# CHAPTER 4

# THEORETICAL MODEL AND HYPOTHESES DEVELOPMENT

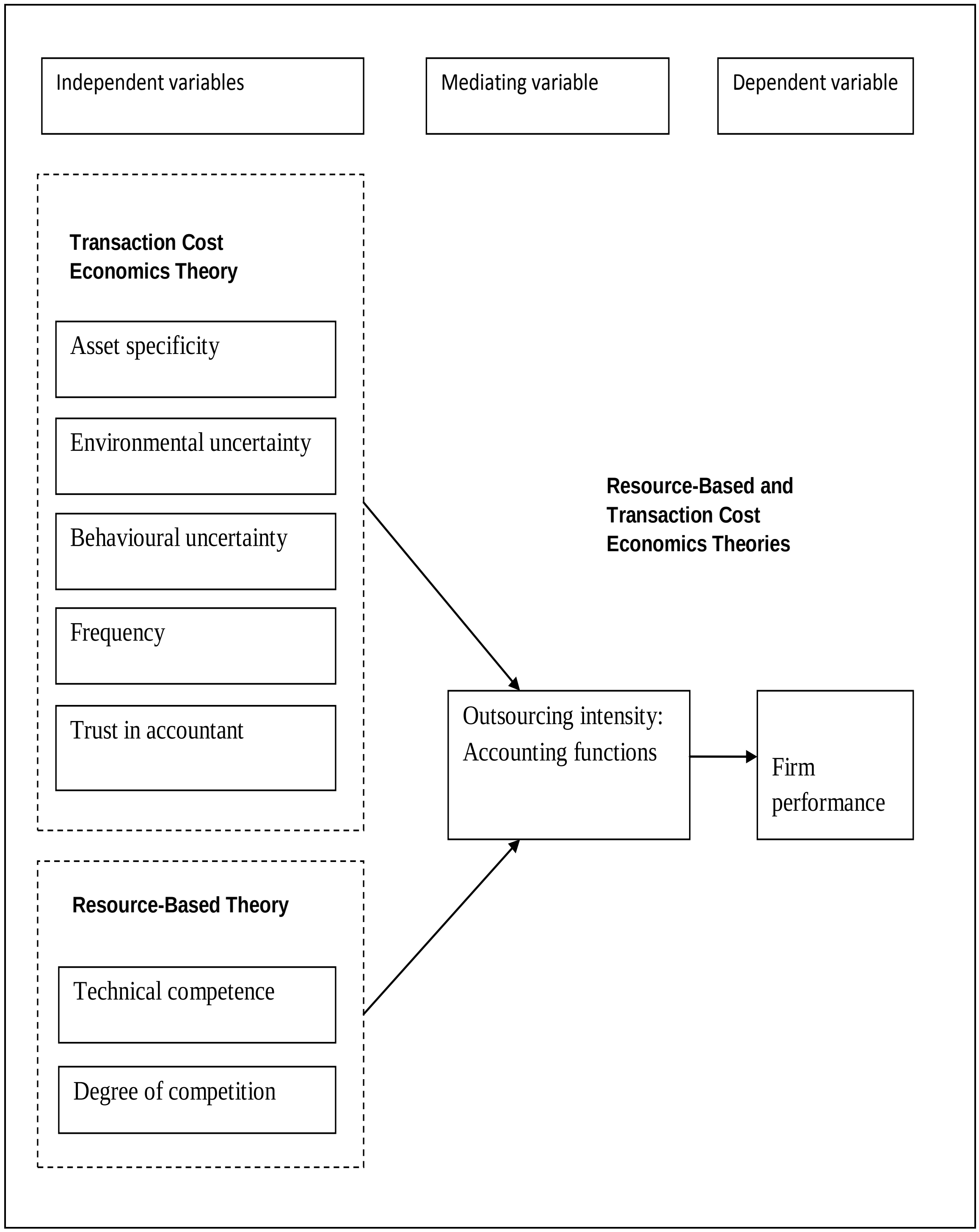
## 4.1. INTRODUCTION

The objective of this chapter is to explain the theoretical model of the study and develop testable hypotheses with regard to outsourcing, based on issues identified in the previous chapter. Based on the review of the literature in the previous chapter, Section 4.2 presents and discusses the theoretical model of the study. Following the theoretical framework, the hypotheses are then developed in Section 4.3. The chapter ends in Section 4.4 with a summary and conclusions.

## 4.2. THEORETICAL MODEL

Based on the TCE theoretical model, this study examines asset specificity, environmental uncertainty, behavioural uncertainty, frequency and trust as the most critical factors affecting outsourcing intensity (Rieple and Helm, 2008; McIvor, 2009; Thouin et al, 2009; Dibbern and Heinzl, 2009; Lee et al., 2008; Greenberg et al., 2008; Hansen and Morrow, 2003; Verwaal et al., 2008). In addition, based on the RBV model, this study investigates variables such as technical competence and degree of competition, which are associated with SMEs' decisions to outsource (Blackburn et al., 2010; Carey et al., 2006; Gooderham et al., 2004). Furthermore, the RBV model is imperative to the study of outsourcing, which link outsourcing to firm performance (McIvor, 2009; Gainey and Klaas, 2003; Roy and Aubert, 2002). Therefore, the theoretical model is shown in Figure 4.1.

**Figure 4.1: The theoretical model**



The RBV focuses on the source of an enterprise's competitive advantage as the basis for SME success and how a SME can maximise its value by utilizing internal and external resources and combining them (Blackburn et al., 2010; Barney, 1991, 2001). Furthermore, TCE model was identified as a useful model for understanding how professional accountants can help their SME clients to reduce transaction costs and thus enhance performance (Carey, 2008).

Referring to the theoretical model, the study examines the relationship between the TCE and RBV variables (asset specificity, environmental uncertainty, behavioral uncertainty, frequency, trust, technical competence and degree of competition), which are the independent variables and outsourcing intensity as the dependent variable. Additionally, this study examines the relationship between outsourcing intensity as an independent variable and firm performance as dependent variable. More importantly, the mediating role of outsourcing intensity on the association between all factors and firm performance is also investigated.

## 4.3. HYPOTHESES DEVELOPMENT

In this section the hypotheses regarding the relationships between the independent variables and dependent variable, "outsourcing intensity" premised on the TCE and RBV theories discussed in previous chapters are developed. Hypotheses are also developed in respect of the relationships between a second dependent variable, i.e., "firm performance" and outsourcing intensity as an independent variable. Moreover, hypotheses are drawn up to examine the mediating role of outsourcing on the relationship between the independent variables (e.g., TCE and RBV factors) and firm performance. These hypotheses are developed as discussed next.

### 4.3.1 The Relationship between Asset Specificity and Accounting Function Outsourcing Intensity

Williamson (1989, p.142) noted that asset specificity turns to "the degree to which an asset can be redeployed to alternative uses and by alternative users without sacrifice of productive value". TCE perspective premises that the higher the asset specificity, the more firm specific the knowledge, language and routines become, the more likely a function will be processed internally (i.e. insourced) (Lamminmaki, 2005; Holcomb and Hitt, 2007; Espino-Rodríguez et al., 2008). The RBV asserts that sourcing decisions is determined by the degree to which the firm can develop an idiosyncratic knowledge and routines and skills produced within the firm (Poppo and Zenger, 1998; Aubert et al., 2004; Espino-Rodríguez et al., 2008; Reeves et al., 2010). The RBV also promises the valuable firm-specific knowledge often drives outsourcing decision (Espino-Rodríguez et al., 2008; Conner and Prahalad, 1996). Therefore, higher asset specificity is explained by costs that do not possess value outside the exchange association, and then leads to increase the costs of transaction (Grover and Malhotra, 2003). TCE argues while asset specificity of a service function intensifies, the function tends to be internalised as a consequence of the opportunistic behaviour that may otherwise result (Lamminmaki, 2007). For example, higher levels of asset specificity lead to a lower percentage of the accounting activities being outsourced (Jiang et al., 2007; Lamminmaki, 2007). In other words, accounting activities with lower asset specificity can be easily managed by external service providers (Everaert et al., 2010; Jiang et al., 2007). This circumstance is more applicable for SMEs because SMEs face with internal resource gaps to carry out accounting functions internally, so they can obtain supplementary value from professional accountants in the form of accounting functions (Everaert et al., 2006).

To summarise the discussion, the proposition is that when asset specificity of the accounting functions increases, firms are expected to internalise those functions (Speklé et al., 2007). Conversely, low asset specificity of accounting functions would motivate firms to outsource accounting functions (Widener and Selto, 1999). Based on the above arguments, accounting functions should be externalise or outsourced when the assets in the accounting functions are not specific or have low specificity (e.g., low firm-specific routines, knowledge, language and skills) (Everaert et al., 2010; Espino-Rodríguez, et al., 2008; Nicholson et al., 2004, 2006). In line with Everaert et al. (2010) and Nicholson et al. (2006), it is expected that, as accounting functions become more customised to a firm and more specialised, asset specificity rises and, accordingly, shifting accounting activities to a professional (external) accountant can be difficult and costly. Hence, the first hypothesis based on the above discussion is as follows:

> **H1:** The higher the level of the asset specificity of accounting functions, the lower the accounting function outsourcing intensity

### 4.3.2 The Relationship between Environmental Uncertainty and Accounting Function Outsourcing Intensity

There are two constructs for uncertainty, comprising degrees of environmental uncertainty and behavioural uncertainty in the handling of an activity (Williamson, 1975, 1979; John and Weitz, 1988; Widener and Selto, 1999). If demand for an activity is volatile and unpredictable, an activity’s environmental context may be uncertain (Lamminmaki, 2009). For instance, if demand for an activity is volatile and unpredictable (e.g., incomplete contracting), the firm cannot identify how much the activities involved in supporting the service's provision are required (i.e., bookkeeping works) (Lamminmaki, 2007, 2009). Therefore, for impeding the problems related to incomplete contracting, TCE perspective holds that in the presence of higher environmental uncertainty in the activities, there is a greater probability for the activities to be managed internally (e.g., insourcing) (Lamminmaki, 2007, 2008, 2009; Nicholson et al., 2006).

As discussed in earlier chapter, environmental uncertainty in the accounting functions relates to the predictability and stability of the accounting functions workload due to the volatility (unpredictability) of business activities (Everaert et al., 2006, 2010; Nicholson et al., 2006). For instance, if the firm cannot to predict the workload related to accounting practices (e.g., low predictability and stability of the workload related to accounting functions), the costs of transaction will be increased as a consequence of renegotiating and changing of the contractual agreements with a professional accountant (Everaert et al., 2010; Lamminmaki, 2007, 2008, 2009). This needs time that the managements of the SMEs may not have or may not be able to reduce the flexibility needed to deal with these fluctuations in the accounting functions workload in a well-timed fashion (Lamminmaki, 2007; Nicholson et al., 2006; Aubert et al., 2004). In addition, if environmental uncertainty in accounting functions rises, it makes it extremely costly to write and implement a contract with a professional accountant, which indicates all achievable future conditions (Everaert et al., 2010). This produces many problems, which raise the costs of transaction (Aubert et al., 2004). Therefore, if the costs of transaction become too high, the transaction will not occur and accounting functions will be insourced (Nicholson et al., 2006; Aubert et al., 2004). In fact, when environmental uncertainty is too high, it will be impossible to agree on a contract with an accounting firm, thereby preventing professional accountants from processing accounting functions for SMEs (Nicholson et al., 2006; Aubert et al., 2004). In other words, if environmental uncertainty in accounting functions is lower, a higher degree of outsourcing of accounting activities is possible (Reeves et al., 2010; Kotabe and Mol, 2009; Nicholson et al., 2006; Aubert et al., 2004; Nam, Rajagopalan, Rao and Chaudhury, 1996).

TCE perspective conjectures that in highly environmental uncertainty in accounting practices, firms prefer to process their accounting functions internally, believing that they can favorably answer to the market more quickly than professional accountants can do (Everaert et al., 2006, 2010; Ellram et al., 2008; Kaufmann and Carter, 2006; Vidal and Goetschalckx, 2000; Nicholson et al., 2006; Aubert et al., 2004). Therefore, the original argument maintains that a high environmental uncertainty in accounting functions, contracting will be incomplete, the costs of transaction will rise, and it is hard to attain an reasonable agreement with an external accountant (Kotabe and Mol, 2009; Lamminmaki, 2007, 2008; Nicholson et al., 2006). For example, when the accounting functions workload is less predictable and stable, an in-house accountant is able to answer more rapidly to these fluctuations than professional (external) accountant can (Everaert et al., 2006, 2010; Williamson, 1991). Hence, it is hypothesised that:

> **H2:** The higher the environmental uncertainty in accounting functions, the lower the accounting function outsourcing intensity

### 4.3.3 The relationship between Behavioural uncertainty and Accounting Function Outsourcing Intensity

Behavioural uncertainty refers to the difficulty of evaluating the quality of performance related to the managing of a function (Lamminmaki, 2007, 2009; Dibbern and Heinzl, 2009). In fact, if it is difficult to control and monitor performance, or to know whether a function has been correctly processed, service provider opportunism may result (Lamminmaki, 2007, 2009). For example, potentially high opportunism by the service providers can contribute to a firm's decision not to outsource their functions (Greenberg et al., 2008). Similarly, in accounting context, behavioural uncertainty is defined as the difficulty of appraising whether the accountant performed the accounting functions correctly. High behavioural uncertainty increases the costs of the transaction as a result of writing, monitoring, enforcing contracts, negotiating, and all related tasks made to preclude opportunistic behaviour (Nicholson et al., 2006). Accordingly, when a firm cannot assess the quality of performance related to the processing of an accounting function accurately, adequate contracts with external accountant will be costly to draft (i.e., if contributions from an external accountant cannot be evaluated correctly) (Everaert et al., 2010; Nicholson et al., 2006). Consequently, if it is difficult to appraise an professional accountant, then TCE premises that the accounting functions will not be provided by professional accountant, as the management of the SME chooses to monitor and control the performance of the in- house accountant directly (Everaert et al., 2006, 2010). In this context, it is more economical to insource the accounting functions, which provides the firm a legal right to monitor and control the actions of its staff directly (Lamminmaki, 2007, 2009; Nicholson et al., 2006; Williamson 1985). For example, the TCE prediction is that higher behavioural uncertainty in accounting functions increases the costs of transaction, and the accounting functions will be performed internally (Everaert et al., 2006, 2010; Lamminmaki, 2007; Nicholson et al., 2006). Conversely, SMEs outsource more readily their accounting functions having low behavioural uncertainty (Nicholson et al., 2006; Aubert et al., 2004). In this case, if SMEs face problems in monitoring and controlling the quality of idiosyncratic accounting functions, they are even more likely to insource the accounting activities (Widener and Selto, 1999). From the results, it is clear that behavioural uncertainty play a critical role in the accounting outsourcing intensity (Lamminmaki, 2007, 2009; Nicholson et al., 2006; Aubert et al., 1996, 2004). Accordingly, based on the discussion above, the hypothesis is proposed as follows:

> **H3:** The higher the level of the behavioural uncertainty in accounting functions, the lower the accounting function outsourcing intensity

### 4.3.4 The Relationship between Frequency and Accounting Function Outsourcing Intensity

One of the important TCE factors is the frequency of the transactions (Williamson, 1999). For instance, according to TCE, frequency is referred to “the repetitiveness and volume of similar transactions” (Lamminmaki, 2007, p.75). Based on TCE, while the extent of a transaction increases, the transaction should be managed internally as a result of the production economies that can be achieved (Lamminmaki, 2007, 2009). In the context of accounting, Everaert et al., (2010) defend frequency as periodicity and size of the activity. It is stated that the periodicity and size of accounting functions have an effect on accounting function outsourcing intensity (Everaert et al., 2006, 2010; Lamminmaki, 2007; Speklé et al., 2007). Thus, it is indicated that the higher the frequency of transactions, the more likely insourcing will be adopted (Reeves et al., 2010). In view of that, TCE argues that the frequency of the transaction affects the sourcing decision (governance choice) because frequency of transactions will affect exposure to opportunism (Nicholson et al., 2006; Reeves et al., 2010).

TCE perspective seeks to economise on both cost of the transaction and production costs (Reeves et al., 2010). According to TCE, as the volume of accounting functions increases, differences in production costs between outsourced accounting practices and internally sourced accounting practices reduce, because larger firms are better equipped to take advantage of economies of scale than smaller firms (Speklé et al., 2007; Everaert et al., 2010). Thus, internalisation of transactions (insourcing of accounting activities) by the firm is only efficient for recurrent transactions (Aubert et al., 1996). An implication of this argument is that as frequency of accounting functions increases, SMEs prefer to develop such functions internally (Speklé et al., 2007; Everaert et al., 2010; Nicholson et al., 2006). This leads to the following hypothesis:

> **H4:** The higher the frequency of accounting functions, the lower the accounting function outsourcing intensity

### 4.3.5 The Association between Trust in Professional Accountant and Accounting Function Outsourcing Intensity

The importance of trust in service provider-client relationships has been emphasised in many prior studies (Hansen and Morrow, 2003; Dyer and Chu, 2000; Zaheer, McEvily and Perrone, 1998; Moorman, Zaltman, Deshpande, 1992). Many recent studies on the governance of interfirm relationships (i.e., relationship between client and service provider) are based on transaction cost economics (TCE) (Greenberg et al., 2008; Verwaal et al., 2008; van der Meer-Kooistra and Vosselman, 2006; Hansen and Morrow, 2003). For example, the social context in which transactions are embedded affects the relationship and the parties' behaviour (Greenberg et al., 2008). Therefore, the parties describe whether transactions should be performed through markets (buy), hierarchies (make), or hybrid arrangements to organise trust as an important factor impacting outsourcing decisions (Greenberg et al., 2008). Rousseau, Sitkin, Burt and Camerer (1998) argue trust in external service provider is developed via relationship between parties to help in minimising potential opportunism. It is precisely through such a relationship, which is 'earned' by building up trust, that the SME owner/manager can tap into the accounting firm's expertise and knowledge of business processes in different sectors of the economy (Blackburn et al., 2010). Hence, trust will reduce the fear of opportunism among client and supplier, so that transaction costs can be reduced (Verwaal et al., 2008). Thus, trust in outside supplier is as an important element in minimizing transaction costs (Hansen and Morrow, 2003; Bromiley and Harris, 2006; Zaheer and Venkatraman, 1995; Andaleeb, 1992), and is a source of competitive advantage (Barney and Hansen 1994). When there is trust, the formal control mechanisms may be reduced, and firm has a propensity to open communication and outsourcing (Verwaal et al., 2008).

Greenberg et al., 2008 (2008) used TCE and the information systems (IS) conceptualisations of trust to offer clients and suppliers a framework to identify the issues involved in business process outsourcing. Consequently, this study revealed that trust had a critical role in outsourcing intensity (Greenberg et al., 2008). Das and Teng (1998) viewed that trust and control had significant roles in producing confidence that suppliers did not behave opportunistically. Van der Meer-Kooistra and Vosselman (2000) extended the TCE framework by including trust as one of the efficient solutions to control in hybrid transactions during the three stages of interfirm relationships (contact, contract and control). This study revealed that the notion of trusted partners into TCE model needed at each of the stages. Further, Langfield-Smith and Smith (2003) used TCE model by discussing trust for each of three elements (the transaction, the transaction environment and the parties). TCE is valuable because it identifies the factors such as trust in outside supplier when decisions about outsourcing are made (Greenberg et al., 2008; Verwaal et al., 2008; Hansen and Morrow, 2003). In this study, TCE perspective is used as the underlying theory for developing a framework that recognises the role of trust in outsourcing decision (Greenberg et al., 2008; Bromiley and Harris, 2006). The reason is that owner-managers of SMEs emphasised the importance of trust in outsourcing as a basis for continuing the relationship with professional accountants (Everaert et al., 2006, 2010; Blackburn et al., 2010). For example, it stands to reason that if trust was critical in the decision to put in an alliance, it can play an important role in subsequent outsourcing decisions (Hansen and Morrow, 2003).

Siakas and Siakas (2008) indicated that trust in service provider is an important factor in improving outsourcing relationships, both breadth-wise and depth-wise. Chiles and McMackin (1996) demonstrate that trust plays a significant role in cooperation and trust is relevant aspect of governance structure. Kim et al. (2007) and Verwaal et al. (2008) suggest that trust is critical driver affecting the intention of adopting outsourcing. Brouthers and Brouthers (2003) examined the effect of trust on outsourcing, and found that trust turned out to be significant for entry mode choices in outsourcing.

Bennett and Robson (1999) examined the level of perceived trust between the supplier of assistance and the SMEs. SMEs perceived that professional accountants were in a position of high trust (Bennett and Robson, 1999). Blackburn et al. (2010) and Blackburn and Jarvis (2010) indicated that while competence was found to be critical before a SME owner/manager relied on their professional accountant, trust is needed to facilitate the exchange. In fact, the trust in professional accountants appeared to arise from their qualified and certified position from frequent communication within the community (Marlow and Carter, 2005). Bennett and Robson (1999), Gooderham et al. (2004), Blackburn and Jarvis (2010), Blackburn et al. (2010) and Everaert et al. (2006, 2010) report that trust is a crucial foundation of the SME – professional accountant relationship[6] and this provides a stage for the potential take-up of non-compliance services. Bachmann (2001) demonstrated that the SMEs decide to outsource their functions is based on the characteristics of the transaction and the trust. Consequently, trust in external accountant is important driver in outsourcing of accounting practices in SME environment (Everaert et al., 2010).

Trust facilitates exchanges in uncertain conditions because of the expectation that service provider will not exploit vulnerabilities (Hansen and Morrow, 2003; Verwaal et al., 2008; Barney and Hansen, 1994; Rousseau et. al., 1998). Therefore, the most important effect of trust on the outsourcing decision lies in the expectation that suppliers will perform the service functions in accordance with agreement with the interests of the clients (Hansen and Morrow, 2003). Hansen and Morrow (2003) and Verwaal et al. (2008) argue that trust is one of the factors influencing the outsourcing decision. Indeed, there is increasing evidence reported in the literature confirming the importance of trust in outsourcing intensity (Greenberg et al., 2008; Verwaal et al., 2008; Kim et al., 2007; Oza et al., 2006; Hansen and Morrow, 2003; Sabherwal, 1999).

The notion of "trust" is extensively discussed in the business and management literature and is regarded as critical in commercial exchange (Hansen and Morrow, 2003; Verwaal et al., 2008). Trust is seen as developing through an ongoing relationship and helps facilitate an understanding of mutual needs whilst minimizing uncertainties (Rousseau et al., 1998). A priori, professional accountants appear to be well placed to benefit from a number of dimensions of trust (Blackburn and Jarvis, 2010; Blackburn et al., 2010). They benefit

6 It is also important for listed companies and professional accountants but such relations exist in a regulated environment with oversight from Securities commission etc.

from the trust that derives from being a member of a government regulated profession, which provides continuous professional development, codes of conduct such as ethics and data protection, trading standards, discipline and enforcement (Hansen and Morrow, 2003; Verwaal et al., 2008). Such institutional regulations are not prevalent amongst other external service providers (Hansen and Morrow, 2003; Verwaal et al., 2008). A further dimension to trust is the behavioral aspect which derives from an ongoing relationship between SME executives and their professional accountants (Blackburn and Jarvis, 2010; Blackburn et al., 2010). Therefore, professional accountants can cultivate "relational" trust based on their repeated provision of compliance services to SMEs (Blackburn and Jarvis, 2010; Blackburn et al., 2010). For example, trust can be developed when multi-stop-shopping occurs and SME executives develop a more rational and critical assessment of professional accountants' proficiency (Everaert et al., 2010). The evidence suggests the "trust" is one of the main reasons why SMEs draw on professional accountants for accounting activities.

TCE model explains that the more trust the SME client perceives; the higher outsourcing of accounting functions is used (Hansen and Morrow, 2003). This can be particularly significant for SMEs, given the role of trust may be rather unique for the accountants' services or the role of the owner/manager and the inter-personal nature of trust (Martin, 2005). Following Bouthers and Bouthers (2003), Verwaal et al. (2008), Hansen and Morrow (2003), Greenberg et al.(2008), and Everaert et al. (2010), it is argued that, if the professional accountant and the management of the SME sustain a trust-based relationship, opportunism will not be of concern. As a result, the following hypothesis is proposed:

**H5:** The higher the level of trust of the SME owner/manager in the professional accountant, the higher the accounting function outsourcing intensity

### 4.3.6 The Association between Technical Competence and Accounting Function Outsourcing Intensity

Technical competence of a professional accountants refers to appropriate qualifications and experience, necessary specialised skills, industry specialisation and technological expertise (Blackburn and Jarvis, 2010; Carey et al., 2006). Technical competence is one of the core principles in the code of ethics for professional accountants, yet there appears to be an expectation gap regarding the competence of the professional accountant to provide accounting and professional services (Blackburn and Jarvis, 2010; Blackburn et al., 2010). The accounting firm is a potential source of critical competencies for survival and development of SMEs (Blackburn and Jarvis, 2010; Blackburn et al., 2010). Demonstration of an accountant's competence is critical before a firm owner-manager of SME will rely on professional accountant (Blackburn et al., 2010).

It is argued that external service providers are well placed to provide a comparative advantage over internal service providers because they possess industry specialisation and professionals and the latest technological resources, who are competent, specialists and experienced (Carey et al., 2006; Anderson, 1996; Powell, 1997; Barr and Chang, 1993). For example, many claim professional accountants have the necessary scale to acquire resources, whereas the internal provision for the services often is too low to permit for a cost-efficient service, (Everaert et al., 2007; Barrar, Jones, Vedovato and Wood, 2002). Furthermore, the majority SME owner/managers have no management, capacity, professional and other formal qualifications (Blackburn and Jarvis, 2010; Stanworth and Gray, 1992). Therefore, they rely on external accountants to achieve special knowledge, skills and experiences to improve their capacity (Blackburn and Jarvis, 2010; Everaert et al., 2006; Greer et al., 1999). For example, SMEs regularly are deficient in these necessary technical expertise and skills, whereas professional accountants often are extremely specialised in this matter (Everaert et al., 2006, 2007).

While professional accountants are perceived to be competent in providing services to SMEs, some SMEs believed that professional accountants do not possess the necessary skills to add value through providing services for their specific industry (Blackburn and Jarvis, 2010; Blackburn et al., 2010). For example, Barr and Chang (1993) assert that external service providers often do not possess the same level of client industry specialisation and specific knowledge as internal accountant. This shows an expectation gap exists between what the SME executives need and what the external accountants are able to provide for them (Blackburn et al., 2010).

In many cases, external suppliers are better able perform an activity than smaller firms carry out internally because they provide services for multiple clients, and they specialise in a variety of similar outputs, to provide the necessary services (Strange, 2009). In fact, the better competence of the external service providers than internal service providers is often the result of methodology and human resources and a high investment in technology over a period of time (Espino Rodríguez and Padrón-Robaina, 2004). Hence, professional accountants enable SMEs to obtain a broader perspective of both their information processing capacity and information needs, so that it is expected that SMEs applying them to achieve higher degrees of competitive advantage (Blackburn et al., 2010; Ismail and King, 2007). In this context, the knowledge and competence can be transferred to firms choosing for outsourcing, since, with their competences and processes, outside supplier will satisfy the needs of their clients (Espino Rodríguez and Padrón-Robaina, 2004; Naderian, 2010). Many outsourcing relationships are motivated by a firm's need to acquire technical competence and in-depth skills in a cost-beneficial manner (Greenberg et al., 2008). For example, firm competences and resources are a firm-level indicator of what should be outsourced (Barney, 1999). According to RBV, a firm with a rich competence base can be organised for undertaking its activity within the firm (Gooderham et al, 2004; Everaert et al., 2006, 2007; Kotabe and Mol, 2009). For those firms that are lack of expertise and competence, outsourcing is more appropriate (Kotabe and Mol, 2009). In fact, given that the competence these qualifications signify significant, this constitutes a dilemma for the SMEs performance (growth) (Gooderham et al, 2004).

The RBV of the firm has been utilised over the last decade to explain the outsourcing (Espino-Rodríguez and Rodríguez-Díaz, 2008). The outsourcing literature incorporates RBV with competence considerations in outsourcing decisions (Gooderham et al, 2004; Barney, 1999; Leiblein, Reuer, Dalsace, 2002; Poppo and Zenger, 1998). According to the RBV, technical competence of professional accountant provides one of the most influential frameworks to explain why firms outsource their functions (Carey et al., 2006; Gilley and Rasheed, 2000; Carey, 2008; Blackburn et al., 2010). The RBV suggests that firms facing with resource gaps (lack expertise or competence) can outsource the activities to supplement their resources and competences, thus improving its strategy to make better utilisation of its capabilities for external opportunities.

Central to the outsourcing decision is the issue of whether or not an external service provider (supplier) can process a function better than in-house service provider (Hansen and Morrow, 2003). Competence of outside supplier is a critical factor influences a firm's decision to outsource a business function (Hansen and Morrow, 2003). SME executives may recognise that an outside service provider has more competence and expertise in a certain business function than internal service provider (Hansen and Morrow, 2003). Accordingly, the perception that an external service provider possesses more competent and expertise than an internal service provider in a particular business function affects the outsourcing decision (Hansen and Morrow, 2003). Owner/managers of SME who find that external service provider has more expertise than internal service provider would likely choose to outsource in the absence of any tension due to the need to monitor and control a function (Hansen and Morrow, 2003). In effect, firm executives who are convinced that external service providers possess superior competence may tend to outsource their activities (Hansen and Morrow, 2003).

Gooderham et al. (2004) found that competence of the external accountants is the most important predictor of an SME's reliance on them as business adviser. SMEs rated very highly the technical competence of professional accountants in relation to accounting services (Leung et al., 2008). Accordingly, technical competence is an important factor affecting a firm decision to outsource because accounting functions do not only require knowledge of generally-accepted accounting principles but also need that an accounting specialist to apply the principles in a business environment (Everaert et al., 2006, 2007). Empirical evidence on outsourcing in other service functions, such as information Technology, business function and internal audit, suggests that technical competence is a significant factor in the decision to outsource (Beaumont and Costa, 2002; Hansen and Morrow, 2003; Carey et al., 2006). Similarly, it is predicted that perceptions of professional accountants' technical competence will influence the firm's decision to outsource their accounting functions (Carey et al., 2006). Consequently, the earlier arguments are summarised in the following hypothesis:

> H6: The stronger the perception that external (professional) accountants are more technically competent than the in-house accountants, the higher the accounting function outsourcing intensity

### 4.3.7 The Association between Degree of Competition and Accounting Function Outsourcing Intensity

In this globalised era, new technologies have emerged, customer culture has changed and competition is intense (Espino Rodríguez and Padrón-Robaina, 2004). With enhanced levels of competition, many smaller firms have recognised the difficulties of developing and maintaining the range of skills and expertise essential to compete effectively (Langfield-Smith and Smith, 2003; Gooderham et al., 2004; Blackburn and Jarvis, 2010; Blackburn et al., 2010). The outsourcing has been realised as a source of competitive advantage to the extent that it aims at a higher value for the fims (Jayabalan et al., 2009). Many firms recognise outsourcing as a skillful technique to achieve firm's high value (Smith, Morris and Ezzamel, 2005; Kim et al., 2007; Espino Rodríguez and Padrón-Robaina, 2004). With increased global competition and the reduction of the life cycle of business processes, most firms are moving to employ business process outsourcing, by outsourcing the total or part of their business activities to external service providers and focusing on their essential (core) business, in order to improve their performance (Kim et al., 2007; Espino Rodríguez and Padrón-Robaina, 2004). Outsourcing makes firms more dynamic and flexible and better able to face the changes and opportunities that occur (Espino Rodríguez and Padrón-Robaina, 2004).

Kotabe et al (2008) indicated that in a highly competitive environment, many firms outsource activities to outside suppliers. Furthermore, many firms have broadened the scope of outsourcing to cover essential activities because of keen market competition and the pressure to stay lean (Hui and Tsang, 2006). In fact, many firms outsource their service functions to achieve competitive advantage (maximise the benefits) and minimise the costs (Hui and Tsang, 2006). In fact, as competitive pressures intensify, there is remarkable pressure for a SME is to obtain competitive advantage and improve its performance

(Gooderham et al., 2004; Blackburn et al., 2010; Hui and Tsang, 2006). Outsourcing of non-core activities is the preferred strategy of many firms to stay lean in competitive market (Hui and Tsang, 2006). In order to make economical use of limited resources, various strategies should be used in line with the decision matrix of outsourcing purpose and outsourcing scope in smaller firms (Hui and Tsang, 2006). Outsourcing is most useful in competitive markets and has an effect of strengthening price-based competition (Kotabe and Mol, 2009). Outsourcing is proving to be a reliance on technical experts and growth industry (Matusik and Hill, 1998). The rationale for outsourcing of accounting functions is chiefly stated in economic terms in a competitive environment, such as reduction in costs, managing the firms' capacity more efficiently, and to enhance firm performance (Jayabalan et al., 2009; Rittenberg and Covaleski, 2001). Accordingly, to meet the value creation challenge for their businesses, SME executives look more and more to outsourcing (Everaert et al., 2006, 2007, 2010; Jayabalan et al., 2009; Quélin and Duhamel, 2003).

Accounting functions play an important role in competitive environment to sustain competitive advantages (Jayabalan et al., 2009). However, most of SMEs face problem in handling their accounting functions (Jayabalan et al., 2009). Consequently, in a competitive environment, smaller firms cannot survive because their internal resource gaps do not permit them to adapt their products (Gooderham et al., 2004). In such circumstances, outsourcing is a major managerial method to obtain competitive advantage while competitive pressures intensify (Delmotte and Sels, 2008). As such, one possible way to reduce competitive pressure and gain sufficient resource is to employ qualified persons (Gooderham et al., 2004). However, given the insufficient number of qualified professional accountants, it is expected that SMEs will outsource accounting functions to professional accountants (Devi and Samujh, 2010; Everaert et al., 2006, 2007; Berry, Sweeting, and Goto, 2006). Accordingly, professional accountants can provide opportunities to encourage SME owner-managers to cope with succession issues by applying their technical and commercial expertise and broader industry perspectives to knowledge of SMEs' succession situations gained from other aspects of client-accountant relationships (Martin, 2005). Indeed, outsourcing of accounting functions has been recognised as a source of competitive benefit in as much as it aims at a higher value for the SMEs (Jayabalan et al., 2009). Although market issues are not regulated as are accounting issues, Pineda, Lerner, Miller and Phillips (1998) reported that owner-managers of smaller firm also see market issues as accounting issue. Thus, SME executives may consider this area of expertise in the same approach as they apply to accounting matters; they may engage professional accountant when they face competitive pressures (Devi and Samujh, 2010; Blackburn and Jarvis, 2010; Blackburn et al., 2010; Gooderham et al, 2004).

The RBV suggests SMEs utilise resources available outside when they face competitive pressures (Gooderham et al., 2004; Worrall, 2007). In effect, in competitive environment, the RBV provides an approach that regards the firm as a set of resources and capabilities those firms can outsource their accounting activities in order to focus on its core business to sustain competitiveness (Arnold, 2000). For example, in the competitive environments, the smaller firms are becoming more needy, and need to become more capable both operationally and strategically (Devi and Samujh, 2010; Blackburn et al., 2010; Worrall, 2007). As competitive pressures intensify, smaller firms have to find a way to grow and obtain competitive advantage (Delmotte and Sels, 2008; Gooderham et al., 2004), outsourcing is as a best way to attain this goal. For instance, outsourcing has become a vital element of business improvement initiatives and firm restructuring (McIvor et al., 2009). Using RBV perspective, Gooderham et al. (2004) argue that when SMEs face with vulnerable competition, they refer to their external accountant as a potential source of competitive advantage. For instance, professional accountants are well placed to help the managements of the SMEs to systematise routine business procedures in order that they themselves can concentrate on the development of exit routes and strategy (Martin, 2005).

Libby and Waterhouse (1996) indicate the importance of designing accounting systems that are suitable for specific competitive environments. For example, in a study of 300 listed large firms, Guilding and McManus (2002) report a positive relationship between competition intensity and client accounting usage. Although Lamminmaki (2007) used contingency theory to describe degree of competition in outsourcing, but it is appropriate to examine degree of competition based on resource-based perspective in SME environment (Blackburn et al., 2010; Gooderham et al., 2004). For example, using RBV, Gooderham et al. (2004) assert that smaller firm is not able to survive as competitive pressures intensify because its narrow resource base does not allow it to adapt its products or services. Appraising the impact of degree of competition on outsourcing allows this study to build on a stream of study initiated by Lamminmaki (2007). To survive in a competitive environment, SMEs need to use professional accountants as source of competitive advantage (Devi and Samujh, 2010; Blackburn et al., 2010). Therefore, degree of competition appears an important variable to this study when one considers the varying competition intensity experienced by SMEs (Blackburn et al., 2010). As outsourcing can assist greater specialisation and efficiencies, a higher degree of outsourcing is expected for those SMEs that are faced with high levels of competition intensity (Lamminmaki, 2007). Although there is no empirical study in accounting to examine directly the effect of degree of competition on outsourcing of the accounting function, evidence on outsourcing in other activities (housekeeping, food and beverage, and general maintenance) suggests that degree of competition is a significant factor in outsourcing intensity (Lamminmaki, 2007). Accordingly, the above arguments are summarised in the following hypothesis:

> **H7:** The stronger the competitive pressures faced by the firm, the higher the accounting function outsourcing intensity

### 4.3.8 The Association between Accounting Function Outsourcing Intensity and Firm Performance

Many claim outsourcing improve a firm performance (Cho et al., 2008; Jiang et al. 2006; Gilleyet al., 2004a; Espino Rodríguez and Padrón-Robaina, 2004). For example, a major concern of the RBV is how a firm's resource develops and influences its performance (McIvor, 2009; Marshall et al., 2007). Therefore, firms will likely achieve higher levels of firm performance if they choose to outsource their functions to outside specialists (Gilley et al., 2004a). In line with the RBV of the firm, outsourcing can lead to superior resources becoming competitive advantages, which in turn leads to improve firm performance (Espino-Rodríguez and Padrón-Robaina, 2005). Effectively, the outsourcing decision is affected by the ability of a firm to invest in developing a resource and supporting a better performance and competitive advantage in the capacity compared with competitors (McIvor, 2009; Gilley and Rasheed, 2000). Furthermore, TCE was identified as a useful model for understanding how professional accountants will help SMEs to reduce transaction costs and thus improve performance (Carey, 2008). Taken as a whole, three important reasons are stated that outsourcing will enhance SME performance (Holcomb and Hitt, 2007). The first reason is that outsourcing potentially reduces bureaucratic complexity (Holcomb and Hitt, 2007). The second reason is that outsourcing allows SMEs to meet production requirements and provides a mechanism for firms to share economies of scale with specialised service provider from outside, transfer risk and reduce uncertainty (Holcomb and Hitt, 2007). For example, outsourcing may result in a reduction in investments in certain facilities and equipment, hence, production costs and overhead decline, which in turn reduces firms' break-even points, enhancing the firm performance, particularly in SME environment (Holcomb and Hitt, 2007). The last reason is that when outsourcing is more efficient, SMEs are more likely to integrate and use specialised resources and capacity (Blackburn et al., 2010; Devi and Samujh, 2010; Holcomb and Hitt, 2007). Overall, outsourcing seems not only to demonstrate positive benefits for cost reduction, but also improve overall firm performance (Hsiao et al., 2010; Kern and Blois, 2002). However, according to the above arguments, it is hypothesised that accounting function outsourcing intensity is associated with firm performance.

**H8:** Accounting function Outsourcing Intensity is positively associated with firm performance

### 4.3.9 The Mediating Role of the Accounting Function Outsourcing Intensity

When the internal transaction costs are equal to the external transaction costs of processing some functions, the firms should stop processing those functions internally and outsource such functions to external sources to improve the firm performance (Espino-Rodríguez et al., 2008; McIvor, 2009; Marshall et al., 2007). The TCE and RBV posit that production efficiency requires specialised human assets are factors critical to a firm performance (Poppo and Zenger, 1998). For example, when a function is specific and a firm decides to outsource that function, there will be a negative effect on firm performance in accordance with TCE perspective (Espino-Rodríguez et al., 2008). In other words, for firms with lower levels of asset specificity of the service function outsourcing will lead to better performance than firms with higher levels of asset specificity of the service functions (Thouin et al., 2009). When level of transaction costs is too low, firms that outsource a greater number of their service functions, therefore will achieve an enhanced firm performance (Thouin et al., 2009). Furthermore, effect of trust on outsourcing of service functions is critical and can increase the likelihood of firm performance (Sabherwal, 1999). Trust in supplier is suggested to enhance firm performance and competitive advantage (Lane and Bachmann, 2001). Kanawattanachai and Yoo (2002) note that trust in external service provider is critical  factor affecting the business relationships and outsourcing decision as it enables more open communication, and improve firm performance with greater satisfaction in the decision making process. Besides, competition is clearly important in a firm performance (Chew, Yan and and Cheah, 2008). Competitive environment determines the relative competitive position and SME performance (Chew et al., 2008). Based on RBV, SME competence and capacity has direct impacts on construction of SME performance (Chew et al., 2008). Thus, there is the fit among competence, competitive position and SME performance (Chew et al., 2008). The competition condition is the strategic choice that can influence SME performance (Chew et al., 2008). In fact, firm competence levels are classically linked to firm performance (Boucher, Bonjour and Grabot, 2007). To date, although no research that has analysed mediating role of accounting function outsourcing, but there is a limited research in other service functions examined mediating role of outsourcing. For example, Lilly et al., (2005) have examined the role of human resource function outsourcing as mediator between the degree of competition and firm performance in a conceptual model. Furthermore, in an empirical study, Abdul- Halim (2009) examined mediating effect of the human resource function outsourcing on the relationship between business strategies and firm performance.

Besides, Cho et al. (2008) examine mediator role of logistics outsourcing on the relationship between logistics capability and firm performance. Regarding earlier discussions, this study proposes that accounting function outsourcing intensity may play a mediating role in the relationship between the asset specificity, environmental uncertainty, behavioural uncertainty, frequency, trust, technical competence and degree of competition, and firm performance. Hence, hypotheses are as follows:

**H9:** Accounting function outsourcing intensity mediates the relationship between asset specificity and firm performance

**H10:** Accounting function outsourcing intensity mediates the relationship between environmental uncertainty and firm performance

**H11:** Accounting function outsourcing intensity mediates the relationship between behavioral uncertainty and firm performance

**H12:** Accounting function outsourcing intensity mediates the relationship between frequency and firm performance

**H13:** Accounting function outsourcing intensity mediates the relationship between trust in accountant and firm performance

**H14:** Accounting function outsourcing intensity mediates the relationship between technical competence and firm performance

**H15:** Accounting function outsourcing intensity mediates the relationship between degree of competition and firm performance

## 4.4 SUMMARY AND CONCLUSION

Drawing on the literature, this chapter has developed hypotheses to examine the research questions developed in Chapter 4. The next chapter discusses the research methodology and research design to examine the hypotheses developed in this chapter.