

How outsourcing firms could avoid lock-in to supplier situation and potential supplier hold-up

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Abstract

In a strategic outsourcing arrangement, power distribution along the dyadic relationship is always imbalanced with the outsourced firm at a power disadvantage. This power is derived from the outsourced firm's dependence on the supplier, and the supplier's potential opportunistic behavior. This study investigates how outsourced firms could avoid a lock-in situation.

Keywords: Lock-in; hold-up; opportunism

Introduction

Dyadic relationships represent the core of outsourcing agreements. Interdependence is developed when buyers and suppliers realize the essentiality of the resources of each other to achieve their relevant business goals where. Lonsdale and Cox (1997) believe that firms tend to think that they will have the same knowledge, competence, and expertise level at third party as they used to have with the firm's internal employees when the process was conducted in-house. Thus behavioral context is important to consider when considering outsourcing (Lonsdale, 2001). Drawing from power-dependence theory, a shift in power is expected to take place overtime, where one player dominates the other (Cox, 2001). These changes could shift governance of relationship management from relational to transactional or vice versa.

This study investigates the power shift that occurs in the buyer-supplier relationship, leading to a lock-in and hold-up situation. The paper is organized as follows. The following section includes the literature review followed by the theoretical framework. Then we present the study methods, data and preliminary analysis, and finally the study conclusion.

Lock-in Situation

Firms can become locked-in as a result of their dependence on another party and thereby shift into a power disadvantage position (Cox, Lonsdale, Watson, and Qiao, 2003). Narasimhan et al. (2009) used social exchange theory to explain cases of lock-in situations and concluded that exclusive supply agreements together with high product demand causes a lock-in. Buyer lock-in situations exist when the balance of power in dyadic relationship between a buyer and supplier in an outsourcing agreement shifts over time to the supplier side (Lonsdale (2001; 2005). In a buyer lock-in situation, a supplier can exercise power by revisiting the contract terms or insisting

on changing some terms to their favor. Suppliers may provide firms with attractive prices in the pre-contractual phase, and then afterward renegotiate in light of their latest dominance of the relationship (Kamp, 2005). Buyer firms become trapped in this dyadic relationship (Mitreġa & Zolkiewski, 2012; Walter et al., 2006). The trap is caused by exit barriers that are derived from relationship specific investments and resource dependence including transaction costs, learning costs, technological costs, legal costs, and cultural, time and geographical constraints. Handley and Benton Jr. (2012) believe that “unique assets” create lock-in situations where one actor becomes hostage to the other.

Asset specificity.

Asset specificity or transaction-specific investments (Williamson, 1981) dedicated to the outsourced activities can shape the buyer-supplier power position. Parties get involved in relationship specific investments to demonstrate that they are keen for the future continuity of the relationship (Williamson, 1985). Transaction-specific investments asymmetry takes place when investments are not equally shared between the parties and where one party is responsible for most of the investment (McGuinness, 1994). Williamson (1985) called this “fundamental transformation”. In situations where outsourcing firms are responsible for all transaction-specific investments, they eventually find themselves in a situations where they are locked-in to the supplier (Caniġls and Roeleveld, 2009; Lonsdale, 2001). Transaction-specific investments asymmetry is specifically intensified in the presence of a high level of uncertainty and information asymmetry (Lonsdale, 2001). Accordingly, outsourcing firms face a post-contractual risk of dependency on the supplier where the supplier dominates the relationship and hence the lock-in situation is created. Transaction-specific investments could be tangible in terms of equipment or intangible like in licenses and training (Hawkins et al., 2008). Transaction-specific investments could either be low, medium, or high. Medium to high transaction-specific investments create high exit barriers (Lam et al., 2004) due to their sunk cost that should be written off alongside with high switching costs (Williamson, 1981). Handley and Benton Jr (2012) indicated that it is not a matter of how many alternative suppliers are available in the market, but rather a matter of how much transaction-specific investments are being made that leads to the power shift in terms of increasing the switching cost.

Switching Cost.

Initial investments made in the relationship will cause the player who made the investment reluctant to search the market for another relationship (Handley and Benton Jr., 2012; Zauberman, 2003). When firms are faced with significant switching costs, a risk of dependence creates a locked-in situation where suppliers can take advantage of the position reflected in contract renegotiations, declining quality of provided products or services, and slow response to outsourcing firm requests (Lonsdale & Cox, 1997). Switching costs include cost of re-tendering, re-negotiating, responsibility transfer, qualifying suppliers, and disruption of supply caused changing suppliers (Lonsdale, 2005).

Hold-up Situation

It is important to differentiate between two situations; “lock-in” and “hold-up”. As demonstrated above, lock-in situations exist when one actor becomes highly dependent on the

other, while a hold-up situations occur when the locked-in actor is faced with opportunistic behavior from the other actor (Handley and Benton Jr., 2009; Holmström and Roberts, 1998; Lonsdale, 2005). Lonsdale (2005) described hold-up situations arising post-contractually where one actor actually exercises their power over the other actor and forces them to accept certain unfavorable terms during contract renegotiations. The powerful actor usually acquires their power from the lack of substitutes away from the relationship. Based on bounded rationality and incomplete contracts, it is expected that opportunistic suppliers will make use of any contractual gaps (Handley and Benton Jr., 2009). This is called the classic hold-up problem.

Opportunistic behavior.

Opportunistic behavior refers to parties acting with guile and out of self-interest (Williamson, 1975; 1985). It is one of the key behavioral assumptions underlying the Transaction Cost Theory (TCT). Outsourcing firms are limited by their own bounded rationality, and are subject to the possibility of opportunism by the suppliers (Williamson 1985, Clemons, Reddi, & Row, 1993, Aron & Singh, 2005; McIvor, 2009). Suppliers acting opportunistically, is a commonly identified risk associated with the outsourcing decision (Willcocks, Lacity, & Fitzgerald, 1995; Willcocks, and Currie, 1997; Lonsdale, 1999; Kakabadse and Kakabadse, 2000; Kremic, Tukel, and Rom, 2006; Holcomb & Hitt, 2007; McIvor, 2009). During the course of the contract, suppliers develop knowledge and expertise about the outsourced products or services making them more competent and knowledgeable about the outsourcing firm's products or service than any other supplier in the market, or even than the outsourcing firm itself (Lonsdale, 1999). Accordingly, suppliers shift to a powerful bargaining position during renegotiations of contract renewal. Information asymmetry (Klein et al., 1990; Ryu & Eyuboglu, 2007) across the relationship in favor of the supplier side can drive the supplier to act opportunistically.

Mitigating opportunistic behavior.

Lonsdale (2005) suggested three powerful arguments derived from economic literature that supports players in being able to balance power in the pre-contractual stage and hence ensure that they are able to successfully manage post-contractual renegotiations. First, outsourcing firms are capable of "feasible foresight" where they can look in to the future and identify any potential threats that could impact relationship performance and consider while they are developing contract Williamson (1990). Second, "contingent renewal" is an effective governance mechanism against supplier lock-in where suppliers focus on long-term gains rather than short-term ones and hence do not exercise power even if they are capable of (Bowles and Gintis (1998). Future contracts are based on previous performance and bounded rationality of supplier's decision makers supports this claim. Actually, suppliers don't have the asymmetric lock-in orientation as long as they are seeking future business with buyers in the same time, it can be seen like rewarding the buyer when suppliers' act in a non-opportunistic manner in a buyer-dependent relationship (Narasimhan et al., 2009). Third, suppliers will not risk their market reputation by exercising power and acting opportunistically which could impact their future contracts with other parties (Milgrom and Roberts, 1992).

Narasimhan et al. (2009) demonstrated that certain tactics can be followed by either the buyer or supplier to ensure a long-term dyadic relationship. Buyers can proactively seek investments to find alternative sources or develop substitute product. Buyers' behavior in this case will

diminish supplier opportunistic behavior and signal the supplier to reduce prices to ensure a long-term relationship with the buyer. On the other hand, suppliers should improve their processes and procedures which will be reflected in their efficiency. By this way supplier's cost will be reduced which will eventually be reflected on the selling price to the buyer. Such change in price over time reflects a supplier who is willing to keep an ongoing long-term relationship.

In conclusion, buyers should realize both pre-contractual and post-contractual risks associated with outsourcing (Lonsdale, 2001).

Theoretical framework

We suggest a dynamic longitudinal model that examines the factors affecting dependence of outsourcing firms on their suppliers. The framework is developed from the perspective of the outsourcing firm, and anticipates how the dyadic relationship is shaped pre and post-contractually. In cases where mutual dependence is not feasible, outsourcing firms enter into an imbalanced power relationship. Figure 1 shows power balance shifts causing lock-in to suppliers and supplier opportunism eventually leading to hold-up by supplier. The figure also shows outsourcing firms investing in idiosyncratic assets and facing switching costs as main contributors to dependency on suppliers.

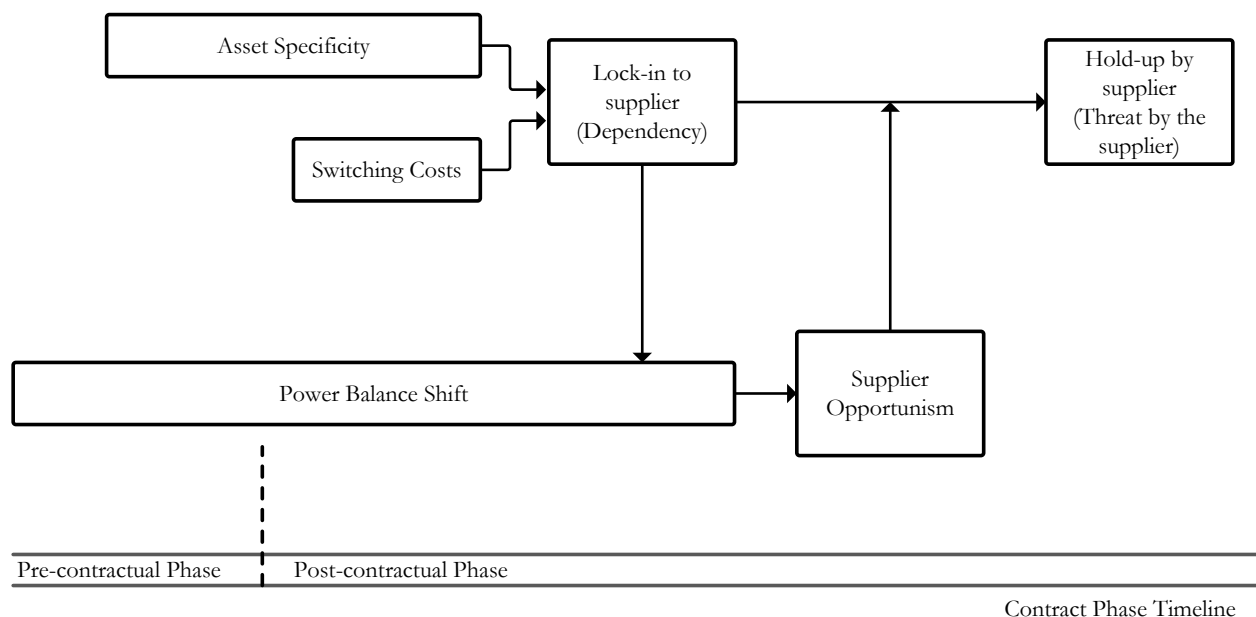


Figure 1: Pre-contractual and post-contractual phases

Phase 1 – Defined factors in the pre-contractual phase:

In this phase, managers are required to estimate both power-balance status of their outsourcing firms and the expected outsourcing firm dependence on supplier and hence lock-in. It is important to identify ones position in this stage to expect how initial contract negotiations will proceed. Outsourcing firms with a power advantage will be able to develop contracts with

safeguard clauses that mitigate future post-contractual risks. Variables that trigger a power shift to either party are described as follows:

Factors that shape power-balance status:

1. *Outsourcing firm with time constraints.* Time constraints to finalize and approve contracts with suppliers will put pressure on outsourcing firms to accept some contract terms which in most cases are unfavorable in order to shorten the time needed for negotiations and accelerate the time needed to get the contract approved (Thomas, Esper, & Stank, 2011). This situation happens for example when an outsourcing firm decides to outsource a product however it could takes longer than expected to identify and qualify a supplier, at that point there will be a sense of urgency to finalize the contract in order to have the product launched in its planned date. Outsourcing firm under time pressure will shift power away from it favoring supplier, accordingly a negative sign is given for this variable (i.e. outsourcing firm under time constraints will trigger power to shift towards supplier).
2. *Outsourcing firm's relative contract size.* Outsourcing firms bringing relatively smaller volumes (and hence value) to suppliers compared to other contracts the supplier has will render the contract unimportant to the supplier (Cho & Chu, 1994; Lonsdale, 2005; Porter, 1980). This will shift power away from outsourcing firm favoring supplier; accordingly a negative sign is given for this variable.
3. *Homogeneous market behavior.* This determines the dominating market norms for a specific economic transaction (Lonsdale, 2005). For example in terms of idiosyncratic investments, it could be a market norm that guides the type of investments that are incurred by the outsourcing firms. In this case, it will not be an option for the outsourcing firm to ask the supplier to incur or even share specific asset investments; accordingly a negative/positive sign is given for this variable because it will depend on the existing norm.
4. *Outsourcing firm brand image.* Suppliers usually seek outsourcing firms with brand equity. Being in contract with such a firm will grant you access to wider market of outsourcing (Jonsson & Zineldin, 2003; Kang, Mahoney, & Tan, 2009; Nyaga, Marshall, Ambrose, & Lynch 2013). Outsourcing firm with brand image will shift power towards itself (assuming that the supplier has no brand image); accordingly a positive sign is given for this variable.
5. *Outsourcing firm's contract safeguards through feasible foresight.* This means that outsourcing firms will have competent managers that are able to foresee possible risks throughout the relationship (Williamson, 2008). For all identified risk, relevant contract clauses will be developed to mitigate this risk when it realizes. At this point, it is important to note that contract safeguards will only cover possible future risks while it will never deal with uncertainty. Outsourcing firm with feasible foresight capability will shift power towards itself; accordingly a positive sign is given for this variable.
6. *Outsourcing firm's weak internal policies.* This factor states that when outsourcing firms have weak internal governing policies, the most competent employees are not those who take decisions (Lonsdale, 2005). Outsourcing firms with weak internal policies will shift power away from outsourcing firm favoring supplier; accordingly a negative sign is given for this variable.

7. *Relative competence of commercial teams negotiating the contract.* If either parties' team negotiating the contract is more competent than the other party, then the competent team will win better contract terms (Lonsdale, 2005). Accordingly a negative/positive sign is given for this variable because it will be relative.
8. *Number of alternative suppliers.* The lower the number of capable suppliers in the market, the more powerful the selected supplier, accordingly this will shift power away from outsourcing firm favoring supplier (Crook & Combs, 2007; Heide & John, 1988; Narasimhan et al., 2009; Porter, 1980). This situation is described as a pre-contractual power balance shifted towards supplier; accordingly a negative sign is given for this variable.

The sum total of all of these variables will determine the direction of the power shift, if any.

It is important to note that power status in the pre-contractual stage is not a static status that will last post-contractually throughout the relationship. Possible future shifts in power are expected to happen. In the same vein, there are other factors that can directly shape outsourcing firm dependence on supplier even in the pre-contractual phase.

Factors that directly shape future lock-in to suppliers:

1. *Strategic importance of outsourced products:* This factor will render outsourcing firms more inclined towards their suppliers. Any interrupted or erratic supply will significantly impact outsourcing firm's economic status (Heide & John, 1988). This factor can be identified pre-contractually.
2. *Government interventions through laws, regulations, and policies:* This factor examines the government interventions in-place and the legal systems actual control that could force dependence on suppliers (Porter, 2008). For example, ministry of health regulations in Egypt forces outsourcing firms to seek supplier approval to terminate the relationship even if the contract defines termination terms. This factor is identified pre-contractually.
3. *Exclusive agreements:* This type of contracts forces dependence on suppliers because outsourcing firm's products will only be manufactured at a single source (Narasimhan et al., 2009). This factor is identified pre-contractually.
4. *Idiosyncratic Investments:* This represents the relationship specific investments (Handley & Benton Jr, 2012; Hawkins et al., 2008; Lam et al., 2004; Lonsdale, 2001, 2005; McGuinness, 1994; Mitrega & Zolkiewski, 2012; Williamson, 1981, 1985). When this cost is significant and mostly incurred by outsourcing firm, it will make exiting the relationship costly. This is because that all these investments will be written off because it has no value outside the relationship. While this factor is identified pre-contractually, it carries on and comes in effect in the post-contract phase, where the more the time passes, the more resources are committed and invested in terms of accumulated sunk costs.

Phase 2 – Factors that shape outsourcing firms' lock-in situation in post contractual phases.

In this phase, managers are required to determine factors that root dependence to the other party. Highly dependent outsourcing firm will fall as a hostage to the supplier. All variables described here will accumulate together to form an exit barrier for the outsourcing firm. The higher the exit barrier, the more dependent the outsourcing firm. Factors described below are in a chronological

order where factors are identified or developed during the course of relationship development and hence this could be either in the pre-contractual or post-contractual phase.

1. *Switching costs.* This represents the cost that the outsourcing firm will incur when it exits the relationship and get a new supplier onboard (Cho & Chu, 1994; Handley & Benton Jr, 2012; Hawkins et al., 2008; Lonsdale & Cox, 1997; Lonsdale, 2001, 2005; Porter, 1980, 2008; Williamson, 1981; Zauberman, 2003). It will include the cost of searching the market, qualifying new vendor and even the opportunity cost of lost sales due to shortage in product supply during the switching period (if any). As the previous definition implies, this factor develops post-contractually.
2. *Knowledge developed at the supplier.* Sometimes knowledge develops at the supplier side throughout the contract period, this renders the supplier differentiated than any other supplier in the market because of the accumulated knowledge (Lonsdale, 1999; Mitreğa & Zolkiewski, 2012; Wendelin, 2007). As the previous definition implies, this factor develops post-contractually.

Phase 3 – Factors that shape suppliers' hold-up situation in post-contractual phase.

It is said that a supplier is holding up outsourcing firm when this supplier exercises power forcing the outsourcing firm to accept supplier's opportunistic moves. This can include actions such as renegotiating contract terms for supplier's favor or increasing prices. However the precursors to this stage are a highly dependent outsourcing firm together with a supplier at a power advantage. To analyze this stage, factors that will either trigger opportunism or inhibit it will be studied. At this stage opportunism is the moderating variable that will shift from lock-in to hold-up stages.

1. *Opportunism activators: (given a positive sign in the model)*
 - a. *Market demand pressures.* If the outsourcing firm is under time pressure, outsourcing firm can compromise and accept supplier's opportunistic behavior to meet market demand pressures.
 - b. *Competition (derived from cooptation).* In cooptation mode, if competition is dominating the relationship, then it will be a win-lose game and suppliers will act opportunistically to win the competition (Bengtsson & Kock, 2000; Rusko, 2011). It should be noted here that this factor is mutually exclusive with the cooperation factor stated below in opportunism deactivators.
 - c. *Information asymmetry.* When information is not equally distributed in the dyadic relationship favoring the supplier, the supplier can make use of the available information to serve his best interest while ignoring the outsourcing firm (Klein et al., 1990; Ryu & Eyuboglu, 2007).
 - d. *Environmental Uncertainty.* This represents any future unpredicted situations that the supplier will use for his best interest (Argote, 1982; Ryu & Eyuboglu, 2007; Stump & Heide, 1996).
2. *Opportunism deactivators: (given negative sign in the model)*

- a. *Supplier reputation*. When suppliers consider this factor, supplier tends to maintain their market reputation to win future contracts with other outsourcing firms (Wagner, Coley, & Lindemann, 2011).
- b. *Contingent renewal*. Suppliers will be keen to renew the contract with outsourcing firms. In such situation, suppliers believe that maintaining a good performance record will grant renewing the contract (Lonsdale, 2005).
- c. *Cost of relationship termination*. Suppliers will consider the lost value if the contract with outsourcing firm is terminated (Narasimhan et al., 2009).
- d. *Outsourcing firm investments in alternative sources*. Investments conducted by outsourcing firms in alternative sources or even alternative products will hinder supplier opportunism (Narasimhan et al., 2009).
- e. *Cooperation (derived from coopetition)*. In coopetition mode, if cooperation is dominating the relationship, then it will be a win-win game and suppliers will collaborate with outsourcing firms (Bengtsson & Kock, 2000; Rusko, 2011).

Variables

In order to simplify the model for better understanding and for better identifying different variables, the model will be discussed in its chronological order that describe relationship's trajectories. This is explained in three phases; Pre-contractual phase (Outsourcing firm's power balance status); Post-contractual/ lock-in phase (Outsourcing firm's dependence on supplier); Post-contractual/ hold-up phase (Supplier holding-up outsourcing firm), and the study variables for each phase are listed in Table 1:

Table 1: Study variables

Variables	Pre-contractual Phase (Outsourcing firm's power balance shift)	Post-contractual/ Lock-in Phase (Outsourcing firm's dependence on supplier)	Post-contractual/ Hold-up Phase (Supplier holding-up outsourcing firm)
Dependent variables	<ul style="list-style-type: none"> Power Balance Shift 	<ul style="list-style-type: none"> Lock-in to Supplier 	<ul style="list-style-type: none"> Supplier Hold-up

Independent variables	Power balance shift <ul style="list-style-type: none"> • Time Constraints • Relative Contract Size • Homogenous market behavior • Firm's brand image • Contract Safeguards through "Feasible Foresight" • Weak Internal Policies • Commercial team negotiating contract competencies • Number of alternative suppliers Dependence <ul style="list-style-type: none"> • Strategic importance of outsourced products • Governmental Laws and Regulations • Exclusive Agreements • Idiosyncratic investments 	<ul style="list-style-type: none"> • Switching Costs • Developed Knowledge at supplier Side 	Opportunism activators: <ul style="list-style-type: none"> • Market demand pressures, • Competition • Information Asymmetry, • Environmental Uncertainty Opportunism deactivators: <ul style="list-style-type: none"> • Supplier Reputation, • Contingent Renewal, • Cost of relationship termination • Outsourcing firm's investments in alternative sources or alternative products • Cooperation
Moderating Variables	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Opportunism

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