

Utilization of commitments in the New-generation FTAs:

Empirical evidence from Vietnam

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ABSTRACT

The escalating number of FTAs signed by Vietnam has proven the country's proactiveness in global economic integration. New generation FTAs contain comprehensive schemes beyond tariff reduction, bringing various opportunities for Vietnamese firms in the global market. Understanding factors underlying firms' adoption of FTA provisions is crucial for policy leverage. A survey of 221 firms in Vietnam suggests that the perceived usefulness of FTA and organizational learning are key determinants of firms' ability to utilize FTA commitments. Government supports and leaders' attitudes toward FTAs do not directly impact firms' ability to utilize them but channel effects via perceived usefulness and organizational learning. The findings have implications for businesses to create a positive learning culture and imply the government's actions to improve perceptions of businesses about the usefulness of FTAs.

KEYWORDS: Implementation, New generation FTA, Utilization, Vietnam, WTO

Introduction

Vietnam's process of international economic integration has been vigorously accelerated in various forms with a roadmap from low to high levels toward adopting international principles and standards of the global economy and market. Vietnam has gradually opened its economy and market to regional and international economies and markets by establishing bilateral relations in trade, investment, and finance and participating in multilateral institutions in these fields. Vietnam has become a member of all major international organizations and recently has gotten involved in new-generation FTAs. Actively participating in new-generation FTAs is not only a step forward in international economic integration but also a sign of determination to integrate deeply into the global economy as well as the willingness to reform Vietnam's economy. The process of implementing new-generation FTAs is a valuable opportunity for Vietnam to re-evaluate the problems faced when enforcing traditional FTAs and find overall solutions in the future. New-generation FTAs not only include activities to fulfill specific commitments but also programs to enhance the competitiveness of businesses and specific sectors; solutions to promote innovative start-ups; policies to support small and medium enterprises (SMEs); actions to improve the business investment environment; and other measures to solve economic bottlenecks such as human resources, infrastructure, etc. Therefore, enacting a new-generation FTA in the current context has a much more significant impact than the direct impact from specific commitments on tariffs or rules of traditional FTAs.

In addition to the opportunity to expand and diversify markets and deeply participate in the global supply chain and production network, Vietnamese enterprises also face an increasingly uncertain and unpredictable world market period with more sophisticated commercial buildings set up everywhere. In this context, the improvement of adaptive capacity for Vietnamese enterprises in order to promote internal resources,

improve their position in the global value chain, exploit integration opportunities, and take advantage of long-term benefits, actively and flexibly utilize WTO and new-generation FTAs, thereby aiming for sustainable development is very important.

Regarding the importance of FTAs in Vietnam's export, understanding how firms can utilize such commitments are receiving growing policy interest. As firms are primary beneficiaries of FTAs, their abilities to utilize such commitments demonstrate the success of negotiation. Disentangling determinants of FTA utilization is particularly important as it is the leverage point of policy. Various studies examine how factors such as firm size, experience can impact firms' ability to use FTAs. However, a lack of studies focuses on other factors such as learning culture, leaders' attitudes, etc. Our study addresses this gap by employing data from a firm-level survey in 2022 to understand key factors contributing to FTA utilization of various firms in Vietnam.

Our paper is structured as follows. The first section provides the context of the study. The second section reviews extensively related literature, pointing out their gap and then proposing testable hypotheses. Next, we justify our methodology in section 3, and the analysis is presented in section 4. Section 5 concludes with key findings and implications for businesses and policymakers.

Literature review and research hypotheses

Studies on FTA utilization

FTA utilization is defined as the ability to utilize FTA commitments by obtaining certificates of origin and exploiting a partner's market information. It belongs to the *operational performance of a firm*. Utilizing FTA schemes grants market access, improves sales, and possibly introduces technological advances for businesses, especially those from developing countries. A large strand of literature examines how FTA

agreements can be associated with a firms' operation. A firm-level survey is the primary method to collect data to evaluate firms' benefits from internationalization.

A prior study by Hirastuka et al. (2009) surveyed firms in Japanese showed that firms have a modest understanding of FTA provisions. Preferential treatment to the ASEAN market is more popular as Japanese firms have already set up businesses in such countries. However, overlapping rules of origin (ROOs) somehow cause confusion to businesses to exploit such commitments. Takahashi & Urat (2010) examined the utilization rate of Japanese firms from FTAs signed with Mexico, Malaysia, and Chile, finding that the utilization rate of preferential treatment from Japan – Mexico FTA and Japan – Malaysia FTA is quite low. Possible disturbance of FTA utilization is the difficulty in obtaining certificates of origin, lack of knowledge of FTAs, and small difference between preferential rate and MFN rate. However, new-generation FTAs have considerable tariff recession for many strategic product categories. Besides, new – generation FTAs include more comprehensive issues, especially technological transferring, and labor conditions, which means better opportunities for businesses to grow. Similarly, Kawai & Wignaraja (2010) found a higher rate of FTA utilization in North Asian countries of Peoples Republic of China (PRC), Korea and a lower rate of utilization in South-East Asia. It is possibly explained by the lack of information and administrative delay when issuing ROOs. Zhang & Shen (2011) reveals that small and medium enterprises (SMEs) within the ASEAN region exhibit a notably low rate of utilization. The study attributes this phenomenon to a range of obstacles, including issues like limited operational efficiency, intricate regulatory policies, and challenges related to information to FTAs significantly hinder the utilization of preferential treatments. Meanwhile, Itaravitak et al. (2011) suggested that some FTA preferential rate is not attractive enough to encourage businesses to adopt them, compared to the fixed costs of ROOs. Mel et al. (2011) pointed out several impediments to the ability to utilize FTA

commitments in Sri Lanka, finding the dominant use of FTA by large firms. The authors identified that the cost of obtaining a certificate of origin makes FTA less attractive to many small businesses. What's more, a lack of information and institutional support also impeded SMEs from taking advantage of such preferential commitments. Some traders suggested in the interview round that financial support from the government would be desirable to meet the strict requirements of ROOs.

A study by Arudchelvan & Wignaraja (2015) indicated that the utilization of Malaysian firms regarding FTA is determined by factors such as exposure to international trade and knowledge about FTAs. When firms are more informed of the provisions and benefits of FTAs, they are more knowledgeable about their usefulness, which is then more likely to encourage them to utilize them. International exposure, such as past experience, is antecedent of future export strategy (Filipe Lages and Montgomery 2004). Kohpaiboon and Jongwanich (2019) examined FTA utilization in Thailand's export, finding that they are typically used by large firms due to the difficulty to comply ROOs and high administrative costs, which create burdens for many SMEs. Kasteng et al. (2022) investigated how Korean businesses adopt preferential terms from EU – South Korea FTA. The result suggests that various facts such as transaction volume, firm size, and preference margin. Nasution & Verico (2019) studied the utilization of free trade agreement in Indonesia. In-depth interviews with 64 firms revealed that around 44% of them are currently adopted FTA provisions. FTA commitments are more popular with large firms as they are more able to get access to information. Lack of information and understanding of commitments, as well as limited government support are identified as three obstacles for businesses to reap benefits from such preferential treatment. Kang & Nam (2022) analyzed how government policies in Korea encouraged the use of FTA provisions. With the proliferation of FTAs signed by South Korea with key trading partners, utilizing FTAs receives lots of policy attentions. Government support by

proving information, making procedures of obtaining certificate of origins more transparent, etc. are found to contribute to encourage the attractiveness of FTA provisions. Authors suggest that policymakers need to provide more support beyond providing information, such as collaboration with related agencies and financial support in some cases.

Overall, it is evident from firm-level study of FTA utilization that lack of information, high costs of obtaining certificate of origin, low difference between preferential rate and MFN rate are key impediments of businesses in utilizing FTA commitments. Surveying businesses that have already adopted such commitments suggests that they highly appreciated the usefulness of FTAs (Kawai and Wignaraja 2010). Government support is found to be critical to improve the utilization of FTA commitments. Besides, firms using FTA commitments are mostly large firms with international experience. Hence, we propose three following hypotheses:

H1: The perceived usefulness of FTAs has a positive effect on enterprises' FTA utilization.

H2: Government support has a positive effect on enterprises' FTA utilization.

H3: FTA utilization is positively correlated with international exposure.

Organizational characteristics and internationalization

While dominant literature focuses on quantitatively measurable aspects of firms on FTA utilization, there are a handful of studies embodying impacts of other organizational characteristics, such as leader's behaviour, learning culture of businesses. According to resource-based view, a firms' competitive advantage stems from its ability to develop, acquire, and develop valuable, rare but non-substitutable resources and capabilities. It means that internal strengths and resources are crucial determinants of its success and ability to outperform competitors. The resource-based view suggests that firms possessing unique resources are more likely to be successful in foreign markets. Putting

into the context of current states of economic integration, the internationalization process involves the exploitation of preferential treatments in foreign markets, including FTA provisions.

Various studies examine how a leader's characteristics can impact the internationalization process of firms. Specific knowledge, preferences, and attitudes of leaders are reflected in firm strategic choice. The key role of manager's attitude is featured in the study by Sousa et al. (2010), as positive attitude of manager toward strategic decisions in foreign market will eventually associated with better export performance. Hsu et al. (2013) surveyed 187 Taiwanese SMEs, finding that international experience, educational level, and age are moderators of SME performance in the international market. Ilhan Nas & Kalaycioglu (2016) studied 221 firms in Turkey to establish the linkage between board characteristics and export competitiveness, suggesting that different board composition can result in different export composition over years. Lee & Seo (2017) investigated CEO characteristics link to export performance of SMEs in Korean, showing that CEO's positive attitude and age can be reflected in organizational culture, which then stipulate the export performance. Thus, the following hypothesis is proposed to test:

H4: Positive leader attitudes toward FTAs increase the ability to utilize FTA commitments.

A burgeoning literature reveals that organizational learning plays a vital role in the internationalization process of firms. Due to the complexity of FTA provisions, utilizing FTA commitments can be viewed as a learning processes. C. Hsu & Pereira (2008) surveyed on 110 American MNEs, revealing the moderating role of organizational learning as a moderator of internationalization process and organizational learning. Organizational learning is imperative for globalization strategy as it enables businesses

quickly adapt and expand (L. Zhong, Collins, and Egmon 2004). Hayakawa et al. (2014) proposed that the expenses related to adhering to ROOs decline as exporting firms amass experience and pertinent insights. Consequently, the probability of engaging with FTA arrangements is directly linked to the acquisition of knowledge about FTAs (Wignaraja 2014). The performance of emerging market companies is enhanced by the accumulation of international experience gained through collaboration with partners from more developed markets (W. Zhong, Peng, and Liu 2013). In the view of these arguments, we propose the following hypothesis to test:

H5: Better organizational learning can improve the ability to utilize FTA's commitment.

While five exploratory variables can determine the ability to use FTA's commitment, we are interested in the mediation effect of perceived usefulness, awareness of barriers and organizational learning. From the interview and literature, we realize that government support does have an impact on firms' behavior by changing firms' perception and understanding of FTA commitments, as well as their knowledge about barriers toward FTA commitments. In fact, government support can harness the usefulness perception of businesses about the FTAs. Furthermore, firms with more experience in the international market can be more beneficial from government support, amplifying the ability to use FTA commitments. Besides, better organizational learning can translate government support more quickly to grasp preferential treatment in the global market. The following testable hypotheses are proposed as follows.

H6a: Perceived usefulness mediates the effects of government support on FTA utilization.

H6b: International exposure mediates the effects of government support on FTA utilization.

H6c: Organizational learning mediates the effects of government support on FTA utilization.

Regarding the leaders' attitudes about FTA commitments, preferences of leader toward FTA can be reflected in the perceived usefulness, organizational learning culture and even the internationalization strategy of firms. Song & Moon (2019) studied factors determining the FTA utilization in Korea. Survey from 221 firms suggested that the positive relationship between CEO attitudes and FTA utilization, and this relationship is moderated by organizational learning and perceived usefulness. Hence, we aim to verify the following hypotheses.

H7a: *Perceived usefulness mediates the effects of leaders' attitudes about FTA commitments on FTA utilization.*

H7b: *International exposure mediates the effects of leader's attitudes about FTA commitments on FTA utilization.*

H7c: *Organizational learning mediates the effects of leader's attitudes about FTA commitments on FTA utilization.*

The research framework of the study is shown in **Figure 1**.

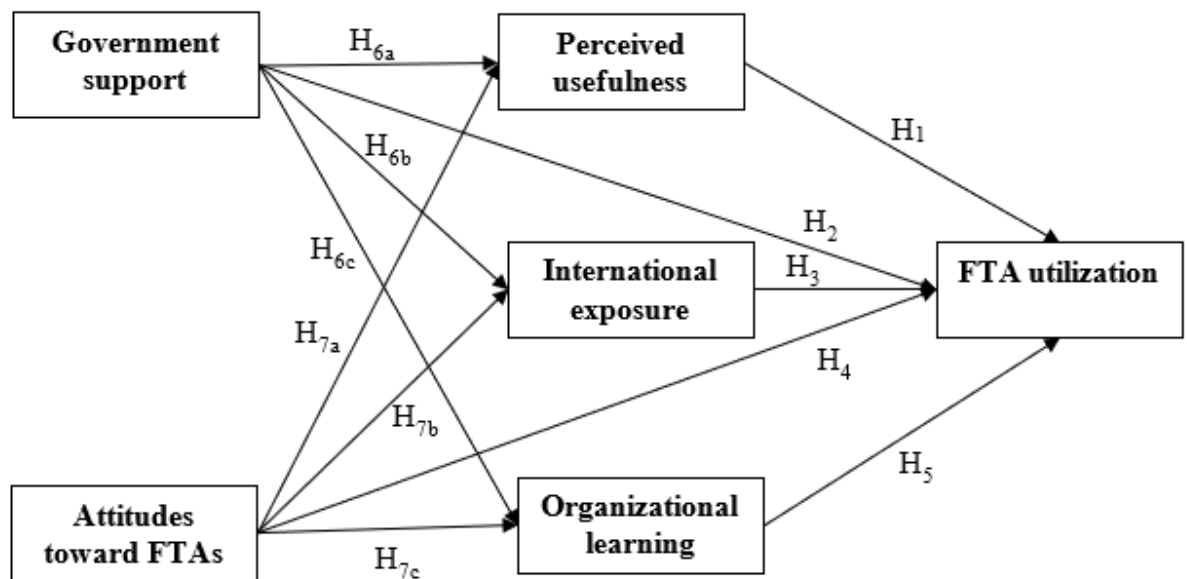


Figure 1. Theoretical framework.

Research method

Data collection

In our analysis of determinants of FTA utilization, we conduct a cross-sectional survey on enterprises operating in Hanoi, Ho Chi Minh City, Quang Ninh, Hai Phong as these cities are industrial and commercial hubs of Vietnam. The survey is under the WTO Chair Programme, funded by WTO to research institutes to partner in researching aspects related to international trade. The survey is sent in-person or via email from March 2022 to August 2022. All respondents are managers or directors of enterprise who understand the operational activities as well as the situation of utilizing FTA commitments in Vietnam. We receive 252 responses and filter out responses with missing data. The final dataset includes information from 221 enterprises.

Measurement

The constructs were developed based on existing literature and in-depth interview. We adopt the 5 – Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Table 1 summarizes the constructs and its items regarding its sources.

Table 1. Description of constructs.

Construct	Indicators	Symbol	The source
FTA Utilization	Our businesses are well aware of the incentives that FTAs will provide in their import and export markets.	UT1	In-depth interview
	Our import and export goods meet the conditions to enjoy preferential treatment from FTAs.	UT2	In-depth interview
	Our import and export goods often get preferential C/O.	UT3	In-depth interview
	Import and export volume of enterprises to/from Vietnam's FTA partner markets increased sharply.	UT4	In-depth interview
Perceived usefulness	Taking advantage of the preferential mechanism from FTA improves the	PU1	Song & Moon (2019), Davis

	price competitiveness by reducing import costs.		(1989), Baier & Bergstrand (2007)
	Take advantage of the preferential mechanism from the FTA boosts exports.	PU2	Song & Moon (2019), Davis (1989), Baier & Bergstrand (2007)
	Taking advantage of the preferential mechanism from the FTA improves foreign business environment.	PU3	Song & Moon (2019), Davis (1989)
	Taking advantage of preferential mechanisms from FTAs increases access to foreign markets.	PU4	Song & Moon (2019), Davis (1989)
International exposure	The proportion of the company's import and export to/from the FTA market is large.	IE1	Mathias Schaub (2012)
	The company has many foreign trade representatives.	IE2	Mathias Schaub (2012), Takashaki & Urata (2008)
	The company has many import and export contracts.	IE3	Mathias Schaub (2012)
	The company has experience in taking advantage of FTAs.	IE4	Recommended by the authors
Government support	The company regularly receives information from the government.	GS1	Cheong (2014)
	The company regularly receives financial support from the government.	GS2	Cheong (2014)
	The company regularly receives other support from the government.	GS3	Cheong (2014)
	Government encourages businesses to take advantage of FTAs.	GS4	Cheong (2014)
Attitude of company leaders	Company leaders encourage import and export to take advantage of preferential mechanisms from FTAs.	ATT1	Song & Moon (2019), Park (2015)
	Company leaders are interested in taking advantage of the preferential mechanism from the FTAs.	ATT2	Song & Moon (2019), Park (2015)
	Company leaders have a positive attitude towards taking advantage of preferential mechanisms from FTAs.	ATT3	Song & Moon (2019), Park (2015)

Organizational learning	The company always collects information and knowledge about taking advantage of preferential mechanisms from FTAs.	OL1	Song & Moon (2019), Wignaraja (2014), Huber (1991), Hayakawa et al (2014)
	The company always actively attends training courses or seminars related to taking advantage of preferential mechanisms from FTAs.	OL2	Song & Moon (2019)
	The company always asks for advice from experts on taking advantage of preferential mechanisms from FTAs.	OL3	Song & Moon (2019)
	Information and knowledge about taking advantage of preferential mechanisms from FTAs are always stored by the company.	OL4	Song & Moon (2019), Huber (1991)
	Within the company, information and knowledge about taking advantage of preferential mechanisms from FTAs is always widely shared.	OL5	Song & Moon (2019), Huber (1991)

Descriptive statistics and correlation analysis

The majority of enterprises in our survey are small enterprises, accounting for 76.02% compared to 6.79% of micro firms, 10.41% of medium firms and 6.79% of large firms. It reflects the characteristics of firm size in Vietnam where micro, small and medium size firms dominate the market. Similarly, 95% of firms are private. Besides, most firms are in the services sector. Even the manufacturing sector represents the largest share in Vietnam's exports, they are typically large in scale. Services enterprises also account for largest share in number of enterprises in Vietnam as they often operate in small scale. Table 2 summarizes the respondent's characteristics of the survey:

Table 2. Sample characteristics.

Characteristic	Measurement	Number of respondents	Percentage
Employee	<10	15	6.79
	10 – 200	168	76.02
	200 – 500	23	10.41
	>500	15	6.79
Ownership	State-owned	7	3.17

Industry	100% FDI	4	1.81
	Private	210	95.02
	Manufacturing	17	7.69
	Mining	1	0.45
	Services	149	67.42
	Trading (goods)	42	19.00
	Agriculture and fishery	4	1.81
	Construction	8	3.62

Table 3 presents the correlation between key latent variables, the result shows that all variables are positively related to each other. Besides, the correlation is modest, around 0.5 on average.

Table 1. Correlation matrix of latent variables.

	Attitudes toward FTA	Government support	International exposure	Organizational learning	Perceived usefulness	Utilization
Attitudes toward FTA	1.000					
Government support	0.494	1.000				
International exposure	0.443	0.664	1.000			
Organizational learning	0.662	0.598	0.462	1.000		
Perceived usefulness	0.544	0.427	0.530	0.474	1.000	
Utilization	0.471	0.360	0.409	0.453	0.710	1.000

Empirical tests and analysis of results

PLS – SEM model is used to analyze the relationship among constructs. This method is appealing for exploratory research since it does not impose strict distributional assumptions on the data and the goal of the method is to maximize the explained variance of the dependent latent constructs (Joe F. Hair, Ringle, and Sarstedt 2011). Our research is explanatory in nature with several new constructs, and the focus is on the prediction of FTA utilization which is still less representative in the current literature. Furthermore, PLS – SEM does not put strict restrictions on distribution, suitable for the nonnormal distribution of our dataset (Lin et al. 2020).

Measurement model analysis

Internal consistency reliability and convergent validity

In measuring latent variables, we use a reflective measurement model, in which latent variables are observed through several measurable indicators. Such measurement indicators are presumedly to be caused by latent variables.

The internal consistency measure assesses to what extent observed indicators are correlated with each other's (Joseph F. Hair et al. 2017a). Cronbach's alpha and composite reliability are two frequently used criteria for evaluating internal consistency. It is argued that Cronbach's alpha can underestimate the internal consistency while composite reliability tends to overestimates the reliability (Joseph F. Hair et al. 2017b). In our paper, we adopt both measures, in which Cronbach's alpha served as the lower bound and the composite reliability is the upper bound. If the Cronbach's alpha or composite reliability is at least 0.6, it is considered to sufficiently ensure the internal consistency reliability.

From Table 4, we observe that our variables satisfy the criteria of qualified reflective measurement models. Factor loading of all reflective indicators are around 0.7

to 0.8, sufficiently to express the effect of latent variables. Cronbach's alpha and composite reliability is high, between 0.7 and 0.9, confirming that observed indicator variables are strongly intercorrelated with each other.

The convergent validity is measured by two indicators, factor loadings and average variance extraction (AVE). Convergent validity examines the extent to which a measure correlates positively with alternative measures of the same construct. Since reflective measurement model measures a construct by different indicators, indicators should share the high variance. Theoretically, loadings should be at least 0.5 and ideally 0.708 or higher (Joseph F. Hair 2019). However, for exploratory research, factor loadings of 0.6 or higher are considerably sufficient to ensure convergent validity. In our study, there are two *constructs with a loading under 0.7 but higher than 0.6*. As it is exploratory in nature, we retain such constructs (GS3, UT2). The other factor loadings are all higher than 0.708, statistically significant at 1%. Average variance extraction AVE is the means of the squared loadings of all indicators related to a particular construct. The rule of thumb for an acceptable AVE is 0.5, implying that the construct can explain at least 50% of variance of its indicators (Joseph F. Hair 2019). All our constructs have AVE higher than 0.5, satisfying the convergent validity.

Table 2. Result of internal consistency reliability and convergent validity.

Constructs	Items	Outer loadings	Cronbach's alpha	Composite reliability	AVE
Attitudes toward FTA	ATT1	0.858	0.804	0.885	0.720
	ATT2	0.888			
	ATT3	0.796			
Government support	GS1	0.814	0.753	0.849	0.591
	GS2	0.869			
	GS3	0.538			
	GS4	0.810			
International exposure	IE1	0.791	0.734	0.848	0.651
	IE2	0.790			
	IE3	0.839			

Organizational learning	OL1	0.767	0.842	0.894	0.678
	OL2	0.818			
	OL3	0.848			
	OL4	0.857			
Perceived usefulness	PU1	0.716	0.725	0.829	0.550
	PU2	0.757			
	PU3	0.806			
	PU4	0.679			
Utilization	UT1	0.825	0.715	0.796	0.572
	UT2	0.573			
	UT4	0.841			

Discriminant validity

Discriminant validity assesses whether a construct is truly distinct from other constructs in the model. In the other words, it ensures that one construct is unique and measures phenomena that are not captured by other constructs (Becker et al. 2023). There are several ways to establish tests for discriminant validity, such as cross-loading or Fornell-Larcker Criterion Analysis. Two approaches are relatively similar, and in this study, we use the Fornell – Larcker Criterion. It is based on the idea that the constructs should have higher variance with itself with any other constructs. Table 5 shows the analysis of discriminant validity using Fornell – Larcker criterion. The diagonal part is the square root of AVE, and the off-diagonal part is the correlation with other constructs. Obviously, the square root of AVE is higher than the correlation between the construct and the other constructs, implying that our constructs satisfy the discriminant validity.

Table 3. Fornell-Larcker Criterion Analysis.

	Attitudes toward FTA	Government support	International exposure	Organizational learning	Perceived usefulness	Utilization
Attitudes toward FTA	0.848					
Government support	0.494	0.769				
International exposure	0.443	0.664	0.807			
Organizational learning	0.662	0.598	0.462	0.823		
Perceived usefulness	0.544	0.427	0.530	0.474	0.741	
Utilization	0.471	0.360	0.409	0.453	0.710	0.756

Structural model analysis

Before considering the empirical meaning of the structural model, we examine criteria of multicollinearity and predictive power of the structural model. All VIF values are below 5, indicating that our model does not struggle with multicollinearity. Next, we assess the predictive power of the model by evaluating the *coefficient of determination* R^2 , *effect size* f^2 , *blindfolding and predictive relevance* Q^2 . Coefficient of determination R^2 represents how exogenous latent variables' affect combining on the endogenous latent variables, or so-called in-sample predictive power (Joseph F. Hair 2017; Sarstedt et al. 2020). The effect size f^2 assesses the change in R^2 when a specific exogenous construct is dropped from the model. It measures the impact of exogenous construct on endogenous constructs (Joseph F. Hair 2017). The effect size of 0.02, 0.15, 0.35 indicates the weak, moderate, and strong effect, respectively (Cohen 1988). Our analysis shows the strong effect size of *government support* (f^2 size = 0.436) and *attitudes toward FTAs* (f^2 size = 0.495) on FTA utilization. Stone-Geisser's Q^2 is an indicator of out-of-sample predictive power, examining the magnitude of E^2 as a criterion of predictive accuracy. We use the cross-validated communality approach, which utilizes only *construct score* specific to endogenous construct to predict omitted data points.

Table 6 presents the predictive power measures of endogenous variables. The R^2 is moderate, roughly around 0.4. The effect size of international exposure and organizational learning is quite large, indicating a strong effect size, while the effect size of perceived usefulness is very weak. The Stone-Geisser's Q^2 for all endogenous variables is larger than 0, indicating the predictive relevance of all three endogenous constructs.

Table 4. Predictive powers of endogenous variables.

Construct	Coefficient of determination R ²	Effect size f ²	Stone-Geisser's Q ²
International Exposure	0.459	0.500	0.439
Organizational learning	0.535	0.259	0.527
Perceived usefulness	0.329	0.001	0.306

Main effects

Table 7 shows the estimated path coefficients of the models, including the sign, magnitude, and statistical significance of path coefficients. Such indicators are calculated using the bootstrapping technique to obtain t-statistics and standard errors to assess the significance level of structural paths (Becker et al. 2023).

Obviously, perceived usefulness plays the dominant role in explaining the ability to utilize FT commitments ($\beta = 0.624, p - value < 0.001$), organizational learning followed by ($\beta = 0.131, p - value = 0.065$). In other words, when businesses have a good perception of how FTA commitments are useful in exploiting the international market, as well as good learning capability, they have a good ability to use such commitment. These results confirm hypotheses H₁ and H₅, respectively.

Interestingly, the analysis shows that, in fact, government support ($\beta = -0.011, p - value = 0.065$) is negatively associated with the ability to utilize FTA commitments, but the result is not statistically significant. Besides, we found no evidence that international exposure ($\beta = 0.004, p - value = 0.483$) and attitudes toward FTA ($\beta = 0.049, p - value = 0.296$) are statistically significant in explaining the ability to use FTA. Although the coefficients are found positive, their p-values are large, indicating their non-statistical significance.

Table 5. Multiple regression analysis.

Hypothesis	Structural relationship	Path coefficients	Standard error	p-values
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H1	Perceived usefulness -> Utilization	0.624	0.066	0.000
H2	Government support -> Utilization	-0.011	0.080	0.445
H3	International exposure -> Utilization	0.004	0.083	0.483
H4	Attitudes toward FTA -> Utilization	0.049	0.091	0.296
H5	Organizational learning -> Utilization	0.131	0.086	0.065

Mediation analysis

Table 8 presents the result of the mediation role of *perceived usefulness, organizational learning, and barriers*. The indirect effect with a 95% confidence interval excluding zero is considered to be statistically significant.

It is intriguing from our analysis that government support has a negative direct effect on FTA utilization. It implies that higher levels of government support do not necessarily mean better utilization of FTA commitments.

The outcomes of our analysis distinctly manifest the statistical significance pertaining to the mediating role of perceived usefulness and organizational learning in the context of the impact engendered by government support on utilization. Put differently, the dimensions of perceived usefulness ($\beta = 131$, $p\text{-value} = 0.002$) and organizational learning ($\beta = 0.047$, $p\text{-value} = 0.079$) assume a partial mediating role in explicating the interconnection between government support and the utilization of FTA commitments. These findings thereby substantiate the formulated hypotheses H6a and H6c. Additionally, it is noteworthy that these mediating relationships exhibit attributes of competitive mediation. Conversely, the envisaged role of organizational learning as a mediating construct in the previously mentioned relationship fails to attain empirical validation. Furthermore, the indirect effect of perceived usefulness outweighs the indirect effect of organizational learning.

With respect to the influence of attitudes towards FTA on the degree of their utilization, our investigation reveals that the mediation of the effects occurs notably through the dimensions of perceived usefulness and organizational learning. As the direct

effect is not statistically significant, perceived usefulness ($\beta = 0.275, p < 0.0001$) and awareness of barriers ($\beta = 0.063, p = 0.060$) play the *full mediator role*, justifying hypotheses 7a and 7c. Noteworthy is the comparative potency of perceived usefulness as a mediator, surpassing the influence exerted by organizational learning. It implies that when businesses hold a positive perception of FTAs, government support can amplify impacts on the ability to utilize commitments. Besides, if they are capable of learning, learning capability can also reinforce the effect of leaders' attitudes on the ability to use. However, this just represents a minor importance in amplifying the effect of attitudes toward FTA and the ability to utilize FTA commitments.

What's more, our result suggests the critical role of perceived usefulness on the effect of government support and attitudes toward FTAs on the ability to utilize such commitments. Organizational learning also has implications for better applying such commitments, as businesses with greater ability to learn are more beneficial for utilizing such commitments. Intriguingly, we do not find evidence of the possible mediating role of organizational learning on the ability to take advantage of FTAs commitments. However, discernibly absent is the substantiation for the mediating function of international exposure in relation to the nexus between attitudes towards FTAs and government support and their utilization.

Table 6. Mediation analysis and significance testing.

Hypothesis	Mediation paths	Total effect	Direct effect	Indirect effect	Standard error	P values
H6a	Government support -> Perceived usefulness -> Utilization			0.131***	0.046	0.002
H6b	Government support -> International exposure -> Utilization	0.168***	-0.011	0.002	0.050	0.483
H6c	Government support -> Organizational learning -> Utilization			0.047*	0.033	0.079
H7a	Attitudes toward FTA -> Perceived usefulness -> Utilization			0.275***	0.054	0.000
H7b	Attitudes toward FTA -> International exposure -> Utilization	0.387***	0.049	0.001	0.014	0.485

H7c	Attitudes toward FTA -> Organizational learning -> Utilization	0.063*	0.041	0.060
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Note: ***, **, * denotes the level of significance at 1%, 5% and 10%, respectively

Discussion

The proliferation of FTAs in Vietnam is expected to create a favourable environment for promoting country's export, leveraging position in the global value chain. The utilization of FTA receives policy attention, as enterprises are key beneficiaries of trade agreements, and the ability to exploit FTA schemes can prove the success of trade negotiation. Employing data from a firm-level survey, the research examines firm characteristics and institutional factors that affect the ability to utilize FTA provisions. Our study contributes to existing literature of firms in global markets, delving into organizational aspects that are meaningful for internationalization.

We found the direct effect of perceived usefulness and organizational learning on the ability to utilize FTA commitments. This result supports previous findings of (J. Song 2022; J.-H. Song and Moon 2019; Takahashi and Urata 2010; Wignaraja 2014), suggesting that when businesses have good perception of how FTAs can leverage their market access and product competitiveness. Besides, when businesses have positive learning culture, such as active participating in training courses, storing and sharing knowledge related to FTAs will enable businesses to better utilize them. Participating in training courses can help businesses to ask meaningful questions, consulting experts for the export of their products, increasing the deep understanding of the commitments. Storing knowledge enables the buildup of knowledge stock which can be ready to use in many cases. Sharing information improves the decision -making as well as operational efficiency, when leaders and employees are more knowledgeable of the commitment, they can coordinate better to achieve certificate of origins for their products.

Government support and positive attitudes toward FTA of leaders do not directly translate into better use of FTA provisions. In fact, it transfers via perceived usefulness and organizational learning. It reflects the fact that government support can build up knowledge of FTAs, and it depends on enterprises to convert this knowledge into actual useful information. Similarly, leader attitudes toward FTAs can be channeled via perceived usefulness and organizational learning, reflecting the embeddedness of leader's attitudes on organizational culture (C. Hsu and Pereira 2008; L. Zhong, Collins, and Egmon 2004).

Implications

Theoretical contributions

Regarding theoretical contribution, we add to current literature of firms in global market by uncovering how FTAs can benefit firms' operation. Apart from regression analysis and measurable firm aspects, we try to quantify organizational characteristics such as learning culture, leader's attitudes, perceived usefulness, which are underrepresented in modern studies.

This study disentangles the direct effect of government support, attitudes toward FTAs, organizational learning, international exposure, perceived usefulness on FTA utilization. We hypothesize that all five variables would have positive and direct effect on FTA utilization. However, our analysis confirms that only perceived usefulness and organizational learning are directly associated with FTA utilization. This result confirms findings from previous studies in which organizational learning and perceptions are crucial for organizational performance.

Our study provides the comprehensive framework for testing the mediation role of perceived usefulness, international exposure, organizational learning. We propose that three variables will mediate the effect of government support and attitudes toward FTAs.

These findings are new among current research as researchers are typically interested in direct effects. Disentangling indirect effects is a crucial finding for policy interventions.

Practical contributions

In terms of practical implications, our study underscores the paramount importance of firm autonomy when it comes to navigating global markets successfully. For businesses, enhancing their learning capabilities is a pivotal factor in effectively leveraging Free Trade Agreement (FTA) commitments. The cultivation of a robust learning culture emerges as a key driver for reaping the benefits associated with FTA commitments. Engaging actively in conferences, participating in training workshops, and fostering dialogues with industry experts emerge as two widely recognized and highly effective strategies for comprehending these commitments and seeking assistance in their practical application within the business landscape.

Moreover, we have observed that organizational learning can be substantially bolstered by the strategic storage and sharing of critical knowledge pertaining to FTAs. This, in turn, fosters cross-functional collaboration and reinforces the capacity for learning. To put it simply, fortifying the ability to learn and nurturing knowledge-friendly practices, such as active learning and knowledge accumulation, proves to be indispensable for realizing the full potential of FTAs.

In our research, we identified perceived usefulness as a pivotal determinant of FTA utilization. It exerts a substantial influence, not only on the direct utilization of FTAs but also on its moderating effects in relation to government support and attitudes toward FTAs. This finding underscores the importance of businesses maintaining a positive outlook on new-generation FTA commitments, rather than clinging to traditional ones. When businesses exhibit a favorable perception of these new-generation FTAs, coupled with positive attitudes from their leadership, it serves as a powerful catalyst for capitalizing on the associated benefits.

Furthermore, a positive perception of FTAs also facilitates a greater willingness to engage in collaborative efforts with government entities, thereby maximizing the advantages in terms of market access and cost reduction offered by FTAs. This insight implies that governments can channel their support more effectively by influencing attitudes and encouraging knowledge-sharing practices within businesses.

Limitations and future research

Our research has several limitations. Firstly, our data are cross-sectional, which can be only tested by empirical methods, such as the degree of data fit and the addition of control variables. However, we cannot perform analysis on panel data with lagged variables. Therefore, future research should use rigorous methods to account for this issue, increasing the objectivity and credibility of the study.

Secondly, our sample size covers firms in large cities, and the majority of them are in services sector. Hence, the result has limited generalizability, encouraging future research to extend the sample size and sector coverage.

Thirdly, we do not account for barriers of taking advantages of FTA commitments and how they can interact with other variables in the model. We do not perform multigroup analysis to examine differences in the utilization of FTAs regarding firm size and industry. Future studies can address this gap, and extend the sample size to generate a more generalized result.

Conclusions

A limited number of studies examines determinants of FTA utilization in Vietnam. It is obvious that perceived usefulness and organizational learning are key determinants of FTA utilization. The direct impacts of attitudes toward FTAs and government support are not statistically significant, but they mostly spur effects via attitudes towards FTAs and government support. What's more, perceived usefulness has larger effect on FTA

utilization than organizational learning. Our finding provides a deep understanding of mechanisms that enable firms to better utilize FTA commitments.

Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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