

Coercion and reverse auctions

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Abstract

Purpose – The paper seeks to examine the presence of coercion in the common use of reverse auctions for industrial procurement and spend management activities, and to illustrate the many problems that arise when purchasing and supply management is viewed by powerful buying organizations as a simple dyadic relationship with sellers.

Design/methodology/approach – The paper takes the form of a literature review, and analysis of the meaning of coercion, and supplier survey data.

Findings – Reverse auctions, as commonly used, are shown to be *fundamentally* coercive, with coercion being *essential* for achieving the outcomes that buyers seek.

Research limitations/implications – Survey responses and findings that can be drawn from them are limited due to the small sample size. Reflects the dyadic nature of buyers' corporate codes of conduct in relation to the day-to-day practice of purchasing and supply management.

Practical implications – The existence of coercion indicates that reverse auctions are inconsistent with corporate codes of ethics or codes of conduct with respect to supplier relationships (e.g. fairness, honesty, and integrity). Reverse auctions are also shown to be inconsistent with US federal procurement standards and the Institute of Supply Management's "Principles and standards of ethical supply management conduct".

Originality/value – The paper brings to the forefront the existence of psychological and economic coercion in the common use of reverse auctions, and discusses how this creates difficult problems for both buyers and sellers. It also presents alternative strategies that managers in buying and selling organizations can use instead of reverse auctions.

Keywords Business ethics, Purchasing, Auctions, Sourcing

Paper type Research paper

Introduction

Business-to-business reverse auctions (RAs) are commonly used by the procurement organizations of *Fortune*[®] Global 2000 corporations as a means to source goods and services ranging from buyer-designed components to pure commodity items, and to obtain lower unit prices. Reverse auction service providers, known as "market makers", arrange for new and incumbent suppliers to compete in real time for their clients' business. The auction is "reverse" because unit prices descend over time, rather than increase. The price-bidding portion of the reverse auction is conducted via a private computer network or over the internet, and is usually completed in 30-90 minutes for each group of items auctioned. Leading providers of reverse auction services include SAP, Oracle, A.T. Kearney, Ariba[®], Procuri, Orbis Online, and Iasta. Details of the reverse auction process and its theoretical foundations have been described previously (Klemperer, 1999; Emiliani, 2000, 2004; Jap, 2001; Beall *et al.*, 2003; Carter *et al.*, 2004).

First introduced by FreeMarkets Online, Inc. in 1995, reverse auctions were soon hailed as an innovative tool that

would fundamentally change industrial procurement (Aepfel, 1999; Baatz, 1999; Tully, 2000; Richards, 2000). The key benefits cited by market makers include a significant reduction in the time it takes to source goods and services, and large cost savings – an average of 15 percent or more (Beall *et al.*, 2003), which is three to five times greater than that achieved through traditional sealed bidding processes. The business press has typically presented reverse auctions in a favorable light (Tully, 2000; Richards, 2000; Judge and How, 2001; Reason, 2001; Carbone, 2005; Moody, 2006), without engaging in careful fact-checking to determine whether the benefits claimed by the market makers are genuine. Many academic studies support these benefits for buyers (e.g. Jap, 2001; Smeltzer and Carr, 2003; Beall *et al.*, 2003), though careful analysis reveals that in fact they too repeat the market maker's claims, as well as claims made by buyers, and have not engaged in critical inquiry.

Studies challenging the savings figures have shown the amount of savings that can actually be achieved are greatly overstated (Emiliani and Stec, 2002a, 2003, 2005). These and other studies have questioned the many other benefits of reverse auctions claimed by the market makers. In general, buyers and sellers do not realize the benefits, and instead must often contend with unfavorable and costly outcomes (Emiliani and Stec, 2003, 2005; Tassabehji *et al.*, 2006). Despite this, market makers continue to promote reverse auctions as an innovation in modern procurement practice

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that saves buyers both time and money. Many manufacturing and service sector businesses, as well as government agencies, will continue to use reverse auctions because managers are not aware of or simply ignore the many pitfalls (Emiliani, 2006).

Critics have described reverse auctions as “coercion or e-mugging” (*Information Age*, 2002), “bid shopping” (Angelo, 2002; Lehner, 2002), and a “technologically-assisted form of traditional power-based bargaining” (Emiliani, 2004). A common supplier response to reverse auctions is: “We are declining to participate in online auctions unless *forced* to by an existing customer” [italics added] (Emiliani and Stec, 2005). As a result of incumbent suppliers’ negative perceptions of reverse auctions, many industry trade associations have questioned or denounced the use of reverse auctions. In response to real and perceived abuse by market makers, buyers, and sellers, trade associations have created voluntary codes of conduct to regulate the information and activities of the parties engaged in reverse auctions (Associated General Contractors of America, 2003; Canadian Construction Association, 2001a, b; Construction Products Association, 2003; European Aluminium Foil Association, 2005; International Housewares Association, 2002; National Electrical Contractors Association, 2002; Original Equipment Suppliers Association, 2002). A recent study (Emiliani, 2005) has shown that the main benefit of codes of conduct is not as a mechanism for voluntarily regulating reverse auctions, but as a source of unified, high-profile, collective feedback from suppliers that challenge the fairness and effectiveness of reverse auctions. This, along with unfavorable outcomes that buyers may have experienced previously, compels buyers to reconsider their use of reverse auctions and return to long-established collaborative methods.

Reverse auctions have been widely criticized by incumbent suppliers, in part because they pose an immediate, significant, and credible threat to near-term profitability and sales volume, as well as customer relationships. A typical view among suppliers is that reverse auctions are “unhealthy, if not unethical” (Lehner, 2002). Recent studies consistently indicate that suppliers have a strong negative view of reverse auctions (Emiliani and Stec, 2002a, 2003, 2005; Jap, 2000, 2002; Paulson, 2004; Smeltzer and Carr, 2003; Tassabehji *et al.*, 2006; Tulder and Mol, 2002), in part because reverse auctions damage existing business relationships and undercut best practices in supply management practice, such as collaborative problem solving, developing trusting long-term business relationships, and joint capability-building (Womack *et al.*, 1990; Bounds *et al.*, 1996; Nishiguchi and Beaudet, 1998; Dyer and Nobeoka, 2000; Liker and Choi, 2004).

Reverse auctions have been argued to be a poor purchasing tool and also bad for business in general because they contradict the outcomes that buying organizations seek to achieve, namely reducing the cost of goods sold and improving supply chain efficiency. Reverse auctions have been characterized as a zero-sum power-based bargaining tool that will likely result in a slow decline in competitiveness and financial performance among the buyers and sellers that use them extensively (Emiliani, 2004).

The objective of this paper is to examine reverse auctions to determine whether they are coercive and, if so, in what ways this is problematic for buyers and sellers. It will also highlight aspects of the way in which reverse auctions have been discussed, which indicate presuppositions stemming from current and accepted business practice that promote and

perpetuate adversarial relationships between business partners predicated on leveraging a power position (Womack *et al.*, 1990; Nishiguchi, 1994). In addition, this paper will seek to answer three questions:

- 1 Are RAs merely an extension of traditional business practices?
- 2 What are the sources and methods of coercion?
- 3 Are RAs *fundamentally* coercive?

The paper is organized beginning with a presentation of coercion from practical and theoretical perspectives, presentation of supplier survey data that further inform their perceptions of reverse auctions, an examination of corporate codes of conduct in relation to buyer-seller relationships and the use of reverse auctions, and a discussion of the findings which includes implications for managers in buying and selling organizations.

Coercion

A recent study argued that reverse auctions are coercive – i.e. “To force [someone] to act or think in a certain way by use of pressure threats, or intimidation” (*American Heritage Collegiate Dictionary*, 1997) – and likely inconsistent with corporate codes of conduct (Emiliani and Stec, 2002b). It cites the existence of explicit and implicit coercion in two varieties, human and electronic, that are both integral components of the reverse auction process as perceived by incumbent suppliers.

Incumbent suppliers commonly complain that reverse auctions are coercive. Is this simply a biased perception among suppliers who may not be competitive in a global marketplace and who stand to lose sales to competitors? Or is it in fact accurate? If so, should anything be done about it? In contrast, it is not obvious to most large buying organizations that reverse auctions are coercive, in part due the very fact that their use is so widespread, as well as explicit or implicit approval of their use by corporate legal departments (Emiliani, 2005).

To facilitate this analysis, an understanding and definition of coercion must be developed that helps differentiate between feelings of coercion and unintentional or intentional coercive behavior by market makers and buyers that use reverse auctions. Important related interests include whether or not reverse auctions are consistent with typical corporate codes of ethics or codes of conduct with respect to supplier relationships, US federal procurement standards of conduct (Federal Acquisition Regulation, 2006; General Services Administration, 2006), and the Institute of Supply Management’s “Principles and Standards of Ethical Supply Management Conduct” (Institute of Supply Management, 2002).

Words such as “coerced”, “forced”, “no choice”, and others with similar connotation are common throughout the trade and academic literature with reference to how incumbent suppliers view reverse auctions. For example:

- “... the nature of the reverse auction tends to force a supplier to progressively reduce its asking price” (Moser, 2002);
- “... suppliers view [...] the auction process as exploitative” (Jap, 2001);
- “... Sellers tend to perceive it [RAs] as a coercive tool” (Thomas and Wilson, 2001);

- “One tactic used by buying firms to overcome this issue [resistance to RA use] was simply to leave suppliers no choice but to participate” (Carter *et al.*, 2004);
- “Suppliers [...] are often reported to be unhappy with the reverse auction process, having been coerced into significant price reductions” (Tassabehji *et al.*, 2006);
- “[There are] accusations that they [buyers] were using the bids as a ‘pressure to conform’ [lower their price]” (Smeltzer and Carr, 2003); and
- “This perceived conflict is primarily caused by the tool’s emphasis on awarding business based on aggressive price competition – the classic arm’s length coercive/competitive model” (Beall *et al.*, 2003).

Examining coercion in reverse auctions requires defining both a general understanding of the term and what is meant when it is used in the context of statements about reverse auctions. While the legal aspects of coercion in buyer-seller business relationship is beyond the scope of this paper, understanding decisions related to contract law can be helpful. The primary focus of this paper is the political or philosophical dimensions that entail freedom, rights, and morality. This is relevant because it helps form the basis of United States Uniform Commercial Code (2003), which governs transactions between buyers and sellers, and from which corporate codes of conduct are partially derived.

According to Wertheimer (1993), “There is no univocal account [...] of the word ‘coercion’ [...] Terms such as coercion, voluntariness, autonomy and the like are best understood as terms of art that do not admit of tight specifications”. These terms are often used loosely, and so our understanding of them depends greatly on context. The relationships of people involved in an activity and the statements they make using these terms helps us understand the nature of the situation.

The theme of coercion, as the antithesis of free will, has received extensive examination in theological, philosophical, and political writings. We make no claim to have exhausted even a fraction of the literature on the topic, but instead cite relevant works to establish a clear understanding of the backdrop to claims of coercion that appear in the reverse auction literature. It will also help to understand the claims themselves and inform the meanings attached to them.

Much of the discussion of liberty and coercion has surrounded the issue of responsibility for one’s actions. For example, is culpability for stealing a loaf of bread mitigated by the starvation that one’s children are experiencing? Is a person legally bound to surrender title to their property if he or she signs the bill of sale at gunpoint? The former is a free will choice, while the latter is the result of coercion. These are simple and clear examples that illustrate the issue in general terms. Other real-life examples may be less obvious and must be examined more closely. To do this, the question of “choice” is often raised. If one’s children are starving, then there is *no choice* but to steal food if there truly is no other means of feeding them. My choice in the case of surrendering property is not free; it is made under duress.

Contract case law can be helpful for understanding coercion. Court cases in which claims of coercion have been made argue that the contract in question should be voided (Wertheimer, 1987). These decisions reveal contextual relevance. For example, what would be considered coercive employment practices during the Great Depression would not

be viewed in the same way during good economic times when *choices* of employment are readily available. The relative power of litigants also has bearing on legal decisions. A case concerning the federal government versus a small company could be said to be coercive simply because of the fact that the alleged coercer, the federal government, had a significant power advantage over the small company. The company has legitimate fear that the government will exercise its vast power.

These decisions are pragmatic and subject to “what works” from a public policy standpoint rather than resting on an ethical or philosophical basis. There have been two basic approaches to the question of freedom, liberty, and coercion views frames the discussion. (Wertheimer, 1987):

One view maintains that a claim of coercion is essentially *empirical* or value-free. A second view maintains that the truth of a coercion claim is fundamentally *moralized*. An empirical theory maintains that the truth of the claim rests on ordinary facts: Will B be worse off than he now is if he fails to accept A’s proposal? Is there great psychological pressure on B? Does B have any reasonable alternative? Would virtually all rational persons accept such a proposal? By contrast, a moralized theory holds that we cannot determine whether A coerces B without answering the following sorts of questions: Does A have the *right* to make his proposal? *Should* B resist A’s proposal? Is B *entitled* to recover should he succumb to A’s proposal?”.

If there is a situation where there is literally no choice but to do X, then the matter is self-evident and coercion is clear. This is rarely the case. Even in the classic “your money or your life” scenario there is a choice – though many would say an impossible one. We must consider the *quality* of the choice options. The discussion turns on a question of degree – a question of “voluntariness”. In arguing against the rights-based or moralized definition of coercion, “a choice is voluntary if and only if it is not made because there is no acceptable alternative” (Olsaretti, 1998). This seems correct, but, what is an “acceptable alternative”? The question of whether another rational person, or even most persons, would choose the same way may limit the discussion to what is legal or enforceable. The question “will involve considerations of freedom, rights, equality, or justice at some stage” (Fabienne, 2004). “Coercion has to do with freedom not enforceability” (Wertheimer, 1987). It is not necessary that choices be made at the point of a gun. Sometimes, informal pressures are enough to coerce (Wertheimer, 1987). Threats need not be explicitly expressed (Nozick, 1969).

And yet *feeling* pressure is not enough. There must be some objective standard that will help avoid a purely subjective understanding, because subjective feelings of coercion are insufficient to analyze and substantiate claims. This is the domain of a moralized, or at least ethics-based, view of coercion. Where does the pressure originate? What is the context in which it is experienced? What *ought* to be the situation? What are the *norms* of behavior among business buyers and sellers that can provide a guideline for evaluation?

In describing the social construction of markets Samuels (2004) calls them “a structure of mutual coercion in which economic agents are exposed to decisions made by other agents”. Fabienne (2004) mentions that other economic theorists “saw coercion as an inevitable consequence of the price system’s purpose to convey the scarcity of resources and to direct them to their most beneficial use”. One can go one step further to say that all negotiation is, in fact, a process of encouragement or inducement of another to carry out a task or perform a service that one needs or wants achieved or completed. Based on the relative power or resources at one’s

disposal, there are advantages or disadvantages experienced in the negotiation process. “Party A’s power over B is determined by B’s dependence on A for valued resources [...] Thus, concessions are granted or obtained as a result of power brought to bear in bargaining” (Dwyer *et al.*, 1987). Are any and all uses of advantage and power in a business relationship valid? Clearly the answer is “no”. Antitrust lawsuits promulgated by the federal government, for example, are brought on the basis of improper use of market power.

It seems easy to see that an unjust use of advantage can be exploitative (Nishiguchi, 1994). Can it likewise be said to be coercive? “Exercise of an unjust power source would control or influence the action of B to promote A’s own goals without B’s consent [...] Exercise of a just power source [...] implies voluntary compliance and behaviors for the promotion of collective goals” (Dwyer *et al.*, 1987). To speak of “control or influence” is to speak of coercion – the negotiation has moved beyond encouragement or enticement to *control*.

Strictly speaking, in all negotiation one has a choice. In some instances the choice has clear consequences that render the alternative unacceptable. This is called this a “hard choice” – “a choice situation in which rejecting a proposal means remaining in dire straits, but accepting the proposal is also unpalatable” (Wertheimer, 1987). These choices can be termed coercive if they are brought about through injustice. Further, the simple fact of someone having chosen a particular option does not mean they would choose the same way without the unpalatable constraint.

Fabienne (2004) raises this question with examples of “significantly constrained volition” that are not instances of downright exercise of force. He questions whether the *presence* of a choice in a market transaction makes it automatically consensual and legitimate. The choice-based conception in economics distinguishes between threats and offers on the basis of whether an “exit” is available. It does not deal with the *quality* of the exit alternative – it suffices that the “exit option” is present. Fabienne (2004) says further: “the possibility of choosing between alternatives does not [...] guarantee absence of coercion”. The choice someone makes between alternatives of another’s determination says nothing about the constraints under which the choice is made: “rather than inferring consent [...] one should expect [latent] dissent” (Fabienne, 2004).

Understanding these facets aids in the development of a working definition of coercion that can be used to examine the claims made by incumbent suppliers in the context of reverse auctions. Theoretically, suppliers can choose to participate or not. While not all suppliers are faced with “hard choices”, *incumbent* suppliers do face “hard choices” because reverse auctions pose an immediate, significant, and credible threat to near-term profitability and sales volume.

Thus, we create a formal definition of coercion with regard to choices made in business-to-business purchasing transactions involving reverse auctions (Dwyer *et al.*, 1987):

Coercion is present in a reverse auction when A (buyer), having a “power advantage,” proposes to B (incumbent supplier) a choice option wherein:

- 1 either choice results in a net loss or less favorable standing for party B and,
- 2 results in a net gain, benefit, or the furthering of party A’s own internal goals and objectives and,
- 3 not choosing results in a loss to party B.

Suppliers’ perceptions of coercion

An anonymous five-question survey of 24 incumbent suppliers who sell a wide range of goods and services was conducted to identify the sources and methods of coercion in reverse auctions (Table I). The only requirement for responding to the survey was that they must be an incumbent supplier and have participated in one or more reverse auctions. Detailed supplier demographic information was not sought because suppliers have, in past surveys, been very reluctant to provide this information. Clearly the survey responses and findings that can be drawn from it are limited due to the small sample size. However, it does provide useful preliminary insights into which party exerts coercion and at what phase during the reverse auction process.

Significant preliminary findings include:

- most incumbent suppliers view reverse auctions as coercive;
- the dominant role that buyers play in coercing suppliers;
- that most coercion appears to occur prior to the auction; and
- the overwhelming perception that reverse auctions do not promote positive supplier relationships.

With regards to question 4, the following supplier responses were given:

- “Was put in position of: ‘If you want business, you will compete under our terms for it’”.
- “We were told that if we did not participate we would no longer receive orders from them”.
- [Were told by customer] “We will move all of your work”.
- “For an existing business you are forced to accept all (newly invented) sales conditions, or you are not allowed to participate, and hence threatened to lose all of your business. During the auction, sometimes you get phone calls to say that you’re not aggressive enough”.
- [Customer said]: “Failure to participate means no business”.
- “We were coerced by being informed that this was the only way to get new work”.
- “Customer tells you if you do not participate you are out”.
- “We had to participate or lose our business [...] I will not do reverse auctions unless I am forced to”.
- “If you want to keep this business you will participate and you need to be low bid”.
- “I was told that I’ll lose the business if I don’t participate in the auction. In the end, they were begging me to bid. They finally cancelled the auction for lack of bidders. I still have the business”.
- “You need to bid if you want to remain as a supplier. A call during reverse auction reminding you that you were not low supplier and could lose business if lower bid not made”.
- “Before auction: Forced to agree to price reduction or customer would *HAVE* auction. After auction: Customer had auction anyway. After auction we had to match prices on every product of lowest bidder in addition to total value”.
- “We are told if you do not participate you will be dropped as a supplier, as an approved source and will not be invited to provide proposals in [the] future”.
- “The customer putting on the auction typically puts in a frantic call as soon as the bidding opens to make sure we

Table I Supplier survey of coercion in reverse auctions

Question	Answer	Supplier response ^a (percent)
1. Using the definition provided, do you feel that you were coerced into participating in online reverse auctions? Definition: To force to act or think in a certain way by use of pressure, threats, or intimidation.	Yes	83
	No (If No, go to question 5)	17
2. If yes, please indicate by whom (check all that apply)	Customer	79
	Market maker	21
	Yourself, boss, owner	4
	Other	0
3. In what part of the reverse auction process were you coerced? (Check all that apply.)	Prior to the reverse auction	83
	During the reverse auction	25
	After the reverse auction	25
4. Briefly describe the way in which you were coerced. What was said or done?	–	Supplier comments listed below
5. Do reverse auctions promote positive supplier relationships? (Check one)	Yes	8
	No	92

Note: Questions 2 and 3 do not add up to 100 percent due to multiple responses

(and everyone else) are participating [...] That customer called us three times during the auction”.

- “... we and our competitors were recently *coerced* by a major corporation to spend three full days bidding against each other in competition for a three year assignment”.

Notable aspects of these comments include the buyers’ direct involvement in the reverse auction after bidding has begun to purposely manipulate supplier’s actions and to direct outcomes, and the use of force – threat of losing current business or withholding future business – to gain compliance to the buyer’s demands for significantly lower unit prices.

Based upon these findings and previous studies, reverse auctions serve the buyer’s narrow interests by facilitating and extending (likely) pre-existing beliefs about the purpose of business – e.g. to make money (Emiliani, 2003) – and patterns of behavior that are tantamount to intentional, well-orchestrated psychological and economic coercion resulting in *price harassment*.

Corporate codes of conduct

Corporate codes of ethics or codes of conduct typically have a section that contains guidelines for how employees should engage in business relationships with suppliers. Of course, these codes are intended to apply to people at all levels in an organization. The following excerpts from US-based large multinational corporations illustrate the language typically contained in corporate codes of conduct:

As Dell employees, we are committed to acting responsibly, honestly and with integrity in all dealings with our suppliers [...] Vendor selection and purchasing decisions must be made objectively and in Dell’s best interest, based upon evaluation of suitability, price, delivery, quality, and other pertinent factors (Dell, 2006).

GE’s relationships with suppliers are based on lawful, efficient and fair practices [...] Following GE guidelines helps ensure that our supplier relationships will not damage GE’s reputation (General Electric Corporation, 2006).

Suppliers are valued partners. We must be honest and fair in dealing with them. They are selected competitively based on quality, service, technology, and price (General Motors Corporation, 2005).

Conduct business with honesty and integrity and in a professional manner that protects GSK’s good public image and reputation. Build relationships with [...] vendors, suppliers [...] based on trust [...] with respect and dignity (GlaxoSmithKline, 2004).

HP suppliers are of great strategic importance [...] you have a duty to deal with suppliers fairly (HP Corporation, 2005).

Building quality relationships with other companies gives Motorola a competitive advantage [...] Subcontractors play a vital role in fulfilling many of our contracts [...] Purchasing decisions must be made based solely on Motorola’s best interests. Suppliers win Motorola business based on product or service suitability, price, delivery and quality (Motorola, 2004).

We will deal fairly with our suppliers and partners. We will seek long-lasting business relationships, without discrimination or deception (United Technologies Corporation, 2006).

Each of these corporations has been heavy a user of reverse auctions, according to press releases and trade industry reporting. In general, squaring the use of reverse auctions with corporate codes of conduct, and in particular, aspects such as fairness, honesty, integrity, etc., would seem difficult.

Indeed, a comprehensive legal analysis sponsored by the European Commission (2006) found that several aspects of reverse auctions, as they are commonly used, constitute unfair trade practice relative to commercial law in European Union member states. Thus, multinational corporations with codes of conduct that cite fairness in business dealings with suppliers are likely affected by these findings. Corporations, whether or not they reside in Europe or source goods or services from European suppliers, can proactively re-examine their codes of conduct with respect to their use of reverse auctions and in relation to country laws governing commerce in order to eliminate inconsistencies. Senior managers who do this should achieve closer alignment with the spirit and intent of corporate policy, and also yield outcomes that are better for the company and its employees, suppliers, investors, and especially customers.

The US federal government has also used reverse auctions extensively (Harris, 2001; Burton, 2004). Relationships between federal officials and contractors are governed by Federal Acquisition Regulation. The “standards of conduct” states:

3.101-1. Government business shall be conducted in a manner above reproach and, except as authorized by statute or regulation, with complete impartiality and with preferential treatment for none. Transactions relating to the expenditure of public funds require the highest degree of public trust and an impeccable standard of conduct (Federal Acquisition Regulation, 2006).

The General Services Administration’s “Get it Right” plan for excellence in acquisition activities states the federal procurement personnel’s main objective:

Secure the best value for federal agencies and American taxpayers through an efficient and effective acquisition process, while ensuring full and open competition, and instilling integrity and transparency in the use of GSA contracting vehicles (General Services Administration, 2006).

While the nature of this standard of conduct differs somewhat from corporate codes of conduct, they retain a common thread of ensuring fairness and integrity in procurement activities.

Finally, the Institute for Supply Management (ISM), a nationally recognized 501(c)(3) non-profit organization located in Tempe, Arizona, has as its mission “to lead supply management”. Their “Principles and standards of ethical supply management conduct” (Institute of Supply Management, 2002) state that persons engaged in sourcing activities – whether a purchasing agent, CEO, engineer, HR manager, etc. – should, among other things:

- *Item 6.* “Promote positive supplier relationships”; and
- *Item 12.* “Enhance the stature of the supply management profession”.

It is clear that reverse auctions do not support either statement because they damage supplier relationships and degrade the stature of the supply management profession by compelling buyers to remain strongly focused on unit price, versus total cost. The following comment from a supplier further illustrates this point:

Procurement Departments have been given too much power to buy services about which they have little or no understanding. Rather than admit this, they proceed to “commoditize” everything, thus reducing complicated service delivery variables to the only thing they truly understand – price.

In addition, ISM’s detailed explanation of Item 6 includes requirements for fairness. Therefore the use of reverse auctions should be explicitly discouraged by ISM and similar organizations.

Discussion

The results of current and previous studies indicate that it is common for buyers to coerce suppliers into participating in reverse auctions and to reduce their unit prices. The question is: why do buyers coerce suppliers to do this? What is driving buyers to take actions that represent worst practices in supply chain management and also unfavorably impinge upon their own codes of conduct? The simple answer is that few suppliers would volunteer to lose sales or give up a large portion of their profit margins – they have to be forced to do it.

But the more important answer is related to senior management compensation and investor expectations. Reverse auctions have been used most widely by large

publicly owned corporations, particularly in the USA, where management’s focus tends to be on stock price – usually short-term (Eisinger, 2006). Market makers know this is one of management’s principal interests, and so that is how they sell reverse auction services to prospective customers. Every dollar saved in a 20 percent gross margin business is equivalent to increasing sales by \$5. So the bottom-line contribution of cost savings achieved through unit price reductions is enormous compared to the time and expense needed to significantly grow sales.

The savings translate directly into higher earnings per share in a simple, predictable way, which in turn leads to higher stock prices. In addition, the financial metric that is used to measure the success of purchasing activities, purchase price variance (PPV), is easily gamed (Emiliani *et al.*, 2005). This leads to financial outcomes that will in most cases *appear* to be favorable, but in fact are likely problematic with regards to internal controls and the accuracy of financial reporting – i.e. the Sarbanes-Oxley Act (2002) in the USA (Engel, 2006). This should be a significant concern among publicly owned corporations because purchased goods and services typically comprise 50-80 percent of the cost of goods sold.

Reverse auctions have been promoted as an innovation in strategic sourcing. Many have criticized its use as merely an extension of traditional power-based bargaining – a more efficient way to achieve unit price concessions from incumbent suppliers who typically have little opportunity to resist or quickly gain new customers. For them there is a history to contend with – assets have been allocated and knowledge has been acquired over the course of many years, so the choices they face carry potentially long-term negative consequences. New suppliers, on the other hand, make short-term, limited investments into efforts to acquire a new customer. While new suppliers may be manipulated against incumbent suppliers, they are not coerced in the reverse auction process – at least not in the same way that incumbent suppliers are. Thus, the relationship and tenor of the transaction is very different for incumbent suppliers compared to new suppliers.

Market makers have long presented reverse auctions as a tool that can be used in conjunction with collaboration or, as it is called today, “supplier relationship management” (Prema, 2006). This view has been proffered by market makers for over ten years, and goes as follows: buyers should use reverse auctions to determine which suppliers are more competitive (i.e. lower unit price than the incumbent). Then, once the switch is made from incumbent to new supplier, the buyer can work with the supplier to jointly develop a long-term relationship. Or, the buyer can continue to do business with the incumbent if they prove themselves to be competitive.

The obvious inconsistency, which many apparently fail to see, is that the prerequisite for developing a fruitful long-term relationship between buyer and seller is participation in destructive short-term cost cutting – and doing it in a threatening way that exposes or creates strong negative feelings, especially among incumbent suppliers (Jap, 2000; Emiliani and Stec, 2003, 2005; Paulson, 2004; Tassabehji *et al.*, 2006). Recent studies note that buyers switch to new suppliers only 20-30 percent of the time (Iasta, 2006; Tassabehji *et al.*, 2006). Therefore, reverse auctions are most commonly used by buyers to reduce incumbent suppliers’ unit prices (Emiliani and Stec, 2002a; Tassabehji *et al.*, 2006), and also avoid the costs associated with switching to new suppliers (Beall *et al.*, 2003).

Further, the approaches found to be most effective for achieving collaborative relationships in actual business settings never argues for a two-step process wherein the first step is for the buyer to exploit current or potential suppliers (Womack *et al.*, 1990; Bounds *et al.*, 1996; Nishiguchi and Beaudet, 1998; Dyer and Nobeoka, 2000; Liker and Choi, 2004). That is because the central concept is to overcome deeply ingrained zero-sum power-based bargaining routines and avoid reverting back to it when pressure to reduce costs return at a later date. While it is possible there are a few cases where this approach has achieved favorable outcomes – likely with new suppliers, not incumbents – the use of reverse auctions as part of an overall approach to improve supplier relationships is fundamentally flawed.

What both new and incumbent suppliers learn very quickly is that reverse auctions offer them little or nothing, while the benefit to buyers is substantial. Buyers learn a great deal about suppliers' capabilities, processes, and cost structure, yet suppliers have little or no visibility into the buyer's capabilities, processes, and cost structure. This one-way transparency contributes to the feeling among suppliers that buyers are exerting their power in an unfair way, which can undercut future efforts to collaborate. Worse yet, it can lead to retaliation among incumbent suppliers who retaliate for real or perceived injustices (Emiliani and Stec, 2003, 2005; Paulson, 2004; Tassabehji *et al.*, 2006). They do this by charging higher prices for new work, charging buyers for change orders, reducing investment for customers that use reverse auctions, withholding cost savings, or relegating the buyer's order to a secondary status when production capacity is constrained. This perpetuates adversarial relationships, which in turn builds-in unnecessary costs and inefficiencies in supply chains (Womack *et al.*, 1990; Nishiguchi, 1994). Mutually assured opportunism can hardly be considered a good start to a long-term collaborative relationship, and it will in fact degrade the long-term competitiveness of both buyer and seller (Emiliani, 2004).

For at least a decade, the value proposition for suppliers has been missing (Emiliani and Stec, 2003, 2005; Tassabehji *et al.*, 2006), and there has been little or no effort by market makers to correct this glaring deficiency (Iasta, 2006). Consequently, overall usage of reverse auctions has declined from 20-30 percent or more of total corporate spend in the late 1990s to less than 5 percent of the total corporate spend today (Hannon, 2003; CAPS, 2006b; Iasta, 2006), even though the number of companies using reverse auctions is increasing (Hannon, 2004; CAPS, 2006a). This has been driven in part by a substantial reduction in supplier's willingness to participate in reverse auctions. Despite these facts, there remain many die-hard supporters of reverse auctions who insist on its efficacy despite incomplete or misleading supporting data.

Reverse auctions greatly magnify the power asymmetry that already exists between buyers and sellers in ways that do not typically occur when traditional sealed bid processes are used. Suppliers and the trade associations that represent them perceive the sealed bid process as imperfect but generally fair and largely free of coercion (Associated General Contractors of America, 2003; Canadian Construction Association, 2001a, b; Construction Products Association, 2003; European Aluminium Foil Association, 2005; International Housewares Association, 2002; National Electrical Contractors Association, 2002; Original Equipment Suppliers Association, 2002) – though exceptions are not difficult to find (Kobe, 2001; Bartholomew, 2002; Rozhon, 2005; Simon, 2006). In most

cases, the traditional arms-length approach to purchasing and supply management can be improved by shrinking the power asymmetry through disciplined application of collaborative organizational routines in buying organizations (Nishiguchi, 1994; Dyer and Nobeoka, 2000; Emiliani, 2004; Liker and Choi, 2004). In addition, most suppliers can do much more to improve their business processes (Emiliani *et al.*, 2003), differentiate their products and services, and offer their customers a better value proposition (Abele *et al.*, 2002).

Acknowledging the theoretical economic view that all markets and all business transactions are on some level “mutually coercive” (Samuels, 2004) does not offer any practical remedy. To say it is “just the way business is” is unacceptable. Codes of conduct exist because of the reality that business is a human activity in which coercion is likely to exist somewhere, sometime. Every new business practice should be evaluated and critically questioned periodically with regards to coercion and its potential effects on business relationships. If it does harm, then how good can it really be?

Based on the definition of coercion developed in relation to reverse auctions, we conclude that reverse auctions, as commonly used, are coercive with regards to incumbent suppliers who are buyers' main target. Incumbent suppliers are put in the position of having to choose to do business for less money or not do business at all so that the buyer may satisfy his own goal of unit price reduction. The exit option of non-participation yields the same result of lost business and is thus not acceptable. Incumbent suppliers who choose to participate in reverse auctions also face unacceptable outcomes. Buyers should expect “latent dissent” (Fabienne, 2004) from suppliers, and all dissent has costs associated with it (Emiliani and Stec, 2003, 2005; Paulson, 2004; Tassabehji *et al.*, 2006). But, remarkably, most managers that use reverse auctions seem to prefer to ignore such real-world outcomes.

Conclusion

The objective of this paper was to examine reverse auctions to determine whether they are coercive. A review of the literature, analysis of the meaning of coercion, and preliminary survey data indicate that reverse auctions are indeed coercive, which accounts in part for the strong negative reaction to reverse auctions among suppliers – particularly those that have had long-standing trading relationships with their customers. Powerful buying organizations that narrowly view purchasing and supply management as a dyadic relationship with sellers will favor the use of zero-sum price-based bargaining tools such as reverse auctions. While this tool delivers greater buying power, senior managers appear to give little attention to the many problems that can arise as a result of this.

This paper also set out answer three questions:

- 1 Are RAs merely an extension of traditional business practices? No, because the use of reverse auctions represents an aggressive expansion of buyer power that re-cast supplies from long-term business partners to instruments whose purpose is to help buyers achieve short-term cost reductions. Further, reverse auctions magnify power asymmetries that typically exist between buyers and sellers that are detrimental to business relationships. This compels many incumbent suppliers to quietly retaliate when the opportunity to do so presents itself.

- 2 What are the sources and methods of coercion? Feedback from a small group of suppliers provides preliminary insight into the sources and methods of coercion: buyers are seen as the main source of coercion, followed by market makers. Coercion occurs principally prior to the auction through threats of loss of future business or the establishment of preconditions for participation such as the loss of current business. Remarkably, sometimes buyers insert themselves directly into the bidding process in real-time by communicating with suppliers as they bid to further drive down prices.
- 3 Are RAs *fundamentally* coercive? Yes. Prior studies of reverse auctions, suppliers' reactions to them, and the philosophical and economic literature related to coercion all indicate this purchasing tool is *fundamentally* coercive. Indeed, psychological and economic coercion is *essential* for achieving the outcomes that buyers seek – namely, unit price reduction, especially from incumbent suppliers. Buyers force suppliers to conform using credible threats, both human and electronic, to advance a coordinated strategy of price harassment.

In addition, reverse auctions, as currently used, are inconsistent with corporate codes of ethics or codes of conduct with respect to supplier relationships (e.g. fairness, honesty, and integrity). Reverse auctions are also shown to be inconsistent with US federal procurement standards and the Institute of Supply Management's "Principles and standards of ethical supply management conduct". Based upon this and other studies, reverse auctions, as they have been commonly used, are an illegitimate method for sourcing goods and services and reducing unit prices.

Business-to-business reverse auctions have long been a controversial means to source goods and services. There are many avenues for future research that can further illuminate why reverse auctions are so controversial, including:

- survey larger numbers of suppliers to learn more about the sources, methods of coercion, and how these effect reverse auction participation, outcomes, and business relationships;
- survey buyers (e.g. purchasing agents, supply managers, executives) to determine their views of the use of reverse auctions in relation to their corporate code of conduct and coercion;
- explore the legal and contractual issues and consequences of coercion in the use of reverse auctions under US commercial law;
- examine circumstances under which a buyer's use of reverse auctions could be an abuse of market power as a monopsony, or if reverse auctions are a monopolistic abuse of market power in the specific case where buyers own the intellectual property (e.g. product designs).

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