleservices industry is clearly one of the industries at the forefront of this movement. As such, it can provide useful lessons for thinking about other service industries. Teleservices TNCs are vertically and horizontally integrated. The transfer pricing literature tells us that the optimal transfer price for such a firm equates the net marginal revenue of the parent firm to the marginal costs of each of the call centres. The optimal transfer price determines how the profits between parent firm and affiliates are split. The parent firm’s profit is determined by the elasticity of the net marginal revenue curve while the foreign affiliate’s profit is determined by the elasticity of its marginal cost curve. The elasticity of the foreign affiliate’s marginal cost curve in turn is affected by factors such as costs, skill level and availability of labour. Since call centres are typically located in areas in which labour costs are low, and low-skill labour is in plentiful supply, the foreign affiliate’s marginal cost curve is highly elastic, translating into a smaller share of profits for the call centre relative to its parent firm.

If an external market price existed at the call centre stage (it appears not to), the Hirshleifer Rule tells us that this would be the profit-maximizing transfer price. Moreover, transfer-pricing regulations (OECD, 1995; IRS, 2003) suggest that the best method to be used in this situation is a CUP. However, since an external market price does not exist at the call centre stage of the value chain, CUP is not an appropriate method in this situation. Moreover, the resale price method is inappropriate because of the intangibles held by the parent firm and because it allocates all residual profits to the call centre stage. CPM and TNMM are difficult to apply because of the lack of data on profit margins at the call centre stage.

In this article, I have argued that the cost plus method is the best method for pricing call centre activities. Since the call centre is basically a contract services provider, the cost plus method – which treats the manufacturer (in this case, the service provider) as a contractor producer and allocates the residual profits to the downstream firm – is the appropriate method. Another possible method would be the residual profit split method. It would give basically the same result but would involve substantially more work (and guesswork) because the individual intangibles would need to be valued. Thus, the cost plus method also dominates the residual profit split. Moreover, I argue that location savings typically belong to the TNC parent firm, not to the call centre site, given the typical functions, assets, risks and economic circumstances of call centres. I therefore argue that the transfer-pricing maxim for teleservices TNCs should be: “Went for cost, priced at cost” (plus a small mark-up).

These conclusions are likely to be controversial for the following reasons. First, the argument that the best method rule is the cost plus method allocates the lion’s share of profit back to the TNC parent firm, increasing the taxable income base in the home country. This should be welcome news to the home country Governments; on the other hand, host country Governments – those where the call centres are located – are also hungry for tax revenue and a cost plus methodology clearly leaves them even hungrier. Recent moves to develop transfer pricing rules for offshored business services by both the United States and Indian tax authorities are emblematic of the importance and controversy associated with this topic. Unfortunately, simply stating that transfer-pricing rules must follow the OECD’s arm’s length standard is not sufficient to

¹⁴ The Indian tax authority’s September 2004 circular states, in paragraph 6: “In determining the profits attributable to an IT enabled BPO unit constituting a Permanent Establishment, it will be necessary to determine the price of the services rendered by the Permanent Establishment to the Head office or by the Head office to the Permanent Establishment on the basis of the ‘arm’s length principle’”. While this is a necessary condition, it is not sufficient to avoid international tax disputes. See Fazelbhoj (2005, p. 36).

avoid controversy and double taxation.¹⁴ From a TNC's perspective, the worst of both worlds is for both Governments to use gross margin methods: cost plus by the home country Government (shifting the bulk of profits to the parent firm) and the resale price method by the host country Government (shifting profits to the foreign affiliate). The residual profit caused by the continuum price problem is therefore taxed twice, even though both Governments are following the arm's length standard. As more activities are shifted offshore, the reality of double taxation becomes even more likely.¹⁵ To the extent that tax authorities better understand the economic principles behind taxing business services, such conflicts should be less likely.

Moreover, there are now many countries competing to attract call centres. Given the labour-intensive nature of production and the higher mobility of capital in this industry, any attempt by one host country Government to tax a call centre too highly, or double taxation through conflicting transfer pricing methods not resolved at competent authority, could easily cause capital flight to another location. While tax havens are not currently major host locations for call centre activities, they do offer potential roosting havens for the mobile geese of the 21st century. Again, a better understanding of the economics of transfer pricing should help reduce the incentives for capital flight.

One caveat is in order. I have assumed that call centres engage in low-skilled teleservices activities with few intangibles. This accurately characterizes most of today's offshored business services. However, the maxim "Went for cost, stayed for quality" (Dossani and Kenney, 2003) suggests that the level of skills in these centres is increasing. Moreover, there are a variety of business services now being offshored. For business services that are clearly sophisticated (level 3 services in figure 3), the residual profit split method may be a better method than the

¹⁵ Ernst & Young (2003) found that 40% of all transfer-pricing adjustments resulted in double taxation. This percentage will likely increase as business services grow as a percentage of international intrafirm transactions.

cost plus method for allocating profits between a TNC parent firm and its offshore affiliate. Therefore, over time, as the quality and complexity of offshored business services increases, I expect the applicability of the cost plus method to decline. Unfortunately, shifting to other methods such as residual profit splits and TNMM is likely to exacerbate transfer-pricing disputes in this industry. The need for a multi-Government approach (e.g. through multi-country Advanced Pricing Agreements) is therefore likely to become more important over time.

This article contributes to the international business literature in several ways. First, it contributes to the growing literature on offshoring and outsourcing of business services by providing a detailed economic analysis of one of the most common offshored services, teleservices (more generally, customer relationship management). Second, it analyzes transfer-pricing regulation of business services, focusing on the United States proposed transfer-pricing regulations. Its economic analysis of the international business of teleservices adds to a transfer-pricing literature dominated by lawyers and accounting professionals. Third, it has extended the literature on location savings, which was developed for offshored, labour-intensive manufacturing in the 1970s and 1980s, to apply to offshored business services in the 21st century. Fourth, it brings the literatures on offshored business services and transfer pricing together, two research areas that have had little connection between them to date. As globalization intensifies, understanding both the international business and the transfer pricing aspects of offshored services becomes increasingly important for both TNCs and Governments. Lastly, the article has implications for the OECD, suggesting it is time to develop guidelines that are more sophisticated for the transfer pricing of offshored services, along the lines of IRS (2003). The development of a model template for a Multi-Government Advanced Pricing Agreement (MAPA) for business services would also help to reduce intergovernmental tax disputes.

In conclusion, international tax authorities and TNCs need to pay close attention to the transfer pricing of offshored business services because there are more complications and uncertainties

involved in this new area of international commerce than in traditional taxation of goods and raw materials. In this article, I have attempted to outline the problem areas, evaluate the alternatives and propose solutions. Even though the catchphrase “Went for cost, stayed for quality”, affirms the importance of both cost and quality as location drivers in the teleservices industry, “Went for cost, priced at cost”, remains the appropriate transfer-pricing maxim for both TNCs and Governments, at least for the foreseeable future. ■

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