# A Model of the Influence of Marketing Objectives on Pricing Strategies in International Countertrade

# Dorothy A. Paun, Larry D. Compeau, and Dhruv Grewal

As international markets become increasingly more competitive, firms must employ innovative marketing strategies merely to survive. One such strategy is the use of international countertrade. Offering to countertrade or responding to countertrade offers not only can enable a firm to survive, but also can provide the firm with the opportunity to achieve its marketing objective. Because countertrading involves complex exchanges of widely disparate products with debatable values, the pricing strategy employed is an important factor. The authors develop and empirically test a model of the influence of marketing objectives on buyers' price expectations and sellers' pricing strategies in international countertrade. Qualitative interviews provide insight into the world of countertrading and assist the articulation of the model and research methodology. A mail survey involving 108 countertrade practitioners from 23 countries offers support for 22 of the 24 hypotheses. The authors develop implications for policymakers and managers.

he U.S. trade deficit has been reaching astronomical proportions over the past decade. The Clinton administration has identified ten big emerging markets and has pledged to be an active partner in helping U.S. businesses win contracts. Therefore, the U.S. government has developed a National Export Strategy. Some key components of this strategy include lowering obstacles to U.S. exports, responsive trade finance strategy, improving access to trade information, and focus of key markets and sectors. Hence, though the government has developed various export enhancing strategies, it has "no clear and consistent policy stance on international countertrade" (Park 1990, p. 38).

As global markets grow more competitive and the balance of power shifts from sellers to buyers, buyers are requiring sellers to engage in reciprocal purchasing obligations, which are commonly referred to as *countertrade*. Stated another way, countertrade occurs when a seller provides a buyer with products and agrees to take some or all of the payment in a form other than money. As the number of buyers shrinks and the competition among sellers in the global market escalates, sellers are turning to countertrade to

DOROTHY A. PAUN is an assistant professor, University of Washington. LARRY D. COMPEAU is an associate professor, Clarkson University. DHRUV GREWAL is an associate professor, University of Miami. This research was partially supported by a grant from the International Business Center at the University of Oregon, and the authors thank the American Countertrade Association, Defense Industry Offset Association, and *Countertrade Outlook* for their help. The authors gratefully acknowledge the helpful comments of Mark Spriggs, Gerald Albaum, Robert Jacobson, Michael Levy, Carolyn Nicholson, A. Parasuraman, Rajesh Sethi, special issue editors, and the three anonymous reviewers. Dhruv Grewal also acknowledges the support of a University of Miami, School of Business Summer Research Grant.

gain a competitive edge over noncountertrade bids (e.g., Cavusgil and Ghauri 1990; Choudhry, McGeady, and Stiff 1989).

A classic countertrade example involves PepsiCo's agreement in the 1970s with the former Soviet Union for the exchange of Pepsi's syrup and bottling equipment for Stolichnaya vodka. Evidence attesting to both the success and longevity of buyer–seller countertrade relationships is provided by the latest countertrade agreement between Russia and Pepsi. Totaling \$3 billion, Pepsi agreed to accept vodka, tanks, and freighters in return for doubling their bottling facilities and distribution in Russia (Okoroafo 1993).

Although the U.S. government does not deter private businesses from undertaking countertrade, it is opposed to foreign government-mandated countertrade transactions (Park 1990). Such U.S. policy is more likely to hurt businesses attempting to export products to developing and underdeveloped countries. It is also likely to hurt the competitive position of U.S. firms, because they cannot engage in certain trade activities that their Japanese and European competitors can undertake. Globally, countertrade activities are on the rise.

It is difficult to measure the total volume of international countertrade because of inconsistent or limited reporting systems. Although the exact level often is debated, one consensus of experts estimates that the percentage of world trade financed through countertrade transactions is between 20% and 25% when all countertrade-related transactions are included (Okoroafo 1992). It generally is accepted that the complexity of countertrade transactions, particularly in terms of selecting an appropriate pricing strategy to avoid assuming unnecessary risk, results in reduced profits (Kublin 1990; Menzler-Hokkanen 1989). A thorough understanding of pricing strategy in countertrade transactions is essential (e.g., Neale, Shipley, and Dodds 1991; Yoffie 1984). Pricing strategy is often acknowledged as the pri-

Vol. 16 (1) Spring 1997, 69–82 mary determinant of whether a countertrade transaction is consummated (e.g., Cho 1987; Khoury 1984). Exporters, though willing to use price as a competitive tool in countertrade, often have bemoaned not knowing how to do so effectively (Kublin 1990).

In light of the expanding role of countertrade and with much at stake in terms of firm performance, it might be assumed that there would be a great deal of research on pricing strategies in international countertrade. Unfortunately, little empirical research has been conducted. Limited conceptual work does exist. Many authors, within the context of countertrade research not centered on pricing, have examined one or several aspects of pricing. More specific, pricing has been discussed in terms of how a subset of marketing objectives affect pricing strategies. Although these individual conceptual efforts have been restricted in focus, taken as a whole they offer a relatively comprehensive overview of the influence of marketing objectives on pricing strategy in international countertrade. Our objective is to be the first to address the theoretical and empirical gaps in the literature. We accomplish this by developing and empirically testing a conceptual model of the role of marketing objectives on buyer and seller pricing strategies in countertrade. Consequently, a key objective of this research is providing U.S. policymakers with information pertaining to the reasons behind countertrade and the effect of these reasons (or objectives) on pricing policies of both the buying and selling firms. We also draw conclusions for public policymakers on how countertrade transactions can be used by firms to potentially circumvent antidumping rules and regulations.

# Model and Hypotheses

We present a model of how a firm's objectives affect its pricing strategies in the context of international countertrade in Figure 1. The model consists of a series of interrelated components, including sellers' marketing objectives, sellers' pricing strategies (price at which they expect to sell their product), buyers' marketing objectives, buyers' pricing strategies (price they are willing to pay), and countertrade outcomes. The arrows in Figure 1 indicate the direct influence of the relationships. For example, the seller's marketing objectives influence the seller's choice of pricing strategy, or the price at which the seller expects to sell the product (e.g., Hague 1971; Monroe 1990). Nagle and Holden (1995) state that when marketing objectives are identified, a firm has a choice of three pricing strategies: (1) sell at a premium price (i.e., price its product higher than the market price); (2) sell at a going-rate or neutral price (price its product equal to the going market price); or (3) sell at a discount price (price its product lower than the market price). Each pricing strategy then is appropriate given a specific marketing objective sought in a countertrade transaction.

Past research demonstrates that buyers have price expectations regarding the price at which a product is available in the marketplace and thus the price they likely would pay (Helson 1964; Monroe 1973, 1990; Tellis and Gaeth 1990). Several empirical investigations document that buyers have considerable knowledge about the price and market value of products (Rao and Bergen 1992; Urbany and Dickson 1991). Furthermore, both adaptation level theory (Helson

1964) and transaction utility theory (Thaler 1985) suggest that buyers' price expectations are influenced by contextual or situational factors such as buying objectives (Monroe, Della Bitta, and Downey 1977). Consequently, the model proposes that buyers' marketing objectives influence the price they are willing to pay or their pricing strategy (Barlow and Eisen 1983; Beardon 1985), and these are paying a premium price (higher than market price), a going-rate price (at market price), or a discount price (lower than market price).

Countertrade outcomes are characterized by the contributions of both buyer and seller to the price-forming process (Kostecki 1987; Paun and Albaum 1993). The intersection of the seller's and buyer's pricing strategies (or expectations) dictates whether the countertrade transaction can occur. In the model, a countertrade transaction is more likely to occur when a buyer is willing to pay a price that matches or exceeds the seller's asking price for the countertrade products (cells 1, 4, 5, 7, 8, 9). Conversely, a countertrade transaction is less likely to occur when a seller's asking price exceeds what the buyer is willing to pay (cells 2, 3, 6). To achieve consummation of the countertrade exchange, or any negotiated pricing exchange (Weitz, Castleberry, and Tanner 1995), the gap or discrepancy between the seller's asking price and the buyer's offering price must be closed as a result of the seller lowering the asking price, the buyer raising the offering price, or a combination of these two alternatives.

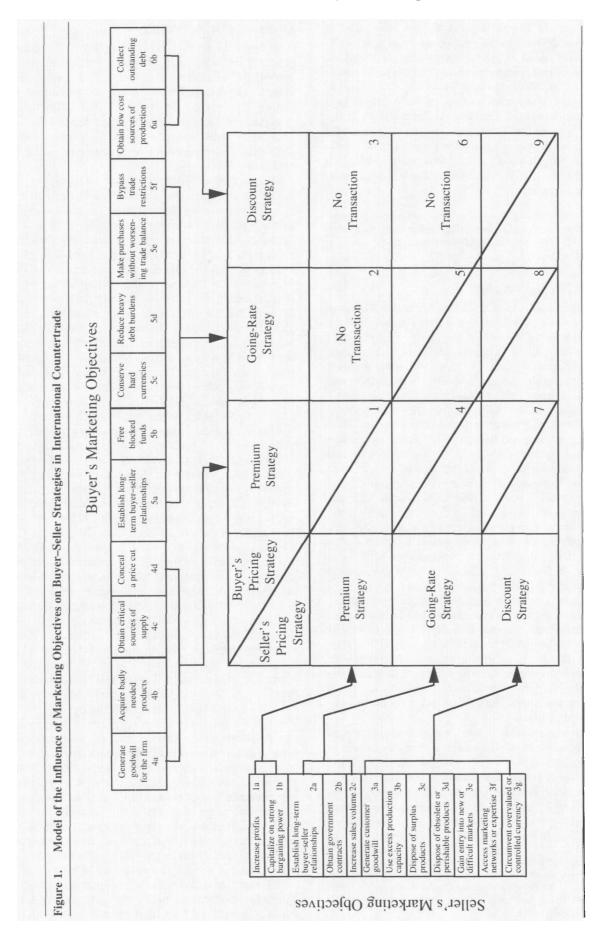
# Seller's Marketing Objectives and Pricing Strategies

The seller's marketing objectives are the specific goals to be accomplished when engaging in countertrade from the selling side of the transaction. Although the classical microeconomic paradigm asserts profit maximization as this goal, the marketing concept implies that a single-minded focus on profits can be self-defeating (Cannon and Morgan 1990). Moreover, profit maximization represents a narrow conception of the function of the firm and might not be the only, or even the most important, marketing objective relevant to price decision making (Diamantopoulos 1991; Samiee 1987). Figure 1 presents the marketing objectives employed by countertrade practitioners that were identified through a comprehensive literature review. These marketing objectives, in turn, influence the seller's selection of a pricing strategy.

#### Premium Pricing Strategy

Setting a premium price is appropriate when the selling firm's objective is to increase profits; a going-rate or discount price would not enable the firm to increase profitability because of the expensive transaction costs associated with countertrade (e.g., brokerage cost of intermediaries, disposition costs of buyback products not directly useable by the buyer) (Hammond 1990). A premium pricing strategy is also appropriate when the seller's objective is to capitalize on a strong bargaining position in a transaction. If the

<sup>&</sup>lt;sup>1</sup>A complete listing of more than 100 references corresponding to marketing objectives for both sellers and buyers is available from the first author.



initiating partner in an exchange is a buyer, the seller is likely to gain a stronger bargaining position because of the buyer's implicit need to use international countertrade (Lecraw 1988). The bargaining power of the seller becomes even greater as the initiating buyer's intensity of the need to consummate the countertrade transaction increases and when few alternatives are available (Cassady 1974). If the seller's goal is to capitalize on this position of power as a responder, then a premium price allows the seller to "maximize gains ... through asking a price which would be high" (Cassady 1974, p. 42). The preceding discussion suggests the following hypothesis:

H<sub>1</sub>: Sellers are more likely to charge a premium price (relative to a going-rate or discount price) when their marketing objective is to (a) increase profits or (b) capitalize on strong bargaining power.

#### Going-Rate Pricing Strategy

A going-rate price will be adopted by a seller that wishes to establish long-term buyer-seller relationships because the motivation underlying this objective is to develop a level of trust in a partnership or establish a synergistic alliance (Yoffie 1984; Zurawicki 1988). Entering into a countertrade agreement with a going-rate price benefits both partners and is likely to show good faith, engender trust, and act as evidence of being a suitable trading partner (Hammond 1990), because it is likely that the price will be perceived as "fair" and "competitive" (Rao and Bergen 1992). With an objective of developing long-term relationships, "the attempt by one partner to make material gains at the expense of the other partner is taboo" (Cassady 1974, p. 26). Consequently, a premium pricing strategy would appear to be gouging a partner and undermining trust. Conversely, a discount strategy in the long term would not provide sufficient financial incentive for the seller to engage in countertrading unless other motives were more pressing (e.g., access to new markets).

Because of the increasing scarcity of large government contracts, fierce competition has erupted on the basis of trade arrangements rather than technical features and price. Buying governments are encouraging sellers to offer reciprocal trade agreements because they "offset" the impact of the purchases on their trade balance. More than 57% of military exports sales by U.S. firms involve countertrade with foreign purchasers (Impoco 1990). Therefore, a going-rate pricing strategy is appropriate because the goal is to offer a countertrade arrangement, not a lower price, as an inducement to win the contract.

Similarly, to expand sales volume, a typical approach is to lower price (Monroe 1990). However, a firm can substitute countertrading as a strategic advantage to increase volume and avoid a price decrease. The firm does not need to depart from prevailing market prices to gain an advantage over competitors unwilling to meet countertrade demands, but rather simply must agree to countertrade and charge a competitive (going-rate) price. In summary, the literature suggests

H<sub>2</sub>: Sellers are more likely to charge a going-rate price (relative to a premium or discount price) when their marketing objective is to (a) establish long-term buyer-seller relationships, (b) obtain government contracts, or (c) increase sales volume.

#### Discount Pricing Strategy

The desire to build goodwill suggests a discount pricing strategy. By charging a low price, the firm hopes it will be rewarded for its discounting activities. For example, though it took years before PepsiCo made any profit from its countertrade agreement with Russia (Gilbert 1990), the goodwill generated by the discount pricing strategy enabled Pepsi to become the most widely available Western consumer product in the Commonwealth of Independent States (Winters and Hume 1990).

In countertrade offers, payment is made in part with goods or services. The actual price charged to the buyer remains elusive to outside firms that are paying a higher price. The cost of goods manufactured also is reduced because increased production results in spreading fixed costs across larger output volume; moreover, efficiencies associated with the experience curve accrue (Alberts 1989; Monroe 1990). Because of these lower costs, the firm has more latitude to discount countertrade products, likely between the marginal cost and prevailing market price (Cho 1987; Kostecki 1987). Therefore, countertrade is an ideal way to utilize excess production capacity to generate incremental sales, without straining relations with existing customers that pay market value (Bragg 1988). Moreover, countertrade allows the maintenance of current prices in monetized markets (Kostecki 1987; Yoffie 1984).

Two similar marketing objectives that warrant a discount pricing strategy are disposing of surplus product inventory and disposing of products that are obsolete or perishable. Hammond (1990) and Neale and Shipley (1988) report that countertrade facilitates the disposal of burgeoning inventory that is in the declining stage of the product life cycle. Furthermore, countertrade facilitates trade without destroying existing price levels and, therefore, might be effective in avoiding accusations of dumping. Nonetheless, camouflaging dumping by using countertrade does not mitigate the impact of dumping on the local economy. Firms employing countertrade to dispense of such products then typically value them not on retail price but "on their wholesale price" (Bragg 1988, p. 62).

Gaining entry to new or difficult markets often is pursued by firms operating in saturated markets in developed countries or firms in developing countries that are isolated from developed markets. From the developed countries' perspective, gaining access to new markets is important because exclusion from those markets can be harmful over the long term (e.g., Choudhry, McGeady, and Stiff 1989). For firms desiring access to new or difficult markets, a 5-20% discount from the domestic price has been offered as a rule of thumb (Rubin 1986). This discount strategy could enable the firm to differentiate itself from competitors and obtain firstto-market access (Menzler-Hokkanen 1989). Firms from developed countries can improve market access to developing countries "by implementing a pricing policy to reduce the relative price of the products, in order to bring them within reach of the broader population" (Leff 1975, p. 55). From a developing country's view, discount prices enable firms to gain entry into highly competitive markets in developed countries (Cavusgil and Ghauri 1990).

To compete effectively in the global market, gaining access to established marketing networks and expertise often is sought by firms that must acquire market intelli-

gence and access to sophisticated marketing channels to overcome entry barriers (e.g., trade restrictions, complex distribution channels) (Agarwala 1991; Lecraw 1988). Taking full responsibility for exporting a product, as compared with garnering marketing assistance from a countertrade partner, would mean that a firm from a developing country would be saddled with additional search and transaction costs (Mirus and Yeung 1986). Therefore, the partner with the expertise "will generally be interested only if compensated through discounted prices" (Cooper 1984, p. 39) for the countertrade products—thus a discount strategy.

Last, practicing a discount pricing strategy enables a firm to circumvent currency controls (e.g., inconvertibility) or an overvalued currency. In the absence of price discounting, products offered by the seller would be expensive to purchase if the price were based on an overvalued exchange rate. International countertrade transactions can be a means of "correcting the distortions introduced by an unsuitable exchange rate in that they allow for selection devaluation" (Agarwala 1991, p. 48). For example, in the early 1980s, when Egypt's currency was considerably overvalued (E1.35 = US\$1), Egypt sold products to countertrade partners at a special exchange rate (E2.00 = US\$1). This special exchange rate enabled Egypt to discount the price of the products. In summary, we hypothesize the following:

H<sub>3</sub>: Sellers are more likely to charge a discount price (relative to a premium or going-rate price) when their marketing objective is to (a) generate customer goodwill, (b) use excess production capacity, (c) dispose of surplus products, (d) dispose of obsolete or perishable products, (e) gain entry into new or difficult markets, (f) gain access to marketing networks and expertise, or (g) circumvent currency controls or overvalued currencies.

# **Buyer's Marketing Objectives and Pricing Strategies**

Microeconomic theory reasons that the goal of buying decisions is to minimize the price paid. This minimum-price model, however, is based on assumptions of perfect competition, perfect information, and perfect product substitutability—assumptions that rarely reflect actual conditions in international countertrade or markets in general (Hunt and Morgan 1995; Moriarty 1983). Although cost minimization is discussed often, other objectives might be important to a firm. Figure 1 highlights various marketing objectives for buyers that influence the selection of a pricing strategy.

#### Premium Pricing Strategy

The objective of generating goodwill on the part of the buyer gives rise to a willingness to pay a premium price. By paying a high price, the firm hopes that it will be rewarded eventually for its initial "goodwill" activities and be provided a "favored" status.

When a firm is trying to acquire a badly needed product, it is also likely that it will be willing to pay a premium price. Developing countries with ambitious development goals require massive transplants of technology and are willing to pay a premium to acquire such technology (Dennis 1982). In terms of the appropriate pricing strategy, the OECD (Organization for Economic Co-operation and Development) (1985, p. 15) suggests that buyers "are prepared to pay a siz-

able premium to obtain [products] for which there is strong domestic demand." When Japan countertraded for aerospace technology, it accepted "a higher per unit cost ... than would have been the case with an 'off-the-shelf' purchase" (Brennan and Amine 1992, p. 116), because the technology was critical. Similarly, to ensure regular supplies, especially when demand for those supplies is high, a buyer must be willing to pay a premium over market prices (Cassady 1974). Japanese firms long have engaged in countertrade with the former Soviet Union to ensure access to Siberian timber (Weigand 1980) and iron ore (Hammond 1990). Firms unwilling to pay a premium can face uncertainty in obtaining critical supplies.

Finally, buyers could pay a premium to conceal a price cut on the product being sold. The underlying principle is that during the first part of the countertrade transaction Firm A (as the seller) charges and Firm B (as the buyer) pays a premium price for Product 1 (e.g., aircraft). During the second part of the transaction, Firm B (as the seller) charges and Firm A (as the buyer) pays market value for Product 2 (e.g., oil). The net effect is that Firm A essentially receives market value for Product 1 while Firm B receives less than market value for Product 2, thus concealing a price discount. For example, Saudi Arabia purchased ten Boeing 747 aircraft with payment of 34.4 million barrels of oil. Honigberg (1985) reports that whereas the oil was priced at market value, the 747s were priced at a premium. The net result was the Saudis were able to conceal that they had discounted oil at 10% below posted world prices. Therefore, the Saudis were able to avoid antagonizing fellow cartel members (Yoffie 1984). In summary, these arguments suggest the following hypothesis:

H<sub>4</sub>: Buyers are more likely to pay a premium price (relative to a going-rate or discount price) when their marketing objective is to (a) generate goodwill, (b) acquire badly needed products and technology, (c) obtain access to critical sources of supply, or (d) conceal a price cut.

#### Going-Rate Pricing Strategy

As with the seller's marketing objective of the same name, establishing long-term relationships calls for a going-rate pricing strategy. That is, the firm agrees to countertrade because of the future potential for monetized trade with its countertrade partner. Here again, the motivation is not to price off the market, but rather to expand business contacts to develop a level of confidence between the trading partners, build a degree of trust in a trading partnership, or establish a synergistic alliance (Yoffie 1984; Zurawicki 1988), all consistent with charging a "competitive" price.

Freeing blocked funds can be accomplished effectively with going-rate pricing. Funds become blocked when the government of a country in which a subsidiary is located severely limits the repatriation of profits, royalties, and so on generated by that subsidiary to the parent company located in another country (Welt 1990). Firms encountering blocked funds are hesitant to leave profits frozen in the denominated currency of the subsidiary country because countries not allowing repatriation of profits typically have high inflation and frequent currency devaluations (Lota 1987). One means of freeing funds is to use countertrade for

local purchases and then export the products received in countertrade. For example, Brazos Capital Film Company works with many multinationals that lend their blocked funds to finance movie productions abroad. The multinationals later receive payback of their so-called loans "in U.S. dollars with minimum to no discounts" (Lota 1987, p. 30).

Many developing countries face scarce foreign currency reserves, which makes the purchase of products from developed countries extremely difficult (Hammond 1990). When there is a lack of hard currencies, countertrade is an attractive alternative to monetized trade because a country can make purchases without having to make major monetary policy changes (Goldstein 1984). That is, developing countries use international countertrade as an alternative form of capital to escape paralysis of trade. Because countertrade arrangements essentially represent an alternative form of capital, using a going-rate pricing strategy or pricing products at their market value is appropriate (Kaikati 1982). There are divergent views regarding the effectiveness of countertrade on conserving hard currencies. We simply postulate that if the objective is to conserve foreign currency, a going-rate price is appropriate.

Many developing countries have substantial foreign debt, and some are banned from international capital markets. In addition, the International Monetary Fund (IMF) has been known to invoke austerity measures that require a reduction in a country's imports as a refinancing condition. Using countertrade enables heavily indebted countries to circumvent a foreign lender's stipulation that foreign exchange earned from exports be applied to outstanding debt. A going-rate pricing strategy reflects the acceptance of market value for products exchanged in the countertrade and the recognition that only a different method of financing is being used (Hammond 1990; Khoury 1984).

A growing number of countries feel obliged to make structural adjustments to improve their trade balance through steep cutbacks in imports; however, restricting imports can result in severe rationing of products, which thus generates undesirable disruptions in the economic and political environment (Agarwala 1991). International countertrade is a way of importing without deteriorating the trade balance (Okoroafo 1988). For example, Egypt's large population and ambitious development plans resulted in Egyptian imports reaching 40% of gross national product. Exports increased only marginally, which resulted in an increasing trade imbalance. Egypt demanded countertrade so that exports also would increase along with imports (Abdel-Latif 1990). Egyptian government officials reported that "the prices of the goods exchanged are specified in U.S. dollars and according to the international prices prevailing on the world market" (Abdel-Latif 1990, p. 24). Because the emphasis rests not on departures from market price but on using bilateralism to avoid trade balance deterioration, a going-rate strategy is appropriate.

Trade barriers also have imposed a significant restraint on the growth of developing countries' exports, and the marketing objective of using international countertrade to overcome the trade restrictions increasingly is cited by governments of developing countries (Alexandrides and Bowers 1987). In addition, firms from developed countries could be excluded from the markets of developing countries because of import control measures on products deemed nonessential (OECD 1985). A countertrade transaction provides the buyer and seller with equivalent benefits (Alexandrides and Bowers 1987); therefore, the objective of bypassing trade restrictions in financing imports with exports through countertrade supports using a going-rate pricing strategy as an alternative form of capital. Therefore, we propose the following hypothesis:

H<sub>5</sub>: Buyers are more likely to pay a going-rate price (relative to a premium or discount price) when their marketing objective is to (a) establish long-term buyer-seller relationships, (b) free blocked funds, (c) conserve hard currencies, (d) reduce heavy debt burdens, (e) make purchases without deteriorating the balance of trade, or (f) bypass trade restrictions.

### Discount Pricing Strategy

From the buyer's perspective, finding reliable foreign suppliers of low-cost resources that are critical to the firm's production process can enable a firm to a gain a strategic advantage over competitors that are unwilling to use international countertrade. Exchange arrangements with countries having countertrade requirements can be an important part of a multinational's strategic sourcing requirements (Carter and Gagne 1988). An interesting way to look at this objective is through a process that Carter and Gagne (1988, p. 35) refer to as "reverse countertrade." Reverse countertrade entails having a firm's purchasing department present to potential countertrade partners the firm's sourcing requirements. Only after the firm has established the availability of goods and the feasibility of purchasing them on favorable terms does it consider selling its own products. To achieve this objective of obtaining low-cost sources of production, purchasing departments search for the firm offering the largest discount and then agree to a countertrade arrangement (e.g., Elderkin and Norquist 1987; Yoffie 1984).

The use of countertrade to collect outstanding debts, which is referred to as debt swapping (Czinkota, Rivoli, and Ronkainen 1992), has emerged as developing countries faced with huge debt burdens find it increasingly difficult to service their outstanding debt obligations. Financing institutions, doubtful that certain countries will repay their debts, have sought to countertrade outstanding loans and have sold, at "substantial discounts," nonperforming loans to firms that then approach the developing country to countertrade the debt obligation for such things as the preservation of natural resources, domestically produced products, and equity in domestic firms (Czinkota, Rivoli, and Ronkainen 1992). For example, Conservation International paid Citicorp \$100,000 for \$650,000 of Bolivian debt and then countertraded the canceled debt obligation back to Bolivia for an agreement to develop and maintain 4 million acres in the Amazon Basin as a wildlife sanctuary (Czinkota, Rivoli, and Ronkainen 1992). In addition, after Mexico's debt crisis in 1982, Cho (1987) reports that countertrade was one way financial institutions could recover uncollected debt. Cho notes that though taking products in return for retiring debt might not be profitable, many banks believe it is better than nonpayment. Therefore, we hypothesize that

H<sub>6</sub>: Buyers are more likely to pay a discount price (relative to a premium or going-rate price) when their marketing objec-

tive is to (a) obtain low-cost sources of production or raw materials or (b) retire outstanding debt.

## **Research Methodology**

Qualitative and quantitative research were conducted at different stages in the overall study. First, we introduce the characteristics of the entire sample and then follow with a discussion of the qualitative in-depth interviews. We then present the quantitative results from a mail survey.

#### Sample Characteristics

Although Hammond (1990) reports that one-half of the Fortune 500 companies have countertraded, it is well known that firms are reluctant to publicly admit it for fear of increasing its incidence. Furthermore, it is difficult to identify the specific persons responsible for such activities (i.e., lack of department or job titles with a reference to countertrade). The American Countertrade Association, Defense Industry Offset Association, and Countertrade Outlook, though unwilling to make public the names of members and subscribers, generously agreed to affix labels and mail the questionnaires. The total number of nonoverlapping members for these three organizations was 668. A total of 123 questionnaires were received, an 18.4% response rate. Fifteen of the 123 questionnaires were excluded from analysis because the respondent had no countertrade experience. Data analyses were based on 108 useable questionnaires, a 16.2% final response rate.<sup>2</sup> Because of competitive silence maintained by many firms, this response rate was expected and is consistent with response rates achieved in other countertrade studies (e.g., Neale, Shipley, and Dodds 1991).

Because the membership lists were "secret," it was not possible to generate a subsample of nonrespondents for nonresponse bias inquiry. We used the extrapolation method (Armstrong and Overton 1977) to assess possible nonresponse bias in the data by analyzing time trend responses across early and late respondents. Questionnaires were received over a period of one and one-half weeks to three months, with roughly 80% received within the first three weeks. We received 80% of the questionnaires well before the latter 20%, which were deemed "late" respondents. We conducted t-tests across the groups of early and late respondents. Only one t-test, conserving hard currencies, was significant at p = .04; however, at least 1 of the 24 t-tests was expected to be significant due to chance alone (Snedecor and Cochran 1967). Therefore, nonresponse bias does not appear to be an issue in this research.

Six questions yielded descriptive data on the respondents. The 108 responding firms represent a broad spectrum of industries, with the highest representation including defense (13.9%), countertrade specialists (11.1%), aerospace (8.3%), electronics (6.5%), agriculture (6.5%), and chemicals (5%). Total annual sales ranged from \$2 million to \$150 billion, with a mean of \$7.2 billion and a median of \$1.3 billion. Total annual countertrade sales ranged from \$100,000

to \$7.5 billion, with a mean of \$215 million and a median of \$50 million. Size of the firm's average countertrade transaction ranged from \$25,000 to \$75 million, with a mean of \$8.3 million and a median of \$2 million. The average percentage of total annual sales from countertrade is 17.4%. However, because 5.6% of the sample reported that 100% of their total annual sales were accounted for by countertrade (countertrade specialists), the median of 10% might be a better measure of central tendency. Of those responding, 53% were with firms located in the United States, and 47% were from firms in 22 countries abroad. The median frequency of countertrade transactions during the past year was six to ten times. Six percent of the respondents reported that they usually initiate countertrade offers, 41% respond to offers made by other firms, and 53% indicated their firms both initiate and respond to countertrade offers. The survey results also suggest that the respondents perceived countertrade to be fairly important (mean = 3.48 on a five-point scale ranging from 1 = not at all important to 5 = veryimportant). Furthermore, they were satisfied with their firm's countertrade experiences (mean = 3.65 on a fivepoint scale).

#### **Qualitative Interviews**

We conducted telephone interviews at various stages of the research process, including exploratory interviews before the construction of the questionnaire was initiated, interviews regarding the development of the survey instrument during construction, and more in-depth interviews after the data had been collected. We conducted these last interviews with a snowball sample, in which the initial telephone numbers were provided by the countertrade association. We interviewed nine respondents, who were selected to represent different industries, positions, and forms of countertrade. The purpose of the interviews was to gain deeper insight into the relationship, if any, between the form of countertrade and pricing strategies; to examine any potential interaction between intrafirm buying and selling pricing strategies; and to explore more richly the subtle nuances of countertrade activities. Each of the practicing countertraders was asked a series of questions, followed by probes when appropriate.

Each interview began with the question, "Does the form of countertrade influence pricing strategy?" Every respondent indicated that the form of the countertrade was unrelated to the pricing strategy, as illustrated by these comments:

No. Modality [form of countertrade] doesn't matter. It doesn't matter if you [use bartering], compensation, or a clearing account, all things equal. What matters is that you can use the take backs, that the quality is there, and that you can get on-time delivery.

The form of countertrade is irrelevant to the prices you charge.

No. In my line of work the forms don't really mitigate the pricing strategy I choose. Rather, it depends more on the reasons that you are using offsets and the competition. I would say, overall, that price is not affected by the form of countertrade.

Therefore, as conceptualized, the pricing strategy appears to be driven by the reasons for using countertrade, or the marketing objectives.

Another question posed to each respondent was "In a countertrade transaction you are both selling and buying

<sup>&</sup>lt;sup>2</sup>The response rate could be considered to be higher because respondents with no countertrade experience are less likely to return the survey (only 15 having no experience returned the questionnaire). We thank an anonymous reviewer for pointing this out.

products. This means that two prices are involved, the price of the product you are selling and the price of the product you are buying. Is there or is there not a relationship between your selling pricing strategy and your buying strategy? That is, are the two intrafirm pricing strategies related or unrelated?" If respondents indicated a relationship, we then explored the nature of this relationship.

In general, two distinct patterns emerged from their responses. Practitioners who relied primarily on offset countertrade transactions believed that the firm's selling and buying strategies were totally unrelated due to either third party participation (e.g., a broker) or time. That is, they view countertrade as involving two separate and completely distinct transactions; in essence, offsets are viewed simply as a financing mechanism. Third-party participation can be viewed from two perspectives. First, in an offset arrangement the firm from which purchases are inevitably made, referred to as the third party, is not directly involved in the offset transaction. One countertrader in the aerospace industry explained it as follows:

The two have nothing to do with each other. I can cite a case right now where we have a \$1 billion offset [pending purchase obligation] for a sale we made for \$2 billion. The two pricing strategies are totally independent. The \$2 billion sale was based on prices when the contract was initiated. The \$1 billion offset program [what must be purchased] would have its own prices that are negotiated separately. When I go to a German machine tool company and negotiate with that manufacturer to reduce the price of what I want to buy because I have an offset obligation, they could care less. It is a separate transaction from my offset obligation.

Alternatively, some contracts contain an "opportunity buy" clause, which affords the seller a degree of control over the price to be paid by them for the products purchased to satisfy an offset obligation.

The sales price and purchase price are completely separate, very independent in offsets. First, I have my pricing strategy for selling, and that price is in the offset contract. Separate from that there is a thing called an "opportunity buy" that is used in some offset contracts. Say that I have an offset agreement with Spain. I promise to solicit prices from three or four Spanish companies for aluminum. If I can show Spain that a U.S. company is offering a better price for a product of the same quality, this will explain why I didn't buy the Spanish product. I had promised to buy from Spain but only if the product was priced competitively. Because I put a lot of effort into trying to buy ... from companies in Spain, I still want the offset credit for the price I paid for the aluminum I bought, because I gave Spanish industry the opportunity to sell me a product that they would not have had.

Timing was the second explanation for a lack of relationship between intrafirm selling and buying pricing strategies in offsets. Time refers to the span between the beginning of the offset agreement (when the sales price is negotiated) and the end of the offset agreement (when the purchase obligation has been fulfilled). A countertrader in the chemical industry with extensive experience in all forms of countertrade offers this insight into the role that time plays in offset agreements.

[Offset] exchanges take years to complete, sometimes as long as ten or twelve years. Sales of capital goods, things that cost a lot and take a long time to build, like airplanes, weapon systems, those things are long term in that you make your sales today and then over a long period of time you work that off [buy products back]. It is hard to have any two things be related when they are separated by a decade.

Countertraders who relied on primarily non-offset forms of countertrade expressed a relationship between the final buying and selling prices. However, there appeared to be little relationship still in terms of the overall strategy. One countertrader in the energy industry presented the following scenario:

Suppose you are going to upgrade a refinery, and in return you are going to take back part of the output from the refinery to pay for that upgrade. Then one seems linked to the other, but really, each part of the transaction is negotiated separately. The only linkage is the money. Say you are selling aircraft to India; they can demand that [the manufacturer] has to buy Indian products. This has nothing to do with financing the [planes]. It is a conditional requirement, a counterpurchase deal. Then the other kind of countertrade is financing the buying of one product with the sale of the other product. Like you sell India crude oil and they pay for it with tea. Each deal is unique.

Finally, the interviews provided a deeper, richer, more complex view of countertrading. Respondents referred to countertrade pricing as "convoluted," "cutting edge," "idiosyncratic," and even a "form of legalized international blackmail." They vocalized a general theme of countertrading as both an opportunity and a requirement to remain competitive in the world market. Specifically, it was articulated that some firms merely accept countertrading as a necessary evil, whereas other firms use countertrading as a competitive tool. All respondents acknowledged that it was now an integral way of doing business. A key conclusion from these interviews is that due to the nature of the transactions and the differences in the time between the buying and the selling, for most countertrade transactions the buying and selling strategies do not appear to interact. That is, the setting of the prices for the products being sold by a countertrader and that same countertrader's expectations for acceptable prices to pay for products being bought appear to be independent.

Although these interviews provide insight into some of the issues associated with countertrading, they do not provide any form of empirical test of the proposed model. Therefore, we now turn to the survey instrument and the subsequent analysis.

### Questionnaire

On the basis of the synthesis of the literature and qualitative research (e.g., telephone interviews), we designed a six-page questionnaire and then subjected it to two pretests. During the first pretest, the questionnaire was sent to six academic scholars who had research experience in countertrade to examine the questionnaire for content validity. There was consensus among those interviewed that the questionnaire exhibited face validity. We then sent the questionnaire to eight countertrade practitioners to evaluate content validity, clarity, and comprehensiveness. Interviews revealed that the questionnaire needed to be shortened to encourage higher response rates and that potential ambiguities regarding phrasing of a few questions existed.

We operationalized the influence of specific marketing objectives on the seller's selection of a particular pricing strategy in the following manner. Respondents were first instructed to "recall the details of your selling-side of the exchange" and then presented with a list of 12 marketing objectives. These 12 measures of marketing objectives represented those stated in H<sub>1a</sub> (increase profits) through H<sub>3g</sub> (circumvent currency controls or overvalued currencies). Respondents were told to read one marketing objective at a time and then indicate the price they would ask for the product they sold in countertrade using a five-point scale anchored on 1 ("much below market value") to 5 ("much above market value"), with a midpoint anchor of 3 ("market value"). After questioning respondents about the selling side of their countertrade exchange, we then asked each respondent about the buying side of his or her countertrade transactions. The influence of specific objectives on the buyer's selection of a particular pricing strategy was operationalized in the following manner. Respondents were first instructed to "recall the details of your buying-side of the exchange" and then presented with a list of 12 objectives. These 12 measures of objectives represented those stated in H<sub>4a</sub> (generate goodwill) through H<sub>6b</sub> (retire outstanding debt). Respondents were told to read one marketing objective at a time and indicate the price they would be willing to pay for the countertrade product using a five-point scale anchored on 1 ("much below market value") to 5 ("much above market value"), with a midpoint of 3 ("market value").

#### **Analytical Procedures**

Hotelling's T<sup>2</sup> multiple comparison procedure was used to test simultaneously the hypothesis that several observed means do not differ from a specified constant (in this research, the theoretical mean of 3.0 or no deviation from market price on the 24 pricing variables). A premium pricing strategy is represented by an observed mean significantly greater than 3.0 ("market value") at the upper-tailed .05 level of confidence. A goingrate pricing strategy is represented by an observed mean that did not differ significantly from the theoretical mean of 3.0 ("market value") at the two-tailed .05 level. Therefore, testing the going-rate pricing strategy, unlike testing premium or discount pricing strategies, involves a "reverse" hypothesis testing logic; that is, nonsignificance supports the stated hypothesis. A discount pricing strategy is represented by an observed mean that is significantly less than the theoretical mean of 3.0 ("market value") at the lower-tailed .05 level of confidence.

# **Empirical Results**

The conceptual model proposes that a particular pricing strategy will be selected depending on the specific marketing objective sought in a countertrade transaction. We first discuss the empirical results of the hypothesized relationships from the seller's perspective and then from the buyer's perspective. Table I reveals that 22 of the 24 hypotheses are supported.

#### **Seller's Perspective**

All of the hypotheses regarding the relationships between marketing objectives and pricing strategies are supported except one. As predicted, the two marketing objectives of increasing profits and capitalizing on strong bargaining power suggests the use of a premium pricing strategy (Hotelling's  $T^2$  yielded a multivariate  $F_{(2,102)} = 12.37$ , p <

.01; see Table 1 for univariate results). As hypothesized, the three marketing objectives of establishing long-term buyer-seller relationships, increasing sales volume, and obtaining government contracts induce a going-rate pricing strategy ( $F_{(3.100)} = .53$ , p = .67). Recall that testing the going-rate pricing strategy, unlike that of premium or discount pricing strategies, involves a "reverse" hypothesis testing logic; nonsignificance supports the hypothesis because the theoretical mean of 3.0 represents market value or a going-rate pricing strategy. Finally, all the marketing objectives hypothesized to result in the seller's selection of the discount pricing strategy are supported, with one exception  $(F_{(7.92)} = 17.62, p < .01)$ . The mean response of 2.80 for the price to charge when attempting to gain entry into new or difficult markets, though not significant at the .05 level, is in the right direction, and the effect size is meaningful at .16 as measured by eta (Rosenthal and Rosnow 1991). Therefore, our test simply may not have been sensitive enough.

#### **Buyer's Perspective**

Results for the hypotheses regarding the buyer's selection of the premium pricing strategy are mixed. Marketing objectives that lead to a premium pricing strategy are generating goodwill for the firm and obtaining access to critical sources of supply ( $F_{(4.93)} = 4.27$ , p < .01). Not supported is the objective of acquiring badly needed products. Again, the mean is in the right direction, and the effect size of .16 (eta) is substantial. It might be reasoned that the impact of acquiring badly needed products was constrained by a global economy in a serious recession during the time of the survey and that a buyer's market prevailed. That is, the results suggest that buyers, whether in the open market or in countertrade arrangements, may not need to pay premium prices for badly needed products depending on the general state of the world economy.

Also unsupported is the impact of the objective of concealing a price cut on selecting a premium pricing strategy. The observed mean of 3.10 and associated p-value of .19 indicate that a going-rate pricing strategy was selected by respondents for this objective rather than the hypothesized premium price. However, upon examination we observed that the distribution was bimodal; that is, respondents tended to choose either a premium pricing strategy or a discount pricing strategy, and these "extreme" responses canceled each other out. The net result was a mean that did not significantly differ from the market value of 3.0. We could speculate that respondents were not sure of how a price cut might be concealed, and this is not surprising as they were asked to figure out how to conceal a price cut as a buyer (a premium pricing strategy as a buyer accomplishes this), not as a seller, where it would be more apparent to use a discount price to realize a covert price concession. It should be noted that because the data for H<sub>4c</sub> were not normally distributed, as was indicated by the Lilliefors K-S statistic, we also conducted a nonparametric test. The Wilcoxon signed rank test reports a z value of -.59 with an associated p-value of .28, and, consistent with Hotelling's T<sup>2</sup> results, the hypothesis remains unsupported. Another potential explanation for lack of support for  $H_{4d}$  resides with the respondents. The literature indicates that it is OPEC (Organization of

| Seller's Marketing Objective                                  | Pricing<br>Strategy | Results    | Mean | Standard<br>Deviations | F      | p-value |
|---|---------------------|------------|------|------------------------|--------|---------|
| H <sub>1a</sub> : Increase profits                            | Premium             | Support    | 3.54 | 1.12                   | 23.92  | .01     |
| H <sub>1b</sub> : Capitalize on strong bargaining power       | Premium             | Support    | 3.46 | 1.14                   | 17.05  | .01     |
| H <sub>2a</sub> : Establish buyer–seller relationship         | Going Rate          | Support    | 3.10 | .92                    | 1.14   | .29     |
| H <sub>2b</sub> : Obtain government contracts                 | Going Rate          | Support    | 2.97 | .81                    | .13    | .72     |
| H <sub>2c</sub> : Increase sales volume                       | Going Rate          | Support    | 3.07 | .73                    | .89    | .35     |
| H <sub>3a</sub> : Generate customer goodwill                  | Discount            | Support    | 2.79 | 1.27                   | 2.75   | .05     |
| H <sub>3b</sub> : Use excess production capacity              | Discount            | Support    | 2.53 | 1.22                   | 15.11  | .01     |
| H <sub>3c</sub> : Dispose of surplus products                 | Discount            | Support    | 1.95 | 1.05                   | 98.46  | .01     |
| H <sub>3d</sub> : Dispose of obsolete or perishable products  | Discount            | Support    | 1.94 | 1.04                   | 103.31 | .01     |
| H <sub>3e</sub> : Gain entry into new or difficult markets    | Discount            | Partial    | 2.80 | 1.25                   | 2.57   | .06     |
| H <sub>3f</sub> : Access marketing networks or expertise      | Discount            | Support    | 2.74 | 1.19                   | 4.81   | .02     |
| H <sub>3g</sub> : Circumvent overvalued/controlled currency   | Discount            | Support    | 2.41 | 1.36                   | 18.30  | .01     |
| Buyer's Marketing Objective                                   |                     |            |      |                        |        |         |
| H <sub>4a</sub> : Generate goodwill for the firm              | Premium             | Support    | 3.43 | 1.07                   | 15.90  | .01     |
| H <sub>4b</sub> : Acquire badly needed products               | Premium             | Partial    | 3.23 | 1.38                   | 2.62   | .06     |
| H <sub>4c</sub> : Obtain access to critical sources of supply | Premium             | Support    | 3.30 | 1.36                   | 4.67   | .02     |
| H <sub>4d</sub> : Conceal a price cut                         | Premium             | No Support | 3.10 | 1.17                   | .76    | .19     |
| H <sub>5a</sub> : Establish buyer–seller relationships        | Going Rate          | Support    | 3.09 | .96                    | .91    | .34     |
| H <sub>5b</sub> : Free blocked funds                          | Going Rate          | No Support | 2.79 | .89                    | 5.22   | .03     |
| H <sub>5c</sub> : Conserve hard currencies                    | Going Rate          | Support    | 3.05 | .89                    | .33    | .57     |
| H <sub>5d</sub> : Reduce heavy debt burdens                   | Going Rate          | Support    | 2.91 | .91                    | 1.03   | .31     |
| H <sub>5e</sub> : Purchases without worsening trade balance   | Going Rate          | Support    | 2.92 | .80                    | 1.03   | .31     |
| H <sub>5f</sub> : Bypass trade restrictions                   | Going Rate          | Support    | 3.01 | .84                    | .02    | .90     |
|   |                     |            |      |                        |        |         |
| H <sub>6a</sub> : Obtain low-cost sources of production       | Discount            | Support    | 2.35 | 1.24                   | 27.38  | .01     |

Petroleum Exporting Countries) members that practice this type of covert discounting. Unfortunately, none of the respondents were from OPEC countries, which could explain this lack of empirical support.

All of the marketing objectives hypothesized to result in the buyer's selection of the going-rate pricing strategy are supported with one exception ( $F_{(6.90)} = 1.27$ , p < .28). The literature indicates that the objective of freeing blocked funds would result in the selection of a going-rate pricing strategy. The reasoning was that using countertrade to make local purchases and then exporting those products simply represented an alternative form of capital. Yet the mean response of 2.79, which is statistically significant at the .05 level, indicates that respondents support a discount pricing strategy when the objective is to free blocked funds. One interpretation is that firms might be willing to convert blocked funds into local products only if compensated for doing so through discount prices. Such discounting might be warranted when we contemplate the reason funds become blocked. Countries block funds when foreign exchange is scarce, yet hard currencies are needed to service debt or pay for essential imports such as food, so conversion of subsidiary earnings into scarce hard currencies is forbidden. However, countries with blocked funds often have high inflation rates and currencies that frequently are devalued. Respondents could be indicating that a discount price is expected because discounting better reflects the underlying value of the countertrade products given anticipated currency devaluations.

Last, the marketing objectives of obtaining low-cost sources of production and collecting outstanding debt were significant factors in the buyer's selection of the discount pricing strategy ( $F_{(2.98)} = 21.64$ , p < .01).

#### Discussion

"I think that the [marketing] objectives important to each of the partners are very different, and so a lot of times you will see that pricing strategies aren't consistent between partners because they have different objectives." —Countertrade Specialist

Different marketing objectives lead to different pricing strategies, even in the context of convoluted international countertrade transactions. International countertrade has received considerable attention in the literature, but the research to date largely ignores the important conceptual dimension regarding pricing strategies. Moreover, the research does not examine both buyer and seller dimensions, whatever the conceptual focus (seller orientation predominates). Finally, from a methodological perspective, the extant research is limited in empirical investigations (only 14 could be located), and none employ the broad international sample so critical to understanding countertrade because it exists in an international setting.<sup>3</sup> For example, Lecraw (1989) uses U.S., Canadian, and Japanese firms. This research addresses these shortcomings.

<sup>&</sup>lt;sup>3</sup>The specific citations are available from the first author.

First, we address a major gap in the countertrade pricing literature. We examine the influence of marketing objectives on buyer and seller pricing strategies and show that systematic differences exist between marketing objectives and the selection of specific pricing strategies. All 12 of the seller's marketing objectives were judged to precipitate the selection of the hypothesized pricing strategy. Premium pricing strategies were chosen by respondents given the marketing objectives of increasing profits or capitalizing on strong bargaining power. A going-rate pricing strategy was selected given the marketing objectives of establishing longterm buyer-seller relationships, obtaining government contracts, and increasing sales volume. Discount pricing strategies were selected when the objectives were to generate goodwill; use excess production capacity; dispose of surplus, obsolete, or perishable products; gain entry into new or difficult markets (partially supported); gain access to marketing networks and expertise; or circumvent currently controlled or overvalued currencies. Of the 12 buyer's objectives, 10 were deemed to produce the selection of the hypothesized pricing strategy. Respondents chose premium pricing strategies when the objectives were to generate goodwill, acquire badly needed products (partially supported), or obtain access to critical sources of supply. They selected a going-rate pricing strategy given the objectives of establishing long-term buyer-seller relationships, conserving hard currencies, reducing debt, making purchases without deteriorating the trade balance, or bypassing trade restrictions. They chose discount pricing when the objectives were to obtain low-cost sources of materials or collect outstanding debts. Therefore, we attempt to fill a major void in the pricing literature: how a firm's marketing objective affects pricing strategy.

Second, we developed and tested a conceptual model of pricing strategies in international countertrade that proposed hypothesized relationships between 12 buyer and 12 seller marketing objectives and 3 pricing strategies. The model went beyond the literature's existing emphasis on the seller's viewpoint to examine the buyer's perspective as well.

Finally, the mail survey conducted in this research utilized an international sample. Of the existing empirical studies involving countertrade, only a few have reached beyond a U.S.-based sampling frame (e.g., Lecraw 1989; Neale and Shipley 1988). As such, this research is the first known study to provide international representation on a broad scale in that data were collected from countertrade practitioners located in 23 countries.

#### **Implications for Further Research**

The conceptual model of pricing strategies in international countertrade provides a foundation for further theory development and testing, and many refinements, extensions, and expansions are possible. In the current study, we examine the marketing objective–pricing strategy relationship on a one-to-one basis. Further research might involve investigating whether firms pursue, simultaneous in one transaction, multiple marketing objectives and, if so, the resultant impact on pricing strategy selection. The number of marketing objectives pursued, combinations of objectives sought

simultaneously, and the linkages between objectives and the resulting impact on the selection of a pricing strategy could all be explored. Moreover, we examined countertrading at a more "general" level, not addressing potential differences across specific transactions, and further efforts could involve attempting to address such differences.

Additional research could expand the model to include moderating factors that might affect the marketing objective-pricing strategy relationship. For example, further efforts could focus on the moderating effects of direct and opportunity costs, the specific products in terms of complexity, quality, or past countertrade experience and performance.

It is hoped that the model will be extended to examine the full range of exchanges that occur between buyer and seller. A unique feature of countertrade is that the countertrader at some point in the transaction both buys and sells. As such, each countertrade transaction requires two interfirm exchanges for each partner (e.g., Firm A sells to Firm B and Firm A buys from Firm B). Because of the secrecy involved with countertraders and the associations to which they belong, we could not break through the anonymity barrier to study the dyadic exchanges. An expanded model could integrate simultaneous exchanges that can occur in certain types of international countertrade in order to examine the transaction from a dyadic perspective. This research might be accomplished by employing laboratory simulations of countertrade transactions, similar to simulations conducted in the channels literature (Gundlach, Ravi, and Mentzer 1995). This approach could focus on an expanded set of linkages between a buyer and seller, relative power positions and bargaining communications, interactions, and outcomes. For example, research could specifically examine the power positions of both the buyer (high, low) and the seller (high, low).

The model developed here could have potential applications in other areas of negotiated pricing outside of the countertrade context. Even though the marketing objectives sought differ between monetized and nonmonetized transactions, and, for that matter, domestic versus international transactions, this model provides a new scheme for classifying and analyzing negotiated pricing outcomes.

As mentioned previously, a key shortcoming in the countertrade literature is the lack of research examining the role of buyers' objectives on the price they are willing to pay. This research addresses this gap by specifically examining buyers' objectives and their relationship to prices they are willing to pay in a countertrade transaction. Past research on buyers' price expectations predominantly focuses on how end consumers' expectations are influenced by certain focal information cues, such as advertised reference prices, brand names, store names, and store characteristics (e.g., Biswas and Blair 1991; Grewal and Compeau 1992). The results of this study suggest that situational cues in the form of objectives for organizational buyers appear to have influence on buyers' price expectations (i.e., price level they expect and are willing to pay). Therefore, these findings reinforce the need to understand further the role of goals and needs in buyers' price expectations.

#### **Implications for Policymakers and Managers**

According to Reisman, Li, and Fuh (1987, p. 1) "an important consequence of the paucity of real empirical insight [on countertrade] is that serious gaps and misconceptions in the countertrade literature remain uncorrected," perhaps offering policymakers and practitioners nothing more than the opportunity to make expensive mistakes. These research results can alleviate misconceptions by offering meaningful guidance to both policymakers and practitioners on the role of pricing strategy in international countertrade. This study is the first known research effort identifying and presenting a fairly exhaustive inventory of marketing objectives and resulting pricing strategies.

A fundamental concern of public policymakers is that firms might dump their products in other countries at a low price (below variable costs). Such practices seriously hurt local business and economies. Consequently, several rules and regulations have developed to avoid these practices. Countertrade transactions have the potential to mask dumping activities. A seller that plans to dump certain products can buy back other products at a higher price (relative to their economic value) and consequently make it appear as though it is selling products at a price higher than variable costs. If the higher price of the buy-back were netted against the price of the products being sold, the transaction could be viewed as dumping. Therefore, these dumping and/or price cutting selling practices can be concealed by selling at a going-rate price while buying certain products back from the other party at premium prices. Policymakers must study such transactions and their potential legal and ethical ramifications.

Conversely, policymakers must be aware that countertrade provides tremendous advantages and benefits to both the buyer and the seller. Many nations (especially underdeveloped countries) face serious shortages of hard currency (e.g., dollars). Without countertrade transactions, these countries would not have the opportunity to participate in trade. Countertrade is also the key form of trade for several industries, such as weapons and aircrafts. Interestingly, the U.S. government has very different (and supportive) policies involving countertrade activities for the sale of defense equipment and agricultural surplus (Park 1990). Policymakers must develop more consistent policies for countertrade that will allow other U.S. industries besides defense and agriculture to avail themselves of countertrade opportunities and facilitate their shortand long-term survival. Policymakers also must be aware that marketers can use countertrade to overcome certain types of trade restrictions (e.g., foreign exchange controls, other tradeinhibiting policies) imposed by developing countries on products deemed nonessential (Goldstein 1984; OECD 1985). These governments are likely to allow the import of products deemed nonessential when the transaction is in the form of a countertrade.

Practitioners can use the empirical results of this study as a framework that indicates marketing conditions under which particular pricing strategies are appropriate, as well as to gain insights into the pricing strategy orientation of a countertrade partner. Nagle (1993, p. 38) aptly puts it: "Pricing is like playing chess. Those who make their moves one at a time, seeking to minimize intermediate losses or exploit intermediate gains, will invariably be beaten by those who

can envision the game a few moves ahead." For marketers to use international countertrade, introspection regarding long-term marketing objectives and the appropriate pricing strategy to achieve those objectives is critical. A countertrader also must understand the objectives of the countertrade partner to grasp the motivation for the partner's particular pricing strategy. Following such a procedure would enable a countertrader to think a few moves ahead of its countertrade partner and increase the likelihood of making profitable pricing decisions to achieve specific marketing objectives.

Both the buyer and the seller are likely to be satisfied with the international countertrade transaction and engage in further transactions when a match exists between the marketing objectives sought and pricing strategies employed. Therefore, appropriate pricing strategies can help consummate a countertrade transaction to enable the firm to attain certain marketing objectives. At the same time, these pricing strategies can provide a strategic weapon to gain a comparative advantage over the competition and increase the performance of the firm.

### References

- Abdel-Latif, Abla (1990), "Egyptian Experience with Counter-trade," *Journal of World Trade*, 24 (October), 17–34.
- Agarwala, P. N. (1991), *Countertrade: A Global Perspective*. New Delhi: Vikas Publishing House PVT.
- Alberts, William W. (1989), "The Experience Curve Doctrine Reconsidered," *Journal of Marketing*, 53 (July), 36–49.
- Alexandrides, Costas G. and Barbara L. Bowers (1987), *Countertrade: Practices, Strategies, and Tactics*. New York: John Wiley & Sons.
- Armstrong, J. Scott and Terry S. Overton (1977), "Estimating Nonresponse Bias in Mail Surveys," *Journal of Marketing Research*, 14 (August), 396–401.
- Barlow, C. Wayne and Glenn P. Eisen (1983), *Purchasing Negotiations*. Boston: CBI Publishing Co.
- Beardon, Richard (1985), "Purchasing from Abroad," in *Purchasing Management Handbook*, David Farmer, ed. Hants, England: Gower Publishing Company, 220–33.
- Biswas, Abhijit and Edward A. Blair (1991), "Contextual Effects of Reference Prices in Retail Advertisements," *Journal of Marketing*, 55 (July), 1–12.
- Bragg, Arthur (1988), "Bartering Comes of Age," Sales and Marketing Management, 40 (January), 61-63.
- Brennan, David J. and Lyn S. Amine (1992), "Offset Trading in the US Aircraft Industry: How Much Is Too Much?" in *Developments in Marketing Science*, Vol. 15, Victoria Crittenden, ed. Chestnut Hill, MA: Academy of Marketing Science, 115–20.
- Cannon, Hugh M. and Fred Morgan (1990), "A Strategic Pricing Framework," *Journal of Services Marketing*, 4 (Spring), 19–29.
- Carter, Joseph R. and James Gagne (1988), "The Do's and Don'ts of International Countertrade," *Sloan Management Review*, 27 (Spring), 31–37.
- Cassady, Ralph, Jr. (1974), Exchange by Private Treaty. Austin, TX: University of Texas.
- Cavusgil, S. Tamer and Pervez N. Ghauri (1990), *Doing Business in Developing Countries*. London: Routledge.

- Cho, K. R. (1987), "Using Countertrade as a Competitive Management Tool," *Management International Review*, 27 (First Quarter), 50–57.
- Choudhry, Yusuf A., Mary McGeady, and Ronald Stiff (1989), "An Analysis of U.S. Firms Towards Countertrade," *Columbia Journal of World Business*, 24 (Summer), 31–38.
- Cooper, Richard N. (1984), "Why Countertrade?" Across the Board, 11 (March), 36–41.
- Czinkota, Michael R., Pietra Rivoli, and Ilkka A. Ronkainen (1992), *International Business*. Fort Worth, TX: The Dryden Press.
- Dennis, Robert D. (1982), "The Countertrade Factor in China's Modernization Plan," Columbia Journal of World Business, 17 (Spring), 67–75.
- Diamantopoulos, Adamantios (1991), "Pricing: Theory and Evidence—A Literature Review," in *Perspectives on Marketing Management*, Vol. 1, M. J. Baker, ed. London: John Wiley & Sons, Ltd., 63–192.
- Elderkin, Kenton W. and Warren. E. Norquist (1987), *Creative Countertrade: A Guide to Doing Business Worldwide*. Cambridge, MA: Ballinger Publishing Company.
- Gilbert, Nathaniel (1990), "Perestroika: Enticements of an Inaccessible Market," *Management Review*, 79 (March), 14–20.
- Goldstein, Elizabeth Ann (1984), A Theoretical Model of Countertrade. New York: Federal Reserve Bank of New York, Research Report No. 8404.
- Grewal, Dhruv and Larry D. Compeau (1992), "Comparative Price Advertising: Informative or Deceptive?" *Journal of Public Policy & Marketing*, 11 (Spring), 52–62.
- Gundlach, Gregory T., Ravi S. Anchrol, and John T. Mentzer (1995). "The Structure of Commitment in Exchange," *Journal of Marketing*, 59 (January), 78–92.
- Hammond, Grant T. (1990), Countertrade, Offsets and Barter in International Political Economy. New York: St. Martin's Press.
- Hague, D. C. (1971), Pricing in Business. London: George Allen and Unwin, Ltd.
- Helson, Harry (1964), Adaptation-Level Theory. New York: Harper & Row.
- Honigberg, James D. (1985), "New Trading System Encourages Global Procurement," *Countertrade and Barter Quarterly*, (Winter), 45–50.
- Hunt, Shelby D. and Robert M. Morgan (1995), "The Comparative Advantage Theory of Competition," *Journal of Marketing*, 59 (April), 1–15.
- Impoco, Jim (1990), "The New Global Game: Let's Make a Deal," U.S. News and World Report, (April 23), 53–54.
- Kaikati. Jack (1982), "Marketing Without Exchange of Money," *Harvard Business Review*, 55 (November/December), 73–74.
- Khoury, Sarkis J. (1984), "Countertrade: Forms, Motives, Pitfalls, and Negotiation Requisites," *Journal of Business Research*, 12, 257–70.
- Kostecki, Michel (1987), "Should One Countertrade?" Journal of World Trade Law, 21 (April), 7–19.
- Kublin, Michael (1990), "A Guide to Export Pricing," *Industrial Management*, 32 (May/June), 29–32.
- Lecraw, Donald (1988), "Countertrade: A Form of Cooperative International Business Arrangement," in *Cooperative Strategies*

- in International Business, F. J. Contractor and Peter Lorange, eds., Lexington, MA: Lexington Books, 425-42.
- ——— (1989), "The Management of Countertrade: Factors Influencing Success," *Journal of International Business Studies*, 20 (Spring), 41–59.
- Leff, Nathaniel H. (1975), "Multinational Corporate Pricing Strategy in the Developing Countries," *Journal of International Business Studies*, 6 (Fall), 55–64.
- Lota, Gerd (1987), "Unplugging Blocked Funds," Credit and Financial Management, 18 (June), 25-32.
- Menzler-Hokkanen, I. (1989), "Countertrade Arrangements in International Trade: A Tool for Creating Competitive Advantage?" Scandinavian Journal of Management, 5, 105–22.
- Mirus, Rolf and Bernard Yeung (1986), "Economic Incentives for Countertrade," *Journal of International Business Studies*, 17 (Fall), 27–39.
- Monroe, Kent B. (1973), "Buyers Subjective Perceptions of Price," *Journal of Marketing Research*, 10 (February), 70–80.
- ——— (1990), *Pricing: Making Profitable Decisions*, 2d ed. New York: McGraw Hill Publishing Company.
- ———, Albert J. Della Bitta, and Susan L. Downey (1977), "Contextual Influences on Subjective Price Perceptions," *Journal of Business Research*, 5 (December), 277–91.
- Moriarty, Rowland T. (1983), *Industrial Buying Behavior: Concepts. Issues, and Applications*. Lexington, MA: Lexington Books.
- Nagle, Thomas T. (1993), "Managing Price Competition," Marketing Management, 2 (1), 36-45
- ——— and Reed K. Holden (1995). *The Strategy and Tactics of Pricing*, 2d ed. Englewood Cliffs, NJ: Prentice Hall.
- Neale, C. W. and David Shipley (1988), "Effects of Countertrade-Divergent Perceptions Between Practitioners and Non-Participants," *Journal of Management Studies*, 25 (January), 57–71.
- ——, and J. Colin Dodds (1991), "The Countertrading Experience of British and Canadian Firms," *Management International Review*, 31 (First Quarter), 19–35.
- OECD (1985), Countertrade: Developing Country Practices. Paris: Organization for Economic Co-operation and Development.
- Okoroafo, Sam C. (1988), "Determinants of LDC Mandated Countertrade," *International Marketing Review*, 5 (Winter), 16–24.
- ——— (1992), "An Application of Bagozzi's Exchange Model to Integration of Countertrade Research," *International Marketing Review*, 9 (Winter), 46–51.
- ——— (1993), "An Integration of Countertrade Research and Practice," *Journal of Global Marketing*, 6 (4), 113–27.
- Park, Jong H. (1990), "Policy Response to Countertrade and the U.S. Trade Deficit: An Appraisal," *Business Economics*, (April), 38-44.
- Paun, Dorothy and Gerald Albaum (1993), "A Conceptual Model of Seller and Buyer's Pricing Strategies in International Countertrade," *Journal of Global Marketing*, 7 (2), 75–95.
- Rao, Akshay R. and Mark E. Bergen (1992), "Price Premium Variations as a Consequence of Buyers' Lack of Information," *Journal of Consumer Research*, 19 (December), 412–23.
- Reisman, Arnold, Gang Li, and Duu-Cheng Fuh (1987), A General Model and Taxonomy for Countertrade Analysis,

- Technical Memorandum 612. Cleveland: Case Western Reserve.
- Rosenthal, Robert and Ralph L. Rosnow (1991), Essentials of Behavioral Research: Methods and Data Analysis, 2d ed. New York: McGraw-Hill Publishing Company.
- Rubin, Steven (1986), The Business Manager's Guide to Barter, Offset and Countertrade. London: Economist Intelligence Unit.
- Samiee, Saeed (1987), "Pricing in Marketing Strategies of U.S.-and Foreign-Based Companies," *Journal of Business Research*, 15, 17–30.
- Snedecor, George W. and William G. Cochran (1967), Statistical Methods. Ames, IA: Iowa State University Press.
- Tellis, Gerard J. and Gary J. Gaeth (1990), "Best Value, Price-Seeking, and Price Aversion: The Impact of Information and Learning on Consumer Choices," *Journal of Marketing*, 54 (April), 34–45.
- Thaler, Richard (1985), "Mental Accounting and Consumer Choice," Marketing Science, 4 (Summer) 199-214.

- Urbany, Joel E. and Peter R. Dickson (1991), "Consumer Normal Price Estimation," *Journal of Consumer Research*, 18 (June), 45–51.
- Weigand, Robert E. (1980), "Barters and Buy-Backs: Let Western Firms Beware!" *Business Horizons*, 23 (June), 54–61.
- Weitz, Barton A., Stephen B. Castleberry, and John F. Tanner (1995), *Selling: Building Partnerships*. Burr Ridge, IL: Richard D. Irwin, Inc.
- Welt, Leo G. B. (1990), *Blocked Funds: Aspects of Capital Flight*. London: Euromoney Books.
- Winters, Patricia and Scott Hume (1990), "Pepsi, Coke: Art of Deal-Making," *Advertising Age*, (February 19), 45.
- Yoffie, David B. (1984), "Profiting from Countertrade," *Harvard Business Review*, 62 (May/June), 8–16.
- Zurawicki, Leon (1988), "Marketing Rationale for Countertrade," European Management Journal, 6, 299–308.