Contents lists available at Science-Gate

International Journal of Advanced and Applied Sciences

Journal homepage: http://www.science-gate.com/IJAAS.html

Accounting outsourcing intensity in Vietnam: Empirical evidence from Vietnamese small and medium-sized enterprises

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ARTICLE INFO

Article history:
Received 26 February 2024
Received in revised form
17 August 2024
Accepted 3 September 2024

Keywords:
Outsourcing intensity
Small and medium-sized enterprises
Transaction cost theory
Resource-based view
Accounting functions

ABSTRACT

This study focuses on developing a strategic management tool for small and medium-sized enterprises (SMEs), where outsourcing is seen as an effective method. Outsourcing allows SMEs to concentrate on their core strengths and compete despite limited resources. In Vietnam, SMEs make up over ninety percent of all businesses and play a key role in the economy. However, they face challenges due to limited resources, especially in managing accounting functions. This research examines the factors influencing the level of outsourcing among SMEs in Vietnam based on two key theories: Transaction Cost Theory (TCE) and the Resource-Based View (RBV). A sample of 236 questionnaires was analyzed using SPSS and regression models. The findings revealed positive and significant relationships between outsourcing intensity (OS.Intensity) and four factors: asset specificity (AS), frequency of accounting tasks (FREQ), trust (TRUST), and technology competence (TECH). The study supports the trend of accounting outsourcing for Vietnamese SMEs, allowing them to enhance their internal strengths despite resource constraints. Future research to gain a deeper understanding of accounting outsourcing is also suggested.

1. Introduction

In management literature, outsourcing refers to the decision to delegate some business activities to external providers (Espino-Rodríguez et al., 2005). Traditionally, businesses may aim to complete all tasks in-house, but if internal operations are more expensive, outsourcing offers a cost-saving strategy that can enhance competitiveness and help businesses survive in the modern market (Anderson and McKenzie, 2022). According to Bolcu and Boharu (2021), the five most commonly outsourced functions are computer systems, logistics, after-sales services, accounting, and maintenance, with accounting being the most outsourced. Burko (2022) highlighted the practice of outsourcing accounting as a modern approach, allowing businesses to concentrate on more profitable activities while reducing the costs associated with an in-house accounting department. Since the 1980s, outsourcing has become a popular management tool, especially for small and medium-sized enterprises (SMEs) that operate with limited resources. Outsourcing helps SMEs focus on their main competencies and compete effectively within their resource constraints. In accounting, SMEs face challenges in hiring skilled accountants or securing long-term commitments from staff due to restricted resources in training, budgets, and work culture. The standardized nature of accounting and finance makes these activities well-suited for outsourcing (Bolcu and Boharu, 2021). This has led to a growing trend in outsourcing accounting and finance functions in a rapidly expanding market.

The main purpose of outsourcing accounting services is to maximize benefits by reducing costs and improving the quality of accounting information. If the cost of outsourcing is less than maintaining internal staff, outsourcing becomes a viable option.

SMEs play a key role in economies worldwide, including in Vietnam, where they represent over 90% of businesses and significantly contribute to job creation. This study focuses on Vietnamese SMEs, which receive support from the government but face challenges, particularly in accounting services (Everaert et al., 2010; Kamyabi and Devi, 2011). To

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alleviate pressures on SMEs, long-term outsourcing plans should be viewed as strategic tools to enhance their internal capabilities and make better use of external resources.

The purpose of this study is to examine the level of accounting outsourcing in Vietnamese SMEs, with a focus on factors influencing the decision to outsource, based on two main theories: Transactional Cost Economics (TCE) and the Resource-Based View (RBV). The study, titled "Accounting Outsourcing Intensity in Vietnam: Empirical Evidence from Vietnamese SMEs," aims to help SMEs determine what, when, and why they should outsource accounting functions, concentrate on core activities, and strategically allocate resources. Additionally, it may offer insights to professional accounting firms on improving their services to meet business needs.

2. Theoretical background and literature review

In order to investigate different facets of outsourcing, researchers use different theoretical approaches: Agency theory (Hancox and Hackney, 1999; Logan, 2000), others use resource theory (Barney, 1991; Hancox and Hackney, 1999; Adekoya and Ojediran, 2024) or transaction cost theory (Coase, 1937; Williamson, 1983; Hancox and Hackney, 1999; Adekoya and Ojediran, 2024). However, in outsourcing for accounting, this research explores the most typical underlying background theories, such as TCE, RBV, and prior outsourcing-related research.

2.1. Theoretical backgrounds

2.1.1. Transaction cost economics

The theory of TCE was initially introduced by Coase (1937) and later expanded by Williamson (1983) and others. TCE plays a critical role in understanding the nature of transactions, explaining how businesses decide between insourcing and outsourcing, and assessing the impact of different types of costs on business decisions (Kang et al., 2009; Tomašević et al., 2023). TCE posits that there are costs associated with market transactions, and businesses can choose between performing activities internally or outsourcing them based on a comparison of costs. The goal of TCE is to guide businesses in conducting transactions at the lowest cost, with a strong focus on cost reduction. TCE has demonstrated its importance in traditional "brick-and-mortar" transactions and remains relevant in modern contexts, including digital transactions (Nagle et al., 2020).

TCE has broad applications across fields such as management, strategy, political science, and accounting. It has become a standard framework for analyzing why SMEs might outsource accounting functions to external service providers. For example, SMEs may hire external accountants to reduce costs, with TCE explaining how transaction costs are managed in this context (Carey et al., 2006; Tomašević et al., 2023). TCE also illustrates the economic efficiencies gained when professional accountants provide services to firms (Carey et al., 2006; Tomašević et al., 2023).

The primary goal of outsourcing accounting is to maximize cost savings while enhancing the quality of accounting information. When outsourcing costs are lower than those of maintaining in-house staff, outsourcing becomes a logical option. This trend reflects an increasing specialization in business practices as firms seek to balance transaction and production costs when deciding to internalize or externalize functions (Jiang et al., 2007).

2.1.2. RBV

Barney (1991) was a key figure in the development of the RBV, which has been widely applied across various fields and industries, including accounting outsourcing. According to Barney (1991), a company's resources encompass all assets and capabilities that could provide a competitive advantage. RBV suggests that implementing value-creating strategies that current and potential competitors cannot easily replicate is essential for firm profitability. To achieve this, businesses need resources that meet the VRIN criteria: Valuable (V), Rare (R), Inimitable (I), and Non-substitutable (N). In outsourcing, RBV implies that if a company can improve its efficiency by outsourcing certain functions to specialists, it can focus more on its core business activities.

In developing countries, SMEs often face challenges like limited human resources, lack of transparency, and inadequate knowledge capital. Many studies use RBV to examine these shortages in SMEs (Gooderham, 2004; Kamyabi and Devi, 2011; Daou et al., 2013; Adekoya and Ojediran, 2024). In competitive markets, small businesses must actively seek ways to reduce costs and create growth opportunities, often by leveraging external resources.

The motivations for outsourcing can be explained through both RBV and TCE (McIvor, 2009). RBV helps organizations assess how well they can connect external resources to their inherent competitive advantages and improve performance (McIvor, 2009), while TCE offers insights into whether to outsource a particular function (Stratman, 2008). Everaert et al. (2010) noted that outsourcing can reduce costs and enhance performance by eliminating the need to invest in equipment or hire additional staff (Jiang et al., 2007).

Both RBV and TCE offer valuable frameworks for understanding outsourcing decisions (Gottschalk and Solli-Sæther, 2006; McIvor, 2009; Kamyabi and Devi, 2011). RBV allows firms to assess their resources and connect external assets to improve competitive advantage and operational performance (McIvor, 2009).

It links outsourcing with enhanced performance in SMEs, particularly by showing how professional accountants provide crucial support to businesses (Lowe and Talbot, 2000).

Meanwhile, TCE helps determine whether it is more efficient to outsource or retain certain functions internally (Stratman, 2008). TCE has proven valuable in explaining how professional accountants help SMEs lower transaction costs and boost performance (Carey et al., 2006). Research on TCE often highlights asset specificity, frequency, and trust as critical factors affecting outsourcing intensity (Greenberg et al., 2008). Other factors, like competitive pressure and technical competence rooted in RBV, are also explored when SMEs aim to maximize competitive advantages by combining internal and external resources (Blackburn et al., 2010).

2.2. Literature reviews on factors affecting accounting outsourcing in Vietnam

In today's knowledge-driven economy, companies focus on their core competencies and often outsource accounting functions to professional service providers. Financial and accounting service firms with expertise in management and extensive experience in hiring and training accountants can help clients significantly reduce costs.

SMEs, in particular, face challenges in finding qualified personnel for accounting roles due to financial and human resource constraints (Everaert et al., 2010; Kamyabi and Devi, 2011). Their limited budgets make it difficult to attract high-quality accountants, and many accountants view SMEs as stepping stones, often leaving for larger or more stable firms once they gain sufficient experience.

As prior research shows (Table 1), the need for outsourced accounting is widespread among SMEs in both developed and developing countries. Jayabalan et al. (2009) found that nearly all small businesses struggle with accounting tasks. SMEs are highly motivated to outsource accounting (Everaert et al., 2010), as accessing professional providers allows them to concentrate on their competitive strengths and benefit from best practices in accounting (Jayabalan et al., 2009).

In Norway, Gooderham et al. (2004) found that nearly all SMEs use accounting services for financial advice. Similarly, in the UK, Scott and Irwin (2009) noted that most SMEs outsource accounting functions, with financial statement preparation, tax, VAT, and accounting system management among the most common outsourced activities (Sian and Roberts, 2009). Globally, SMEs tend to prefer outsourcing professional accounting services, as seen in countries like Malaysia, Belgium, the UK, Canada, and Australia (Jayabalan et al., 2009; Everaert et al., 2010; Blackburn et al., 2010; Carey et al., 2006). Conversely, Rogosic (2019) reported that while most SMEs outsource accounting, this can lead to a lack of essential accounting information in daily business operations, recommending that companies consider internalizing their accounting systems despite the added costs and complexity. Similarly, Dekker et al. (2018) and Bagieńska (2016) argued that outsourcing accounting can be costly, limit access to records, and reduce financial analysis capabilities.

Table 1: Outsourcing accounting services in SMEs worldwide

Authors	Country	Results
Gooderham et al. (2004)	Norway	Most all of SMEs use accounting services as financial advisors for them
Sian and Roberts (2009)	UK	57.2% of SMEs outsource accounting functions: Financial statements (51.1%), tax and VAT tax (30.8%), accounting system (18.1%)
Scott and Irwin (2009)	UK	A majority of SMEs outsource accounting functions
Berry et al. (2006)	UK	85% of SMEs use advisory accounting services
Jayabalan et al. (2009)	Malaysia	A majority of SMEs outsource accounting functions: bookkeeping, account receivables/payables management, financial statements, managerial reports, tax reports
Everaert et al. (2010)	Belgium	2/3 of SMEs use accounting services
Blackburn et al. (2010)	UK and Canada	Use accounting services for advisory about rules and principles more than other functions
Carey et al. (2006)	Australia	67% of SMEs outsource accounting functions
Tomašević et al. (2023)	Montenegro	75.4% of companies enter outsourcing arrangements with bookkeeping agencies or with external accountants.
Adekoya and Ojediran (2024)	Nigeria	The study found that there is a significant effect of outsourcing bookkeeping services on the financial reporting quality of SME

The TCE model has been recognized as valuable in explaining the benefits of outsourcing to professional accountants, as it helps SMEs reduce transaction costs and enhance performance. Researchers have identified factors like asset specificity, transaction frequency, and trust as key influences on outsourcing decisions (Greenberg et al., 2008). Other elements, such as competitive pressure and technical competence, based on RBV, are also important in evaluating outsourcing, as SMEs aim to maximize competitive advantages by combining internal and external resources (Blackburn et al., 2010).

Trust in service providers is crucial to maintaining commitment between businesses and accounting service providers. According to TCE, trust enhances customer-provider relationships by reducing fears of opportunistic behavior, thereby lowering transaction costs (Verwaal et al., 2008). Trust is an essential factor in outsourcing accounting decisions, as emphasized by Verwaal et al. (2008), Greenberg et al. (2008), and Everaert et al. (2010).

In Vietnam, the development of organizations like the Vietnam Federation of Accountants and Auditors (VAA) and the Vietnam Association of Certified Public Accountants (VACPA) in 2012 reflects a

growing market for audit and accounting services. Accounting outsourcing has become a significant topic, with the Việt Nam Accounting Association (VAA) and other accounting service companies emerging. However, research on accounting outsourcing in Vietnam is limited, with only a few brief essays discussing professional accounting services, mainly through advertisements or experience summaries. This study aims to address this gap.

In conclusion, SMEs in emerging and developing economies, including Vietnam, face numerous challenges, such as limited human resources, inadequate regulatory frameworks, and insufficient knowledge capital (McIvor, 2009; Daou et al., 2013). Under growing competitive pressure, small businesses must actively seek ways to reduce costs and create new opportunities by effectively utilizing external resources.

3. Hypothesis construction and methodology

3.1. Proposed hypothesis

In this research, the proposed model is constructed based on the foundational theories of TCE and RBV, along with a review of relevant literature from prior studies. The research model and formulated hypotheses are presented in Fig. 1.

3.1.1. Assets specificity

Lamminmaki (2005) and McIvor (2009) identified two main types of asset specificity: physical assets (such as machinery and equipment) and human assets (such as specialized knowledge and skills). In this study, asset specificity refers to specialized knowledge, language, and skills related to the unique characteristics of an enterprise's accounting functions (Everaert et al., 2010; Tomašević et al., 2023). From a TCE perspective, when asset specificity is high, accounting functions are likely to be managed internally, as they require specialized knowledge and are challenging to outsource. Conversely, accounting activities with lower asset specificity can be outsourced to external service providers (Everaert et al., 2010; Jiang et al., 2007; Espino-Rodríguez and Rodríguez-Díaz, 2008; Tomašević et al., 2023). Therefore, Hypothesis H1 is proposed:

H1: The level of the asset specificity of accounting functions has a negative relationship with outsourcing intensity.

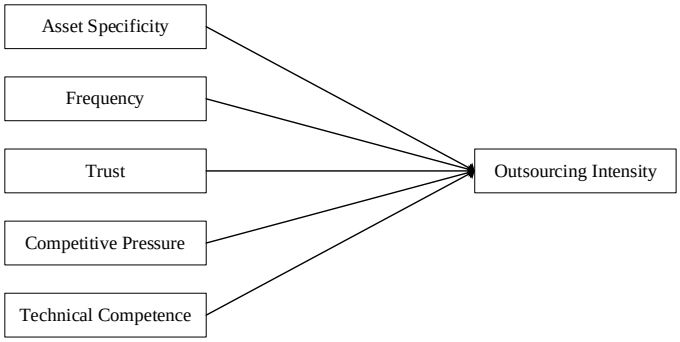

Fig. 1: Research framework

3.1.2. Frequency

Frequency shows how often transactions happen in the business. It is stated that the frequency of accounting functions has an effect on outsourcing intensity (Everaert et al., 2010; Lamminmaki, 2007; Spekle et al., 2007). From the TCE viewpoint, it is indicated that the higher the frequency of transactions, the more likely SMEs develop such functions internally (Reeves et al., 2010; Everaert et al., 2010; Nicholson et al., 2006). This leads to the following hypothesis:

H2: The frequency of accounting functions has a negative impact on the intensity of accounting outsourcing.

3.1.3. Trust

Trust in service providers should be an indication of commitment between business and accounting service providers. Based on transaction cost economics (TCE), trust will make the relationship between customers and providers become more efficient and reduce the fear of opportunism, thus, transaction costs can be reduced (Verwaal et al., 2008). When making outsourcing accounting decisions, TCE identifies trust as one important factor (Greenberg et al., 2008). As a result, the following hypothesis is proposed:

H3: There exists a positive relationship between the trust of the SME owner/manager in the professional accountant and outsourcing intensity.

3.1.4. Competitive pressure

Due to limitations in human and financial resources, SMEs face challenges in developing and retaining skilled labor, especially in the context of rising competition (Gooderham et al., 2004). Outsourcing certain accounting functions can enable small businesses to concentrate on their core activities, enhance performance, and become more

flexible and adaptable (Kim et al., 2007; Espino-Rodríguez et al., 2005). According to the RBV, SMEs are encouraged to leverage external resources when confronted with competitive pressures (Gooderham et al., 2004):

H4: The competitive pressures faced by the firm have a positive effect on outsourcing intensity.

3.1.5. Technical competence

When a business chooses to outsource a function, particularly in finance and accounting, it considers the "technical competence" of professional accountants. This includes their qualifications, experience, specialized skills, industry expertise, and technological proficiency (Blackburn et al., 2010; Carey et al., 2006; Everaert et al., 2010). Some researchers have suggested that a firm's perception of accountants' technical competence may influence its decision to outsource accounting functions (Carey et al., 2006). Therefore, Hypothesis H5 is proposed:

H5: The level of perceptions of accounting service providers' technical competence, the higher the accounting function outsourcing intensity.

3.2. Research methodology

In this study, the authors used descriptive and exploratory research methods to examine and assess the current state of accounting outsourcing in Vietnam, aiming to address the research objectives effectively. They adapted questionnaires from previous studies to measure variables and scales, developing a detailed and specific questionnaire for this research. Table 2 provides detailed information about each measure, including scale type and sources.

3.2.1. Written questionnaire

Referred to the questionnaires of previous studies in measuring variables and scales, thereby developing detailed and specific questionnaires for research (Everaert et al., 2010; Espino-Rodríguez and Rodríguez-Díaz, 2008; Lamminmaki, 2007; Gooderham et al., 2004).

3.2.2. Sampling and data collection

After completing the questionnaire, a pilot test was conducted in which several experts and respondents reviewed the questionnaire to ensure clarity, coherence, and logical flow of the measures. The authors distributed 500 questionnaires to small and medium enterprises across various locations in the country, receiving 250 responses. After removing incomplete data, 236 questionnaires were analyzed. The data were entered into SPSS statistical software for analysis.

3.2.3. Regression model

In addition, to verify what factors affect the level of outsourcing accounting functions, the author built the regression model:

$$OS.Intensity = \alpha_0 + \alpha_1 AS + \alpha_2 FREQ + \alpha_3 TRUST + \alpha_4 COMPETE + \alpha_5 TECH + \varepsilon \quad (1)$$

where, OS.Intensity represents Outsourcing intensity; AS is Asset specificity; FREQ is Frequency, TRUST is Trust; COMPETE denotes Competitive Pressure; TECH represents Technical competence; ε is the error term.

4. Research results

4.1. Descriptive statistics

Table 3 shows the demographic details of the research sample. From Table 3, it can be seen that the majority of companies in the research sample have an average age of 5 to 10 years, operating mainly in the field of merchandising and services. 62% of these companies have less than 20 employees. This is also a prominent feature of the SME system in Vietnam.

The descriptive statistical results on outsourcing accounting functions are shown in Table 4. According to Table 3, the most frequent occurrence of most of the functions (Bookkeeping works, Payroll accounting, Budgeting/forecasting, product costing, Design/review internal control systems) is above 50 and at the medium level of outsourcing. Among the functions, the most outsourced functions are the preparation of financial statements and procedures related to payroll and social insurance systems.

4.2. Reliability: Cronbach's Alpha

As shown in Table 5, the reliability test results for each item and the overall constructs are clearly presented. The Cronbach's alpha values are all above 0.7, indicating acceptable reliability. Items AS and FRE were excluded as they did not meet the acceptable threshold. Similarly, in Table 6, certain items that did not meet the required level were also excluded.

Table 2: Measurement and sources

No.	Variable	Coding	Measurement and source	Scale type
1	Asset specificity	AS	Everaert et al. (2010), Espino-Rodríguez and Rodríguez-Díaz (2008)	7-point Likert
2	Frequency	FREQ	Everaert et al. (2010), Lamminmaki (2007),	7-point Likert
3	Trust	TRUST	Everaert et al. (2010)	7-point Likert
4	Competitive pressure	COMPETE	Lamminmaki (2007, 2008)	7-point Likert
5	Technical competence	TECH	Carey et al. (2006), Gooderhan et al. (2004)	7-point Likert
6	Outsourcing intensity	OS.INTENSITY	Espino-Rodríguez and Rodríguez-Díaz (2008), Lamminmaki (2007, 2008)	7-point Likert

Table 3: Demographic characteristics

Category	Number	Ratio (%)
Gender		
Male	62	26
Female	174	74
Company age		
1 to 5 years	77	33
5 to 10 years	93	39
10 to 15 years	58	25
over 15 years	8	3
Working experience		
Less than 3 years	67	28
3-6 years	89	38
6-10 years	50	21
over 10 years	30	13
Company size		
less than 20 members	146	62
20-50 members	41	17
50-100 members	32	14
More than 100 members	17	7
Field of expertise		
Accounting, auditing, and finance	125	53
Technique	80	34
Others	31	13
Company fields		
Merchandising	98	42
Services	71	30
IT	28	12
Manufacturing	27	11
Others	12	5

Table 4: Descriptive statistics about outsourcing accounting functions

Functions outsourced		Frequency						
(Likert scale)		1	2	3	4	5	6	7
Bookkeeping works	236	3	16	32	78	65	29	13
Preparation of financial statements	236	5	24	18	38	54	39	58
Payroll accounting	236	12	48	29	54	48	28	17
Budgeting/forecasting	236	6	23	40	62	45	46	14
Customer profitability analysis	236	18	22	36	55	53	32	20
Product costing	236	56	47	45	26	26	24	12
Financial planning	236	10	33	36	58	43	41	15
Financial management services	236	14	21	35	56	52	32	26
Design/review internal control systems	236	12	16	21	78	39	47	23

After eliminations, all Cronbach's alpha values range from 0.721 to 0.955, exceeding the recommended level of 0.7, indicating strong reliability. In the next step, following the reliability tests, Exploratory Factor Analysis (EFA) was conducted, with results displayed in Table 7 and Table 8.

4.3. Factor analysis

Table 7 shows that the KMO coefficient reaches 0.752>0.5, and the variables do not correlate with each other (Sig=0.000<0.05), which satisfies the conditions of factor analysis. Initially, the questionnaire contained 29 questions. However, items TRUST 3, COMPETE 1, COMPETE 2, and FREQ 9 were removed due to loading values below 0.5. The resulting factor loading matrix is shown in Table 8. A total of 5 factors with 25 items were identified in this study. Factor Analysis was performed, followed by reporting the results of the Extraction of Component Factors in Table 8. All Eigenvalues exceed 1, and the total variance explained is over 60%, which is considered acceptable.

Factor analysis was conducted using VARIMAX rotation, as this method maximizes the variance of the factor loadings, making associations between items and factors clearer. Loadings greater than 0.5 indicate clear positive or negative associations with the factors. Additionally, factor loadings for the dependent variable are presented in Table 9.

4.4. Multi regression

Multiple regression analysis was conducted to examine the relationship between independent (predictor) variables and the dependent (criterion) variable. In this study, OS.INTENSITY is the dependent variable, while AS.new, FREQ.new, TRUST.new, COMPETE.new, and TECH.new are the independent variables. To test the hypotheses, a significance level of 10% was applied, meaning that a p-value below 0.1 indicates a significant effect on the dependent variable. After running the regression model in SPSS, the results, displayed in Tables 10 and 11, showed F = 21.200 with p = 0.000 < 0.1, confirming that the model is valid.

All Variance Inflation Factor (VIF) values are slightly above 1, indicating that multicollinearity is not a concern in the dataset. Table 11 shows that four variables—AS.new, FREQ.new, TRUST.new, and TECH.new—are significant predictors of OS.INTENSITY. The regression model between these variables is presented in Eq. 2:

$$OS.Intensity = -0.250 + 0.205\ TECH + 0.178\ ASSET + .333\ TRUST + 0.310\ FREQ + \varepsilon \quad (2)$$

Table 5: Cronbach's Alpha-reliability scale

Variables	Scale mean if item deleted	Scale variance if item deleted	Corrected item-total correlation	Cronbach's Alpha if item deleted
Asset specificity: Alpha = 0.721				
AS 1	20.16	13.089	.511	.661
AS 2	19.89	12.784	.489	.670
AS 3	19.71	13.757	.458	.682
AS 4	19.69	13.151	.465	.680
AS 5	20.34	13.580	.475	.676
Frequency: Alpha = 0.833				
FREQ 1	34.76	63.099	.484	.822
FREQ 2	34.77	61.313	.511	.819
FREQ 3	34.92	58.922	.596	.809
FREQ 4	34.78	59.111	.655	.803
FREQ 5	34.74	58.456	.612	.807
FREQ 6	35.05	57.764	.670	.800
FREQ 7	34.78	59.583	.589	.810
FREQ 8	34.74	59.563	.566	.812
FREQ 9	34.37	70.762	.157	.851
Trust: Alpha = 0.713				
TRUST 1	14.69	7.297	.765	.481
TRUST 2	14.72	7.120	.765	.474
TRUST 3	14.39	13.006	-.076	.948
TRUST 4	14.67	7.141	.794	.460
Competitive pressure: Alpha = 0.798				
COMPETE 1	19.33	23.099	.293	.842
COMPETE 2	19.47	23.254	.272	.849
COMPETE 3	19.32	17.282	.807	.684
COMPETE 4	19.28	17.019	.797	.685
COMPETE 5	19.31	17.016	.817	.679
Technical competence: Alpha = 0.778				
TECH 1	25.39	19.653	.549	.738
TECH 2	25.52	19.527	.551	.738
TECH 3	25.46	19.219	.518	.747
TECH 4	25.50	19.711	.593	.726
TECH 5	25.64	21.491	.454	.761
TECH 6	25.57	20.510	.481	.755
OS.Intensity: Alpha = 0.955				
OS.INTENSITY 1	35.56	97.634	.819	.950
OS.INTENSITY 2	35.57	99.080	.784	.952
OS.INTENSITY 3	35.58	96.176	.850	.949
OS.INTENSITY 4	35.43	96.774	.806	.951
OS.INTENSITY 5	35.56	97.634	.819	.950
OS.INTENSITY 6	35.57	97.429	.828	.950
OS.INTENSITY 7	35.45	97.066	.822	.950
OS.INTENSITY 8	35.57	96.340	.828	.950
OS.INTENSITY 9	35.49	96.991	.809	.951

Table 6: Scale reliabilities

Scale	Number of items	Reliabilities
Asset specificity	5	0.721
Frequency (eliminate Item 9)	8	0.851
Trust (eliminate Item3)	3	0.948
Competitive pressure (eliminate Item 1,2)	3	0.9832
Technique competence	6	0.778
Outsourcing intensity	9	0.955

Table 7: KMO and Bartlett's test

Kaiser – Meyer – Olkin measure of sampling adequacy		.752
Test Bartlett	Approx. Chi-Square	3621.628
	df	231
	Sig.	.000

4.5. Discussions

Among the five variables influencing outsourcing decisions, four—Asset Specialization (AS), Frequency (FREQ), Trust (TRUST), and Technical Competence (TECH)—are significant.

The variable "Asset Specificity" (AS) shows a positive relationship with outsourcing intensity, with a coefficient of 0.156 and a p-value < 0.1. This suggests that higher asset specificity increases the likelihood of outsourcing accounting functions in Vietnamese SMEs. Hypothesis H1 initially anticipated a negative relationship between asset specificity and outsourcing intensity, as TCE and RBV theories suggest that companies with high asset specificity are more likely to internalize tasks to maintain specialized knowledge within the company (Poppo and Zenger, 1998; Lamminmaki, 2007). As assets become more specialized, processes, tasks, and knowledge are more likely to be handled internally (Everaert et al., 2010; Jiang et al., 2007). However, due to limited capital, technology, and expertise in Vietnamese SMEs, asset specificity remains relatively low, leading to a greater reliance on outsourcing accounting services.

The "Frequency" (FREQ) variable also positively impacts outsourcing, with a coefficient of 0.301 and a p-value < 0.1. This implies that as the frequency of

accounting tasks increases, so does the likelihood of outsourcing. TCE theory generally associates high task frequency with a tendency to internalize functions for cost-saving reasons. Studies, including those by Widener and Selto (1999) and Reeves et al. (2010), support this inverse relationship, indicating that higher task frequency often results in decreased outsourcing. However, in the context of Vietnam's developing economy, this finding may only hold for large enterprises. Vietnamese SMEs, even with high task frequency, may still outsource due to the relative cost advantage over maintaining in-house accounting staff.

Table 8: Factor analysis

Rotated component matrix						Eigenvalue	Variance explained
Name of items	Loading						
FREQ 1	.564						
FREQ 2	.528						
FREQ 3	.842						
FREQ 5	.674						
FREQ 6	.866						
FREQ 8	.633					4.789	21.770
COMPETE 3		.936					
COMPETE 4		.935					
COMPETE 5		.943				4.056	40.206
TRUST 1			.915				
TRUST 2			.902				
TRUST 4			.939			2.077	49.646
TECH 1				.717			
TECH 2				.714			
TECH 3				.729			
TECH 4				.732			
TECH 5				.546			
TECH 6				.559		1.746	57.585
AS 1					.719		
AS 2					.735		
AS 3					.567		
AS 5					.663	1.466	64.248

Extraction method: Principal component analysis; Rotation method: Varimax with Kaiser normalization

Table 9: Factor analysis

Rotated component matrix			
Name of items	Loading	Eigenvalue	Variance explained
INTENSITY 1	.861	6.637	73.747
INTENSITY 2	.832		
INTENSITY 3	.885		
INTENSITY 4	.846		
INTENSITY 5	.861		
INTENSITY 6	.867		
INTENSITY 7	.858		
INTENSITY 8	.869		
INTENSITY 9	.848		

Table 10: Model summary for linear regression 1

Model	R square	Adjust R square	F-test	
			F	Sig.
1	.315	.301	21.200	.000

Predictors: (Constant), AS.new, FREQ.new, TRUST.new, COMPETE.new, TECH. new; Dependent variable: OS.INTENSITYnew

Table 11: Coefficients of linear regression model 1

Model		Unstandardized coefficient		Standardized coefficients	t	Sig.	VIF
		ß	Std. error	Beta			
1	Constant	-.250	.540		-.463	.644	
	TECH new	.205	.083	.145	2.458	.015	1.176
	ASSET new	.178	.082	.131	2.156	.032	1.241
	TRUST new	.333	.062	.326	5.409	.000	1.220
	COMPETE new	- .032	.052	-.038	-.611	.542	1.270
	FREQ new	.310	.070	.274	4.427	.000	1.290

Dependent variable: OS.INTENSITY new

"Trust" (TRUST) is positively related to outsourcing intensity, with a coefficient of 0.308 and a p-value < 0.1, supporting Hypothesis H3. This finding aligns with TCE theory, which suggests that high levels of trust between companies and service providers reduce fears of opportunism and transaction costs, encouraging outsourcing (Rousseau et al., 1998; Verwaal et al., 2008). Prior studies, including those by Tomašević et al. (2023), also confirm trust's importance in outsourcing decisions. As Barney (1991) noted, trust reduces the need for formal regulatory mechanisms, promoting more extensive use of outsourced services.

"Technical Competence" (TECH) also positively impacts outsourcing, with a coefficient of 0.213 and a p-value < 0.1, supporting Hypothesis H5. This indicates that when managers perceive a lack of in-house technical expertise, they are more likely to

outsource accounting functions. This finding aligns with human resource-based management theory, which highlights that SMEs often face limitations in mechanisms, scale, experience, and workforce quality (McIvor, 2009; Daou et al., 2013). TCE theory similarly emphasizes that SMEs facing competitive pressures should leverage external resources to reduce costs and create new opportunities instead of internalizing functions.

In Vietnam's expanding economy, SMEs face numerous challenges, particularly a shortage of intellectual capital (McIvor, 2009; Daou et al., 2013). These businesses, lacking extensive resources but possessing core competencies, are especially motivated to seek external support.

The "Competitive Pressure" (COMPETE) variable shows a negative relationship with outsourcing (coefficient = -0.048) but is not statistically significant (p-value > 0.05), leading to the rejection of Hypothesis H4.

5. Conclusions and recommendations

This study integrates TCE and Resource-Based View (RBV) theories to develop a factor analysis model that explores factors influencing the decision of Vietnamese SMEs to outsource accounting functions. The regression model results indicate a positive and significant relationship between the dependent variable, outsourcing intensity (OS.Intensity), and four independent variables: asset specificity (AS), frequency of accounting tasks (FREQ), trust (TRUST), and technical competence (TECH). Hypotheses H1, H2, H3, and H5 are supported, while H4 is rejected.

According to these findings, higher levels of asset specificity, accounting task frequency, trust in accounting services, and resource constraints increase the likelihood that a company will outsource its accounting function. These results align with previous studies, affirming that accounting outsourcing allows SMEs to focus on their competitive strengths (Jayabalan et al., 2009). The findings are practically significant, offering valuable insights for accounting service providers on how to enhance their services to better meet business needs. Additionally, SME managers can use these results to identify organizational gaps and understand when and why they should outsource accounting services to increase efficiency, especially under resource constraints. The study also suggests that government and regulatory bodies should promote outsourcing by building trust in outsourced accounting services, recognizing the cost-saving benefits, and supporting businesses' focus on core competencies.

Future research can address sample size and methodology limitations by incorporating additional factors influencing outsourcing decisions, such as environmental uncertainties, managerial and psychological factors, and their impact on outsourcing. Furthermore, examining the relationship between outsourcing intensity and SME performance would be beneficial. Future studies could also use qualitative methods, such as in-depth interviews or case studies, to uncover new variables that impact SMEs' decisions to outsource accounting functions.

Compliance with ethical standards

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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