

Tax Transparency, Knowledge and Awareness Dynamics in Cross-Border E-Commerce: The Case of Türkiye*

Mine SÖNMEZAY**

ABSTRACT

With digitalized trade, consumers encounter various tax liabilities in their purchases from different countries; this situation directly affects their decisions. This research aims to examine the tax factors affecting consumer behavior in the digitalizing global trade environment from a holistic perspective. In particular, the effects of tax-related knowledge level, awareness and transaction transparency perceptions on purchasing decisions in cross-border e-commerce were evaluated. Data were collected via an online survey with convenience sampling method between June 5–15, 2025 and analyzed with structural equation modeling (SEM). The findings revealed that only the Perceived Transaction Transparency variable had a significant and high level of effect on purchasing behavior. On the other hand, the direct effects of Tax Knowledge Level and Tax Awareness and Perception were not found to be statistically significant. This result suggests that the clarity and accessibility of tax-related information is more influential on consumer behavior than its mere presence.

Keywords: Cross-border e-commerce, purchase decisions, online decision-making, consumer behavior, PLS-SEM

Jel Codes: D91, F14, H26, M31.

Sınır Ötesi E-Ticarette Vergi Şeffaflığı, Bilgi ve Farkındalık Dinamikleri: Türkiye Örneği

ÖZET

Dijitalleşen ticaretle birlikte tüketiciler, farklı ülkelerden yaptıkları alışverişlerde çeşitli vergisel yükümlülüklerle karşılaşmakta; bu durum kararlarını doğrudan etkilemektedir. Bu araştırma, dijitalleşen küresel ticaret ortamında tüketici davranışlarını etkileyen vergisel faktörleri bütüncül bir bakış açısıyla incelemeyi amaçlamaktadır. Özellikle vergiye ilişkin bilgi düzeyi, farkındalık ve işlem şeffaflığı algılarının sınır ötesi e-ticaretteki satın alma kararları üzerindeki etkileri değerlendirilmiştir. Veriler, 5–15 Haziran 2025 tarihleri arasında kolayda örnekleme yöntemiyle daha önce sınır ötesi e-ticaret alışverişi yapan Türkiye’de yaşayan tüketicilerden çevrimiçi anket aracılığıyla toplanmış ve yapısal eşitlik modeli (YEM) ile analiz edilmiştir. Bulgular, yalnızca Algılanan İşlem Şeffaflığı değişkeninin satın alma davranışı üzerinde anlamlı ve yüksek düzeyde etkili olduğunu ortaya koymuştur. Buna karşın, Vergi Bilgi Düzeyi ile Vergi Farkındalığı ve Algısı’nın doğrudan etkileri istatistiksel olarak anlamlı bulunmamıştır. Bu sonuç, dijital alışverişlerde bilginin varlığından çok, sunum biçiminin daha belirleyici olduğunu göstermektedir. Çalışma, vergisel şeffaflık kavramını literatüre dâhil ederek kuramsal katkı sağlamakta; dijital platformlara ve politika yapıcılara uygulamaya yönelik öneriler sunmaktadır.

Anahtar Kelimeler: Sınır ötesi e-ticaret, satın alma kararları, çevrimiçi karar verme, tüketici davranışı, PLS-SEM

Jel Kodlar: D91, F14, H26, M31.

* Published by The Journal of Accounting and Finance. This article is published under the Creative Commons Attribution (CC BY 4.0) licence.

Makale Gönderim Tarihi: 01.07.2025, **Makale Kabul Tarihi:** 12.08.2025, **Makale Türü:** Araştırma Makalesi
The survey study in the article was decided to be ethically appropriate by the decision of the Mudanya University Ethics Committee dated 25.06.2025 and numbered 2025-3/2.

** Dr., Mudanya University, Vocational School, Foreign Trade Program, mine.sonmezay@mudanya.edu.tr, ORCID: 0000-0002-0965-3353,

1. INTRODUCTION

Globalization, digitalization and rapid developments in communication technologies have radically transformed the structure of traditional trade; cross-border electronic commerce (e-commerce) has become central to this transformation. Cross-border e-commerce is a form of trade that refers to the international circulation of products or services through digital platforms, where the buyer and seller are located in different countries (Ari, 2019: 12). As highlighted by Valarezo et al. (2018), the basis of this system is the widespread use of internet technologies, the increase in the use of mobile devices, the development of digital payment systems and advances in international logistics infrastructure. All these factors have led to a striking growth in the volume of cross-border trade, especially since the 2010s. As of 2020, the e-commerce sector has reached double-digit annual growth rates worldwide, while it has been determined that the increase in cross-border transactions has occurred at higher rates compared to local e-commerce (Unctad.org, 2023).

According to a study by Valarezo et al. (2018), the proliferation of cross-border e-commerce has brought not only economic but also legal, tax, and cultural challenges. Similarly, Varnali (2024) stated that the fact that e-commerce operates across national and geographical borders raises various legal issues, particularly regarding the sharing of international taxation authority. This necessitates a reassessment of existing international tax legislation and double taxation agreements. In particular, when legal business headquarters are spread across different countries, problems such as double residence and, consequently, double taxation arise.

One of the significant elements influencing global buying choices is how well the consumer knows the tax burden that has to be incurred while making the transaction. Due to differences in national tax regimes, consumers often face uncertainty, which in turn directly influences their purchasing decisions (Valarezo et al., 2018). Especially in emerging countries, not having clear information about taxes when making purchases over online platforms can cause the consumer to drop the shopping process or lose confidence (Grainger & Morini, 2019: 965). However, consumers who shop cross-border do not have sufficient information on the import duties, value added tax (VAT) and other customs charges that they need to pay, in addition to the price of the goods. Missing tax information can prompt consumers to rethink shopping or even forego the process (Zhang et al., 2022: 141).

In consumer behavior, the condition of tax awareness includes not only rational price comparison, but also cognitive risk perception and perception of trust. Morini et al. (2024), in their study of a Brazilian case, proved that consumers' lack of knowledge of tax legislation in cross-border e-commerce reduces purchasing trust. Similarly, Ortakarpuz (2022), in his analysis specific to Türkiye, stated that taxation problems in shopping made through digital platforms cause indecision and a lack of confidence in consumer behavior. On the other hand, when the consumer has sufficient information about taxes, this can positively affect both transaction security and purchase intention.

In this context, increasing tax awareness is an element that directly concerns not only individual decisions but also the fiscal sustainability of countries. The OECD (2021) report emphasizes that simplifying e-commerce tax systems and ensuring transparency for consumers can enhance tax compliance and support the sustainable development of cross-border trade. As noted by Tokdemir, the limited number of studies conducted on this subject in Türkiye show that both individual consumers and micro-entrepreneurs have low levels of knowledge about their tax liabilities, which negatively affects both the state's tax revenues and consumer behavior.

In light of all these evaluations, investigating the impact of consumers' tax knowledge levels on purchasing decisions in cross-border e-commerce in Türkiye will both contribute to the academic literature and enable e-commerce policies to be shaped in a more effective and inclusive manner. The main purpose of this study is to analyze the tax knowledge levels of Turkish consumers who shop cross-border at an individual level and to reveal the extent to which this knowledge is effective in decision-making processes. Thus, it is aimed to develop applicable suggestions for decision-makers and platform providers. The study also aims to contribute to the consumer behavior literature in terms of explaining the effects of the concept of tax knowledge level in the context of cross-border trade.

2. LITERATURE REVIEW

Economic globalization has accelerated the rise of cross-border e-commerce as a modern form of international trade, offering fresh momentum for the expansion of foreign trade in many countries (Liu et al., 2021: 36140). The global scale of e-commerce has rendered

existing tax regulations inadequate by transcending national economic boundaries. This situation raises the question of which country has jurisdiction over e-commerce taxation and creates problems in areas such as the place of income generation, the definition of a place of business, and the source-destination principle. Moreover, according to Şimşek and Yay (2023), efforts are ongoing to develop international cooperation and common taxation principles in order to prevent tax loss and evasion due to the inadequacy of traditional control mechanisms.

In the literature, many factors have been identified that affect consumer purchasing behavior in a cross-border context. These factors are classified by Grudecka, (2025) as internal (such as perceived value, trust in the seller, satisfaction, perceived risk) and external (such as product features, seller reputation, website design and usability, e-service quality, delivery time and cost, return policies, payment methods and security, legal stimuli, and economic and socio-cultural conditions). According to Bilici and Sönmezay (2025: 300), among legal stimuli, tax legislation and regulations stand out in particular. Indeed, in developing countries such as Türkiye, additional tax regulations for overseas shopping, delivery problems, and product quality uncertainties have negatively affected consumer satisfaction and created an important problem area in cross-border e-commerce. In addition, in the study of Toly et al., (2023), it is emphasized that there is increasing academic interest in the effects of variables such as tax knowledge and awareness on consumer compliance behavior in the context of e-commerce.

According to Mebratu (2024), tax knowledge refers to a consumer's knowledge of tax legislation, tax processes, and obligations. Tax knowledge can play a significant role in shaping people's behavior and compliance with the law. In their study, Yelman et al. (2023) stated that tax knowledge level indicates an individual's ability to understand and manage their tax obligations and forms the basis of tax literacy. According to Olivola & Sussman (2015), they established that tax knowledge is a core component of taxpayers' voluntary tax compliance and that knowledge level has a significant impact on compliance behavior. Similarly, it has been established in a recent work that the level of tax compliance for the e-commerce consumers is proportionate to the individual tax awareness (Toly et al., 2023: 9).

To be more precise, either the consumer or the online business operator's unawareness of taxation can prevent them from complying with their obligations and thus have low levels of compliance or behavioral change. Lwin et al. (2007) conducted a study on Australian individual

consumers and found that scant information on taxes and surcharges in cross-border e-commerce reduced purchase intentions by boosting transaction uncertainty and perceived risk among consumers. Similarly, Hamid et al. (2019) observed a situation in Malaysia where the level of tax information within online firms remained a determinant concerning voluntary tax compliance. These findings imply that increasing the level of information on taxes will encourage customers to make safer and more informed decisions when it comes to cross-border internet shopping. Individuals with a high information level are able to compute prospective fiscal costs in advance, develop an expectation of transparency in the buying process, and are likely to comply with tax laws.

On the other hand, Irfandhani et al. (2023) found that tax knowledge alone is not sufficient to determine purchasing decisions. The study demonstrates that individuals' knowledge of taxes does not guarantee that this knowledge will translate into behavior. Furthermore, Feldman and Ruffle's (2015) research reveals that despite improvements in consumers' tax understanding, purchasing behavior is often influenced by other determinants beyond tax knowledge. Expanding on these ideas, Yohana and Masdupi (2023) suggest that the impact of tax-related knowledge on financial literacy is complex. They find that knowledge of tax rules may influence financial management behaviors, but is not directly related to purchasing behavior.

According to the definition in Demir and Akyol (2024), tax knowledge level refers to an individual's cognitive understanding of tax legislation, obligations, declarations, and technical processes related to taxation; in other words, it concerns what they know. In contrast, tax perception/awareness encompasses attitudinal and emotional dimensions such as how an individual evaluates taxes, how they feel about them, and whether they view taxes as compensation for public services; in other words, it concerns how they think and feel. In this context, the level of knowledge indicates measurable cognitive competence, while perception/awareness reflects the individual's subjective evaluations and behavioral tendencies toward taxes.

Rista et al. (2022) define tax perception and awareness as the level of people's knowledge of the purpose, meaning, and processes of taxes and their attitude towards taxes. According to the tax awareness theory, taxpayers' understanding of tax rules and awareness of

them is of utmost importance in reference to tax conformity. Increased awareness of tax implications can support informed purchasing decisions. For example, consumers may seek to understand tax exemption thresholds and avoid high import duties when purchasing products from abroad (Giuffrida et al., 2021). In fact, Toly et al. (2023) proved in their study that tax consciousness in the context of e-commerce directly affects tax compliance behavior. With regard to tax perception, the belief that the tax system is fair and reasonable significantly shapes individuals' attitudes and behavioral responses toward taxation. The literature has argued that tax policies that are seen as fair and transparent enhance voluntary compliance, while they reduce the likelihood of tax evasion (Saad, 2014: 1074). According to Saad's findings, the perception of justice towards the tax system and the transparency of its implementation significantly affect taxpayers' willingness to voluntarily comply with the law.

Moreover, negative perceptions about taxes or uncertainties in practices can negatively affect consumer decisions, especially in cross-border shopping. A striking example can be given from the European Union: In 2021, the EU removed the VAT exemption for low-value imported products. Following this regulation, many consumers who learned that they would have to pay tax on small-scale overseas purchases gave up on such purchases (Europa.eu, 2021). According to the research in question, the removal of the VAT exemption threshold caused most EU consumers to deter cross-border online shopping. Similar results are also found in studies conducted specifically for Türkiye. For example, in a qualitative study conducted in Bursa, Turkish consumers who had experience with cross-border e-commerce expressed tax and customs practices as the greatest source of dissatisfaction. 74.29% of the participants identified tax and customs processes as one of the main factors that negatively affect their purchasing decisions (Bilici & Sönmezay, 2025: 300). This high rate reveals how critical and sensitive tax regulations and obligations are perceived from the consumer's perspective. Therefore, as consumers' tax awareness increases and they perceive tax practices to be more fair and clear, they are expected to act more rationally and compliantly in cross-border purchasing decisions.

On the other hand, Giuffrida et al. (2021) found no direct relationship between consumer tax awareness and purchase intentions for specific product groups in cross-border e-commerce. The authors emphasize that psychological factors such as product safety, rather than tax

awareness, are more influential in consumer behavior in sectors subject to stricter regulation following quality scandals. Similarly, Guo et al. (2021) examined the impact of interactive shopping experiences on consumer behavior, revealing that the perception of high value offered through rich content is more decisive in purchasing decisions compared to factors such as tax awareness. In their research on the fashion industry, Salim and Doraisamy (2022) highlighted the impact of social value on purchase intentions in cross-border e-commerce, demonstrating that emotional and social ties can be a stronger determinant than tax awareness. This suggests that social influences can override tax concerns.

Perceived transaction transparency is the customer's perception of how transparent and understandable information about the online purchasing process is. Zhou and colleagues state that perceived transaction transparency refers to how easily accessible and understandable the information customers need, such as ordering, payment, privacy, and security policies, to assess the reliability of transaction processes (Zhou et al., 2018: 9). More specifically, knowing how a transaction is conducted on an e-commerce site and seeing all processes and fees in advance gives the consumer a high sense of transaction transparency. This becomes even more important in cross-border purchases, as factors such as differences in country laws and additional customs and tax fees complicate transactions (Bilici and Sönmezay, 2025: 301).

For example, Nicolaou emphasizes that transparent transaction mechanisms serve as reliable data assurance signals, helping users navigate decision uncertainty and mitigate the perceived risks associated with online transactions (Nicolaou, 2011). This is supported by findings from Chen et al., who demonstrated that increased perceived information transparency plays a significant role in reducing consumers' uncertainty and positively impacts their purchasing behavior (Chen et al., 2023).

A qualitative study of consumers in Türkiye demonstrated that cost and process transparency plays a critical role in satisfaction with the international e-commerce experience. According to the study findings, consumers' purchasing behavior is more positive in shopping environments where transactions and costs are clearly disclosed in advance and where there are no surprise fees or unclear procedures (Bilici and Sönmezay, 2025: 301). In this context, transparency in product, transaction, and seller information can help reduce consumers'

perceived risk and increase their trust, which in turn can influence their purchase intentions (Zhou et al., 2018: 3).

In summary, the literature has strong findings that concepts such as tax knowledge level, tax awareness/perception, and perceived transaction transparency have an impact on consumer behavior in cross-border e-commerce. Toly et al. (2023) and Rista et al. (2022) suggest that highly informed and tax-aware consumers are able to make more rational decisions by anticipating the tax expenses and obligations they are most likely to incur; this is likely to have a positive effect on both legal compliance and purchase intention. A clear, understandable, and fair tax situation supports consumers' acceptance of those fees and satisfaction with the shopping experience (Kirchler et al., 2008: 216). On the other hand, transactional non-transparency or uncertainty about tax processes can lead to mistrust and high perceived risk for consumers, resulting in shopping abandonment behavior (Zhou et al., 2018: 3; Bilici & Sönmezay, 2025: 301). Therefore, of great importance to regulators and businesses in cross-border e-commerce is to prioritize steps that will make consumers more knowledgeable and aware of taxes, make taxes and charges transparent, and thus encourage healthy purchasing behavior. Academic studies in this stream of research strongly support the effect of the variables studied on purchase behavior by presenting similar results across different contexts, e.g., consumers in Türkiye.

The study hypotheses are:

H₁: The extent of tax knowledge significantly affects the purchase behavior of individual consumers in cross-border e-commerce.

H₂: Tax awareness and perception significantly affect the purchase behavior of individual consumers in cross-border e-commerce.

H₃: Perceived transaction transparency significantly affects individual consumers' purchasing behavior in cross-border e-commerce.

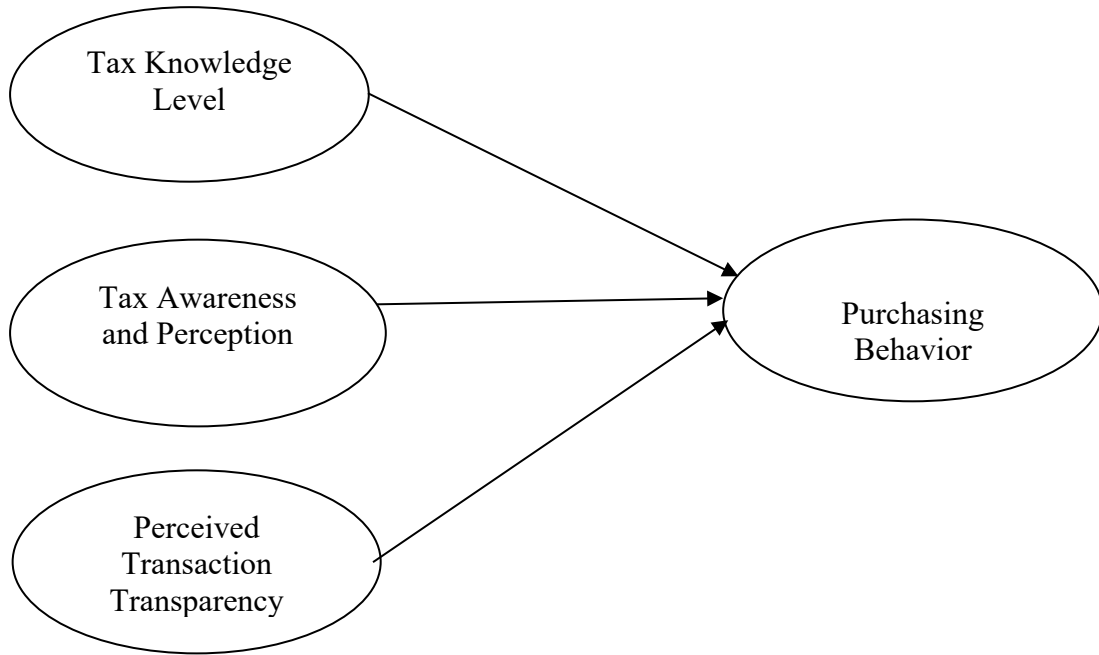


Figure 1: Research Model

3. METHODOLOGY

This study is structured within an explanatory model framework by adopting a quantitative research approach. The main purpose of the study is to examine the effects of individuals' tax knowledge level, tax awareness and transaction transparency perceptions on purchasing behavior within the scope of cross-border e-commerce. In this context, partial least squares structural equation modeling (PLS-SEM) technique was used in the analysis of causal relationships between variables. This technique was particularly suitable for exploratory

The universe of the study consists of individuals actively engaged in cross-border e-commerce in Türkiye and the convenience sampling method was selected as the sample. Participants were reached through various digital channels; the data collection process was carried out through the link shared on online platforms. The data were collected between June 5 and June 15, 2025. PLS-SEM can analyze complex models flexibly and reliably, as it does not require a normal distribution assumption and can work even with small sample sizes. In the literature, <100 is considered small, 100-200 is considered medium, and >200 is considered

large for SEM; the recommended threshold is above 200. In PLS-SEM, a sample size between 200-500 is generally considered sufficient (Bilici, 2024). Therefore, 225 participants in this study fall into the large category and are considered statistically sufficient for PLS-SEM application.

A structured survey form was used as the data collection tool. The survey form consists of four main sections and all variables were adapted based on previously developed scales. The statements regarding tax knowledge level and tax awareness and perception were taken from the study of Dogan (2025) and adapted to the subject. The measurement structures developed by Zhou et al. (2018) were used as the basis for the variable of perceived transaction transparency, and the items regarding purchasing behavior were adapted from the study of Klein et al. (1998), who examined consumer behavior under the title of hostility model in foreign product purchases. All statements in the questionnaire form were rated as five-point Likert type (1: Strongly Disagree, 2: Disagree, 3: Undecided 4: Agree 5: Strongly Agree).

SMARTPLS 4 software was used in the analysis of the data. In the analysis process, descriptive statistics were first examined, then the measurement validity of the model was evaluated. Cronbach's Alpha and Composite Reliability (CR) values were calculated for the internal consistency of the scales, and the construct validity was tested with the help of confirmatory factor analysis. Fornell-Larcker criterion and HTMT ratios were used in the assessment of discriminant validity. In the last stage, structural model analysis was carried out, and the hypotheses were tested on the basis of path coefficients and significance levels. In addition, the explanatory power and predictive performance of the model were evaluated with statistics such as R^2 , Q^2 , effect size (f^2) and variance inflation factor (VIF). Thanks to this methodological approach, the relationships between the theoretical structures discussed in the study were tested reliably and important inferences were made on the tax factors affecting consumer behavior in the context of cross-border e-commerce.

4. FINDINGS

4.1. Demographic Characteristics of Survey Participants

Demographic characteristics of the survey participants are presented in Table 1.

Table 1. Distribution of Demographic Characteristics of Participants

Variable		N	%
Gender	Female	141	62,67%
	Male	84	37,33%
Age	18-25	75	33,34%
	26-35	77	34,22%
	36-45	61	27,11%
	46 and above	10	5,33%
Education	Two Year Degree	50	22,22%
	Undergraduate	146	64,89%
	Postgraduate	29	12,89%
Occupation	Public Sector	98	43,56%
	Unemployed	70	36,44%
	Private Sector	45	20,00%
Income (TRY)	<20.000	63	28,00%
	20.001 - 30.000	29	12,89%
	30.001 - 50.000	18	8,00%
	50.001 - 80.000	94	41,78%
	80.001 - 100.000	13	5,78%
	>100.001	8	3,55%
Marital Status	Single	124	55,11%
	Married	101	44,89%
Total		225	100,00%

As seen in Table 1, the vast majority of the participants participating in the survey are young individuals. More than 70% of the participants are between the ages of 18-34. In terms of gender distribution, there are more female participants (62.7%) than male participants (37.3%). When examined in terms of education level, it is seen that the majority of the participants have undergraduate (64.9%) and postgraduate (12.9%) education. When looking at the monthly income level, it is seen that a significant portion of the participants are in the 50,001 TL - 80,000 TL income group, followed by the 20,000 TL and below income group.

Table 2. Measurement Model Analysis Results

Expressions	Factor Loadings	Cronbach's Alpha	Composite Reliability - CR	Average Variance Extracted (AVE)
Tax Knowledge Level (TAXKNOW)				
Knowing which tax items (VAT, customs duty, etc.) are added to the total price of the product I purchase affects my decision to shop cross-border. (Taxknow1)	0,655	0,920	0,937	0,718
The state providing transparent and understandable information about taxes collected in cross-border shopping increases my sense of trust in cross-border shopping. (Taxknow2)	0,837			
The fair and consistent application of tax rates increases my trust in cross-border e-commerce. (Taxknow3)	0,883			
Being informed about taxation allows me to make more conscious choices in my cross-border shopping. (Taxknow4)	0,924			
Raising tax awareness in the family or at school helps individuals be more careful in cross-border shopping. (Taxknow5)	0,846			
The clear explanation of tax policies to the consumer by the e-export site positively affects my cross-border shopping decisions. (Taxknow6)	0,910			
Tax Awareness and Perception (TAXAW)				
Paying taxes on cross-border purchases is a civic duty. (Taxaw1)	0,837	0,742	0,774	0,503
Paying taxes when shopping abroad is a legal obligation. (Taxaw2)	0,797			
Without sufficient tax revenue, public services will suffer. (Taxaw3)	0,782			
Sanctions against tax evaders need to be more deterrent. (Taxaw4)	0,517			
Punishments for tax evaders on cross-border purchases are inadequate. (Taxaw5)	0,547			
Perceived Transaction Transparency (PERCTR)				
I have clear and understandable information about VAT, customs and other tax procedures on the website. (Perctr1)	0,432	0,732	0,890	0,523
I think that sufficient information is given about tax and customs processes during shopping. (Perctr2)	0,448			
When I buy a cross-border (import) product, I feel comfortable when I know the tax obligations. (Perctr3)	0,919			
I prefer to buy cross-border products when I find the tax processes clear and transparent. (Perctr4)	0,927			
Purchasing Behavior (BEHAV)				
I prefer to shop cross-border because tax and customs procedures are not a problem for me. (Behav1)	0,927	0,836	0,835	0,858
The clarity of tax, customs and delivery processes increases my desire to buy cross-border products. (Behav2)	0,927			

Within the scope of PLS-SEM, the reliability and validity of the measurement model are assessed through basic metrics such as Cronbach's Alpha, factor loadings, Composite Reliability (CR), and Average Variance Extracted (AVE). Generally accepted threshold values have been defined in the literature for these indicators.

Cronbach's Alphas are a generally accepted measure of internal consistency. In social science research, a threshold of 0.7 is often cited as the minimum acceptable value for good reliability (Kim et al., 2021; Burzyńska et al., 2022; Bejer et al., 2019). Values above 0.8 are considered superior and indicate excellent reliability, while values exceeding 0.9 may indicate redundancy in the measured items (Peterson and Kim, 2013). Several studies have reported empirical findings indicating that Cronbach's Alpha for scales should ideally be greater than 0.7 to ensure reliability (Ibrahim & Borhan, 2023). CR stands out as an alternative to Cronbach's Alpha, and values of 0.7 and above are considered sufficient (Peterson & Kim, 2013; Calderon et al., 2020; Sarstedt et al., 2019). AVE is used to assess convergent validity; values of 0.5 and above are considered significant (Hair et al., 2014). In factor loadings, values below 0.4 can be eliminated, while loadings between 0.4–0.7 are acceptable as long as they do not disrupt the general structure of the model (Rianto et al., 2024; Li & Lay, 2024). In the analysis conducted in this context, a total of three items—two from the tax awareness scale (Taxaw6 and Taxaw7) and one from the purchasing behavior scale (Behav3)—were removed from the model due to factor loadings below 0.40.

The relatively low factor loadings of some statements related to the Perceived Transaction Transparency (PERCTR) variable (e.g., 0.432 and 0.448) may be due to content differences in the measurement structure of the variable and uncertainty in participants' perceptions of these statements. While the statements in question focus on whether tax transparency is clearly presented on online platforms, other statements are more oriented toward the consumer's sense of comfort during the transaction process. As a result, this situation may reflect participants' focus on the contribution of information to transaction security rather than access to information. Additionally, it was found that these low loads did not disrupt the overall structure of the measurement model, and the structural validity and component reliability (CR and AVE) were above the thresholds. Therefore, these statements were retained in the model to preserve the theoretical scope of the structure.

Tax Knowledge Level dimension stands out with its high internal consistency and validity indicators. Cronbach's Alpha value is 0.920, CR value is 0.937 and AVE value is 0.718. Factor loadings of all items vary between 0.655 and 0.924 and they successfully represent the theoretical structure. In the Tax Awareness and Perception dimension, Cronbach's Alpha was found as 0.742, CR as 0.774 and AVE as 0.503. Since the factor loadings of all items analyzed range between 0.517 and 0.837, structural validity is ensured. In the Perceived Transparency of Transactions dimension, Cronbach's Alpha was determined as 0.732, CR as 0.890 and AVE as 0.523. All factor loadings are above 0.40 and are at an acceptable level in terms of structural validity. The Purchasing Behavior dimension is the strongest structure. After removing 1 statement related to this dimension from the analysis, the values obtained were measured as Cronbach's Alpha 0.836, CR 0.835 and AVE 0.858. The factor loading of both items is 0.927, indicating that the structural validity is quite high.

4.2. Structural Equation Modeling (SEM) Results

The Fornell-Larcker criterion assumes that the square root of Average Variance Extracted (AVE) for a construct should be greater than the correlation coefficients estimated for all other constructs in the model. This suggests that indicators' variance for a construct should be greater than the variance with other constructs, demonstrating sufficient discriminant validity (Panahi et al., 2023; Henseler et al., 2009). The AVE value needs to be above 0.50 to establish convergent validity, rounding up the test of discriminant validity (Hair et al., 2014).

Conversely, the HTMT criterion provides a more sensitive and subtle test of discriminant validity based on correlations between constructs. Current literature suggests that HTMT values should not be more than 0.85 for discriminant validity; some studies assume that the cutoff value should be 0.90 (Panahi et al., 2023; Ackermans et al., 2024; Hejazi et al., 2022; Liu et al., 2025). Whenever HTMT ratio is beyond such ranges, it usually indicates that there is no discriminant validity between the constructs of interest (Ackermans et al., 2024; Hejazi et al., 2022).

In this context, Fornell-Larcker criterion identifies that AVE values should be higher than other construct correlations in the correlation matrix, whereas HTMT criterion calls for testing if discriminant validity is ensured by examining the relationship between constructs

more precisely. Depending on analysis type and conservatism, threshold values of 0.85 or 0.90 for HTMT are typically employed.

Table 3. Discriminant Validity Findings According to the Fornell-Larcker Criterion

	(1)	(2)	(3)	(4)
Perceived transaction transparency (1)	0,823			
Purchasing behavior (2)	0,782	0,927		
Tax awareness and perception (3)	0,469	0,416	0,709	
Tax knowledge level (4)	0,328	0,316	0,383	0,847

The discriminant validity analysis based on the Fornell-Larcker criterion shows that conceptual separation between the constructs in the model is sufficient. According to this process, the square root of the Average Variance Extracted (AVE) of each construct should be greater than the correlation measures of the same construct with other constructs (Henseler et al., 2009; Panahi et al., 2023). In this regard, the outcome realized shows that all four constructs within the model functioned admirably in discriminant validity.

Firstly, the square root AVE of the Perceived Transaction Transparency factor is 0.823, which is higher than the correlation values with other structures (0.782, 0.469 and 0.328). Similarly, the square root AVE of the Purchasing Behavior factor is highest at 0.927, which is significantly higher than all its correlation values with other structures. This indicates a strong conceptual distinction between purchasing behavior and the other constructs in the model.

The square root AVE of the Tax Awareness and Perception construct is 0.709, and if compared with values of correlations between this construct and other constructs (0.469, 0.416 and 0.383), discriminant validity will be obtained. Lastly, the square root AVE of the Tax Knowledge Level construct is 0.847, which is larger than values of correlations with other constructs of 0.328, 0.316 and 0.383. This means the construct maintains its distinctiveness and does not lead to conceptual confusion in the model.

In conclusion of overall assessment, the analysis conducted based on the Fornell-Larcker criterion shows that the measurement model used in the study possesses high discriminant validity and that each construct can statistically portray their conceptual domains effectively. This result shows that the model is stable in terms of validity and confirms that there is no overlap for the constructs.

Table 4. Discriminant Validity Results according to the HTMT Criteria

	(1)	(2)	(3)	(4)
Perceived transaction transparency				
Purchasing behavior	0,895			
Tax awareness and perception	0,666	0,524		
Tax knowledge level	0,357	0,352	0,506	

The following HTMT (Heterotrait-Monotrait Ratio) matrix was created to examine the discriminant validity between the constructs examined in cross-border e-commerce. The HTMT ratio of 0.90 or lower is commonly employed as a sufficient criterion for discriminant validity in literature (Panahi et al., 2023; Ackermans et al., 2023). These values provided in the table provide important cues suggesting the degree to which the constructs under consideration are differentiated from each other. According to the HTMT matrix, the HTMT ratio of the constructs Perceived Transaction Transparency and Purchasing Behavior was 0.895. Though this is very close to the limit value of 0.90, it does not exceed the limit.

The HTMT values between all other constructs fall within the acceptable ranges. For example, HTMT values of 0.524 were obtained between Purchasing Behavior and Tax Awareness and Perception, 0.506 between Tax Awareness and Perception and Tax Knowledge Level, and 0.352 between Purchasing Behavior and Tax Knowledge Level. These ratios show that the constructs are clearly separated from each other and that the discriminant validity is at a satisfactory level. The lowest HTMT value of 0.357 was seen in the relationship between Perceived Transaction Transparency and Tax Knowledge Level, confirming that the two constructs have quite different conceptual foundations.

Although some values in the HTMT analysis are close to the threshold levels, it is understood that there is a sufficient level of theoretical and measurement separation between the constructs according to the Fornell-Larcker criterion. As a result, all of the HTMT values remain below the 0.90 threshold value, which shows that the constructs in the model generally exhibit satisfactory discriminant validity.

Findings from the Structural Equation Modeling Analysis

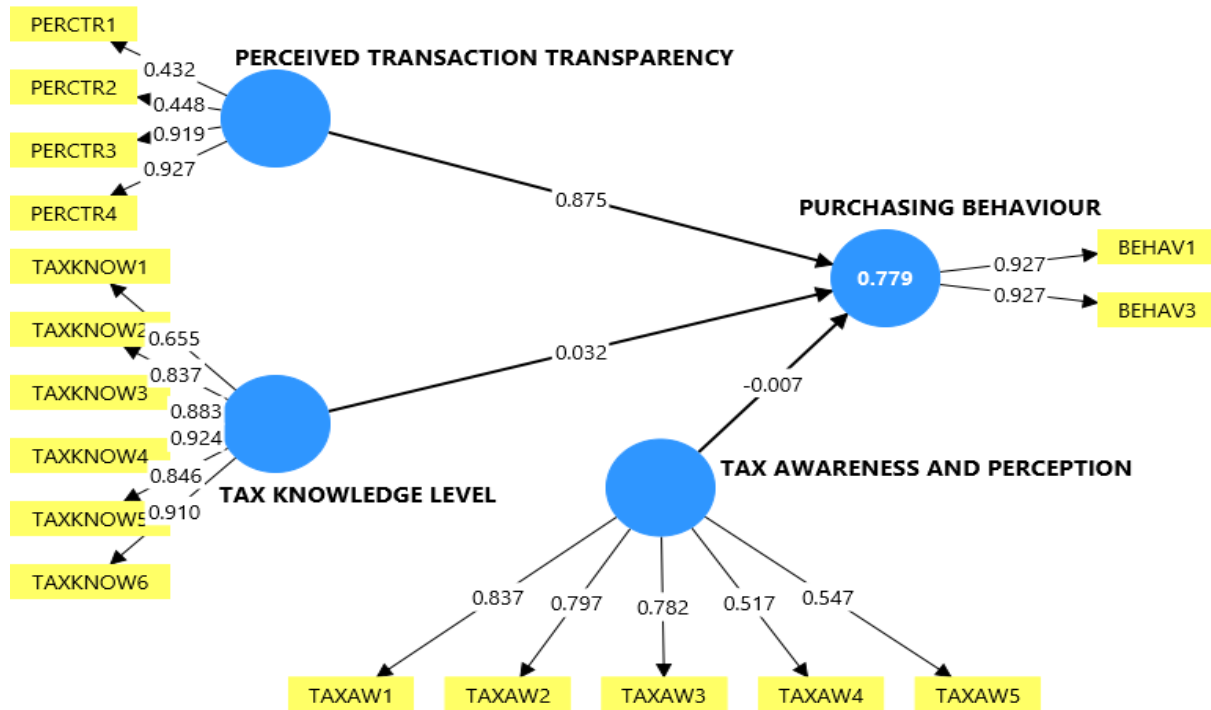


Figure 2. Measurement Model Analysis Results

Table 5. PLS-SEM Analysis Results

	PATHS	Standardized Beta Coefficient	Standard deviation	T value	P values	Results
H ₁	Tax knowledge level -> Purchasing behavior	0,032	0,036	0,867	0,386	Rejected
H ₂	Tax awareness and perception -> Purchasing behavior	-0,007	0,040	0,170	0,865	Rejected
H ₃	Perceived transaction transparency -> Purchasing behavior	0,875	0,030	29,279	0,000	Accepted

In this study, the effects of three basic tax-related variables (tax knowledge level, tax awareness and perception, perceived transaction transparency) on consumers' purchasing behavior in the context of cross-border e-commerce were tested through PLS-SEM. The analysis results showed that only perceived transaction transparency significantly affected purchasing behavior. The effects of the other two variables were not found to be statistically significant. The findings reveal that consumers' cognitive levels and ethical awareness regarding taxes do not directly affect purchasing decisions, whereas transparency in transaction processes is a strong determinant.

Within the scope of the first hypothesis (H_1), the effect of consumers' tax knowledge levels in cross-border shopping on purchasing behavior was tested. The standardized beta coefficient of this relationship was calculated as 0.032, t-value as 0.867, and p-value as 0.386. A p-value above 0.05 indicates that this relationship is not statistically significant. Therefore, the hypothesis was rejected. This finding suggests that consumers' technical knowledge levels regarding taxes are not directly determinant on purchasing decisions. In other words, consumers' knowledge of tax items and rates alone does not constitute a sufficient influential factor in this decision-making process. This may indicate the existence of other mediating or moderating variables for knowledge to be transformed into behavior.

The second hypothesis (H_2) evaluates the effect of individuals' tax awareness levels and perceptions on purchasing behavior. The standardized beta coefficient obtained is -0.007, t-value is 0.170 and p-value is 0.865. These values indicate that the direction of the relationship is negative and its effect is quite low, and it is also not statistically significant. The hypothesis is therefore rejected. This result shows that consumers' perceptions of ethical or legal responsibilities regarding taxes have a limited effect on purchasing behavior. Participants' agreement with statements such as paying taxes is a civic duty or tax revenues finance public services is not directly reflected in purchasing actions. In this context, it can be said that there is a gap between normative perceptions and actual consumer behavior. The existence of the social desirability effect should also be taken into account in the interpretation of this finding.

Within the scope of the third hypothesis (H_3), the effect of perceived transaction transparency on purchasing behavior was evaluated. The standardized beta coefficient obtained for this relationship is 0.875, t-value is 29.279 and p-value is 0.000. The results demonstrate a statistically robust and substantively meaningful relationship. The hypothesis was accepted. This finding reveals that the most determining factor in the purchasing decisions of consumers in cross-border e-commerce is the extent to which the tax and customs information encountered during the transaction process is presented in a clear, understandable and transparent manner. In particular, in terms of consumer experience, the completeness and simplicity of the information presented during the transaction positively shapes purchasing behavior. The high beta coefficient confirms that the strongest path coefficient in the model belongs to this variable and that the perception of transparency is a fundamental building block in purchasing intention.

As a result, in this study, while cognitive and normative elements such as tax knowledge level and tax awareness do not directly affect consumer behavior, the transparency of the transaction process strongly affects consumer decisions. These findings indicate that cross-border e-commerce platforms should provide user-friendly explanations, especially regarding tax and customs transactions. From an academic perspective, the results of the study support the concepts of behavioral economics such as cognitive load and perceived convenience in e-commerce. Transparency throughout the purchasing process is a key element not only in adhering to the law but also in trust-building and in creating the decision-making process an easy one.

In the instance of PLS-SEM, there are a number of threshold values that determine the reliability and validity of the model, taking into consideration factors such as R^2 , Q^2 , VIF, and f^2 . Researchers need to know these thresholds so that their research findings are firm and trustworthy.

R^2 is the proportion of variance explained by the model. Benchmark thresholds establish that an R^2 value above 0.1 indicates a small effect, above 0.25 indicates a moderate effect, and above 0.36 indicates a large effect (Hair et al., 2019). Similarly, the Q^2 value measures model predictive power and provides values above zero, which reveals that the model has higher predictive accuracy than a naive average model (Rasyad et al., 2024). This provides a basis for determining the validity of the model to predict outcomes.

The VIF is constructed globally across PLS-SEM to gauge multicollinearity. Standard values define that a VIF value above 5 (or 3,3 in some contexts) indicates possible multicollinearity issues that might affect the reliability of the regression coefficients (Judijanto et al., 2023; Göktaş & Dirsehan, 2024). Keeping the VIF values below such cut-offs is necessary in order to test the structural validity of the model. A cut-off of 3.3 has been suggested in certain studies as being more conservative, particularly in exploratory studies, due to the risk of common method bias (Kock, 2015; Vural et al., 2024).

Effect size, depicted in the form of f^2 , measures the effect of a predictor variable on the dependent variable. Standard guidelines categorize f^2 values: an f^2 value greater than 0.02 depicts a small effect size, values close to 0.15 depict a moderate effect, and an f^2 value greater

than 0.35 depicts a large effect size (Rasyad et al., 2024). It indicates the magnitude of construct relationships by making researchers aware of their significance in the model.

In summary, R^2 , Q^2 , VIF, and f^2 threshold value definitions provide a comprehensive platform for the validation of PLS-SEM models. Researchers should adhere to the specified threshold values to ensure their findings are reliable, appropriately checking for multicollinearity, predictive relevance, and effect sizes.

Table 6. Results for R^2 , Q^2 , f^2 , and VIF

<u>PATHS</u>	<u>R²</u>	<u>Q²</u>	<u>VIF</u>	<u>f²</u>
Tax knowledge level -> Purchasing behavior	0,776	0,769	1,211	0,003
Tax awareness and perception -> Purchasing behavior			1,386	0,000
Perceived transaction transparency -> Purchasing behavior			1,325	2,619

Analysis results obtained in PLS-SEM show that the model has generally quite a high explanatory and predictive power. Firstly, the computed value of R^2 for dependent variable Purchasing Behavior is 0.776. This value is extremely high according to the thresholds laid down by Hair et al. (2019), and it reflects that the model explains 77.6% of the variance in purchasing behavior and has a huge effect in this context. The Q^2 value was obtained as 0.769; this reveals that the model has excellent prediction capability and demonstrates improved predictive efficiency compared to univariate mean-based models (Rasyad et al., 2024).

When the VIF values for the multiple linear relationship measures between the structures are examined, it is understood that the VIF values of all variables are less than 3.3 and less than 5 in a broader context. Variables Tax Knowledge Level (1.211), Tax Awareness and Perception (1.386) and Perceived Transaction Transparency (1.325) all show that there is no critical multicollinearity problem in the model. This ensures the validity and robustness of the structural model (Judijanto et al., 2023; Gökteş & Dirsehan, 2024; Kock, 2015).

On being run on effect size (f^2), the effects of the variables Tax Knowledge Level ($f^2 = 0.003$) and Tax Awareness and Perception ($f^2 = 0.000$) on Purchasing Behavior are extremely low and still below the 0.02 benchmark set by Hair et al. (2019), which means that they are contributing nothing significantly. On the other hand, the variable Perceived Transaction

Transparency also has a very high f^2 value of (2.619). This is much more than the 0.35 that is prescribed in literature and thereby signifies that this variable is the most dominant determining factor for the model. This finding shows that the perception of transparency plays a decisive role on purchasing behavior and is at the center of the structural model. As a result, the model has a high explanatory power in general, and the effect of the variable Perceived Transaction Transparency in particular seems dominant. The contribution of the other two variables is negligible. This shows that perception of transparency is a critical factor in explaining purchasing behavior, while tax knowledge and perception have limited effect.

5. CONCLUSION

5.1. Theoretical Results

The findings of this study indicate that the level of knowledge and awareness of taxation in cross-border e-commerce may have a limited effect on consumer behavior. The analysis conducted using a structural equation model revealed that only perceived transaction transparency had a significant and positive effect on purchasing behavior ($\beta = 0.875$). On the other hand, the variables of tax knowledge level, tax awareness, and perception did not have a direct significant effect. This finding suggests that, rather than simply possessing information, the way in which this information is presented—in a clear, simple, and understandable manner—is more decisive in consumers' decision-making processes.

Irfandhani and colleagues (2023) emphasized that tax knowledge alone is insufficient to determine purchasing behavior; they showed that being knowledgeable does not guarantee that this knowledge will translate into behavior. Similarly, Feldman and Ruffle (2015) found that despite improvements in consumers' understanding of taxes, purchasing decisions are largely influenced by factors other than tax awareness. Yohana and Masdupi's (2023) study aligns with this perspective; the researchers argue that there is a complex relationship between tax knowledge and financial literacy, and while this knowledge may influence financial management behaviors, it does not have a direct effect on purchasing tendencies. The findings of this study support the research conducted in the literature.

Similarly, Giuffrida et al. (2021) found that consumers in industries subject to stricter regulations following quality scandals prioritize psychological factors such as product safety

over tax awareness in their purchasing decisions. This result is consistent with the findings of this study. Similarly, Guo et al. (2021) determined that the rich content and perceived high value offered by interactive shopping experiences have a stronger impact than tax awareness, revealing that the presentation style and quality of the experience are more decisive than the level of information in consumers' purchasing decisions. Salim and Doraisamy (2022) have shown that social values and emotional bonds in the fashion industry influence consumer intentions, demonstrating that social effects can override financial factors. These findings are also consistent with the results obtained in this study.

However, the findings in the literature by Chen et al., 2023; Nicolaou, 2011; Zhou et al. (2018) say that perceived transparency plays a key role in establishing trust and the probability of transaction completion in digital consumer behavior support the result obtained in this study. When all these findings are evaluated together, it can be seen that consumer behavior in cross-border e-commerce cannot be explained solely by the level of tax information; multidimensional factors such as psychological security, perceived value, social ties, and interaction experience may be stronger determinants.

5.2. Practical Results

The research results offer concrete suggestions, especially for policy makers, e-commerce platforms and consumer education. First of all, at the policy level, it should be mandatory to clearly and understandably display the taxes and customs fees to be applied in cross-border shopping during the shopping process. Consumers are more concerned about when and how they will encounter this tax rather than the content of the tax. Therefore, displaying tax and customs obligations before the order in shopping via digital platforms reduces transaction abandonment rates and positively affects purchasing behavior. The suggestions emphasized by the OECD (2021) to simplify e-commerce tax systems and provide transparent information to consumers are supported in this context.

From the perspective of e-commerce platforms, it is important to make tax calculation systems more visible in user interfaces. Clear answers to basic questions such as “Is tax included in the order total?” and “Will I pay import tax?” directly affect customer loyalty and trust. Platforms offering cost explanation panels or dynamic tax calculators that provide step-by-step

tax and customs costs at the ordering stage would significantly improve the customer experience. Multilingual explanations and infographic-based information cards would be especially useful for platforms operating in multinational markets to increase global consumer confidence.

In terms of consumer education, another important result of this research is that the inability to access information or make sense of information is more effective on behavior than the lack of tax information. Therefore, traditional tax education models should focus not only on teaching tax types, but also on presenting this information in a simple manner. For example, in information campaigns conducted by public institutions or platforms, why and how items such as import tax and VAT are collected should be explained with simple and understandable graphics; the use of complex language should be reduced. As stated by Adam et al. (2022), the lack of information or uncertainty encountered during the transaction causes consumers to stop the shopping process or lose confidence.

6. LIMITATIONS OF THE RESEARCH

This study has certain limitations. First of all, the study only covers individuals who shop cross-border in Türkiye. As cultural values, digital literacy levels, and regulatory frameworks differ, different results may be obtained in other countries. Therefore, the generalizability of the findings is limited. Secondly, the data used in the study are cross-sectional; that is, they were collected at a specific time and do not reflect changes over time. Therefore, longitudinal studies are needed to test the cause-effect relationships more strongly.

Thirdly, since the research data are based on the participants' own reports, there may be subjective evaluation bias or social desirability bias. Behavioral experiments or observational studies based on digital shopping history may be more effective in overcoming such limitations. Finally, only tax-related variables are included in the model, but other important factors that may affect consumer behavior (such as product originality, delivery time, platform security) are not included as control variables. Integration of these variables in future studies will further increase the explanatory power of the model.

REFERENCES

- Ackermans, K.- Bakker, M.- Gorissen, P.- Van Loon, A. MP.- Kral, - Bakker Camp, G. (2024). “Development and validation of a test for measuring primary school students' effective use of ICT: The ECC-ICT test”. *Journal of Computer Assisted Learning*, 40(3), 960-972.
- Adam, S. M.- Shagari, S. L.- Kabir, M. A.- Abubakar, A. (2022). “Perceived effect of e-commerce tax awareness and technology optimism on tax compliance intention”. *Journal of Integrated Sciences*, 3(1).
- Ari, Y. O. (2019). “Türkiye’de ve dünyada sınır ötesi elektronik ticaret”. *Erzincan Binalı Yıldırım Üniversitesi İİBF Dergisi*, 1(2), 11-22.
- Bejer, A.- Szczepanik, M.- Płocki, J.- Szymczyk, D.- Kulczyk, M.- Pop, T. (2019). “Translation, cross-cultural adaptation and validation of the polish version of the Oxford Shoulder Score in patients undergoing arthroscopic rotator cuff repair”. *Health and Quality of Life Outcomes*, 17, 1-9.
- Bilici, F. (2024). “Tüketicilerin doğal bal algısı ve satınalma davranışlarını etkileyen faktörler üzerine bir araştırma”. *Uludağ Arıcılık Dergisi*, 24(1), 93-125.
- Bilici, F.- Sönmezay, M. (2025). “Sınır ötesi e-ticarette tüketici memnuniyetsizliği: Nitel bir değerlendirme”. *Bursa Uludağ Üniversitesi Uluslararası Ticaret ve Lojistik Sempozyumu Bildirileri*, 296-302. https://www.iksadkongre.com/_files/ugd/614b1f_be855cbb97014b4dad4f1b28d9ec8b1.pdf (Access Date: 25.06.2025).
- Burzyńska, J.- Rękas, M.- Januszewicz, P. (2022). “Evaluating the psychometric properties of the eHealth literacy scale (eHEALS) among polish social media users”. *International Journal of Environmental Research and Public Health*, 19(7), 4067.
- Calderon Jr, R. - Kim, G.- Ratsameemonthon, C.- Pupanead, S. (2020). “Assessing the adaptation of a Thai version of the ryff scales of psychological well-being: A PLS-SEM approach”. *Psychology*, 11(7), 1037-1053.
- Chen, X., Wei, S., Ding, R.- Li, Y. (2024). Managing users' uncertainty in social commerce: The moderating role of cultural tightness. *Industrial Management & Data Systems*, 124(2), 666-697.
- Demir, S.-Akyol, S. (2024). Vergi algısı ve vergi bilinci üzerine ampirik bir araştırma: Akdeniz üniversitesi örneği. *Maliye Çalışmaları Dergisi*, 72, 1-20.
- Dogan, B. S. (2025). Vergi algısı ve vergi bilinci: Tokat Gaziosmanpaşa Üniversitesi İktisadi ve İdari Bilimler Fakültesi öğrencileri üzerine bir analiz. *Erciyes Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 70, 115-124.

- European Commission (2021). VAT e-commerce package: Introduction of new VAT rules for e-commerce as of 1 July 2021. Publications Office of the European Union. (https://ec.europa.eu/taxation_customs/business/vat/vat-e-commerce_en, Access Date: 26.06.2025).
- Feldman, N. E., & Ruffle, B. J. (2015). The impact of including, adding, and subtracting a tax on demand. *American Economic Journal: Economic Policy*, 7(1), 95-118.
- Fornell, C.- Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Giuffrida, M., Jiang, H.-Mangiaracina, R. (2021). Investigating the relationships between uncertainty types and risk management strategies in cross-border e-commerce logistics. *The International Journal of Logistics Management*, 32(4), 1406-1433.
- Göktaş, P.- Dirsehan, T. (2024). “Using PLS-SEM and xai for causal-predictive services marketing research”. *Journal of Services Marketing*, 39(1), 53-68.
- Grainger, A.- Morini, C. (2019). “Disentangling cross-border interactions”. *The International Journal of Logistics Management*, 30(4), 958-973.
- Grudecka, A. (2025). “Consumer behavior and cross-border e-commerce perspective”. In *Digital Internationalisation of Firms*, Routledge.
- Guo, J., Li, Y., Xu, Y.-Zeng, K. (2021). How live streaming features impact consumers’ purchase intention in the context of cross-border E-commerce? A research based on SOR theory. *Frontiers in Psychology*, 12, 1-10.
- Hair, J. F.- Sarstedt, M.- Hopkins, L.- Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM). *European Business Review*, 26(2), 106-121.
- Hair, J. F.- Risher, J. F.- Sarstedt, M.- Ringle, C. M. (2019). “When to use and how to report the results of PLS-SEM”. *European Business Review*, 31(1), 2-24.
- Hamid, A. N.- Ibrahim, N. A.- Ariffin, N.- Taharin, R.- Jelani, F. A. (2019). “Factors affecting tax compliance among Malaysian SMEs in e-commerce business”. *International Journal of Asian Social Science*, 9(1), 74-85.
- Hejazi, S. S.- Hosseini, M.- Ebadi, A.- Alavi Majd, H. (2022). “Development and psychometric properties evaluation of caregiver burden questionnaire in family caregivers of hemodialysis patients”. *BMC nursing*, 21(1), 246.
- Henseler, J.- Ringle, C. M.- Sinkovics, R. R. (2009). “The use of partial least squares path modeling in international marketing”. In *New challenges to international marketing*, Emerald Group Publishing Limited.
- Ibrahim, A. N. H.- Borhan, M. N. (2023). “Studying the factors influencing user satisfaction and reuse intention towards monorail service using a PLS-SEM approach: A case study

- in Kuala Lumpur, Malaysia”. In IOP Conference Series: Materials Science and Engineering, IOP Publishing.
- Irfandhani, R., Sulastri, S., Maulana, A.-Widiyanti, M. (2023). Influence of tax knowledge, socialization, and sanction on the decision to participate in the voluntary disclosure program with intention as an intervening variable: A case study AT Palembang Ilir Timur Tax Office. *International Research Journal of Management, IT and Social Sciences*, 11(1), 7-14.
- Judijanto, L.- Murthada, M.- Putra, A. S. B.- Astuti, A. K. (2023). “Synergy of work environment, ceo characteristics, and msme performance: A case study in Indonesia’s clothing industry”. *International Journal of Business, Law, and Education*, 4(2), 1328-1339.
- Klein, J. G.- Ettenson, R.- Morris, M. D. (1998). The animosity model of foreign product purchase: An empirical test in the People's Republic of China. *Journal of Marketing*, 62(1), 89-100.
- Kim, J.- Seo, J.- Zo, H.- Lee, H. (2021). “Why digital goods have not replaced traditional goods: The case of e-books”. *Journal of Enterprise Information Management*, 34(3), 793-810.
- Kirchler, E.- Hoelzl, E.- Wahl, I. (2008). “Enforced versus voluntary tax compliance: The “slippery slope” framework”. *Journal of Economic psychology*, 29(2), 210-225.
- Kock, N. (2015). “Common method bias in PLS-SEM: A full collinearity assessment approach”. *International Journal of e-Collaboration*, 11(4), 1-10.
- Li, W.- Lay, Y. F. (2024). “Examining the reliability and validity of measuring scales related to informatization nstructional leadership using PLS-SEM approach”. *Dinamika Jurnal Ilmiah Pendidikan Dasar*, 16(1), 12-32.
- Liu, X.- Dou, Z. Yang, W. (2021). “Research on influencing factors of cross border e-commerce supply chain resilience based on integrated fuzzy”. *IEEE Access*, 9, 36140-36153.
- Liu, F.- Yang, Y.- Wang, F.- Li, W. (2025). “The English debating self-efficacy scale: Scale development, validation, and psychometric properties”. *PloS one*, 20(2), 1-17.
- Lwin, M.- Wirtz, J.- Williams, J. D. (2007). “Consumer online privacy concerns and responses: A power–responsibility equilibrium perspective”. *Journal of the Academy of Marketing Science*, 35, 572-585.
- Mebratu, A. A. (2024). Theoretical foundations of voluntary tax compliance: Evidence from a developing country. *Humanities and Social Sciences Communications*, 11(1), 1-8.
- Morini, C.- Pieri Leonardo, F.- Chaudhary, V.- Hintsu, J. (2024). “A paradigm shift in cross-border e-commerce regulatory compliance: Evidence from Brazil”. *World Customs Journal*, 18(2), 3–19.

- Nicolaou, A. I. (2011). Supply of data assurance in electronic exchanges and user evaluation of risk and performance outcomes. *Electronic Markets*, 21(2), 113-127.
- OECD. (2021). “Tax policy reforms 2021: Special edition on tax policy during the COVID-19 pandemic”. OECD Publishing.
- Olivola, C. Y.- Sussman, A. B. (2015). “Taxes and consumer behavior”. In M. I. Norton, D. D. Rucker, & C. Lambertson (Eds.), *The Cambridge handbook of consumer psychology*, Cambridge University Press.
- Ortakarpuz, M. (2022). “Sınır ötesi elektronik ticarete vergilendirme sorunları ve sorunların çözümüne yönelik uygulamalar”. *Vergi Raporu*, 274, 11-32.
- Panahi, S.- Bazrafshani, A.- Mirzaie, A. (2023). “Development and validation of a modified LibQUAL scale in health sciences libraries: Application of Structural Equation Modeling”. *Journal of the Medical Library Association: JMLA*, 111(4), 792-801.
- Peterson, R. A. - Kim, Y. (2013). “On the relationship between coefficient alpha and composite reliability”. *Journal of Applied Psychology*, 98(1), 194.
- Rasyad, R. K.- Afgani, K. F.- Ali, Q. (2024). “The effects of ESG on firm performance and firm value: A study of Indonesian and Malaysian listed companies”. *Journal Integration of Management Studies*, 2(1), 1-17.
- Rianto, L.- Agustina, I.- Alfian, S. D.- Iskandarsyah, A.- Pradipta, I. S.- Abdulah, R. (2024). “Development and validation of a structured questionnaire for assessing risk factors of medication non-adherence among pulmonary tuberculosis patients in Indonesia”. *Frontiers in Pharmacology*, 14, 1-16.
- Rista, N.- Aprilina, V.- Baryanto, S. (2022). “E-commerce, self assessment system, tax knowledge and automatic exchange of information on tax avoidance intentions”. *Journal Ilmiah Manajemen Dan Bisnis*, 8(2), 191-202.
- Saad, N. (2014). “Tax knowledge, tax complexity and tax compliance: Taxpayers’ view”. *Procedia-Social and Behavioral Sciences*, 109, 1069-1075.
- Sarstedt, M.- Hair Jr, J. F.- Cheah, J. H.- Becker, J. M.- Ringle, C. M. (2019). “How to specify, estimate, and validate higher-order constructs in PLS-SEM”. *Australasian Marketing Journal*, 27(3), 197-211.
- Şimşek, H. Z.- Yay, S. (2022). Açımlayıcı faktör analizi ve e-ticaretin vergilendirilmesinde karşılaşılan sorunlar üzerinde etkili olan boyutların belirlenmesi üzerine bir uygulama. *Ekonomi Bilimleri Dergisi*, 14(2), 216-236.
- Tokdemir, S. (2019). “Elektronik vergi uygulamalarının vergi maliyeti ve vergi uyumu üzerindeki etkileri”. Master's thesis, Marmara Üniversitesi (Türkiye), https://tez.yok.gov.tr/UlusalTezMerkezi/tezDetay.jsp?id=h6_qgP4RE2XtuYmKe7N7cw&no=EhIqWoIfaa9bwNEZQciJmg, (Access Date: 23.06.2025).

- Toly, A. A.- Sandova, G. A.- Hutabarat, M. S. S. (2023). “The influence of tax awareness, tax knowledge, and tax socialization of value added tax imposition on tax compliance of e-commerce users” (Doctoral dissertation, Petra Christian University), https://repository.petra.ac.id/20910/1/Publikasi1_01050_10444.pdf, (Access Date: 23.06.2025).
- UNCTAD. (2023). Cross-border e-commerce and consumer trust: Challenges and solutions. United Nations Conference on Trade and Development. (https://unctad.org/system/files/official-document/tdr2023_en.pdf, Access Date: 25.06.2025).
- Valarezo Unda, Á.- Pérez-Amaral, Á.- Garín-Muñoz, T.- López, R. (2018). “Drivers and barriers to cross-border e-commerce: Evidence from Spanish individual behavior”. *Telecommunications Policy*, 42(6), 464–473.
- Varnalı, T. (2024). Elektronik ticaretin vergilendirme zorlukları ve çözüm yolları. *Toplum Ekonomi ve Yönetim Dergisi*, 5(1), 195-224.
- Vural, C. A.- Balci, G.- Balci, E. S. - Gocer, A. (2024). “Looking inside the panarchy: Reorganisation capabilities for food supply chain resilience against geopolitical crises”. *Supply Chain Management: An International Journal*, 30(7), 1-19.
- Yelman, E., İnal, V.- Beşel, F. (2023). Vergi okuryazarlığına yönelik ampirik çalışmalar: Sistematik bir literatür taraması. *Sakarya İktisat Dergisi*, 12(4), 539-565.
- Yohana, E.- Masdupi, E. (2023, June). The influence of financial knowledge on tax literacy with individual financial management. In *Proceedings of the Ninth Padang International Conference on Economics Education, Economics, Business and Management, Accounting and Entrepreneurship*, 672, 57. Springer Nature.
- Zhang, X.- Zha, X.- Zhang, H.- Dan, B. (2022). “Information sharing in a cross-border e-commerce supply chain under tax uncertainty”. *International Journal of Electronic Commerce*, 26(1), 123-146.
- Zhou, L.- Wang, W.- Xu, J. D.- Liu, T.- Gu, J. (2018). “Perceived information transparency in B2C e-commerce: An empirical investigation”. *Information & Management*, 55(7), 912-927.