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INTERNAL AND EXTERNAL FACTORS ON FIRMS' TRANSFER PRICING DECISIONS: INSIGHTS FROM ORGANIZATION STUDIES

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Internal and external factors on firms' transfer pricing decisions:

Insights from organization studies

ABSTRACT

Well understood in economics, accounting, finance, and legal research, transfer pricing has rarely been comprehensively explored in organization management literature. This paper explores some theoretical explanations of transfer pricing within multidivisional firms drawing insights from various organizational theories - primarily institutional theory, transaction cost economics, and social networks - to develop a conceptual model of transfer pricing. This model focuses on the nature of multidivisional firms' internal transfers, internal and external technological environments, and internal and external social environments. We highlight the importance of transfer pricing as a key strategic dimension to understand intra-firm flows and their associated costs.

Keywords: theory, value, transfer pricing, intra-firm flows, multidivisional firm.

Kim: "I … don't understand why it would make sense to pay $450/ton for pulp [to buy internally from Northwestern's U.S. pulp mills] when I can get it for $330/ton from Chile."
Ewing: "I understand your motivation for wanting to source the pulp from Chile, but it is important [to buy inside] for the corporation to act as an integrated team."

-- Barrett and Slape (2000: 597)

The quote above is an excerpt from a phone conversation between Bill Ewing, the Vice President of Northwestern Paper Company[1], and Arthur Kim, the Director of Northwestern's South Korean subsidiary. After this conversation, Ewing likely questioned himself on the advantages and disadvantages of utilizing internal transfer prices. For example, given that some subsidiaries are located in lower tax jurisdictions[2], would it not be logical to set lower internal transfer prices from the U.S. to those subsidiaries? Would it not be logical to allow the Korean subsidiary to purchase from outside suppliers given that internal transfer prices are much higher than market prices in Chile? Allowing subsidiaries to outsource externally would lead to the bankruptcy of the US subsidiaries, which would not have enough demand for their products? What are the advantages and disadvantages of a reward system based on the allocation of internal consumption? Is the allocation process "fair" to each subsidiary? Is it "fair" to the company as a whole? Questions and doubts on transfer pricing probably haunt not only Mr. Ewing and the

[1] Northwestern Paper Company is an Oregon-based firm founded in 1916. Northwestern Paper Company had grown into one of the largest U.S. producers of pulp and paper products by the 1950s.
[2] As of early 1994, the federal corporate tax rate in the U.S. was 34%, with South Korean taxes ranging from 20% to 34%.

Northwestern Paper Company, but more generally all the managers who need to set internal prices for intra-firm flows of goods and services.

Transfer pricing is a major concern for multinational corporations (MNCs) as might be highlighted by the fact that approximately 80% of *Fortune 1000* must select transfer pricing strategies, requiring a complex array of financial, legal, and operational considerations (Eccles, 1985: 2). In addition, intra-firm trade accounts for about 55% of the international trade between the EU and Japan, 40% of the trade between the EU and the US, and 80% of the trade between Japan and the US (Stewart, 1993). That is, a large proportion of the international trade is actually intra-MNC and occurs among subsidiaries of the MNCs. These MNCs rely on internal transfer prices to value their intra-firm flows. Furthermore, transfer pricing is also a concern for governments and regulatory agencies because the manner in which MNCs price these intra-firm flows of tangible and intangible assets (Eden & Boos, 2003) across national boundaries impacts the distribution of tax income among countries. But transfer pricing is also important for the majority of multi-divisional firms, even if they do not carry out international operations.

The *transfer price* is the value (or price) placed on the goods, services and intangibles that are transferred within the firms, as it moves from one organizational entity (e.g., a division, an unit, a

subunit, a division[3]) to another within a corporate group (Eccles, 1985; Cravens, 1997). Hence, while the role of *prices* is to efficiently allocate resources in the market, the role of *transfer prices* is to efficiently allocate resources within the firm. Despite substantial interests by scholars, the transfer pricing is still largely regarded as an accounting issue and hence has seen little penetration into the core management literature. Research on transfer pricing has been mainly carried out by economists, accounting professionals, and lawyers. It is not surprising that the primary focus has been on taxation considerations. In addition, much of the existing literature is largely atheoretical or, at least, does not include well-developed theory. Hence, it is also not surprising that the majority of existing research has seldom utilized established management theories to examine other dimensions (e.g., strategic, social networks, technological) of transfer pricing, or the strategic implications of transfer pricing decisions (with some notable exceptions, such as Eccles (1985)). In fact, we have limited knowledge and understanding of fundamental questions such as: why there has been an increase in the variety of transfer pricing practices; how transaction characteristics impact transfer prices; how technological and business environment influence transfer prices; and how inter-divisional relationships affect the firms' transfer pricing decisions.

In this paper we draw insights from organizational theories and

[3] In this paper we utilize the terminology subunits, divisions, departments, units and subsidiaries interchangeably.

current management research, and integrate these insights into a fairly comprehensive understanding of transfer pricing by multidivisional firms. We specifically focus on three main streams of research: transaction cost economics, institutional theory, and social network theory. We, therefore, examine three aspects that affect firms' transfer pricing decisions: (1) the nature of internal transfers; (2) the firms' internal and external technological environments; and (3) the firms' internal and external social environments. In the first section of the paper, we briefly review the extant literature and research and describe transfer pricing of multidivisional firms. In the second section, we examine the factors that influence transfer pricing and propose a conceptual model that incorporates a strategic dimension to transfer pricing. We conclude with a discussion on the implications for practice and possible future research avenues.

TRANSFER PRICING: FOCUS AND APPROACHES

Transfer prices may apply to departments, divisions, subsidiaries, or affiliate business units (Cravens, 1997; Eden & Boos, 2003). The use of transfer pricing emerged with the hierarchical multi-divisional organization. This is because as firms grow they need to organize production in multiple divisions and hence have a tendency to departmentalize knowledge and activities into more specialized subunits (Lawrence & Lorsch, 1967). As Hayek (1937) noted, the division of labor is inevitably accompanied by a division of knowledge. However, the interdependence created by divisional

specialization in large multidivisional firms increases intra-firm flows, which necessitates a transfer price system to govern these exchanges/flows between divisions. A clear transfer pricing system is also important for divisional managers because they are frequently held accountable for revenues and costs (profit center) (Brickley, Smith, & Zimmerman, 2001: 433).

The concept of transfer price can be traced to the 1880s (Eccles, 1985; see also Cox, Howe, & Boyd, 1997). Notwithstanding, it is worth noting that when discussing the theory of exchange value of material products, in *The Principles of Political Economy*, Harry Sidgwick (1901) recognized the possibility that producers could consume some of their own outputs. This possibility complicated his assumption that products were produced to be sold on the external market. In Sidgwick's years, most firms manufactured only one product or a narrow line of products. The later boom of decentralized multi-unit firms elevated transfer-pricing problems and caught scholars' attention.

Economists and accounting researchers made pioneer contributions to the current understanding of transfer prices. For example, Hirshleifer (1956) first formalized the transfer-pricing problem in economics, arguing that the market price was the correct transfer price only when the commodity being transferred was produced in a perfectly competitive market. If the market was not perfectly competitive, or if the market for the transferred commodity

did not exist, the “correct” transfer price would be the marginal cost, given certain simplifying conditions[4]. Accounting scholars considered both economic arguments and real business needs, and devoted research efforts to taxation-minimization concerns (e.g., Grebmer, 1987) and the development of a double accounting system (e.g., Boer, 1999). Undeniably, saving tax money is beneficial for the firms’ profitability in the short term, but ignoring internal coordination may turn out to be detrimental for the firms' long-run profitability. Albeit tax is indeed a potentially important factor in determining an optimal transfer price, by no means it is the only one.

Two conditions make transfer pricing an unavoidable component for a multidivisional firm’s efficiency. First, the agency hazards within multidivisional firms make transfer pricing necessary for internal management, and stem from a lack of congruence between the interests of the agent and the principal (Ouchi, 1979; Eisenhardt, 1989; Govindarajan & Fisher, 1990). There are at least two general types of agency problems that can be observed in large multidivisional firms: (1) the division’s misrepresentation of the firm’s interests as a whole, and (2) the conflicts among the divisions, which convey negative spillover effects (Eden & Li, 2003). Thus, an “ideal” transfer pricing system depends on the comparison of the firms’ total costs and benefits; that is, the spillovers between divisions must be included in the transfer price. Unfortunately, as we will discuss, an

[4] Hirshleifer’s analysis is based on the assumptions of technological independence and demand independence.

ideal system, although simple to state conceptually, is often difficult to implement in practice and requires the formulation and interpretation of the focal firm's strategy.

Second, imperfect and asymmetric information (Ouchi, 1979; Eisenhardt, 1989; Govindarajan & Fisher, 1990) justifies the existence of a transfer pricing method even in the absence of other agency problems. Perfect information may not be attainable due to (1) the unavailability of certain information to the central management (such as the corporate headquarters) or the other divisions, and/or (2) the difficulties, or high costs, of moving information across subunits. For example, in large multidivisional firms knowledge generally resides at lower levels within the firm where it assumes a private nature and tends to be costly to either transfer and/or verify by outsiders (Szulanski, 1996). Under conditions of imperfect information, the performance evaluation of business units/divisions requires establishing transfer prices for internally exchanged goods or services (Egelhoff, 1982; Eccles, 1985). Because transfer pricing affects performance evaluations and hence managers' rewards, dispute over the transfer price between divisions is “virtually inevitable” (Brickley et al., 2001: 438). Transfer pricing serves not only as a system for internal efficient allocation of resources/costs, but it is also a mechanism for the coordination of subunits.

Firms generally choose one of the three main approaches to

value internal transfers, these are: the negotiated price, the adjusted external-market price, and the cost-based price (see, for example, Eccles, 1985; Cravens, 1997). These approaches vary in the amount of subunit autonomy (see Table 1). A *negotiated price* is set through internal bidding, or direct negotiation, between the seller and the buyer divisions. This approach involves little or even no higher-level management. Because internal transfers only occur when both parties agree on an acceptable price, it is common to designate this as "internal market price". Internal-market prices are employed when external referent prices do not exist or the firm's strategy requires divisional flexibility. An *adjusted external-market price* is set in proximity to the external market prices and hence reduces the division managers' autonomy to set the transfer price. For instance, an adjusted external-market price may be determined as the market price minus a fixed discount, the best price to an outsider during a specific period, or the negotiated price with a listed price range. A *cost-based price* is set drawn from the supplier's costs. This approach allows the selling division to charge a markup on the cost to cover overhead and provide a profit margin. This solution leaves the selling division with little flexibility in manipulating transfer prices because it requires the division to expose all cost-related information. Table 1 summarizes these three different transfer pricing approaches and lists examples for each.

TABLE 1. A typology of transfer pricing

Low subunit autonomy ←		→ **High subunit autonomy**
Cost-based price	**Adjusted external-market price**	**Negotiated / internal-market price**
Information on supplier costs is referred to while setting transfer prices.	Prices on the external market serve as the referent for determining the values of internal transfers.	Managers of the trading profit centers establish a price that is acceptable to both the seller and the buyer before the exchange can be consummated.
e.g., actual full production cost; standard production cost; full production cost plus a mark up; etc.	e.g., market price less a discount; best price to an outsider during a specific period; negotiated price with listed price range; etc.	e.g., negotiated prices between subunits, bidding.

It is worth noting that the boundaries between these three approaches are not clear-cut. In fact, this classification in three approaches does not prevent firms from utilizing other transfer-pricing methods that are better tailored to their idiosyncratic needs.

A CONCEPTUAL MODEL OF TRANSFER PRICING

To better understand transfer pricing within large multi-unit firms through management lenses, we propose a conceptual model of transfer pricing. This model integrates the insights from three main organizational theories - i.e., institutional theory, transaction cost economics, and social networks theory - that have proved useful in explaining other organizational phenomena. We trust that the utilization of these theories on transfer-pricing research may provide insightful perspectives and highlight the importance of transfer pricing specifically in corporate strategy and international

management.

In our conceptual model, we examine various conditions that may affect firms' transfer pricing decisions. Specifically, we investigate how the nature of internal transfers, firms' technological environments, and firms' social environments may influence transfer pricing. Figure 1 summarizes the main propositions advanced in the following sections. We focus on exploring the direct effects of these three factors on firms' transfer pricing decisions, and acknowledge that an explanation of possible interactions is beyond our scope, and an avenue for future studies.

[Insert Figure 1 about here]

The Nature of Internal Transfers

The transfer pricing decisions are fundamentally influenced by the characteristics of the internally transferred products[5] (Adler, 1996). There are two critical dimensions of these internal transfers. First, transfer-pricing methods are likely to vary through the life cycle of the products subject to internal transfers. Hence, defining a transfer price for a product is even more complex for firms because this price is bound to vary as the focal products evolve along their life cycles (i.e., from introduction to growth, maturity, and decline). To some extent transfer prices are based on the availability of external referent prices. The rationale is rooted in classical economics arguments that in competitive markets the market price is the best

[5] This paper employs "product" in a broad sense to include tangible and intangible goods, technologies, and services.

reference for evaluating internally transferred products (Hirshleifer, 1956) and set a price for these internal transfers. However, when new products are first introduced, it may be difficult to find external market prices that may serve as a reference price; indeed an external market price may simply not exist. In contrast, it is easier to utilize external market prices as reference prices for mature products (Cats-Baril, Gatti & Grinnell, 1988). Therefore, it seems reasonable to suggest that in many instances the internal transfers of newly developed products (or innovations) will likely be priced on the basis of manufacturing costs due to the lack of an external reference price, and, conversely, the valuation of internal transfers of mature products may rely on existing external market prices.

Second, transfer prices are likely to vary throughout a multidivisional firm because intra-firm transactions involve different degrees of asset specificity. Williamson (1985: 55) defined asset specificity[6] as "durable investments that are undertaken in support of particular transactions, the opportunity cost of which investment is much lower in best alternative uses or by alternative users should be original transaction be prematurely terminated". In the presence of asset specificity, hold-up and moral hazard problems may emerge, and either the selling and/or the buying subunit may engage in opportunistic behaviors. For example, when the purchasing subunit refuses to acquire from the seller, the seller's investments in assets

[6] Williamson (1985) identified four different types of asset specificity: site, physical asset, human asset, and dedicated assets specificity.

specific to the exchange cannot be inexpensively withdrawn or reassigned to other uses (Williamson, 1985; Spicer, 1988). Since the external market for such idiosyncratic assets is limited, external reference prices may not be available. Additionally, the potential *ex post* opportunistic behavior of the buyer may decrease the selling unit's negotiation power once the investment is made. To eliminate potential transaction hazards related to asset specificity, cost-based prices are favored over negotiated prices by multi-unit firms, but demand proximate monitoring of the manufacturing processes (Spicer, 1988; Colbert & Spicer, 1995). Therefore, when standardized intermediate products are the objects of internal transfer, market prices will likely be the primary basis for setting internal transfer prices. When internally transferred intermediate products involve a moderate degree of customization, internal manufacturing costs will likely play a greater role in the initial negotiations to set transfer prices, and in any ex-post proposal to adjust them. Finally, when the internally transferred intermediate product is idiosyncratic and involves a large transaction-specific investment, it seems reasonable to suggest that internal manufacturing costs will likely be the primary basis for setting transfer prices, and that a larger degree of central control over the make-or-buy decision may be needed.

Proposition 1: *The characteristics of the goods transferred internally affect firms' transfer pricing method, such that:*

Proposition 1a: *Firms are more likely to utilize cost-based*

transfer prices to value internal transfers of newly developed products, and to utilize adjusted external-market transfer prices to value internal transfers of mature products.

Proposition 1b: *Firms are more likely to utilize cost-based transfer prices to value internal transfers of idiosyncratic products, and to utilize adjusted external-market transfer prices to value internal transfers of standardized products.*

Internal Technological Environment

The 'internal technological environment' refers to the degree of interdependence across different units within a firm that stems from the technological requirements of the activities performed by the firm. In this paper, we use Thompson's (1967) classification of technologies (i.e., long-linked, mediating, and intensive technologies) to develop the following arguments. The *long-linked technologies* represent the kind of serial interdependence within firms (i.e., action Z can be performed only after the successful completion of action Y) that can be best observed, for example, in mass assembly lines of standardized products. In these instances, to assure serial coordination, central control will tend to be high and the valuation of manufacturing costs will likely be based on attributing values to the intermediate goods transferred within the firm. This is, it seems reasonable to suggest that firm operating long-linked technologies will tend to define internal transfer prices based on costs incurred.

The *mediating technologies* may be best observed in service firms linking different types of clients to each other (cfr. Thompson, 1967). For instance, banks serve as the "bridge" for the depositors and the borrowers. These organizations rely on standardization as the mechanism to coordinate among organizational units in firms operating with mediating technologies. Given that in these firms the internal competition may have a positive impact on the units' performance, we suggest that external market prices will likely be used as referrals to set internal transfer prices. Lastly, the *intensive technologies* are characterized by a reliance on feedbacks from the product itself, and the technologies are largely customized. Under these conditions, it is likely that the costs for internal transfers are difficult to be determined. Moreover, it is probable that often referent market prices will not exist. Therefore, we suggest that internal transfer prices will be settled through internal negotiation between the subunits involved. In proposition form, we advance that:

Proposition 2a: *Firms are more likely to utilize cost-based prices when long-linked technologies are embedded in internal transfers.*

Proposition 2b: *Firms are more likely to utilize adjusted market-based prices when mediating technologies are embedded in internal transfers.*

Proposition 2c: *Firms are more likely to utilize negotiated prices when intensive technologies characterize the inter-linkages among the activities originating the products for internal transfers.*

Internal Social Environment

The transfer-pricing problems only arise within a recognizable social system (e.g., an organization). Hence, additional insights may be drawn from considering transfer pricing in a broader social system context (Granovetter, 1985) in which internal flows occur. That is, we may gain insights by considering the internal social interfaces, or social networks, among subunits. Social networks can be defined as the collectivity of individuals, or individual groups, among whom exchanges take place and are supported by shared norms of trustworthiness (Dubini & Aldrich, 1991; Gulati, 1995; Liebeskind et al., 1996) and social control mechanisms (Coleman, 1988). In fact, firms may be considered as networks of business units each performing specific functions and activities (Ghoshal & Nohria, 1989; Powell & Smith-Doerr, 1994; Burt, 1997). Buckley and Casson (1998) documented the shift in contemporary organizations away from bureaucratic to newer, more flexible, possibly network-type organizational form. This shift brings to the forefront the importance of social capital (particularly trust) as a major coordination mechanism within the organization (Gulati, 1995). As Arrow (1974: 23) stated “[t]rust is an important lubricant of a social system. It is extremely efficient; it saves a lot of trouble to have a fair degree of reliance on other people’s word”.

Transfer pricing, hierarchical authority, and trust are largely intertwined as firms employ these three control mechanisms to

achieve governance and operational efficiency. Transfer-pricing methods provide managers with another tool for coordination (Westland, 1992), in addition to hierarchical authority and trust. Various transfer-pricing methods are employed to match different degrees of authority and trust to achieve the desired level of control over internal transfers of both tangible products and intangible assets (Eden & Boos, 2003). Moreover, these three control mechanisms do not substitute each other; rather, they tend to be largely complementary. For example, if there is more trust among the subunits, the quality, timeliness and speed of information flows will be higher and will spread across different divisions facilitating mutual understanding among the subunits (Zucker, 1986). Thus, high-levels of trust attenuate the need for authority's involvement and limit the need for strict transfer pricing mechanisms. Stated differently, inter-unit trust renders easier flows of information and reduces the uncertainties involved in interdivisional dependency.

Therefore, we suggest that a higher level of trust between subunits is likely to lead to the use of negotiated transfer prices. Conversely, lower level of trust restricts information flows beyond formal report systems as imposed by hierarchical control. In these instances, all knowledge about internal transfers is either the reflection of external market prices (when they exist) or made known by headquarter requirements. Hence, it seems reasonable to suggest that a lower level of trust between subunits is likely to be associated

with the use of adjusted market-based prices and/or cost-based prices.

Proposition 3: *Firms are more likely to utilize negotiated transfer prices when inter-division trust is high, and to utilize adjusted external-market prices and/or cost-based prices when inter-division trust is low.*

External Technological Environment

The 'external technological environment' refers to the pace of technological changes for the whole industry. It is likely that firms operating in stable external technological environment may more accurately make predictions on the major technological changes and their implications for firm performance, resources, and survival. In contrast, firms in unstable external technological environments will find it more hazardous to predict potential changes of the main technologies and the outcome of those changes (Lant & Mezias, 1990; Brews & Hunt, 1999). The environmental (un)certainty may be assessed by the frequency of technological change, such that the more frequently major technologies change in an industry, the more uncertainty firms will experience (Lawrence & Lorsch, 1967). Our proposition is that the characteristics of the external technological environment (e.g., in terms of technological stability) are likely to impact on the definition of the transfer prices firms use.

When technologies are fairly stable the products also tend to be reasonably standardized. Hence, we suggest that the easiest and

cheapest way for firms in stable technological environments (i.e., with standardized products) to value internal transfers may be simply to utilize extant external market prices. Utilizing external market prices as referent values for inter-unit flows enables firms to save the costs of detecting and governing agency problems. Conversely, when technologies are unstable (i.e., heterogeneous products), firms may chose to internalize the links of their value chain (as transaction cost theory suggests – see, for example, Williamson, 1985). It is difficult for firms facing unstable external technological environments to find external referent prices. In fact, even when an open market price exists, referent prices may not be appropriate for firms facing different forms of technologies and pace of technological change. Therefore, we suggest that firms in unstable technological environments are more likely to utilize cost-based and/or negotiated transfer prices. In proposition form:

Proposition 4: *Firms are more likely to utilize adjusted external-market prices when the external technological environments are stable, and to utilize cost-based and/or negotiated prices when the external technological environments are unstable.*

External Social Environment

As any other organizational activity and decisions, transfer pricing should not be analyzed in isolation of the firms' external social context (Granovetter, 1985). Firms are not atomistic actors competing for profits against each other in a perfect marketplace

(Gulati, 1998). Instead, they are embedded in networks of social, professional, and exchange relationships with other organizations and agents in their surrounding environments (Granovetter, 1985). This view entail an open systems perspective that is akin to institutional theory (Meyer & Rowan, 1977; DiMaggio & Powell, 1983) and represents a move towards recognizing that the organization and its activities are integrated not only with an external technological environment, but also with an external social environment (Scott, 1998). Firm's success is contingent upon the extent to which it is able to gain legitimacy in the host marketplace.

Firms need to be embedded in their social environment to gain legitimacy and assure firms' survival and growth (Meyer & Rowan, 1977; DiMaggio & Powell, 1983). To gain legitimacy, organizations respond to institutional forces placed on them by the external social agents (Oliver, 1990). DiMaggio and Powell (1983) specified three mechanisms firms may utilize to "fit" within the host environment and designated the process as isomorphism. As an organization seeks legitimacy it may endeavor to resemble (or become isomorphic) other firms operating in the host environment through one of three processes: coercive, mimetic, and normative. *Coercive* isomorphism emanates from an external authority and results in the need to conform to the expectations of other organizations from which the focal firm depends for resources. *Mimetic* isomorphism is atypical response to conditions of uncertainty and involves imitating

incumbent firms (DiMaggio & Powell, 1983; Haunschild & Miner, 1997; Haveman, 1993). According to Haveman (1993) the focal firm may utilize successful firms, large firms, firms of similar size, or firms in the same industry as the referent others to imitate strategies and market positions. Finally, *normative* isomorphism is typically a reflection of the influence of professional communities, who by their actions shape organizational forms and practices. For example the knowledge produced by academic specialists and the norms created through industry associations determine the degree of normative pressures upon firms. It seems reasonable to advance that as an internal practice with broad impact on the firms' operations, the selection of transfer pricing method is likely to be subject to the firms' institutional environment.

Organizational practices are often either direct reflections of, or strategic responses to, rules and structures built into their larger environments (DiMaggio & Powell, 1983; Oliver, 1997; Scott, 1998). For example, firms' transfer pricing has to comply with the laws, regulations, and rules exerted by its external environment (coercive pressures). Section 482 regulations issued by the US Internal Revenue Service (IRS) are the basis for the US firms' transfer pricing methods. These regulations represent the coercive/regulative institutional pressures for all US firms. The industry associations also often issue reference prices for intermediate products. Although these are commonly labeled as "recommended transfer pricing", firms that

fail to comply with these “recommendations” may face legal disputes or suffer collective sanctions. Tang (2002) noted that normative isomorphism in transfer pricing practices has been observed in recent years. It is worth noting that due tot he complexity of government regulations on transfer pricing, firms increasingly turn to professional companies (or consultants) for aid in establishing transfer prices (Ernst & Young, 2001). This is more complex for multinational firms carrying operations in several countries and facing different sets of regulations.

It seems reasonable to suggest that transfer-pricing methods can be learned or imitated. That is particularly true when transfer pricing methods can be observed directly (Gox, 2000). Even though transfer-pricing practices are typically not “crystal-clear” to outsiders and involve some ambiguity, knowledge on transfer pricing methods can still flow across organizational boundaries through the movement of executives, communication between personnel, or some form of industry associations and meetings. Usually firms' decisions to imitate other firms' transfer pricing methods are largely based on the analysis of a causally ambiguous relationship between transfer pricing practices and firm success. Notwithstanding, the salience of the outcomes of different transfer pricing methods and the level of uncertainty involved will likely determine how imitation occurs (Haunschild & Miner, 1997). That is, when faced with uncertainty, organizations tend to rely more on social indicators, and on the

observation of other firms' transfer pricing methods. In these instances, imitation becomes more likely. Thus, when the causality between the transfer pricing method and firm performance is vague and the industry environment is unstable, imitation of seemingly successful organizations in the same industry (possibly even across industries) may be utilized to enhance firm's likelihood of survival. We suggest in proposition form that:

Proposition 5a: *Firms' external institutional environment is likely to affect transfer pricing either through government/industrial regulations, professional norms, and/or imitation of successful firms.*

In the late 1970s, Meyer and Rowan (1977) stressed firms' difficulties to adjust to both institutional expectations and the need for efficiency. The authors identified two general problems. First, technical activities and demands for efficiency create conflicts and inconsistencies in an institutionalized organization's efforts to conform to the ceremonial rules of production. Second, because these ceremonial rules are transmitted by myths that may arise from different parts of the environment, these rules may conflict with each other.

At different stages of institutionalization, the balance between survival and efficiency is likely to vary. For example, in the pre-institutional stage (Barringer & Milkovich, 1998), the tendency to imitate incumbent firms is low for several reasons. First, the

relationship between certain practices and superior performance has not been completely disclosed. Second, the public has not formed a stereotype of legitimacy regarding those practices. Therefore, in the pre-institutional stage institutional pressures to adopt specific transfer-pricing methods are low. Hence, we suggest that decisions to comply with the institutional environment depend mostly on economic and technical considerations. In other words, efficiency considerations are likely to overrun external institutional pressures. However, as more organizations adopt a certain transfer-pricing method the pressures to conform to prevailing practices is likely to increase. The logic – "if leading companies are doing it, so should I" – plays an increasingly important role, while economic efficiency rationale is likely to become less important, or even taken-for-granted by follower firms.

Furthermore, it is likely that different firms have different abilities to resist external institutional pressures. For example, Barringer and Milkovich (1998) noted that firms' size is an important indicator of firms' ability to resist institutional pressures and to initiate actions that break away from prevailing institutional norms. This is because large firms possess more slack resources that increase firm's resilience and resistance to institutional pressures, than small firms (Greening & Gray, 1994). Therefore, it is likely that the institutional environment may be more influential to small firms than to large firms in setting the terms for internal transfer prices.

Proposition 5b: *Firms' concurrent pursuit of efficiency and legitimacy in their institutional environment influences their selection of transfer pricing method.*

DISCUSSION AND CONCLUDING REMARKS

This paper contributes to the transfer pricing literature by providing a relatively comprehensive set of factors that affect firms' transfer pricing methods. In this paper we explore the impact on transfer pricing of the main aspects – the nature of the internal transfers, firms' technological environment, and firms' social environment. By examining transfer pricing through various management theoretical lenses, we offer new insights in a parsimonious model of firms' transfer pricing decisions. This is important because extant transfer pricing research has been largely fragmented and restricted to economics, accounting, taxation, and finance studies. By pooling together a more diverse literature and ways to analyze transfer pricing, our study contributes to a better understanding of transfer pricing in large multidivisional firms.

This paper has various implications for both practitioners and academic researchers. For practitioners, we offer a parsimonious model for the analysis of the intertwined determinants of transfer pricing by identifying the major factors that should be taken into consideration in complex transfer pricing decisions. For example, the design of a reward system is an important puzzle for improving firm performance. However, for a deliberately designed reward system to

work, it must be adjusted to the transfer pricing method. Transfer pricing methods based on negotiation may lead to huge waste of time and effort when the evaluation and reward of subunits are based on their individual financial performance. For academic research, we identify an important research gap that has been largely unattended to. Transfer pricing carries significant inferences for the firm's strategic management, which warrants more attention from researchers. In addition to the arguments developed in this paper there are various promising avenues for future research. For instance, future research may observe specific aspects of each of the factors we examined, such as the impact of strategic partnerships and alliances in the context of the external social environment.

In addition, several interaction possibilities related to firms' internal social environments may be analyzed. First, transfer prices, trust, and authority may be jointly used to cope with asset specificity. In large multidivisional firms, it is often difficult to assess accurately asset specificity, and relatively autonomous subunits typically have the option to buy outside. Although the hierarchical governance has been suggested to incorporate the production of idiosyncratic assets to reduce opportunistic hazards (Williamson, 1985), the hierarchical control of asset specificity arising from inside may not be sufficient. Under such conditions, trust and transfer pricing methods may be jointly utilized and possible interactions should be studied. Second, social relationships need to be taken into consideration when

analyzing how the technologies utilized require certain transfer pricing methods. Due to information asymmetry between the headquarters and the subunits, it is impossible to exert complete control over each internal transfer. Thus, trust may have a facilitating role on the definition of the transfer prices when technological requirements are critical. Therefore, the interaction between trust and technological requirements appears interesting for future research.

Furthermore, the uncertainty involved in a firm's technological environment may also exert influence on its simultaneous consideration of survival and efficiency (Meyer & Rowan, 1977). This is because when faced with unstable and uncertain environments organizations tend to imitate the practices of other organizations that they perceive as successful (Haveman, 1993). If high technology industries experience higher uncertainty than traditional/mature industries, it is likely that we may observe higher variety of transfer-pricing methods in high-technology industries than in traditional/mature industries.

This paper focuses on multidivisional firms regardless of their geographic scope. Transfer pricing decisions and methods are not bound exclusively to MNCs. Nonetheless, the MNCs may encounter more difficulties in transfer pricing than their domestic counterparts. This is also because MNCs operate across taxation jurisdictions that make both taxation considerations and internal coordination issues

even more complex. Furthermore, MNCs are likely to face additional differences across their internal institutional environments, influencing the selection of transfer pricing methods for foreign subsidiaries. Further research may be prospective to examine how an MNC's transfer pricing strategy balances between external and internal institutional pressures, and the pressures imposed by the home and host country institutional environments.

To conclude, transfer pricing concerns are not bound only to taxation considerations. Both the characteristics of internal transfers, internal and external technological environments, and internal and external social environments exert influences on the transfer pricing practices adopted in a multidivisional firm. Therefore, transfer pricing should be treated as a key strategic dimension in the management literature and in practitioners' checklist.

REFERENCES

Adler, R. 1996. Transfer pricing for world-class manufacturing. *Long Range Planning*, 29(1): 69-75.

Arrow, K. 1974. *The limits of organization* ([1st] ed.). New York,: Norton.

Barrett, M. E. & Slape, M. 2000. Cast study: Northwestern Paper Company. *Thunderbird International Business Review*, 42(5): 597-602.

Barringer, M. & Milkovich, G. 1998. A theoretical exploration of the adoption and design of flexible benefit plans: A case of human resource innovation. *Academy of Management Review*, 23(2): 305-324.

Boer, D. 1999. Tax aspects of transfer pricing: 1-31: Ernst & Young's Transfer Pricing Group.

Brews, P. & Hunt, M. 1999. Learning to plan and planning to learn: Resolving the planning school/learning school debate. *Strategic Management Journal*, 20(10): 889-913.

Brickley, J., Smith, C., Jr., & Zimmerman, J. 2001. *Managerial economics and organizational architecture* (2nd ed.). New York, NY: McGraw-Hill/Irwin.

Buckley, P. J., & Casson, M. 1998. Models of the multinational enterprise. *Journal of International Business Studies*, 29(1): 21-44.

Burt, R. S. 1997. The contingent value of social capital. *Administrative Science Quarterly*, 42(2): 339-365.

Cats-Baril, W., Gatti, J., & Grinnell, D. 1988. Transfer pricing in a dynamic environment. *Management Accounting*: 30-33.

Colbert, G. & Spicer, B. 1995. A multi-case investigation of a theory of the transfer pricing process. *Accounting, Organizations and Society*, 20(6): 423-456.

Coleman, J. 1988. Social capital in the creation of human capital. *American Journal of Sociology*, 94(Supplement): S95-S120.

Cox, J., Howe, W. & Boyd, L. 1997. Transfer pricing effects on locally measured organizations. *Management Accounting*, March/April: 20-29.

Cravens, K. 1997. Examining the role of transfer pricing as a strategy for multinational firms. *International Business Review*, 6(2): 127-145.

DiMaggio, P. & Powell, W. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2): 147-160.

Dubini, P. & Aldrich, H. 1991. Personal and extended networks are central to the entrepreneurial process. *Journal of Business Venturing*, 6(5): 305-313.

Eccles, R. 1985. *The transfer pricing problem: A theory for practice*: Lexington, Mass. : Lexington Books, c1985.

Eden, L. & Boos, M. 2003. *Transfer pricing issues in the 21st century*. Paper presented at the Eastern Academy of Management, Oporto, Portugal.

Eden, L., & Li, D. 2003. *Who should set transfer prices?* Paper presented at the Strategic Management Society 23rd Annual International Conference, Baltimore, Maryland.

Eden, L., & Yeung, B. 2003. *Transfer pricing: Thinking like a manager*. Paper presented at the Academy of Management Annual Meeting, Seattle, WA.

Egelhoff, W. G. 1982. Strategy and structure in multinational corporations: An information-processing approach. *Administrative Science Quarterly*, 27(3): 435-458.

Eisenhardt, K. M. 1989. Agency theory: An assessment and review. *Academy of Management Review*, 14(1): 57-74.

Ernst & Young. 2001. Transfer pricing 2001 global survey: Making Informed Decisions in Uncertain Times. Washington, DC: Ernst and Young International.

Ghoshal, S. & Nohria, N. 1989. Internal differentiation within multinational corporations. *Strategic Management Journal*, 10(4): 323-337.

Govindarajan, V. & Fisher, J. 1990. Strategy, Control Systems, and Resource Sharing: Effects on Business-Unit Performance. *Academy of Management Journal*, 33(2): 259-285.

Gox, R. 2000. Strategic transfer pricing, absorption costing, and observability. *Management Accounting Research*, 11: 327-348.

Granovetter, M. 1985. Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 3: 481-510.

Grebmer, K. 1987. International transfer pricing in pharmaceutical industry. *Intertax*, 4-5: 92-99.

Greening, D. & Gray, B. 1994. Testing a model of organizational response to social and political issues. *Academy of Management Journal*, 37(3): 467-498.

Gulati, R. 1995. Does familiarity breed trust? The implications of repeated ties for contractual choices in alliances. *Academy of Management Journal*, 38(1): 85-112.

Gulati, R. 1998. Alliances and networks. *Strategic Management Journal*, 19(4 - Special Issue Supplement): 293-317.

Haunschild, P. & Miner, A. 1997. Modes of interorganizational imitation: The effects of outcome salience and uncertainty. *Administrative Science Quarterly*, 42(3): 472-500.

Haveman, H. 1993. Follow the leader: Mimetic isomorphism and entry into new markets. *Administrative Science Quarterly*, 38(4): 593-627.

Hayek, F. 1937. Economics and knowledge. *Economica*, February: 33-54.

Hirshleifer, J. 1956. On the economics of transfer pricing. *Journal of Business*: 172-184.

Holmstrom, B. & Tirole, J. 1991. Transfer pricing and organizational form. *Journal of Law, Economics and Organizations*, 7: 201-288.

Lant, T. & Mezias, S. 1990. Managing Discontinuous Change: A Simulation Study of Organizational Learning and Entrepreneurship. *Strategic Management Journal*, 11(Summer): 147-179.

Lawrence, P. & Lorsch, J. 1967. *Organization and environment; managing differentiation and integration*. Boston: Division of Research Graduate School of Business Administration Harvard University.

Liebeskind, J., Oliver, A., Zucker, L. & Brewer, M. 1996. Social networks, learning, and flexibility: Sourcing scientific knowledge in new biotechnology firms. *Organization Science*, 7(4): 428-443.

Meyer, J. & Rowan, B. 1977. Institutionalized organizations: Formal structure as myth and cermony. *American Journal of Sociology*, 83(2): 340-363.

Oliver, C. 1990. Determinants of interorganizational relationships: Integration and future directions. *Academy of Management Review*, 15(2): 241-265.

Oliver, C. 1997. Sustainable competitive advantage: Combining institutional and resource-based views. *Strategic Management Journal*, 18(9): 697-713.

Ouchi, W. 1979. A conceptual framework for the design of organization control mechanisms. *Management Science.*, 25: 833-848.

Powell, W. & Smith-Doerr, L. 1994. Networks and economic life. In N. Smelser, & R. Swedberg (Eds.), *The Handbook of Economic Sociology*, Princeton, N.J.: Princeton University Press, 368-402.

Scott, W. 1998. *Organizations: Rational, natural, and open systems* (4th ed.). Upper Saddle River, N.J.: Prentice Hall.

Sidgwick, H. 1901. *The Principles of Political Economy* (3 ed.). London: Macmillan.

Spicer, B. 1988. Towards an organizational theory of the transfer pricing process. *Accounting, Organizations and Society*: 302-322.

Stewart, T. 1993. The new face of American power. *Fortune*, July 26: 72.

Szulanski, G. 1996. Exploring internal stickiness: Impediments to the transfer of best practice within the firm. *Strategic Management Journal*, 17(Winter): 27-43.

Tang, R. 1993. *Transfer pricing in the 1990s : tax and management perspectives*. Westport, Conn.: Quorum Books.

Tang, R. 2002. *Current Trends and Corporate Cases in Transfer Pricing*. Westport, Connecticut; London: Quorum Books.

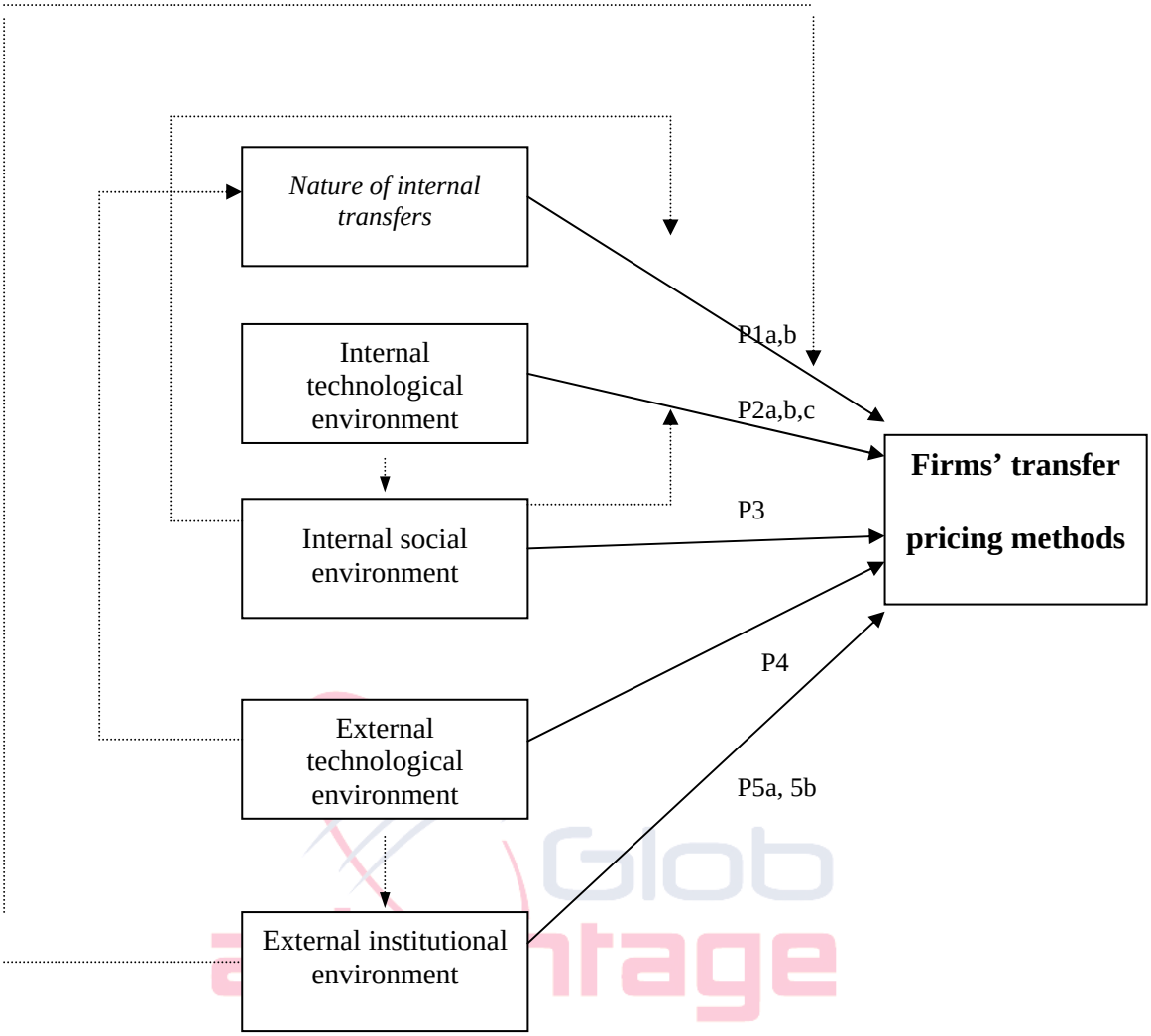
Thompson, J. 1967. *Organizations in action: Social science bases of administrative theory*. New York,: McGraw-Hill.

Westland, J. 1992. Congestion and network externalities in the short run pricing of information system services. *Management Science*, 38(7): 992-1009.

Williamson, O. E. 1985. *The economic institutions of capitalism: Firms, markets, relational contracting*. New York: Free Press.

Zucker, L. 1986. Production of trust: Institutional sources of economic structure, 1840-1920. *Research in Organizational Behavior*, 8: 53-111.

FIGURE 1. A conceptual model of transfer pricing



Note: Dotted lines represent examples of relationships that are not covered in the current paper.