Topic: Strategic purchasing and quality performance: The moderating roles of coercive power and asset specificity

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1. Introduction

The positive effects of strategic purchasing on a firm's success are well established in extant literature.

1. PLC is shorter
2. Offshoring
3. Globalization
4. Internet
1. Introduction

Our objectives:
1. Is there any relationship between strategic purchasing and quality performance?
2. Is this relationship weakened by coercive power?
3. Is this relationship strengthened by asset specificity?
2. Theoretical background and hypothesis development

- Transaction cost economics (TCE) has received considerable attention in various disciplines of business (Grover and Malhotra, 2003). Considering the interplay of two assumptions of human behavior (bounded rationality and opportunism) and two dimensions of transactions (asset specificity and environment uncertainty), firms should choose one out of three generic governance structures (market, hybrid, and hierarchy) to solve two potential problems (adaptation and safeguarding), which in turn minimize the transaction costs. The co-existence of asset specificity and opportunism create safeguarding problems. Due to the propensity of supplier to serve their self-interest with guile and the possibility of expropriation of the nontransferable assets invested to the supplier, firms have to increase the costs of crafting safeguards, and therefore, transaction costs increase.
H1: Strategic purchasing has positive impacts on buyer quality performance.

SP benefits:
(1) break most communication barriers;
(2) facilitate material flows;
(3) inhibit opportunism; and
(4) foster two-way strategic and sensitive information sharing with their suppliers (Paulraj et al., 2006).

Product development involvement earlier in the design stage enhances product costs and quality (Dowlatshahi, 1992).
H2: Coercive power weakens the relationship between strategic purchasing and buyer quality performance.

The analysis of power effects is under-investigated (Benton and Maloni, 2005).

The use of coercive power reduces partners’ willingness to cooperate (Maloni and Benton, 2000); creative problem solving may be problematic (c.f. Earley, 1999).
Conceptual model 1

- Strategic purchasing
- Quality performance
- Coercive power

H1

H2
H3: Asset specificity strengthens the relationship between strategic purchasing and buyer quality performance.

1. a form of credible investment (Williamson, 1993:459)
2. to foster trust, dependability, and cooperation among partners (Chen and Paulraj, 2004),
3. to remain in the relationship (Nyaga et al., 2010), increase knowledge accumulation (Reuer et al., 2002),
4. to reduce the need to write complex and explicit contracts (Dyer and Singh, 1998), to assign tasks better, develop a common language for discussing technical and design issues (Hoetker, 2005) and problem solving
Conceptual model 2

- Strategic purchasing
- Quality performance
- Asset specificity

H1

H3
3. Methodology

• Setting: the HK electronics industry
• > 58% of Hong Kong’s total exports and the gross export of the industry was US$254,000 million in 2012
• The world’s largest exporter of telephone sets in value terms in 2010 (Hong Kong Trade Development Council, 2013).
4. Data Analysis and Results

Response rate of 28.3% (i.e., 175/618)

Non-response bias Armstrong and Overton's (1977)

Harman’s one factor test, to examine the possibility of common method variance bias (Podsakoff et al., 2003).

\[ \chi^2_{(54, \ N = 175)} = 628.97, \ \chi^2/df = 11.65, \ \text{non-normed fit index (NNFI)} = 0.32, \ \text{comparative fit index (CFI)} = 0.44, \ \text{and root mean squared error of approximation (RMSEA)} = 0.25 \]
Measures

• 1= strongly disagree and 7= strongly agree
• 3 items from Carr and Smeltzer (1999) and Carr and Pearson (1999) to measure SP
• 3 items from Fynes and Voss (2002) to measure the buyer quality performance
• 3 items from Corsten et al. (2011) and Joshi and Stump (1999) to measure assets specificity
• 2 items to measure the degree of coercive power use by the large buying firm (c.f. Benton and Maloni, 2005).
Reliability

All Cronbach alphas > 0.7
Construct validity

LISREL 8.5 (Jöreskog and Sörbom, 2001); SEM; ML, with the correlation matrix input

CFA yields \( (30, N = 175) = 70.22, \chi^2/df = 2.34, \text{NNFI} = 0.94, \text{CFI} = 0.96, \text{and RMSEA} = 0.084 \). All the absolute goodness of fit values are well above 0.90, suggesting that the measurement model has a good fit (Hair et al., 2006) for convergent validity test

By fixing the correlation between any pair of related constructs in the measurement model to the perfect correlation of 1.0, the chi-square value increases more than 50, highly significant at \( p = 0.01 \) \( (\Delta \chi^2 \geq 6.635) \). Therefore, discriminant validity is achieved.
Method

• Following Mathieu (1992) and Cortina et al (2001), we standardize all three IVs.

• First enter gross annual sales volume in model 1
• then enter SP and CP in model 2
• Last enter SP*CP in model 3
• *When two IVs interact, the changes in the DV cannot be explained by independent effects of the two variables.*
Results (1)

Strategic purchasing (SP)

Coercive power (CP)

SP*CP

Quality

0.30***

0.07

-0.14**
Results (2)

- Strategic purchasing (SP)
  - Asset specificity (AS)
  - SP*AS

- Quality
  - 0.57***
  - -0.56***
  - 0.22**
5. Discussion and Conclusions (1)

1. Coercive power has no direct impact on quality
2. It interacts with SP and weakens the strategic purchasing - quality relationship

=> CP is a *pure* moderator (Sharma et al., 1981)
Discussion and Conclusions (2)

1. Asset specificity has a direct negative impact on performance (in line with Klein et al., 1978) (such locked-in with the obsolete technology -> inflexible to improve quality)

2. Asset specificity strengthens the strategic purchasing - quality relationship

AS is a *quasi* moderator (Sharma et al., 1981)
Managerial implications (1)

First, electronics firms, as critical customers for the suppliers due to the volume of sale, are likely to capitalize on their buying powers, maintaining a demanding attitude to the suppliers (Benton and Maloni, 2005). Such demanding attitude can yield harmful effects on all partners, including the power holder.

Our study offers evidence to urge a more conscious and considerate use, or even disuse of coercive power.
Managerial implications (2)

Accompanying with the presence of AS, the shift of purchasing from short time and adversarial relationship to long-term and cooperative can provide indispensable benefits to rational decision-making (Bendoly and Swink, 2007), which in turn, decrease the adversarial impact of bounded rationality (Williamson, 1975). Consistent with TCE in that a partner is regarded as a protector to safeguard asset specificity and as an informant to facilitate the adaptation (Williamson, 1975).

**Top management should make more credible investments** to strengthen the strategic role of purchasing (Klein et al., 1978).
Limitations and further research

1. not readily generalized to other industries or other countries.
2. a longitudinal study of the relationship
3. our study only used two indicators to measure coercive power.
4. the main and interaction effects of trust, which is the obverse of opportunism, have not been explored in this study

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