

AN INTRODUCTION TO TRANSFER PRICING

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ABSTRACT

This paper provides an overview of transfer pricing as an increasingly key issue in international business and trade and examines the topic from both micro (firm level) and macro (economy wide) perspectives. On a micro level, how transfer pricing decisions are made within a firm is examined via a case study, highlighting the difficulty in solving the “corporate transfer pricing problem” and the shortcomings of recent regulations in providing a framework for a solution. On a macro level, recent literature is reviewed that demonstrates the impact that transfer pricing has on the larger economy.

I. INTRODUCTION

Within the past 5 to 10 years, transfer pricing has become a significant issue to the broader business audience. The popular press often portrays transfer pricing as a practice whereby multinational firms distort profit flows and corporate tax payments. In response to these fears, governments around the world follow the lead of the United States in making transfer pricing audits a strategic priority.

Under a high level of scrutiny, establishing appropriate transfer pricing policies is a difficult task. Various economic factors must be considered, as illustrated by the recent litigation involving multinational corporations that we will review (or otherwise give us an example and a footnote).

Perhaps the most vexing concern is the need for multinationals to solve the “corporate transfer pricing problem” by establishing transfer pricing policies and practices that: (i) satisfy the needs of the business with respect to strategy and internal incentives; (ii) result in an efficient use of resources; and (iii) provide an appropriate transfer pricing answer from a tax perspective. As illustrated by means of a case study, arriving at a solution to this problem is exacerbated in the case of financial services transactions, where recent transfer pricing legislation fails to provide adequate guidance. The impact of transfer pricing, however, is felt well beyond the confines of the individual firm, and can affect the economy at large.

II. TRANSFER PRICING: A DEFINITION

“Intrafirm trade involves the sale or transfer of tangible and intangible goods between related companies in two or more countries. Multinational transfer pricing is concerned with the pricing of intrafirm trade” (Tang 1997, p.xv)

As far back as 1979, however, economists noted that the term “transfer pricing” often assumed pejorative connotations suggesting that large multinationals have leeway to manipulate the prices on intrafirm trade and service flows for business advantage. (Plasschaert 1979, p.19) When unrelated companies transact with each other, the circumstances of their commercial and financial relations are generally driven by market forces. By contrast, when related companies transact with each other, their commercial and financial relations may not be directly affected by external market forces in the same way. As a result, the prices charged for intrafirm transfers of goods, for instance, between a foreign subsidiary of a multinational and its US based parent, may differ from those charged to independent companies for the transfer of comparable goods. Plasschaert argues that the US based parent theoretically exercises control over its subsidiaries and therefore has the power to fix the level of prices applied to intrafirm trade. If the overall profits of the multinational can be increased or if costs can be reduced, then the US based parent may have an incentive to artificially deviate from the “true” price for goods or services (Plasschaert 1979, p.17).

The decades since Plasschaert’s comments have witnessed an explosion in the global reach of business accompanied by increases in intrafirm, cross border trade flows. On its website the Bureau of Economic Analysis states that intrafirm trade in services has increased from USD 26.9 billion in 1997 to USD 57.6 billion in 2006¹ (Bureau of Economic Analysis). This increase in cross border activity has only served to wet the media’s appetite to find sinister intent in an often misunderstood aspect of international trade.

In a *New York Times* article, transfer pricing is described as “a practice meant to minimize United States taxable profits by overpaying foreign subsidiaries for product supplies.” (*The New York Times* 2006). The *Financial Times* presents a European point of view and describes transfer pricing as “the practice whereby profits of UK-based foreign multinationals are channeled through a Northern Ireland office without actually bringing any additional economic activity to the province” (Brown 2007). As *The Economist* described strategies that multinational corporations can employ to minimize or avoid taxation, they referred to transfer pricing as a “big stick in the corporate treasurer’s tax-avoidance armoury;” an issue that has become the “taxman’s nightmare” (*The Economist* 2007). Covering news from Vatican City, Richard Owen reports that Pope Benedict XVI, spiritual leader of the Roman Catholic Church, is working on a doctrinal pronouncement that will condemn the use of offshore tax havens as an immoral and ‘socially unjust’ practice (Owen 2007).

III. RESPONSE OF GLOBAL TAX AUTHORITIES

To increase domestic tax revenues and prevent perceived abuses of the tax system, global taxing authorities implemented stringent documentation requirements that multinational corporations must meet in order to detail the prices that they are charging for intrafirm transfers.² In 2007, the Norwegian Ministry of Finance published draft documentation requirements concerning transfer pricing, with a view towards improving the ability of the Norwegian tax authorities to assess companies’ transfer pricing compliance (KPMG 2007-38). In India, the result of a 2007 tax court ruling highlighted the latitude being provided to local tax examiners in bringing transfer pricing issues to court, and also placed the onus on taxpayers to perform thorough benchmarking analyses (Ceteris 2007).

With an interest in harmonizing the activities of its member countries the Organisation for Economic Co-operation and Development (OECD) released guidelines on transfer pricing in 1995 (OECD 1995). In accord with the OECD’s mission to support economic growth and financial stability, the OECD guidelines were developed to provide a common framework for

governing intrafirm transfer pricing. Although often vague and lacking a means of penalty enforcement, they are the closest thing currently available to a unified, multinational, playbook for establishing appropriate transfer prices.

For developing countries and taxing authorities just turning their attention to transfer pricing, the OECD guidelines often form the basis for their own directives. In July 2007, for example, Spain proposed transfer pricing regulations that are based on the OECD Guidelines (KPMG 2007-32). Through its Centre for Tax Policy and Administration, the OECD organizes regular conferences with industry representatives and tax authorities from member countries—one of the most well known outcomes being the guidance published on the attribution of profits to permanent establishments in December 2006.³ Not to be outdone, the European Union (“EU”) seeks to streamline the documentation requirements of its member states through an EU-wide approach to transfer pricing known as the “masterfile.” This would contain common background information relevant for multinational enterprises operating in EU countries, which would then be supplemented by “country-specific documentation” (PriceWaterhouseCoopers 2006).

In a *Financial Week* article on avoiding transfer pricing tax traps, Barbara Mace and Chris Faiferlick describe the growing trend by tax authorities to adopt a macro view towards transfer pricing issues by collaborating and sharing best practices and data sources. This trend seems to be beneficial from the perspective of taxpayers, providing cohesive guidance in a fragmented regulatory environment. However, these efforts at collaboration have not always translated into agreement regarding the tax treatment of intricate transactions or the resolution of conflicts because each tax authority has a vested interest in retaining tax revenues in their respective jurisdiction (*Financial Week* 2007).

a. The U.S. Internal Revenue Service Focuses on Transfer Pricing

According to Bernard et al., the United States was unable to collect an estimated USD 5.5 billion in corporate tax revenues in 2004 because of transfer pricing (Bernard et al. 2008 p.3). As a result of such statistics, the Internal Revenue Service (“IRS”) has indicated its intent to focus on transfer pricing issues during tax audits. In reference to a multibillion dollar transfer pricing settlement with a pharmaceutical company, IRS commissioner Mark Everson stated that “transfer pricing is one of the most significant challenges for [the IRS] in the area of corporate tax administration” and that “settlement of this case sends a strong message of our resolve to continue to deal with this issue going forward.” (IRS 2006 on-line)

b. U.S. Regulatory Framework

The United States codified the most comprehensive regulations on transfer pricing available (§482 of the Internal Revenue Code (“IRC”)). The IRC §482 regulations are based largely on the concept of the arm’s length principle. Neighbor (2002) and Eden and Smith (2001) discuss the arm’s length principle in the context of transfer pricing, while Brem and Tucha (2006) point to its potential shortcomings in today’s business environment. For our purposes, we can define the arm’s length principle as the idea that intrafirm transfer prices must be consistent with third party, market results.⁴ Taxpayers must ask, “what would an independent company operating in a competitive market charge for performing comparable services”?

The IRC §482 regulations enumerate various economic methods that taxpayers can use to test the arm’s length nature of intrafirm transfers. A separation is made between methods applicable to the transfer of tangible goods, and methods applicable to the transfer of

intangible goods. The Comparable Profits Method relies on the profitability margins that third party companies earn as a benchmark for establishing transfer prices. While the more involved Residual Profit Split makes use of allocation keys to attribute an arm's length amount of revenue to the party in a transaction that performs value added services, and then allocates the remaining amount (the residual) to the party that performs routine services. A provision is also made for a bit of taxpayer creativity by way of "unspecified methods."⁵

To encourage taxpayers to comply with transfer pricing regulations, the United States instituted stiff penalties. Specifically, the IRS finalized penalty regulations under IRC §6662 on February 8, 1996.⁶ Under this regulatory scheme, if the IRS makes an adjustment to a taxpayer's tax liability pursuant to IRC §482, and this adjustment exceeds certain benchmarks, 20% or 40% penalties can be imposed on top of the valuation misstatement (for "substantial" or "gross" misstatements, respectively). Other tax administrations have followed suit, in an apparent contest to create the most damning penalty regime possible.

c. European Regulatory Framework

The OECD⁷ Guidelines for transfer pricing were approved and published in 1995⁸. The guidelines seek to reduce incidents of double taxation between member countries and provide a framework for international cooperation.⁹ The OECD guidelines do not, however, override domestic laws on transfer pricing that OECD member countries may legislate. However, when European OECD member countries have codified their own transfer pricing regulations these have generally been consistent with the principles of the OECD guidelines.¹⁰

Similar to the IRC §482 regulations, the OECD guidelines are based upon the concept of the arm's length principle. The authoritative statement of the arm's length principle is found in paragraph 1 of Article 9 of the OECD Model Tax Convention (OECD 1995, p. I-3):

[When] conditions are made or imposed between...two [associated] enterprises in their commercial or financial relations which differ from those which would be made between independent enterprises, then any profit which would, but for those conditions, have accrued to one of the enterprises, but, by reason of those conditions, have not so accrued, may be included in the profits of that enterprise and taxed accordingly. (OECD 1995)¹¹

To evaluate whether an intercompany transfer pricing arrangement satisfies the arm's length standard under the OECD guidelines, two issues must be addressed. One must first determine whether the activity "provides a respective group member with economic or commercial value to enhance its commercial position."¹² Once this determination has been made, the next issue is to derive the appropriate arm's length intrafirm charge. The OECD guidelines enumerate various economic methods to suit this purpose, and these methods are broadly consistent with those found under the IRC §482 regulations.¹³ Unlike the IRC §482 regulations, however, the OECD guidelines place an emphasis on "traditional transaction methods"¹⁴ and dictate the order in which potential economic methods should be considered.¹⁵ Bell (2008) reports that the OECD is keen to modernize the OECD guidelines in the way the United States has, and that any significant updates are likely to revolve around comparability issues, the application of profits methods, and a review of the domestic guidelines of all OECD member countries to ensure consistency and to benefit from best practices.

IV. THE ECONOMICS OF TRANSFER PRICING

What does all of this mean in a practical sense? Multinationals who fail to comply with tax driven transfer pricing regulations can find themselves at risk both financially and in terms of their reputation. However, satisfying compliance requirements from a tax perspective addresses only one component of the intersection between economics and transfer pricing. To analyze this relationship more fully, we herein construct a working definition of the “corporate transfer pricing problem”, i.e., the requirement of multinationals to establish transfer pricing policies and practices that: (i) satisfy the needs of the business with respect to strategy and internal incentives; (ii) result in an efficient use of resources; and (iii) provide an appropriate transfer pricing answer from a tax perspective. As we will review, there are a number of economic factors that multinationals must consider when establishing transfer pricing policies.

d. Optimal Corporate Strategy & Internal Incentives

One element of the corporate transfer pricing problem concerns the intersection between economics and transfer pricing with respect to optimal corporate strategy. According to Eccles, strategy and administrative process are the primary determinants of transfer pricing practices (Eccles 1985, p.8). These practices have a direct impact on economic decisions, which influence corporate performance, performance measurement, evaluation, and reward—all of which affect perceptions of fairness by individual managers. There is a difficulty in establishing transfer pricing policies that will lead to decisions that increase corporate performance while measuring, evaluating and rewarding performance in a way that managers of decentralized profit centers view as fair.

From a corporate strategy perspective, there are a variety of options for implementing a transfer pricing system, including market based, negotiated, and cost based approaches. With respect to market based transfer pricing systems, a study of 73 German companies revealed that these produce stronger perceptions of efficiency and motivation (Wolff 2007). However, it is commonly understood among transfer pricing practitioners that the third party data necessary to derive tax defensible market based and/or negotiated transfer pricing systems are not always readily available for certain transactions, and therefore cost based systems are often used as methods of last resort (Urquidi and Ho 2006; Urquidi and Faiferlick 2005). This dichotomy of potential approaches draws our attention to the fact that “transfer pricing is not an exact science” (OECD 1995, p. I-19), and that the determination of what constitutes an appropriate solution will differ dramatically from case to case.

e. Corporate Efficiency

A second element of the corporate transfer pricing problem concerns the need to establish transfer pricing policies that lead to efficient decisions among employees. As described by Kuntz and Vera (2005) the underlying economic rationale is that the institution of transfer pricing mechanisms will result in individuals using resources as efficiently as possible when they are made to pay for them. Kuntz and Vera (2005) used data on approximately 57,000 operations carried out at the University Hospital Hamburg-Eppendorf in Germany over the period from 2000 to 2002 to test the results of introducing a transfer pricing mechanism between surgeons and anesthesiologists. The results indicate that when the surgery department within the hospital was forced to directly pay for the resources of the anesthesiologists on an hourly basis, the surgically controlled time of operations was significantly reduced.¹⁶

Although the study by Kuntz and Vera (2005) focuses on implications for the practice of health care management, we can extrapolate and make application to a variety of industries and business scenarios. Many firms operate in a decentralized structure whereby decision making authority is delegated to sub-units. Often, the financial results for these sub-units are calculated on a discrete basis. Without the presence of transfer prices to serve as restraints, individuals within a sub-unit may use more of a particular good than they otherwise would, which could lead to inefficient consumption of resources and a negative financial impact in the sub-unit. In the language of economics, a form of “moral hazard” can thus present itself under such circumstances. Consider, for example, an automobile manufacturer that has installed new computer systems at each of its many dealerships nationwide. To support post-training questions about functionality that may come from employees in the field, the automobile manufacturer establishes an in-house call center at its home office location. Without the financial disincentive of having to pay for calls to the center, employees in each of the decentralized locations may overuse the call service, as opposed to spending time reading the supplied user manual or engaging in an online tutorial.

As summarized by Kuntz and Vera (2005) the institution of transfer pricing policies leads to an increased awareness of the financial consequences of behavior, specifically an increased awareness of costs. The implications of this are that efficiency within organizations can be enhanced through proper application of transfer pricing policies.

f. Economic Double Taxation

Of particular concern to multinational corporations is the development of transfer pricing policies that minimize the risk of economic double taxation. In a transfer pricing context, economic double taxation is best explained by way of an illustration. Consider, for example, a transaction between a Canadian financial advisory firm and its US subsidiary, whereby the US subsidiary performs extensive advertising and marketing functions for the US marketplace in exchange for a fee paid by its Canadian parent. If the IRS determines upon audit that the fee received by the US subsidiary is insufficient, they may make an adjustment to increase the amount of income recorded in the United States. This income, however, has already been recorded in Canada, which results in a tax payment in two different jurisdictions on the same portion of income. This in turn could lead to an increase in the global effective tax rate for the company (Chung and McAlonan 2007). Taking into consideration this potential risk, global firms may alter their behavior, such that economic double taxation may have a detrimental effect on the movements of capital, technology and persons and on the exchange of goods and services (OECD 2007).¹⁷

g. Business Economics

Often, general economic principles compound the difficulty for multinationals who seek to solve the corporate transfer pricing problem. Consider the UK based pharmaceutical giant GlaxoSmithKline (“GSK”). In September 2006 GSK settled a dispute with the IRS representing the largest settlement in IRS history. As described by Reichert *et al.* (2006) the dispute involved compensation received by the US based affiliate for marketing and advertising expenses incurred, largely in relation to the popular ulcer drug Zantac. GSK characterized these functions as “routine distribution” activities, taking the position that they were of little economic value to the overall product and therefore warranted only a modest financial return to the US affiliate (located in Research Triangle Park in North Carolina). In contrast, the IRS contended that the profits retained by the US affiliate were drastically understated as the development was for highly profitable drugs. In the final analysis, GSK

agreed to pay more than \$3 billion in taxes and interest covering tax years from 1989 to 2005 (*The New York Times* 2006).

Another example concerns a case that is in litigation before the Tax Court of Canada as of August 2008. General Electric Capital (“GE US”) maintains a Canadian based subsidiary (“GE Canada”) that operates a real estate financing and leasing business. To fund the operations of its Canadian business, GE Canada issued debt securities which included a financial guarantee by GE US for all issuances after 1988 (Wright 2007). Such intrafirm guarantee arrangements are common in the financial services industry. Generally, the parent company (with a high credit rating) will provide a financial guarantee to its subsidiary (with a lower credit rating) that allows the subsidiary to: (i) secure funds from the local market at a preferable interest rate; and (ii) secure a larger total amount of funds than would otherwise be possible.

Beginning in 1995, GE Canada began paying GE US a fee for these guarantees, equal to 1% of the principal amount of debt securities outstanding per year. Appealing to Canadian tax laws, GE Canada claimed a tax deduction for these guarantee fees paid. The Canada Customs and Revenue Agency (“CRA”), however, contends that the payment of a guarantee fee was not necessary and levied a transfer pricing adjustment in the amount of CAD \$136.4 million that disallows these deductions (Wright 2007). Specifically, the CRA claims that the Standard & Poor’s credit rating that GE Canada had used was designed for rating stand-alone companies (not wholly-owned subsidiaries) and therefore assigned to GE Canada an artificially low credit rating when in reality GE Canada was just as credit worthy as its parent (therefore negating the premise of a guarantee fee). In addition, the CRA contends that the economic method selected by GE Canada to determine the 1% guarantee fee was unsuitable because differences existed between the fact pattern of the intrafirm transaction and third party benchmarks, and reliable economic adjustments could not be made to account for these differences (Wright 2007).

As illustrated in these cases, there are many economic factors that multinationals must consider when establishing transfer pricing policies. In the GSK case, the crux of the issue rested on understanding value drivers in the corporate process flow, the economics of the pharmaceutical industry, and the relative importance of worldwide profit centers. In the GE Canada case, the primary concerns were the validity of credit rating methodologies, the comparability of third party economic benchmarks, and the underlying premise of whether explicit guarantee arrangements between affiliates should adjust for the fact that subsidiaries may receive an implicit benefit by virtue of group association.

V. SOLVING THE CORPORATE TRANSFER PRICING PROBLEM: FINANCIAL SERVICES

The issue of finding a solution to the corporate transfer pricing problem is exacerbated in the case of financial services transactions as a result of both increased industry scrutiny and the unique nature of the intrafirm transactions in question.

h. Increased Scrutiny

With respect to increased scrutiny, Mace *et al.* (2007) noted: (i) an increase in tax audit activity in the industry as a whole over the last several years; and (ii) the adoption by tax administrations of the view that capital can be readily moved around the world with the intent of achieving tax arbitrage objectives. In addition, Mace *et al.* (2007) noted that a lack of concrete transfer pricing guidance further complicates the ability of financial services

companies to manage their transfer pricing risks. Without such guidance, taxpayers have been subject to scrutiny from taxing authorities regarding the economic validity of their transfer pricing arrangements. In a 2006 survey conducted by Ernst & Young, tax directors and transfer pricing personnel from 70 of the world's largest financial firms listed the "economic substance" of intrafirm transactions as a key issue when they were asked about the top transfer pricing related challenges raised by tax authorities (Ernst & Young 2006, p.5).

i. Inadequacy of Existing Regulations

Much of the difficulty associated with establishing economically sound transfer pricing policies for intrafirm service transactions stems from the inadequacy of guidance specific to services under the IRC §482 regulations. As a result, taxpayers historically relied on methods intended to price tangible and intangible transfers of goods, notwithstanding that such methods do not take into account the many unique economic characteristics of financial services transactions. In an attempt to address this issue, on August 4, 2006, the US Department of the Treasury issued Final and Temporary regulations¹⁸ relating to the treatment of controlled services transactions under IRC §482. Effective on January 1, 2008, the regulations update the existing rules regarding intrafirm services¹⁹ which were originally made in 1968.²⁰

Among other changes, the new services regulations did away with the Integral Test,²¹ instituted a more stringent Benefit Test,²² revamped the Profit Split Method,²³ and narrowed the definition of what types of services can be constituted "shareholder activities" (i.e., a specific class of services that can be excluded from consideration for transfer pricing purposes) (US Department of the Treasury 2006, p. 159).

One of the most important developments of the new services regulations was the promulgation of the elective Services Cost Method ("SCM"). The SCM provides for a means by which taxpayers can charge for intrafirm services on a cost only basis, without including a profit element. The SCM is designed to minimize the time spent by taxpayers in preparing documentation for "low margin" or "non value added" services, and therefore streamline their approach to transfer pricing. (US Department of the Treasury 2006, p. 91) In order to apply the SCM, the intrafirm service in question must meet both of the following general conditions:

1. The taxpayer must reasonably conclude in its "Business Judgment" that the services do not contribute significantly to the fundamental risks of success or failure for the business; and
2. The services must not be an "excluded service."²⁴

In addition, the service must meet one of the following two specific conditions:

1. The service must be specified under IRS Rev. Proc. 2007-13²⁵, which represent services that are largely clerical or administrative; or
2. The taxpayer must conduct a profitability analysis of third party comparable benchmarks, derive the median result from such an analysis, and confirm that the median profit margin is less than or equal to seven percent. (US Department of the Treasury 2006, p. 91)

VI. BENEFITING FROM MICROANALYSIS

For services that are specifically listed by the IRS under Rev. Proc. 2007-13²⁶, the SCM may provide a means to address the corporate transfer pricing problem. However, what is not known are the transfer pricing implications of the new IRS guidance for services that are not specifically listed under Rev. Proc. 2007-13. One mechanism for answering this question is to place ourselves in the position of a manager at Global Co., a hypothetical multinational firm struggling with a solution to its corporate transfer pricing problem. By establishing a realistic fact pattern for Global Co. and analyzing the decision process Global Co. management is likely to follow in determining an economically sound transfer pricing policy, we can extrapolate general observations on the sufficiency of the new services regulations.

a. The Case of “Global Co.”

Global Co. operates as a diversified financial services firm that maintains operations worldwide. As part of a recent company wide realignment, Global Co. has consolidated all back office support functions into one center, located in Des Moines, Iowa. The services performed in Des Moines for the benefit of Global Co. affiliates worldwide encompass a broad array of activities, from human resource recruiting and performance measurement to finance related supportive functions. Global Co.’s key offices are located in the tax jurisdictions of Germany, Italy, and Japan - where corporate tax rates are comparable to that of the United States. By reference to the aforementioned Benefit Test, affiliated offices receive an economic benefit from these services, and therefore an appropriate amount of compensation must be determined.

From a corporate strategy perspective, Global Co. wants to keep revenue in the local offices where revenue is being created and “value added” functions are being performed. This will serve as an incentive to management who bear financial responsibility for local office operations. Global Co. is also concerned about corporate efficiency, and making sure the costs of these support functions accurately reflect their consumption of resources. Furthermore, Global Co. is currently subject to an IRS tax audit, so they are keen to minimize any potential transfer pricing adjustments that would result in economic double taxation. Like many firms, Global Co. wants to satisfy the relevant transfer pricing regulations while keeping revenue in the proper locations given the economics of their business.

With these facts in mind, Global Co. decides to explore the possibility of applying the SCM in order to reimburse the Des Moines office on a cost only basis. The nature of the activities performed in Des Moines is such that they are not “specified” services under Rev. Proc. 2007-13, are not “excluded” under US Treas. Reg. §1.482-9T(b)(3)(ii), and in the opinion of management do not contribute significantly to the fundamental risks of success or failure for the business.

b. The Search Process for Comparables

The first step for Global Co. is to perform a profitability analysis by reference to independent, US based companies who perform services similar to those performed by the Des Moines office. To perform this search, the June 2007 edition of Compustat North America (produced by Standard & Poor’s) is used.²⁷ The search process adopted for the comparable search²⁸ consisted of three main stages of identification and screening:

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1. Electronic identification of a sample of entities which would be potentially comparable to the tested party by using the automated search capabilities of the database;
2. Refinement of this initial sample of entities by performing manual research based on the quantitative and qualitative information contained in the databases; and
3. Wherever necessary and reasonably possible, validating the initial sample as refined above by reviewing the most recent 10-K / annual report filings made by the companies with the SEC and / or relevant regulatory authorities; and / or undertaking additional Internet research.

Compustat classifies companies according to Standard Industrial Classification (“SIC”) codes.²⁹ Given the activities performed by the Des Moines office of Global Co., the Compustat database was searched for an SIC code that may contain potentially comparable companies. The search therefore focused on SIC code 7389, representing miscellaneous business services that are not classified in other, more specific codes. Fiscal years from 2004 through 2006 were encompassed in the search.

Compustat identified 147 potentially comparable companies from the search. To this set, a financial screen was applied, and 39 companies were removed for not maintaining financial data for all three years from 2004 through 2006. In addition, 14 companies were removed for reporting three years of consecutive operating losses, under the assumption that these companies were in a start up phase, or were otherwise subject to exogenous variables (e.g., acquisitions) that distorted their financial results.

The remaining 94 companies were reviewed in detail, to ensure economic comparability to the activities performed by the Des Moines office of Global Co. Companies were removed on the basis of one or more of the following criteria:

- Primarily performs non comparable business activities (e.g., provides credit reporting services, licenses technology products, operates as a media marketing company, etc.);
- Operates in a non comparable geographic region;
- Functions as a subsidiary of a parent company (under the assumption that the parent company could exert control over the pricing arrangements of its subsidiaries);
- Maintains ownership of intangible property (e.g., trademarks and/or software programs); and
- Insufficient information was available to determine economic comparability (e.g., inadequate business descriptions available through public sources).

As a result of these screening criteria, a total of 8 companies remained. These companies were deemed sufficiently comparable to the activities performed by the Des Moines office for purposes of determining the suitability of the SCM.

c. Calculating Profitability Indicators

For these 8 companies, a measure of profitability known as the full cost markup³⁰ was calculated for the period from 2004 through 2006. These results were then averaged for each company, as shown below.

Table 1: Full Cost Markup for Comparable Companies

	2004	2005	2006	Average
Firm A	-2.2%	4.6%	7.2%	3.2%
Firm B	14.2%	7.5%	4.4%	8.7%
Firm C	3.4%	2.1%	5.5%	3.7%
Firm D	1.5%	-2.2%	2.4%	0.6%
Firm E	2.9%	2.7%	5.2%	3.6%
Firm F	1.5%	2.9%	3.3%	2.6%
Firm G	5.3%	3.9%	5.6%	4.9%
Firm H	9.3%	7.6%	8.3%	8.4%

Source: derived from search using Compustat database, June 2007 edition.

d. Calculating the Arm's Length Range

Once these averages have been calculated, the next step is to construct the arm's length range of results, which under the guidance of the IRC §482 regulations is derived from the interquartile range.³¹ Summary statistics, including the lower, median, and upper boundaries of the arm's length range for the selected set of comparable are presented below.

Table 2: Interquartile Range for Comparable Companies

Average	4.4%
Minimum	0.6%
Lower	2.9%
Median	3.6%
Upper	6.7%
Maximum	8.7%

As can be seen, the results of the profitability analysis reveal that the arm's length range extends from 2.9% to 6.7%, with a median of 3.6%. This implies that independent companies who perform services similar to those performed by the Des Moines operation earn margins equal to costs incurred plus a profit element that falls within this range.

e. Implications

Under the guidance of the new services regulations, Global Co. is eligible to apply the SCM and to reimburse the Des Moines operations on a cost only basis as the median result of the comparables is less than seven percent. This, however, does not result in a clear, economically viable solution for Global Co.'s transfer pricing needs. That is, in order to support the potential application of a cost only approach, Global Co. had to prepare a benchmarking study that effectively amounts to having applied a Comparable Profits Method or similar profit based transfer pricing analysis. Rather than minimize the amount of effort expended by Global Co. to defend its transfer pricing structure for a non-core function, the new services regulations have added a burdensome layer of analysis.

From a strategic point of view, Global Co. has also now tipped its hat to US tax authorities, insofar as their documentation reveals that companies engaged in comparable functions receive a markup, albeit a relatively low one in the range of 2.9% to 6.7% above costs. This would only make sense, as one would not expect independent companies operating in the US marketplace to continue operations at such a rate as to only recoup operating costs. So Global Co. is still saddled with its original dilemma: do they reimburse on a cost only basis, or institute a transfer pricing policy that includes a modest profit margin? Electing to apply the SCM is no guarantee that on audit the IRS will agree with their position, and thus the risk of economic double taxation still applies in the first instance. In the second, Global Co. would face the same challenge as if they had applied the CPM or a similar profit based method: they are effectively resting their hat on the economic substance of the intrafirm transaction in question and on the validity of their third party benchmarking analysis. In addition, regardless of what the results of their benchmarking analyses indicate, Global Co. is going to fight an uphill battle in convincing its local managers in Des Moines to operate under a policy where only costs are reimbursed. This will not provide any incentive to local managers to perform their best, and may force Global Co. into a position where it will have to maintain one transfer pricing policy for management reporting purposes and a separate policy for statutory accounting purposes. Determining the appropriate transfer pricing policy is also important with respect to corporate efficiency. Pricing intercompany services incorrectly could lead to Global Co. employees overusing the support services performed out of the Des Moines office.

For all of these reasons, solving the corporate transfer pricing problem is a priority for Global Co., and applying the guidance of the SCM has not moved Global Co. any closer to a solution.

VII. MACRO PERSPECTIVE: TRANSFER PRICING AND THE ECONOMY

As demonstrated via the case study of Global Co., transfer pricing can play an important role in the strategic decisions made by multinational firms. Looking beyond the firm level, there is an abundance of literature that examines the interrelationship between transfer pricing and the larger economy. Kant (1990; 1995) examines the impact of transfer pricing on intrafirm trade and government revenues. Clausing (1998) and Collins *et al.* (1998) find that foreign direct investment may be negatively impacted by high tax rates, leading to aggressive transfer pricing policies. Eden and Smith (2001) note that firms can use transfer pricing to the demise of nation specific goals such as productivity, growth, and employment. To understand the broader implications of transfer pricing, we will review two studies that demonstrate the potential links between transfer pricing and stock market valuations, aggregate export price indices, and evaluations of corporate performance.

Eden *et al.* (2005) addressed the question of how transfer pricing penalties impact the profits of multinational firms, restricting their analysis to Japanese companies with US subsidiaries. Their hypothesis was that if these multinational firms were manipulating transfer prices to shift profits out of the United States, then the introduction of US transfer pricing penalties would reduce their incentive for this behavior, resulting in decreased cash flows in the United States and lower stock market prices for their American Depository Receipts. Performing an event study of the period from February 20, 1990 through July 17, 1997,³² they found that in the absence of the penalty legislation the market value for these American Depository Receipts would have been USD 56.12 billion, or 12.56% higher than it was at the end of the period.

Bernard *et al.* (2008) examined whether transfer prices set by multinational firms differ between independent third parties and related party entities, and the extent to which these differences are elastic to product and firm characteristics, market structure, and government policy. Working with point of export customs documents which provide pricing information for US international export transactions occurring between 1993 and 2000, their analysis reveals that on average, third party prices were 43% higher than related party prices for similar goods transacted under similar circumstances. This gap is wider for differentiated products than for commodities, is more pronounced for firms with greater market power, and increases in instances where corporate tax rates are low and tariffs are high. Bernard *et al.* (2008) therefore argues that tax minimization may indeed play a role in transfer pricing decisions made by firms, as firms appear to make substantial price adjustments to changes in country tax and tariff rates.³³ In addition, they note that the gap narrows as the US dollar appreciates relative to the currency of the foreign country, with the implications that: (i) intrafirm trade plays a role in the determination of aggregate export price indices; and (ii) firms may be able to insulate themselves from exchange rate movements using transfer pricing. Finally, Bernard *et al.* (2008) question whether evaluations on the performance of multinationals should incorporate the effects of transfer pricing, insofar as the ability to purchase goods from affiliates at lower prices may influence a firm's size, and levels of innovation, productivity, and wages.

VIII. CONCLUSION

As intrafirm cross border trade expands, the practice of transfer pricing is framed by the popular press as a practice that can be used to minimize corporate tax liabilities. Consider this fear in the context of the current business environment where governments are searching for additional sources of revenue and multinational corporations are subject to increased public scrutiny, and one can understand why transfer pricing has become a hot topic in the world of international business. Beyond tax implications, however, transfer pricing is an area with strong roots in the discipline of economics that presents a challenge for proper implementation at the firm level. Specifically, firms seek to solve the corporate transfer pricing problem of achieving a transfer pricing system that: (i) satisfies the needs of the business with respect to strategy and internal incentives; (ii) results in an efficient use of resources; and (iii) provides the "right" transfer pricing answer from a tax perspective. This is a daunting task, particularly for financial services firms, and one that has not been remedied by recent transfer pricing regulations. Beyond its impact on the firm, however, transfer pricing can also have significant impacts on cross border, international trade and on the macro economy. As the prevalence and complexity of intrafirm, cross border trade increases, economic analysis will continue to play a key role in assisting firms to navigate the transfer pricing process.

END NOTES

¹ Represents US international cross border trade and sales through majority owned affiliates.

² The reader is referred to Peralta *et al.* (2006) for an exploration of the theory that countries may achieve optimal benefit by *not* monitoring the profit shifting activities of multinational firms by way of strict regulations.

³ This guidance was issued in four parts. The most recent (focusing on insurance transactions) was released in draft form for industry commentary on August 22, 2007.

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⁴ The arm's length principle derives from the "separate entity" approach of determining taxable income, whereby each affiliate of a multinational organization is treated as an independent entity for purposes of determining taxable income. Hyde and Choe (2005) make the important observation that although this approach has been embraced by the OECD as the standard for international transfer pricing, the "formula apportionment" approach, whereby a formula based on factors such as consolidated sales and assets is used to allocate consolidated taxable income among a multinational organization's affiliates, remains an alternative. Interested readers are also directed towards an article by Paul Armstrong (*Tax Business* November/December 2005) that discusses alternatives to the arm's length principle.

⁵ The interested reader is referred to Herr and Jain (2007) for a case study surrounding the use of Monte Carlo simulation techniques in estimating arm's length prices.

⁶ Congress first consolidated the tax penalties into IRC §6662 in December 1989, and in the ensuing years a number of revisions were made. The process was brought to a finish when the IRS established a penalty oversight committee to ensure uniform application of §6662 on March 11, 1996.

⁷ OECD member countries include: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

⁸ The report *Transfer Pricing and Multinational Enterprises*, published by the OECD Committee on Fiscal Affairs in 1979, was the foundation for the OECD Guidelines. To reflect changes in international trade and benefit from the United States experience on the subject, the OECD published the revised OECD Guidelines in 1995, with subsequent chapters added in 1996 (intangible property and intercompany services) and 1997 (cost contribution arrangements). Various annexes, reports, and glossaries related to transfer pricing have subsequently been issued by the OECD, and transfer pricing economists generally intend the phrase "OECD guidelines" to capture these documents as well

⁹ It should be noted that although OECD membership is comprised of countries from around the world, the discussion herein is limited to the application of the OECD guidelines to European nation states.

¹⁰ In the United Kingdom, for example, the 1998 Finance Act ("FA 98") introduced a comprehensive modernization of the United Kingdom's transfer pricing legislation. FA 98 altered language in the prior Income and Corporation Taxes Act in order to more closely align the UK's approach to transfer pricing to Article 9 of the OECD Model Tax Convention and Chapter IV of the OECD guidelines.

¹¹ OECD 1995 guidelines paragraph 1.6.

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¹³ The Transactional Net Margin Method under the OECD 1995 guidelines, for example, is analogous to the Comparable Profits Method under the IRC §482 regulations.

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¹⁵ Generally, the OECD 1995 guidelines indicate that methods should be considered in the following order: Comparable Uncontrolled Price, Resale Price, Cost Plus, Profit Split, and Transactional Net Margin.

¹⁶ Surgically controlled time was specified by Kuntz and Vera (2005) as: (i) the pure surgical time (from incision to closing of the wound); (ii) time spent positioning and preparing the patient; and (iii) time spent by surgeons in washing and dressing in preparation for the operation.

¹⁷ It should be noted that in an attempt to secure a corresponding decrease in income recorded in the foreign tax jurisdiction, and therefore eliminate double taxation, the firm may appeal to the Competent Authority process. Competent Authority is a process established under the mutual agreement procedure articles of US tax treaties that enables taxpayers to obtain double taxation relief when one treaty country makes a transfer pricing adjustment (Chung and McAlonan 2007). Chung and McAlonan (2007) note, however, that most corporate tax departments do not have direct experience with this procedure, and that it takes on average two to three years to reach a competent authority settlement.

An introduction to transfer pricing

¹⁸ US Treas. Reg. § 1.482-9T.

¹⁹ US Treas. Reg. § 1.482-2(b).

²⁰ The IRS had released services regulations in September 2003 in proposed form, but these fell short by many accounts and it took three years to iron out all of the wrinkles.

²¹ A four-part test previously used to determine whether an intrafirm service warranted a cost only reimbursement.

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²³ The Profit Split Method relies on the assumption that certain activities are central to the creation of value within a particular enterprise, whereas other functions are ancillary or routine in nature. Under the residual profit split method, profits are first allocated to the “value added” functions of an enterprise based on metrics such as usage rates, revenue, and head count, and then the remaining (residual) profit is allocated to the routine functions. The comparable profit split relies on independent, third party profit split data to benchmark the appropriate split of profits for the intrafirm transaction(s) under question. (OECD 1995, p. III-2)]

²⁴ Excluded services are listed under US Treas. Reg. § 1.482-9T(b)(3)(ii) and include services such as manufacturing, production, and construction.

²⁵ The IRS herein lists 101 specific activities, organized into 20 categories.

²⁶ A revenue procedure is an official statement of a procedures that affects the rights or duties of taxpayers or other members of the public under the Internal Revenue Code, related statutes, tax treaties, and regulations that should be a matter of public knowledge. Procedures do not have the force and the effect of Treasury Department Regulation, but may be used as precedents. The IRS issues revenue procedures sequentially, such that Rev. Proc. 2007-13 represents the 13th procedure issued during 2007.

²⁷ Compustat is a database of North American public business establishments. The database provides business descriptions and detailed financial information including income statement, balance sheet, cash flow and supplemental data for over 23,000 public business establishments in the United States and Canada. The data is primarily sourced from publicly available documents filed with the US Securities and Exchange Commission. The Compustat database is commonly used for the purposes of constructing transfer pricing benchmark sets, and is used by the IRS in performing transfer pricing audits.

²⁸ Although the fact pattern is hypothetical, the data used for the comparables search is factual. For confidentiality purposes the names of the individual companies used in the analysis are not revealed.

²⁹ The SIC system is a four digit scheme of business classification developed by the US government to classify companies according to the type of economic activity in which they are engaged.

³⁰ The full cost markup is defined as the ratio of operating income / (sales – operating income).

³¹ Note that the interquartile range as calculated under the IRC §482 regulations differs from that commonly found in statistics textbooks due to differences in rounding.

³² This time horizon was selected by Eden *et al.* (2005) to correspond to the period between February 20, 1990, when the IRS made public its intention to audit foreign multinationals for transfer pricing related tax underpayments, and September 17, 1997, when the first transfer pricing penalty was announced.

³³ See also Bartelsman and Beetsma (2003) who examine tax avoidance in OECD member countries.

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