## Sources of Buyer Bargaining Power and its Impact on Performance

Tobias Schoenherr, Ph.D.<sup>1</sup>
Assistant Professor of Supply Chain Management
Department of Supply Chain Management
The Eli Broad Graduate School of Management
Michigan State University

517/432-6437; Schoenherr@bus.msu.edu

Vincent A. Mabert, Ph.D.
Emeritus Professor of Operations Management
Editor - Production & Inventory Management Journal
Kelley School of Business
Indiana University

812/855-2661; mabert@indiana.edu

**Summary.** Buyer bargaining power has been a central variable in industrial procurement. This symposium paper offers a first attempt to place buyer bargaining power within a comprehensive framework, investigating its sources and its subsequent impact on purchase performance. Potential antecedents considered include market uncertainty, information search, extent of analysis, item difficulty, and supply base availability. These are integrated into a framework leading to buyer bargaining power, whose impact on purchase performance is subsequently assessed. This proceedings publication conceptually develops the framework and its hypotheses.

**Introduction.** Buyer bargaining power has been a central variable in influencing the competitiveness of a firm (Porter, 1980), and has been studied as a key component influencing how supply chain management and sourcing is conducted by organizations (Benton and Maloni, 2005; Kraljic, 1983). Although there has been a shift during the last two decades from adversarial buyer-supplier relationships to more collaborative bonds, possessing bargaining power continues to be a competitive advantage (Dowlatshahi, 1999). This power position can provide leverage for the procurement function and increases the company's competitive market position (Spekman, 1985; Ellram and Carr, 1994), and needs to be considered when developing a firm's supply chain strategy (Dorling, Scott and Deakins, 2006).

Despite a proliferation of literature on power in buyer-supplier relationships, empirical research exploring this domain is still limited (Caniëls and Gelderman, 2007), with some researchers suggesting buyer bargaining power be investigated with various theoretical lenses (Wallin, Rungtusanatham and Rabinovich, 2006) and within the context of supply chain management (Maloni and Benton, 2000). In addition, while studies exist that examine how buyer bargaining power can be increased (e.g., Cachon and Zhang, 2006), no identified research looks at the issue of bargaining power in a comprehensive context, exploring several of its antecedents,

-

<sup>&</sup>lt;sup>1</sup> Corresponding author

and the subsequent impact on performance. This paper focuses upon buyer bargaining power in context and examines it within a comprehensive framework.

**Literature review and research model.** The bargaining power of buyers is a central component of Porter's (1980) Five-Forces-Model and has received much attention as a variable in explaining buyer-supplier relationships (Cox et al., 2002). For example, Knudsen (2003) and Kotabe, Murray and Javalgi (1998) use power to explain the competitiveness of markets. Dowlatshahi (1999) compares the traditional adversarial buyer-supplier relationship approach with a more cooperative one, and the relative implications on the distribution of power. Caniëls and Gelderman (2007) investigate power and interdependence in buyersupplier relationships based on Kraliic's (1983) stages of purchasing sophistication, and find that the power symmetry in the strategic quadrant no longer holds. Kumar, Scheer and Steenkamp (1999) look at power in buyer-supplier relationships in terms of interdependence. punitive capability, and the reciprocation of punitive actions. Power has also been the subject of operations and supply chain management literature. For example, Cox (2001a) provides a framework for procurement and supply competence based on the power of buyers and suppliers. This framework is extended beyond the immediate relationship of buyers with their first-tier suppliers in Cox, Sanderson and Watson (2001) and includes complex power regimes within upstream supply networks. In addition, Maloni and Benton (2000) found that power plays a significant role in supply chain management, noting that power, when used in a judicious manner, can lead to higher levels of integration and performance. In another study Benton and Maloni (2005) investigate the impact of power in buyer-supplier relationships on the satisfaction of the supplier, and conclude that power-affected relationships influence both performance and supplier satisfaction positively.

The investigation of industrial buyer behavior has its origins in the models by Robinson, Faris and Wind (1967), Webster and Wind (1972), and Sheth (1973). These important models provide the first conceptual frameworks to analyze, explain, and describe industrial buyer behavior. For the interested reader, Johnston and Lewin (1996) provide a good summary and synthesis of articles that have been using some aspect of industrial buyer behavior. The selection of our variables and the development of our research model, which is presented in Figure 1, were guided in large part by this body of literature.

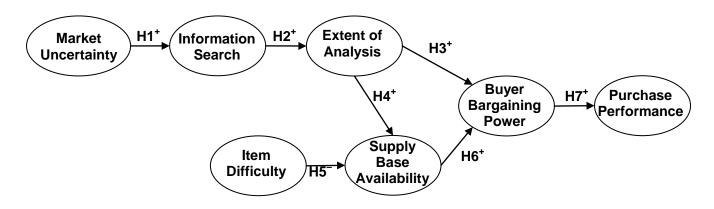


Figure 1. Research model.

Hypothesis development. Linking market uncertainty to information search. A crucial component in sourcing is the company's ability to obtain valuable supplier and market information that can aid in the decision making process (Monczka, Nichols and Callahan, 1992). Knowledge about the supply base and the item characteristics is absolutely necessary to develop the most appropriate sourcing approach (Anderson and Katz, 1998; Monczka and Trent, 1992), with information search being a key variable in industrial buying (Sheth, 1973). For example, it has been suggested that a buyer should possess as much high-quality information about their suppliers as possible due to an associated increased level in power (Knudsen, 2003; McDonald, 1999; McDowell Mudambi, 1994). From the old axiom that "knowledge is power", information search should therefore play a critical role in our model of buyer bargaining power.

The motivation and desire to search for information can itself be triggered by the uncertainty in the market. Market uncertainty refers to the unpredictable variability of outcomes present in the supply market (Achrol and Stern, 1988) and the associated difficulty and challenge to develop a clear and consistent assessment. It characterizes the market environment (Heide and John, 1988) and is an indication of its dynamic (Cannon and Perreault, 1999). Industrial purchasers are expected to engage in a heightened search for information when there is higher market uncertainty. This is in line with arguments by Moriarty and Spekman (1984) who suggest that more information is sought when the buying situation is risky; by Weiss and Heide (1993) who associate a faster rate of change with more extensive search efforts; and by Garrido Samaniego et al. (2006) who write that personal sources of information are of special importance as uncertainty increases. This leads to hypothesis #1:

## H1. Heightened market uncertainty leads to increased information search.

Linking information search to extent of analysis. Once information has been collected, it can be used as input for analyses to help in the decision making process. Oftentimes, the raw data collected possess only limited usefulness in an unanalyzed form, not necessarily representing a competitive advantage. The extent of raw data available does not always equate to their potential value, since the data need to be analyzed to create knowledge and influence appropriate behavior. When more effort is expended to collect information, a more thorough analysis should follow to convert the available information into knowledge, which should enhance the buyer's advantage (cf. Hunter, Bunn and Perreault, 2006). Additionally, a more involved analysis can also substantiate the expenses incurred in information gathering; as noted by past research suggesting that the larger the number of information sources accessed, the more time is required to make the purchase decision (Dholakia, Johnson, Della Bitta and Dholakia, 1993). Therefore, hypothesis #2 is as follows.

## H2. Heightened information search leads to an increased extent of analysis.

Linking extent of analysis to buyer bargaining power and supply base availability. Analysis of available information is an important aid in sourcing decision making (Sashi and Kudpi, 2001). As such, a heightened extent of analysis devoted to the particular RFQ should make the buyer more confident in his or her position. Additionally, more analysis conducted with the available information should also facilitate the development of a more advantageous sourcing approach for the buyer. The effort expended in the analysis should enhance and be a source of the buyer's bargaining power. A similar link, between information search and bargaining power,

was suggested in prior research (Clopton, 1984; Bunn and Clopton, 1993; Cachon and Zhang, 2006). Cox (2001a) also wrote about the value of information and the effect in can have on the leverage of parties in supply markets. We hypothesize, however, that this information needs to be processed and analyzed first, then leading to a better bargaining position for the buyer. This aligns well with Cox (2001b) who linked procurement competence with increased buyer bargaining power. Hypothesis #3 is therefore formally stated as:

H3. A greater extent of analysis leads to increased buyer bargaining power.

Supply base availability assesses the extent of the supplier choice set available to the buyer (Cannon and Perreault, 1999). We propose that a more involved analysis of the available information can result in better supply base visibility. With little analysis some supply sources may never be found by industrial buyers, limiting their choice set. More analysis conducted should thus lead to better supply market availability, motivating hypothesis #4:

H4. A greater extent of analysis leads to better supply base availability.

Linking item difficulty to supply base availability. Supply base availability is influenced by the uniqueness or difficulty of the purchased items. This dimension is an assessment of how customized or highly-engineered the individual items are. Prior studies posited that as the difficulty (i.e., specifications and/or manufacturing) of the item increases, buyer bargaining power should decrease (Heide, 1994), and even switch to the supplier's side (cf. Wallin, Rungtusanatham and Rabinovich, 2006). However, if items from different suppliers cannot be differentiated from each other, bargaining power should be retained by the buyer (cf. Kotabe, Murray and Javalgi. 1998). Wallin et al. (2006) also proposed that transaction cost economics, with the dimension of asset specificity, may provide a theoretical justification for such decision drivers as the uniqueness of the item. While above studies suggest a link between item difficulty and bargaining power directly, we hypothesize that item difficulty first impacts the supplier choice set, which then in turn affects bargaining power. Homburg and Kuester (2001) argue firms facing more difficult purchase situations generally utilize fewer suppliers, supporting hypothesis #5:

H5. Increased item difficulty leads to restricted supply base availability.

Linking supply base availability to buyer bargaining power. Buyer bargaining power can be influenced by the availability of qualified and capable suppliers. Better supplier availability should increase competition, and thus the bargaining power of the buyer. This position is supported by past research (Bakos and Brynjolfsson, 1993; Perdue, 1992). It is also consistent with a study by Dorling, Scott and Deakins (2006) who associated a large number of suppliers and low switching costs with high bargaining power. Similar arguments were provided in the research by Kotabe, Murray and Javalgi (1998), Murray, Kotabe and Wildt (1995), and in a case study published by Chiesa, Manzini and Tecilla (2000). Along this same line, Wallin, Rungtusanatham and Rabinovich (2006) associated a larger number of available suppliers with the buyer's ability to demand concessions, and based their argument on work by Heide (1994), Handfield (1993) and Pfeffer and Salancik (1978). This suggests hypothesis #6.

H6. Better supply base availability leads to increased buyer bargaining power.

Linking buyer bargaining power to purchase performance. One factor that is widely acknowledged to affect performance in negotiations is power (Bacharach and Lawler, 1981; Fisher, Ury and Patton, 1991; Cox et al., 2002). Power can also influence how supply chain relationships are pursued (Dorling, Scott and Deakins, 2006), can help buyers gain a competitive advantage (Knudsen, 2003; Spekman, 1985), and can determine the performance of bidding events for industrial purchases (Schoenherr and Mabert, 2007). Besides impacting sourcing leverage, the power structure between buyers and suppliers can also enable one party to drive favored integration agendas, such as the implementation of interorganizational systems (Saeed, Malhotra and Grover, 2005). While this relationship has widely been recognized, the reverse argument that increased supplier power will decrease business outcomes, was not supported (Cousins and Lawson, 2007). Nevertheless, within the context of this study, we put forward hypothesis #7:

H7. Increased buyer bargaining power leads to better purchase performance.

## **REFERENCES**

Achrol, R.S., L.W. Stern. "Environmental determinants of decision-making uncertainty in marketing channels", *Journal of Marketing Research*, 25 (1), 1988, pp. 36-50.

Bacharach, S., E.J. Lawler. *Power and politics in organizations*, Jossey-Bass, San Francisco, CA, 1980.

Bakos, J.Y., E. Brynjolfsson. "Information technology, incentives, and the optimal number of suppliers", *Journal of Management Information Systems*, 10 (2), 1993, pp. 37-54.

Benton, W.C., M. Maloni. "The influence of power driven buyer/seller relationships on supply chain satisfaction", *Journal of Operations Management*, 23 (1), 2005, pp. 1-22.

Bunn, M.D., S.W. Clopton. "Patterns of information source use across industrial purchase situations", *Decision Sciences*, 24 (2), 1993, pp. 457-478.

Cachon, G.P., F. Zhang. "Procuring fast delivery: sole sourcing with information asymmetry", *Management Science*, 52 (6), 2006, pp. 881-897.

Caniëls, M.C.J., C.J. Gelderman. "Power and interdependence in buyer supplier relationships: a purchasing portfolio approach", *Industrial Marketing Management*, 36(2), 2007, pp. 219-229.

Cannon, J.P., W.D. Perreault Jr. "Buyer-seller relationships in business markets", *Journal of Marketing Research*, 34 (4), 1999, pp. 439-460.

Chiesa, V., R. Manzini, F. Tecilla. "Selecting sourcing strategies for technological innovation: an empirical case study. *International Journal of Operations and Production Management*, 20 (9), 2000, pp. 1017-1037.

Clopton, S.W. "Seller and buying firm factors affecting industrial buyers' negotiation behavior and outcomes", *Journal of Marketing Research*, 21 (1), 1984, pp. 39-54.

Cousins, P.D., B. Lawson. "Sourcing strategy, supplier relationships and firm performance: an empirical investigation of UK organizations", *British Journal of Management*, 18 (2), 2007, pp. 123-137.

Cox, A. "Understanding buyer and supplier power: a framework for procurement and supply competence", *Journal of Supply Chain Management*, 37 (2), 2001a, pp. 8-15.

Cox, A. "Managing with power: strategies for improving value appropriation from supply relationships", *Journal of Supply Chain Management*, 37 (2), 2001b, pp. 42-47.

Cox, A., J. Sanderson, G. Watson. "Supply chains and power regimes: toward an analytic framework for managing extended networks of buyer and supplier relationships", *Journal of Supply Chain Management*, 37 (2), 2001, pp. 28-35.

Cox, A., P. Ireland, C. Lonsdale, J. Sanderson, G. Watson. *Supply Chains, Markets and Power: Mapping Buyer and Supplier Power Regimes*. Routledge, New York, NY, 2002.

Dholakia, R.R., J.L. Johnson, A.J. Della Bitta, N. Dholakia. "Decision-making time in organizational buying behavior: an investigation of its antecedents", *Academy of Marketing Science Journal*, 21 (4), 1993, pp. 281-293.

Dorling, K., J. Scott, E. Deakins. "Determinants of successful vendor managed inventory relationships in oligopoly industries", *International Journal of Physical Distribution and Logistics Management*, 36 (3), 2006, pp. 176-191.

Dowlatshahi, S. "Bargaining power in buyer-supplier relationships", *Production and Inventory Management Journal*, 40 (1), 1999, pp. 27-36.

Ellram, L.M., A. Carr. "Strategic purchasing: a history and review of the literature", *International Journal of Purchasing and Materials Management*, 30 (2), 1994, pp. 10-19.

Fisher, R., W. Ury, B. Patton. Getting to Yes, Penguin, New York, NY, 1991.

Garrido Samaniego, M.J., A.M. Gutiérrez Arranz, R. San José Cabezudo. "Determinants of internet use in the purchasing process", *Journal of Business and Industrial Marketing*, 21 (3), 2006, pp. 164-174.

Handfield, R.B. "A resource dependence perspective of just-in-time purchasing", *Journal of Operations Management*, 11 (3), 1993, pp. 289-311.

Heide, J.B. "Interorganizational governance in marketing channels", *Journal of Marketing*, 58(1), 1994, pp. 71-85.

Heide, J.B., G. John. "The role of dependence balancing in safeguarding transaction-specific assets in conventional channels", *Journal of Marketing*, 52 (1), 1988, pp. 20-35.

Homburg, C., S. Kuester. "Towards an improved understanding of industrial buying behavior: determinants of the number of suppliers", *Journal of Business-to-Business Marketing*, 8 (2), 2001, pp. 5-33.

Hunter, G.K., M.D. Bunn, W.D. Perreault Jr. "Interrelationships among key aspects of the organizational procurement process", *International Journal of Research in Marketing*, 23 (2), 2006, pp. 155–170.

Johnston, W.J., J.E. Lewin. "Organizational buying behavior: toward an integrative framework", *Journal of Business Research*, 35 (1), 1996, pp. 1-15.

Knudsen, D. "Aligning corporate strategy and e-procurement tools", *International Journal of Physical Distribution and Logistics Management*, 33 (8), 2003, pp. 720-734.

Kotabe, M., J.Y. Murray, R.G. Javalgi. "Global sourcing of services and market performance: an empirical investigation", *Journal of International Marketing*, 6 (4), 1998, 10-31.

Kraljic, P. "Purchasing must become supply management", *Harvard Business Review*, 61 (5), 1983, pp. 109-117.

Kumar, N., L.K. Scheer, J.-B.E.M. Steenkamp. "Interdependence, punitive capability, and the reciprocation of punitive actions in channel relationships", *Journal of Marketing Research*, 35 (2), 1998, pp. 225-235.

Maloni, M., W.C. Benton. "Power influences in the supply chain", *Journal of Business Logistics*, 21 (1), 2000, pp. 49-73.

McDonald, F. "The importance of power in partnership relationships", *Journal of General Management*, 25 (1), 1999, pp. 43-59.

McDowell Mudambi, S. "A topology of strategic choice in retailing", *International Journal of Retail and Distribution Management*, 22 (4), 1994, pp. 32-40.

Monczka, R.M., E.L. Nichols Jr., T.J. Callahan. "Value of supplier information in the decision process", *International Journal of Purchasing and Materials Management*, 28 (2), 1992, pp. 20-30.

Monczka, R.M., R.J. Trent. "Worldwide sourcing: assessment and execution", *International Journal of Purchasing and Materials Management*, 28 (4), 1992, pp. 9-20.

Moriarty, R.T., R.E. Spekman. "An empirical investigation of the information sources used during the industrial buying process", *Journal of Marketing Research*, 21 (2), 1984, pp. 137-147.

Murray, J.Y., M. Kotabe, A.R. Wildt. "Strategic and financial performance implications of global sourcing strategy: a contingency analysis", *Journal of International Business Studies*, 26 (1), 1995, pp. 181-205.

Perdue, B.C. "Ten aggressive bargaining tactics of industrial buyers", *Journal of Business and Industrial Marketing*, 7 (2), 1992, pp. 45-52.

Pfeffer, J., G. Salancik. *The External Control of Organizations*, Harper and Row, New York, NY, 1978.

Porter, M.E. Competitive Strategy, Free Press, New York, NY, 1980.

Robinson, P.J., C.W. Faris, Y. Wind. *Industrial Buying and Creative Marketing*, Allyn & Bacon, Boston, MA, 1967.

Saeed, K.A., M.K. Malhotra, V. Grover. "Examining the impact of interorganizational systems on process efficiency and sourcing leverage in buyer-supplier dyads", *Decision Sciences*, 36 (3), 2005, pp. 365-397.

Sashi, C.M., V.S. Kudpi. "Market selection and procurement decisions in B2B markets", *Management Decision*, 39 (3), 2001, pp. 190-196.

Schoenherr, T., V.A. Mabert. "The effect of buyer-imposed bidding requirements and bundle structure on purchase performance", *Journal of Supply Chain Management*, 43 (1), 2007, pp. 27-39.

Sheth, J.."A model of industrial buyer behavior", *Journal of Marketing*, 37 (4), 1973, pp. 50-56

Spekman, R. "Competitive procurement strategies: building strength and reducing vulnerability", *Long Range Planning*, 18 (1), 1985, pp. 94-99.

Webster, F.E., Y. Wind. "A general model for understanding organizational buying behavior", *Journal of Marketing*, 36(2), 1972, pp. 12-19.