

DETERMINANTS OF ENVIRONMENTAL ACCOUNTING INFORMATION DISCLOSURE: AN EMPIRICAL ANALYSIS FROM THE FDI SECTOR IN VIETNAM

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Abstract. Vietnam is a country with fast and dynamic economic growth in Asia. Implementing social responsibility is a strong development trend driven by market demands, government regulations and other stakeholders. This study analyzes the factors affecting the intention to disclose environmental accounting information of FDI enterprises in Vietnam. The study combines three theories including the theory of planned behavior, stakeholder theory, and agency theory to build empirical model. We collected primary data through a survey of 320 FDI enterprises in 5 provinces. The data were analyzed with techniques such as descriptive statistics, Cronbach's Alpha analysis, exploratory factor analysis, and regression. The results show that ten factors from all three theoretical models have a positive and significant impact on the disclosure of environmental accounting information by FDI enterprises, with the attitude of enterprises towards information disclosure having the strongest impact. The study also discusses and proposes ideas to promote the disclosure of social responsibility information in general and environmental accounting information in particular at FDI enterprises.

Keywords: *accounting, business model, corporate social responsibility, sustainable development, enterprises, sustainability report*

Introduction

In recent years, the social role of enterprises has received increasing attention from the community (Ali et al., 2017; Gupta, 2020; Momin and Parker, 2023). Under pressure from the market and increasingly stringent requirements from the governments, the disclosure of information on corporate social responsibility (CSR) has become an indispensable part of the business strategy of enterprises, especially those operating in many countries (Dienes et al., 2016; Baje et al., 2020; Halbac et al., 2021; Jijian et al., 2021). In the trend of global economic integration, investors are increasingly interested in how enterprises have business strategies to increase competitiveness and sustainable development. An enterprise reporting on transparency and social responsibility helps enterprises build trust with stakeholders and contributes to overall economic trust (Orazalin et al., 2018; Kong et al., 2019; Li et al., 2020). The benefits of disclosing social responsibility information include increased customer trust, enhanced opportunities for new business ventures, strengthened relationships with customers, suppliers, and supply chains, attraction of skilled human resources, competitive

advantage, and improved brand image. These potential benefits contribute to promoting more and more businesses of all types, sizes and sectors around the world to decide to publish reports related to their environmental and sustainability aspects (Orazalin and Malmood, 2019; Tauringana, 2020; Khattak and Ahmad, 2021; Precul et al., 2022).

Currently, environmental accounting information disclosure (EAID) is a form of corporate responsibility for the environmental impacts caused by manufacturing activities (Kouloukoui et al., 2019; Agyemang et al., 2023). EAID has been increasingly implemented in both developed and developing countries with the aim of increasing transparency and accountability for environmental impacts, while helping them build trust and credibility with stakeholders, including investors, employees, customers and communities (Alroud et al., 2018; Goldstein and Yang, 2019). According to Gupta et al. (2019), many environmental regulations and mechanisms have been issued in the world to force businesses to be accountable for their environmental responsibilities. In particular, the formation of regulations on EAID is necessary, raising the awareness of businesses of sustainable development and production compatible with the conservation of ecosystems. Empirical results show that EAID contributes to the success of businesses in both financial and non-financial aspects and sustainability (Jankovic et al., 2014; Gupta et al., 2019; Agyemang et al., 2021).

There have been many studies so far on the issue of EAID in general and in the manufacturing industry in particular, along with the factors determining the behavior and level of information disclosure have also been identified (Hasan et al., 2015; Mudiyansele, 2018; Kouloukoui et al., 2019; Agyemang et al., 2023). The authors have used many different theories to explain the voluntary and mandatory EAID behavior of companies, including the commonly used theories such as the theory of planned behavior, the theory of reasoned action, legitimacy theory, stakeholder theory, agency theory, resource-based view theory, and a combination of them (Ali et al., 2017; Baje et al., 2020; Momin and Parker, 2023). Deegan and Gordon (1996) conducted a study on the EAID of economic groups in Australia and showed that companies disclose this information due to increasing pressure on market transparency; however, they only disclose information that is beneficial to them and tend to hide unfavorable information. Gupta (2020) found that there is a positive relationship between internal factors such as profit, company size, number of shareholders and information disclosure in annual reports. Hahn and Kühnen (2013) demonstrated that geographical factors, listing status, industry group, and company size have an impact on voluntary and mandatory environmental information disclosure in enterprises in developing countries. Islam and Deegan (2018) showed that there is a positive relationship between the level of accounting disclosure of a company and the structural factors of equity, firm size, firm age, profitability and multinational affiliation in Asia and Africa. Kouloukoui et al. (2019) showed that perceptions of potential benefits, attitudes and social trends have a positive impact on voluntary environmental disclosure in listed companies in Brazil. Chau and Gray (2022) showed that in Hong Kong, the lower the government shareholding, the higher the level of disclosure and vice versa; in addition, the size and industry of the enterprise affect the disclosure of environmental accounting information; companies operating in the manufacturing sector tend to disclose more information than those operating in the service and trading sectors.

Vietnam, after implementing the Doi Moi (1986), has achieved many economic development achievements and is currently one of the countries with the fastest growing economies in Asia in the past two decades (Dat and Truong, 2020; Nguyen et al., 2022).

The GDP scale has been constantly expanding, reaching about 430 billion USD in 2023, becoming the 5th largest economy in ASEAN and the 35th among the 40 largest economies in the world (General Statistics Office - GSO, 2024). Industry and services have developed quite rapidly, continuously increasing and currently account for about 88% of GDP. GDP per capita has increased 58 times compared to 1986, reaching more than 5000 USD in 2023 (GSO, 2024). However, the process of socio-economic development has revealed shortcomings and created great pressure on the ecological environment. Environmental quality is rapidly and seriously deteriorating (Dat and Truong, 2020). In 2023, Vietnam ranked 178/180 countries in the EPI environmental index, in which the most serious problems are air pollution, biodiversity loss, resource depletion and climate change (Yale, 2024). Every year, Vietnam has to pay up to 6% of GDP due to air pollution and 2.5% of GDP damage due to climate change (World Bank, 2023). These environmental problems have threatened and hindered the country's sustainable development goals (Dat and Truong, 2020; World Bank, 2023).

In the Vietnamese economy, FDI is a pillar and plays a particularly important role (Le and Nguyen, 2019; Dat and Truong, 2023). Since the promulgation of the Law on Foreign Investment in Vietnam (1987) to date, Vietnam has attracted nearly 438.7 billion USD of FDI capital (GSO, 2023). In 2023 alone, although Vietnam's economic growth decelerated (only reaching 5.05% of GDP compared to 8% of GDP in 2022) due to the difficult global economic context, Vietnam is still an attractive destination for FDI capital. FDI capital in Vietnam reached 36.61 billion USD in the year, disbursement reached 23.18 billion USD (GSO, 2023). The number of new projects increased by 66.3%, much higher than the growth rate of total new investment capital, showing that small and medium-sized foreign investors continue to be interested in and confident in Vietnam's investment environment. FDI not only creates strength for growth but also has many positive social impacts such as contributing to economic restructuring, modernizing industries, creating more jobs, promoting technology transfer and improving labor productivity (Dat and Truong, 2020; Nguyen, et al., 2022; GSO, 2023).

In Vietnam, the issue of CSR and CSR disclosure is increasingly of interest to enterprises due to the need for international economic integration, which forces enterprises to accept the "rules of the game" of the world, combined with pressure from the community after a series of environmental scandals caused by FDI enterprises (Le and Nguyen, 2019; Dat and Truong, 2020; Nguyen et al., 2022). In Vietnam, CSR disclosure is regulated in the Law on Enterprises (amended in 2020) and Circular No. 155/2015/TT-BTC of the Ministry of Finance guiding CSR disclosure. Accordingly, companies must disclose information on 22 CSR indicators, including environmental protection, labor standards, human rights and community development measures. In addition, Circular 96/2020/TT-BTC of the State Securities Commission stipulates that public and listed companies must disclose in their annual reports their environmental and social impacts. In particular, it is necessary to measure and report total greenhouse gas emissions directly and indirectly. However, the awareness and level of CSR disclosure of enterprises in Vietnam still have many shortcomings and limitations (Dat and Truong, 2023). In 2021, the State Securities Commission (SSC) said that it had issued 568 decisions to sanction administrative violations, with a total fine of up to VND 29.5 billion. In which, the violations were mainly related to information disclosure (SSC, 2023).

The above research and practical context raises a research question: What factors determine EAID of FDI enterprises in Vietnam? A summary of existing studies in this

field points out some gaps. Firstly, there are quite a few studies on factors affecting EAID information disclosure, the main analytical method is to score information disclosure and then perform regression analysis to examine the correlation between factors and dependent variables (Kong et al., 2019; Islam et al., 2018; Momin and Parker, 2023). Secondly, these studies are mainly conducted in the context of developed countries with clear regulations on EAID; there are not many studies on the same topic in developing countries with dynamic economies and the key role of FDI in economic growth (Nguyen et al., 2022). In addition, previous studies are often based on a fundamental theory, which can be used in its original form or supplemented with some factors; there are few studies that combine theories together. The combination will allow for a more comprehensive picture of the analysis and enhance the explanatory power of the theories when connected (Alroud, 2018; Agyemang et al., 2023).

This study aims to analyze the factors affecting EAID intentions of FDI enterprises in Vietnam. We establish a model combining three theories, TPB, TOE and TRA, to explore the factors affecting EAID as well as the interactions between those factors in the context of rapid economic integration and development in Vietnam. Thereby, we draw managerial implications for Vietnam in the coming time to promote EAID in particular and CSR in general. The study is structured as follows: (i) the introduction describes the background, need and research gap; (ii) the next section presents the theoretical framework and analytical model; (iii) the methodology section describes the research process, measurement of variables, data collection and analysis; (iv) the results section presents the main findings of the study; (v), finally, the discussion section will compare the results with existing studies and propose some managerial implications drawn from the study.

Theoretical framework and model development

Environmental accounting information disclosure

According to Ali et al. (2017), corporate information disclosure is a process of transmitting information from the company to stakeholders including: state management agencies, suppliers, financial institutions, investors, employees, and the community. These stakeholders are interested in information from the company's operations because it affects their interests. In which, environmental information disclosure is an important step in the disclosure of CSR information of the enterprise (Ali et al., 2017; Alroud, 2018). The environmental information disclosed by the company can be financial or non-financial information, in which financial information can include compliance costs, investment, management, and fines; non-financial information includes data on environmental components, reserves, environmental impacts, waste, pollution levels, environmental degradation, and information on other environmental issues (Deegan and Gordon, 1996; Gupta, 2020; Aayemang et al., 2023). According to Agyemang et al. (2021), EAID is the disclosure of information on the balance sheet, business performance report and financial statement notes, describing the environmental issues that the company may encounter, the improvements that the company has made, the level of implementation of environmental protection measures according to regulations; information on assets, costs, liabilities, environmental income (Gupta, 2020; Kouloukoui et al., 2019). Environmental accounting information that businesses disclose can be mandatory or voluntary. Mandatory information provided to users through annual reports in compliance with regulations, mandatory disclosure puts the

organization in a position of increased supervision. Environmental reports of enterprises can be presented through channels such as social responsibility reports, independent environmental reports, or sustainable development reports (Dolling, 2010; Goldstein I., Yang, 2019; Ding et al., 2022).

Stakeholder theory

Stakeholder theory is derived from the economic interest in all actions of economist Milton Friedman (1970) in the study of CSR. The theory of stakeholders emphasizes the responsibility of enterprises as well as the interests of stakeholders. In the process of implementing responsibilities to stakeholders, information disclosure plays an important role (Mathuwa and Kiview, 2016; Oseil, 2017). Based on the theory of stakeholders in strategic management, Ullmann (1985) proposed three models in three different directions to explain the behavior of CSR information disclosure. The first direction refers to the power of stakeholders of enterprises. According to the author, when stakeholders control important resources for enterprises, enterprises will find ways to satisfy the needs of stakeholders. If CSR disclosure is considered an effective management strategy to address stakeholder relationships, it can be seen that the relationship between stakeholder power and CSR disclosure is positively correlated. The second dimension refers to the strategic posture towards social needs - which describes how business leaders respond through making important decisions to meet social needs. The third dimension refers to the economic performance of the business in the past and present. The author argues that the economic performance of the business has an important impact on social needs and economic performance is the top concern of managers. Thus, from the perspective of stakeholder theory, the motivation for businesses to practice and report CSR information is to fulfill their responsibilities to stakeholders (Saleh et al., 2018; Wang et al., 2020). Depending on the power status of stakeholders, the vision of the administrator and economic resources, the enterprise can have a strategy to implement and disclose CSR information for it (Zhao and Patten, 2016; Osei et al., 2017).

Agency theory

Jensen and Meckling (1976) defined an agency relationship as a contractual relationship whereby one or more persons (principals) appoint another person (agent) to act on behalf of the principals in relation to the company. These tasks specifically include the management of the company, even decisions related to the disposal of the company's assets. In practice, the key management positions (CEO or board of directors) of the company will be selected by the company's shareholders (Dilling, 2010; Chau and Gray, 2022). These people will be empowered by the shareholders to make decisions on behalf of the shareholders, aiming at the common goal of the company's development. The content of the manager's actions will be clearly stated in the company's charter. According to agency theory, agency costs arise from the assumption that the two parties in this relationship (shareholders and managers of the company) have different interests. This leads to conflicts arising when both parties act in their own interests. Therefore, there is a basis to assert that there will be times when managers, for their own interests, forget the interests of the company and its owners (Hahn and Kuhnen, 2013; Islam and Deegan, 2018; Ding et al., 2022). Because of their own interests, managers will have the incentive not to work hard to seek benefits for the

company, but also to be willing to seek benefits for others outside the company. Therefore, to protect the interests of shareholders - owners of the company, it is necessary to carry out monitoring activities of managers. Agency relationships lead to information asymmetry problems due to the fact that managers have access to more information than shareholders (Islam and Deegan, 2010; Khan et al., 2013). Voluntary disclosure is a means to mitigate the agency problem, where managers who voluntarily disclose information will reduce agency costs and also to convince external users that managers are acting optimally (Gupta, 2020; Nguyen et al., 2022; Momin and Parker, 2023).

Theory of planned behavior

The TPB is a theory in the field of psychology and behavioral science developed by Ajzen (1991). TPB has proven its value and effectiveness in many studies on explaining the behavior of individuals/organizations (Mathuva and Kiweu, 2016; Orazalin and Mahmood, 2019; Phuong et al., 2024). TPB describes how a person/organization forms an intention and performs an action using three main factors: attitude, subjective norm and perceived behavioral control. Attitude is a person's view about their behavior, including values, beliefs and emotions. Subjective norms are the influence of society, family and friends on the intention to perform a behavior and are determined by social consensus and peer pressure. Behavioral control is the ability and belief to control one's behavior in different situations, including the perception of favorable or unfavorable conditions for performing the behavior (Ajzen, 1991). TPB believes that intention is the most important factor in predicting individual/organizational behavior. Intention arises from the interaction of attitudes, popular opinions and behavioral control factors. If an individual has a clear intention to perform an action and has the ability to control his/her behavior, he/she is more likely to perform that action (Dilling, 2010; Ding et al., 2022; Phuong et al., 2024).

Hypothesis development

Attitude toward environmental accounting information disclosure (ATT)

The TPB indicates that attitude is one of the factors that influence behavior. Individual attitude toward a behavior is defined as an individual's positive or negative feelings when performing that behavior. Mudiyansele (2018) believes that environmental attitude is the concern for environmental issues that stems from each individual's own perspective and the degree to which that individual perceives himself to be part of the environment. According to Kouloukoui, et al. (2019), the enterprise's awareness of environmental protection will directly affect the implementation of environmental accounting and EAID. The study suggests that managers and operators who are knowledgeable about the environment will appreciate the usefulness of implementing environmental accounting and EAID. The issue of perceived usefulness reflects the understanding of the environmental accounting and EAID foundations as well as the role of environmental accounting in supporting corporate governance and linking corporate interests with social interests. As to Khan et al. (2013), applying EAID not only helps improve the image of the enterprise but also strengthens the relationship with the community and stakeholders (Kong et al., 2019).

Hypothesis H1: Attitude has a positive impact on intention to implement EAID.

Environmental accounting information disclosure perceived benefit (PB)

Perceived benefits are the feelings and perceptions of organizations and individuals about the potential benefits of an improvement or when performing a certain behavior (Phuong et al., 2024). Many studies have demonstrated a positive relationship between perceived benefits and the intention to perform environmental behaviors of enterprises (Dienes et al., 2016; Ismail and Ibrahim, 2018; Ismael and Zkaria, 2020). Agyemang et al. (2023) demonstrated that a perceived benefit has a positive impact on EAID application in FDI in China on the condition that enterprises are equipped with specific knowledge about environmental accounting and EAID. Alroud (2018) argued that perceived benefits are an intermediary variable in connecting factors of enterprise characteristics with the intention to apply EAID in Jordan. In the world, for countries with developed market economies, CSR information disclosure is no longer a strange issue. CSR is proven to bring many benefits such as contributing to cost reduction and productivity increase, increase revenue, enhance brand value and reputation of the company, contribute to attracting good labor force, and at the same time help businesses have the opportunity to access the latest achievements in science and technology and apply those achievements to their businesses to help improve their productivity (Belal and Owen, 2017). In general, when businesses' awareness of EAID increases, the possibility that they will apply EAID will also improve (Cappellaro et al., 2020; Ayamba et al., 2023).

Hypothesis H2: Perceived benefit has a positive impact on intention to implement EAID.

Subjective norm (SN)

Ajzen (1991) defines subjective norm or social influence as the perception of influential people that an individual should or should not perform a behavior. Subjective environmental norms can be described as an individual's perception of social pressures to perform or not perform a certain environmental behavior (Chernyaev et al., 2018). According to TPB, subjective norms can be formed through the perception of normative beliefs from people or social factors that influence the entrepreneur/business owner (such as family, friends, colleagues, media, etc.). The level of impact of subjective normative beliefs on the tendency to protect the environment depends on (1) the level of support/opposition to the environmental behavior of the enterprise and (2) the enterprise's motivation to follow the wishes of influential stakeholders. The influence of stakeholders and the motivation of enterprises to follow stakeholders are two basic factors to evaluate subjective norms (Gupta, 2020; Ding et al., 2022; Nguyen et al., 2022). According to Hahn and Kühnen (2013), the greater the trust of enterprises in stakeholders, the greater the influence on CSR disclosure. Islam and Deegan's study (2018) found that social factors such as market influence, investors, customers and society are important sources affecting the level of CSR disclosure of enterprises in developing countries. Mathuva and Kiweu (2016) also built and tested a model based on TPB theory with the influences of social agents (customers, government, media) on EAID intentions and behaviors of enterprises in Kenya.

Hypothesis H3: Subjective norm has a positive impact on the intention to implement EAID.

Perceived behavior control (PBC)

Perceived behavioral control refers to the ease or difficulty in performing a behavior and reflects past experiences as well as anticipated obstacles (Phuong et al., 2024).

Ajzen (1991) demonstrated that perceived behavioral control directly influences behavioral intention and if a person's perception of control is accurate, behavioral control also predicts behavior. In contrast to Bandura's (1991) concept of perceived efficacy, it is considered "an individual's belief in his or her ability to perform the behavior required to produce performance." Self-efficacy takes into account internal control factors (Bandura, 1991). Perceived behavioral control emphasizes external and general factors (Nobili and Cappellaro, 2021). Many studies have shown that perceived behavioral control has a positive impact on green behavior intentions in various research contexts, such as the household's intention to use solar systems (Bayar and, Remeikiene, 2020), the intention to purchase green products (Phuong et al., 2024)). In the field of CSA, Bussy and Huanhuan (2023) argues that a company's environmental vision and commitment are important and are the initial steps in mobilizing efforts and resources to improve corporate sustainability. Agyemang et al. (2021) believe that current management structures and future organizational concepts determine the ease or difficulty of implementing innovation and thus promote CSR behaviors.

Hypothesis H4: Perceived behavior control has a positive impact on intention to implement EAID.

Social pressure (SP)

According to Haibo et al. (2019), the main driving force for the increasing attention to CSR comes from pressure from the public, consumers and business standards. This factor is mentioned in Islam and Deegan's study (2018) as the most important factor promoting corporate CSR behaviors. Mathuva and Kiweu (2016) pointed out that the impact of pressure from the community, media, and government agencies on environmental protection standards will make businesses apply environmental accounting. Environmental issues are of great concern to management agencies in Vietnam and the community. In 2015, the State Securities Commission issued regulations requiring public companies to disclose information related to CSR. However, there is no empirical evidence in Vietnam showing that this pressure can lead to changes in the disclosure of CSR information by Vietnamese businesses (Nguyen et al., 2022). This result has also been demonstrated in study by Osei et al. (2019) in Ghana context with the milestone of changes in the legal regulations on environmental information disclosure. In line with legitimacy theory and stakeholder theory, we argue that enterprises may increase their intention to EAID to achieve "legitimacy" or to meet the expectations of stakeholders in Vietnam regarding environmental protection.

Hypothesis H5: Social pressure has a positive impact on intention to implement EAID.

Perceived available resource (PAR)

To implement environmental issues and social responsibility towards the environment, manufacturing enterprises must invest capital to do this work. Financial resources are one of the factors affecting the level of application of environmental accounting (Wang et al., 2020; Ostic et al., 2022), as well as the disclosure of environmental information (Saleh and Jawabreh, 2020); despite the increase in environmental awareness, the lack of financial resources is an obstacle for enterprises in implementing environmental management systems in enterprises. In addition, human resources are also an important factor leading to the implementation of CSR including

the environment. In particular, enterprises need accountants with capacity in environmental accounting to collect and process environmental information before publishing (Mathuva and Kiweu, 2016; Tauringana, 2020). However, the level of environmental accounting in developing countries is not high, leading to difficulties in analyzing and processing environmental information. This leads to environmental-related costs not being clearly presented and not specifically mentioned in CSR reports. Environmental related costs such as incident response costs and cleanup costs, ecological damage costs, and compensation costs are often included in the enterprise management costs without clear separation. This limits the disclosure of information and the quality of published environmental information (Haibo et al., 2019; Mudiyansele, 2018).

Hypothesis H6: Perceived available resource has a positive impact on intention to implement EAID.

Firm size (SIZE)

Researchers have suggested that larger firms are more visible to the public (Mudiyansele, 2018; Agyemang et al., 2023). They may have more exposure to the media, NGOs, governments and other stakeholders in society, which may influence their CSR practices. In addition, it has been suggested that larger firms are more likely to diversify geographically and product-wise, so they may be larger and more diverse. Previous studies have also found a positive association between firm size and CSR disclosure in both developed and developing countries (Dilling, 2010; Belal and Owen, 2017; Gupta, 2020).

Hypothesis H7: Enterprise size has a positive impact on intention to implement EAID.

Financial performance (FP)

When explaining CSR disclosure behavior based on stakeholder theory, Ullman (1985) pointed out that in addition to the power factor of stakeholders, financial performance is also a factor that affects the disclosure behavior of CSR information of enterprises. According to Ullman (1985), enterprises with good financial performance are more likely to meet social requirements. An overview shows that many studies confirm that it affects the level of CSR disclosure (Hahn and Kühnen, 2013; Khan et al., 2013; Momin and Parker, 2023). Orazalin and Mahmood (2018) argued that enterprises with good financial performance are those with qualified business administrators. These people can make their enterprises profitable; they also have knowledge and understanding of CSR.

Hypothesis H8: Enterprise profitability has a positive impact on intention to implement EAID.

Corporate social responsibility strategic management (SM)

Corporate strategic management oriented towards social needs is described as the way leaders make policies and important decisions to meet social needs. According to Ullman (1985), a business whose managers actively affirm the position of the business with stakeholders through building CSR programs, participating in regular monitoring of these activities and institutionalizing CSR reporting activities is a business with a high level of CSR information disclosure (Hasan and Hosain, 2015; Osei et al., 2019;

Wang et al., 2020). This has also been demonstrated in the study of Ismai and Ibrahim (2018), showing that if a business where information disclosure is institutionalized according to specific standards such as having a specialized department to collect performance measurement data and issuing separate CSR reports, those businesses perform CSR and disclose CSR at a high level.

Hypothesis H9: Enterprise strategic management has a positive impact on intention to implement EAID.

Foreign shareholders (FS)

CSR originated from developed countries and then gradually spread to developing countries through globalization (Chau and Gray, 2022; Momin and Parker, 2023). Hahn and Kühnen (2013) also showed that in developed countries, enterprises make more CSR reports than enterprises in developing countries. In addition, some previous studies have also demonstrated that the foreign ownership ratio has a positive impact on the level of CSR disclosure (Mathuva and Kiweu, 2016; Mudiyansele, 2018; Saleh and Jawabreh, 2020). Therefore, the author believes that in the context of Vietnam, a developing country where the practice and disclosure of CSR information is still limited, Vietnamese enterprises with foreign shareholders from developed countries will have high requirements for the practice and disclosure of CSR information.

Hypothesis H10: The larger the foreign ownership of enterprises, the higher level of EAID intention.

Industry (IND)

Previous research has shown that the level of CSR disclosure depends largely on the type of business of a company (Kouloukoui et al., 2019). Wang et al. (2020) showed that manufacturing and potentially polluting industries tend to disclose more CSR information than service and trading businesses. This difference is due to the pressure from stakeholders on business types, manufacturing businesses often have more impacts and influences on the environment and public health than businesses in other industries. Saleh et al. (2018) pointed out those companies with sensitive business sectors, such as: chemical, mining and metallurgy industries tend to apply environmental accounting and disclose this information more than companies in other industries. Manufacturing companies with environmentally sensitive business sectors have a high demand for applying environmental accounting because they often have unexpected risks, impact on the environment, causing Businesses face many arising compensation claims, increasing costs and affecting business interests (Kong et al., 2019; Dat and Truong, 2020; Momin and Parker, 2023).

Hypothesis H11: Enterprises in manufacturing industries have higher intention to implement EAID than enterprises in non-manufacturing industries.

Figure 1 presents proposed model of the study.

Methodology

Variables and model

In this study, we apply the process as shown in *Figure 2* to design and conduct the study. First, we summarize previous studies to identify the underlying theories used

to explain CSR and EAID disclosure behavior, followed by the research models analyzed to find the influencing factors corresponding to the underlying theories. On that basis, the study proposes the model and hypotheses, and at the same time builds the measurement scale for the variables in the research model, including multidimensional factors and must be measured by many different observed variables. Specifically, the observed variables and the measurement scale are adapted and adjusted from related studies of ABC. Each factor is represented by multiple observed variables and is read based on a 5-point Likert scale corresponding to 5 levels of statements about agreement or disagreement with each observed variable (1 = strongly disagree, 2 = disagree, 3 = Neutral, 4 = agree, and 5 = strongly agree). The analysis model includes 11 independent variables, 1 and 1 dependent variable (Table 1).

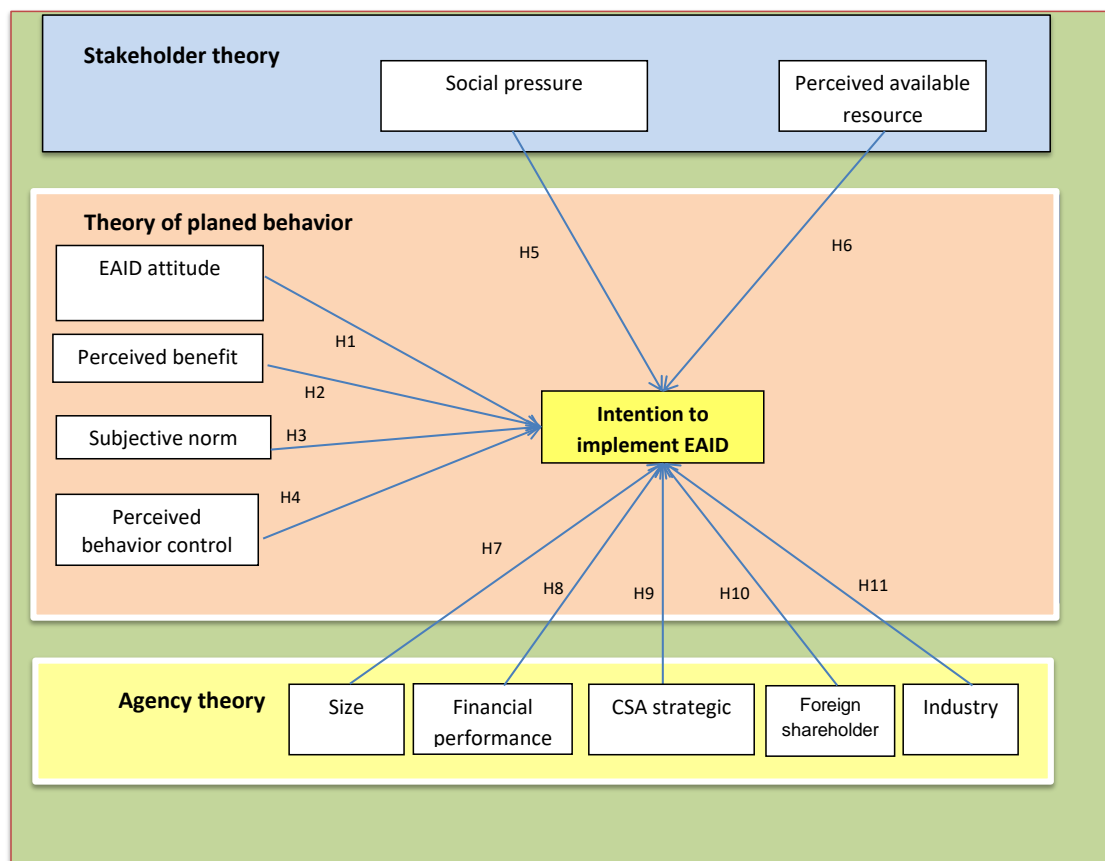


Figure 1. Proposed model of factors influencing EAID intention. Source: Research design (2024)

The model of factors affecting the intention to implement EAID of the FDI sector in Vietnam was presented in Equation 1 and Table 2:

$$EAID_i = \alpha + \beta_1 * ATT + \beta_2 * PB + \beta_3 * SN + \beta_4 * PBC + \beta_5 * SP + \beta_6 * PAR + \beta_7 * SIZE + \beta_8 * FP + \beta_9 * SM + \beta_{10} * FS + \beta_{11} * IND + e_i \quad (\text{Eq.1})$$

α : intercept; β_i : coefficients; e_i : errors.

Table 1. Factors and observed variables

Factors	Observed variables	Literature source
EAID attitude	ATT1: Environmental pollution and resource depletion are on the rise in the world and in Vietnam ATT2: Business activities contribute significantly to environmental pollution ATT3: Environmental management will help businesses operate more effectively and communicate better with stakeholders ATT4: Environmental management is an inevitable behavior of businesses	Dienes et al., 2016; Ismail and Ibrahim, 2018; Ismael and Zkaria, 2020
Perceived benefit (PB)	PB1: EAID helps businesses manage their internal affairs better and optimize operating costs PB2: EAID helps businesses better meet market and consumer expectations PB3: EAID helps businesses communicate better with investors and society PB4: EAID helps businesses improve their social image and brand	Hahn and Kühnen, 2013; Khan et al., 2013; Momin and Parker, 2023
Subjective norm (SN)	SN1: Corporate vision and strategy drive EAID SN2: The trend of other businesses adopting EAID will drive EAID at our business SN3: Adopting EAID is a code of conduct in the context of globalization and the demand for market transparency SN4: Social media drives EAID adoption	Mathuva and Kiweu, 2016; Mudiyansele, 2018; Saleh and Jawabreh, 2020
Social pressure (SP)	CSP1: Legal regulations will promote EAID implementation CSP2: Market and consumer pressures will promote EAID implementation CSP3: Investor concerns will promote EAID adoption CS4: International economic integration will promote EAID adoption	Agyemang et al., 2021; Kouloukoui et al., 2019; Wang et al., 2020
Perceived behavior control (PBC)	PBC1: Business commitment and motivation for change will drive EAID PBC2: Support from business and industry associations will drive EAID PBC3: Business organizational capacity and resources will drive EADI PBC4: Government support will drive EAID	Mathuva and Kiweu, 2016; Mudiyansele, 2018; Saleh and Jawabreh, 2020
Perceived available resource (PAR)	PAR1: Internal accounting system responsiveness will drive EAID PAR2: Accounting capabilities will drive EAID PAR3: Enterprise data management and analysis capabilities will drive EAID PAR4: Enterprise financial resource responsiveness will drive EAID	Kouloukoui et al., 2019; Mudiyansele, 2018; Saleh and Jawabreh, 2020
Intention to implement EAID (EAI)	EMA1: My business will implement EAID IEMA2: Implementing EAID is a priority in our operational plan IEMA3: We will implement EAID when we have sufficient resources IEMA4: We will implement EAID when we receive adequate support	Kouloukoui, et al., 2019; Agyemang et al., 2021; Agyemang et al., 2023

Source: Research design (2024)

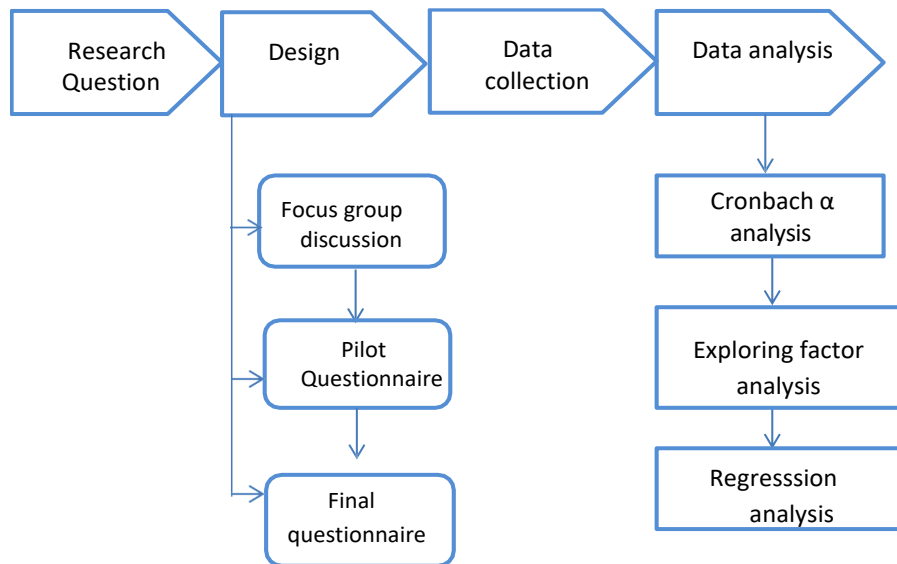


Figure 2. Research process (2024). Source: Research design (2024)

Table 2. Variables in estimated model and expected sign

Variable	Symbol	Measurement	Expected sign
Intention to implement EAID	EAID	1 to 5 point	
EAID attitude	ATT	1 to 5 point	+
Perceived benefit	PB	1 to 5 point	+
Subjective norm	SN	1 to 5 point	+
Perceived behavior control	PBC	1 to 5 point	+
Social pressure	SP	1 to 5 point	+
Perceived available resource	PAR	1 to 5 point	+
Size of firm	SIZE	Total asset value	+
Financial performance	FP	Return on assets (ROA)	+
CSR strategic management	SM	= 1 if the enterprise has prepared a CSR report and = 0 otherwise	+
Foreign shareholder	FS	Percentage of foreign ownership	+
Industry	IND	= 1 if belonging to manufacturing = 0 if not belong to manufacturing	+

Source: Research design (2024)

Data collection

Data in the study were collected from primary and secondary sources. For primary data, we conducted a focus group discussion (FGD) and a survey of FDI enterprises to collect data. First, the study organized a FGD with FDI enterprises, the purpose of which was to (i) learn about the context and implementation of CSR information disclosure of enterprises, (ii) discuss factors affecting EAID, (iii) collect information to build a questionnaire and (iv) build a scale for observed variables. The FGD was

conducted in July 2024, in which 7 FDI enterprises were randomly selected from the group of manufacturing enterprises and 5 FDI enterprises in non-manufacturing industries. Enterprise representatives attending the FDG were enterprise owners, chief accountants or people in charge of corporate communications. The results showed that businesses agreed on 11 influencing factors expected to be included in the analysis model, delegates also agreed on the use of a 5-point Likert scale to measure observed variables, especially business representatives gave their opinions on observed variables and corresponding statements to measure these variables. In which, each factor was measured by 4 observed variables. These variables were also emphasized in previous studies on CSR disclosure behavior. The draft questionnaire was developed and tested with 12 businesses to complete (6 businesses in the manufacturing industry and 6 businesses in the non-manufacturing industry). The final questionnaire used in the official survey consisted of three main parts: (i) general information about the enterprise such as name, location, years of operation, industry, workforce size, etc. (ii) information about factors affecting EAID such as EAID attitudes, perceptions of EAID benefits, subjective norms, etc., (iii) challenges in applying EAID and some suggestions from enterprises to promote EAID.

The research population is all FDI enterprises in Vietnam. We used the following formula (Eq. 2) to calculate the sample size to ensure reliability (Hair et al., 2013):

$$n = Z^2 * \frac{p*(1-p)}{e^2} \quad (\text{Eq.2})$$

of which n was sample size, z was z-score, e was margin of error, and p was standard deviation (SD). With 90% confidence level, SD of 60% and 5% error, the sample to for reliability was 312. In practice, we collected 320 questionnaires in a face-to-face format. The sampling method used was clustered with random selection. Enterprises were divided into two groups according to size: large enterprises and small and medium enterprises (SMEs) (number of employees not exceeding 200 people and total capital not exceeding 100 billion VND). Enterprises of different sizes were further divided into manufacturing and non-manufacturing groups (Table 3).

Table 3. Enterprises in the survey sample

	Large enterprises	SMEs	Total
Manufacturing enterprises	80	80	160
Other enterprises	80	80	160
Total	160	160	320

Source: Research design (2024)

To select the enterprises for investigation, the research team collected the names of FDI enterprises in the list of enterprises published by the Ministry of Planning and Investment (MPI) and the GSO. In which, the enterprises were classified by industry, scale, location and type of investment. The study selected 5 provinces with many FDI industrial parks in the North including Hanoi, Vinh Phuc, Bac Ninh, Hai Duong and Nam Dinh. From the list and initial grouping, enterprises were randomly selected. We contacted the enterprises by phone to arrange interviews, including discussing the purpose of the interview and determining the expected time. Enterprises that did not

agree were replaced by other enterprises randomly selected from the list. The official survey was conducted from August to October 2024.

After being collected, the data was cleaned and entered into Excel software, then continued to be entered into SPSS 22.0 for processing. Data analysis includes the following steps: (i) descriptive statistics, (ii) Cronbach's Alpha analysis to assess the reliability of the scales, (iii) Exploratory factor analysis (EFA) to assess the convergence of observed variables on factors, and (iii) Regression to analyze factors affecting EAID.

Results

Sample characteristics

During the research, we collected 320 questionnaires from FDI enterprises in Vietnam. Regarding job positions, 23.8% of respondents were CEOs, executives and involved in the strategy making of enterprises, 132 (41.2%) were managers, 24.6% were chief accountants and the rest were people in charge of corporate communications (10.4%). Regarding the industries of FDI enterprises, we investigated enterprises in the manufacturing industry such as steel (9.7%), construction materials (10.9%), paper (6.7%), textiles (12.2%) and electronics (10.6%) as well as enterprises in other industries (50.0%) (*Table 4*).

Table 4. *Sample characteristics*

Characteristics		Number	Percentage (%)
Gender	Male	183	57.2
	Female	144	42.8
Work position	CEO	76	23.8
	Managers	132	41.2
	Chief accountant	79	24.6
	Communication head	33	10.4
Sectors	Steel and iron	31	9.7
	Textile	39	12.2
	Paper	21	6.7
	Electronic	34	10.6
	Construction materials	35	10.9
	Other	160	50

Source: Research results (2024)

Cronbach's Alpha analysis

To evaluate the reliability of the scale, we use Cronbach's Alpha analysis. Cronbach's Alpha analysis allows evaluating the degree of close correlation between observed variables in the same factor. It shows which of the observed variables of a factor has contributed to the measurement of the factor concept. A good Cronbach's Alpha result of a factor shows that the observed variables measuring the factor are reasonable, reflecting the characteristics of the parent factor; a good scale should have a Cronbach's Alpha reliability of 0.7 or higher (Hair et al., 2013). Song and Li (2021)

also said that a scale that ensures unidimensionality and achieves reliability should have a Cronbach's Alpha threshold of 0.7. However, as a preliminary exploratory study, a Cronbach's Alpha threshold of 0.6 is acceptable. Another important index in Cronbach's Alpha analysis is Corrected item – total correlation. This value represents the correlation between each observed variable and the remaining variables in the scale. Hair et al. (2013) said that a good scale is when the observed variables have a Corrected Item – Total Correlation value of 0.3 or higher. In this study, the results of the first round of analysis showed that the observed variable SN3 (Adopting EAID is a code of conduct in the context of globalization and the demand for market transparency) had a Corrected item – total correlation value of less than 0.3, so this variable was eliminated. The results of the second round of analysis after eliminating the SN3 variable showed that the loading values were all reliable and consistent with the allowable values. Therefore, 23 observed variables were retained for EFA analysis (Table 5).

Table 5. Summary of scale testing results

Observed variables	Scale mean if remove variables	Variance if remove variables	Corrected item – total correlation	Cronbach's Alpha coefficient if remove variables
Attitude toward EAID (Cronbach's Alpha = 0.818)				
ATT1	9.18	4.173	0.617	0.712
ATT2	9.72	4.483	0.753	0.831
ATT3	9.53	5.439	0.638	0.821
ATT4	9.24	4.493	0.725	0.907
Perceived benefit (Cronbach's Alpha = 0.842)				
PB1	7.14	1.832	0.517	0.795
PB2	7.83	1.739	0.653	0.773
PB3	7.63	1.737	0.673	0.825
PB4	7.36	1.773	0.628	0.833
Subjective norm (Cronbach's Alpha = 0.795)				
SN1	7.09	8.373	0.783	0.783
SN2	7.15	8.022	0.638	0.773
SN4	7.47	8.383	0.683	0.737
Perceive behavior control (Cronbach's Alpha = 0.809)				
PBC1	7.83	2.184	0.647	0.737
PBC2	7.93	2.573	0.627	0.758
PBC3	7.39	2.448	0.794	0.774
PBC4	7.72	2.949	0.706	0.817
Social pressure (Cronbach's Alpha = 0.833)				
SP1	7.84	4.174	0.763	0.843
SP2	7.93	4.574	0.729	0.817
SP3	8.54	4.390	0.773	0.892
SP4	7.83	4.353	0.720	0.811
Perceived available resource (Cronbach's Alpha = 0.817)				
PAR1	9.22	6.484	0.784	0.743
PAR2	8.29	6.773	0.733	0.851
PAR3	9.11	7.285	0.684	0.819
PAR4	8.45	6.384	0.726	0.842
EAID intention (Cronbach's Alpha = 0.808)				
EAID1	7.21	3.384	0.614	0.828
EAID2	7.48	3.485	0.611	0.791
EAID3	7.33	3.632	0.667	0.737
EAID3	7.38	3.194	0.637	0.773

Source: Research results (2024)

Exploratory factor analysis

After Cronbach's Alpha analysis, we performed EFA to examine the convergence of observed variables into separate factors. EFA belongs to the group of interdependent multivariate analysis, which means that there are no dependent and independent variables, but it is based on the correlation between variables (Hair et al., 2013). EFA is used to reduce a set of k observed variables into a set F ($F < k$) of more meaningful factors. The basis of this reduction is based on the linear relationship of factors with observed variables. We accomplished EFA for both independent and dependent variables with Varimax rotation techniques. EFA results for the independent variables indicated that KMO coefficient value was 0.724 belonging to the range from 0.5 to 1. In addition, Bartlett's test gave significant value = 0.000 showing that the analysis was valid and reliable. The coefficient of variance extracted was 72.40 (>50%) saying that factors in this analysis could explain 72.40% the variation of dataset. Eigenvalues coefficient value was 1.463 > 1, meaning the high level of convergence of selected factors. Hence, all factors with observed variables were kept and used for the regression analysis in later step (Table 6).

Table 6. EFA for independent variables

Observed variables	Factors					
	1	2	3	4	5	6
ATT1	0.827					
ATT3	0.814					
ATT2	0.799					
ATT4	0.773					
PB4		0.813				
PB1		0.798				
PB3		0.782				
PB2		0.752				
SN1			0.806			
SN2			0.782			
SN4			0.765			
PBC2				0.858		
PBC1				0.826		
PBC3				0.812		
PBC4				0.785		
SP1					0.817	
SP3					0.805	
SP2					0.793	
SP4					0.772	
PAR1						0.859
PAR3						0.834
PAR2						0.843
PAR4						0.787

KMO = 0.724
 Eigenvalues = 1463
 Variance extracted: 72.40

Source: Research results (2024)

EFA was also conducted with dependent variable (EAID) and the results included: KMO = 0.679 > 0.5, Significant level of Bartlett's test = 0.000 indicating that EFA was reliable for this dataset. The Eigenvalues was 1.8397 > while cumulative of eigenvalue = 73.17 (>50%). This suggested that only 1 dependent factor (EAID) with 4 observed variables and 73.17% of variance on the data was explained by this EAID factor.

Correlation and regression analyses

Before running the multiple regression model, Pearson correlation analysis was performed to examine the correlation between the analyzed variables. The results showed that the largest correlation coefficient was between PBC and SN. The analysis also showed that the variables were correlated with each other but at a low level and were not statistically significant. Therefore, the phenomenon of multicollinearity was not detected and the variables were used for regression analysis (Song and Li, 2021) (Table 7).

Table 7. Pearson correlation tables

		EAID	ATT	PB	SN	PBC	SP	PAR
EAID	Pearson correlation	1	.428**	.305***	.217**	.318**	.297**	.229***
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	320	320	320	320	320	320	320
ATT	Pearson correlation	.428**	1	.124	.174	.137	.243	.173
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	320	320	320	320	320	320	320
PB	Pearson correlation	.305***	.124	1	.015	.301	.043	-.04
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	320	320	320	320	320	043	320
SN	Pearson correlation	.217**	.174	.015	1	-.021	.108	.162
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	320	320	320	320	320	320	320
PBC	Pearson correlation	.318**	.137	.301	-.021	1	.054	.072
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	320	320	320	320	320	320	320
SP	Pearson correlation	.297**	.243	.043	.108	.054	1	.122
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	320	320	320	320	320	320	320
PAR	Pearson correlation	.229***	.173	-.04	.162	.072	.122	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	320	320	320	320	320	320	320

***Significant level 1%

**Significant level 5%

Source: Research results (2024)

The results of the regression equation show that the F test has a p value < 0.05, which means that the model fits the data set. The adjusted R² value of 0.772 indicates that the 11 factors included in the model can explain 77.2% of the variation in the dependent variable (EAID) (Table 8).

Table 8. Regression results

Model	R	R Square	Adjusted R square	Durbin-Watson	F	Sig.
1	.797	0.789	0.772	1.785	21.164	0.000

Regression coefficients

Model	Unstandardized coefficients		Standardized coefficients	t- value	p- value	Collinearity statistics	
	Beta	S.E	Beta			Tolerance	VIF value
Intercept	0.083	0.064		1.565	0.018*		
ATT	0.184	0.053	0.178	3.434	0.000**	0.785	1.756
PB	0.143	0.047	0.141	3.153	0.000**	0.874	1.354
SN	0.135	0.084	0.130	2.735	0.029**	0.834	1.473
PBC	0.149	0.048	0.146	1.737	0.014**	0.886	1.527
SP	0.098	0.064	0.092	1.734	0.041**	0.737	1.356
PAR	0.115	0.048	0.107	2.773	0.000***	0.643	1.526
SIZE	0.089	0.053	0.078	2.632	0.031**	0.746	1.464
FP	0.119	0.045	0.112	1.733	0.023**	0.837	1.452
SM	0.078	0.073	0.069	1.423	0.028**	0.737	1.464
FS	0.384	0.083	0.331	2.936	0.076	0.843	1.358
IND	0.127	0.036	0.119	1.646	0.017**	0.743	1.529

***Significant level 1%

*Significant level 5%

Source: Research results (2024)

Multivariate regression results showed that there were 10 factors that had a significant impact on EAID (p-value < 0.05), only the FS variable had no significant impact on EAID. Among the 10 variables that had an impact, ATT was the factor with the strongest impact and SM was the factor with the weakest impact (Table 8). The standardized regression equation (Eq. 3) is shown as follows:

$$EAID_i = \alpha + 0.178 * ATT + 0.141 * PB + 0.146 * PBC + 0.130 * SN + 0.119 * IND + 0.112 * FP + 0.107 * PAR + 0.092 * SP + 0.078 * SIZE + 0.069 * SM + e_i \quad (Eq.3)$$

In the regression results, the VIF coefficients are all less than 2, so there is no multicollinearity in the regression analysis. The Durbin – Watson value is 1.785 in the range of 1.5 to 2.5, so there is no autocorrelation (Hair et al., 2013). The histogram of the residuals also has a normal distribution, and the P–P Plot also shows that the points are concentrated close to the diagonal, so the assumption of normal distribution of the residuals is not violated. Furthermore, the standardized prediction values are also concentrated at the center line (value 0) and are not distributed too far from this line with no outliers, so there is no phenomenon of uneven variance (Fig. 3).

Discussion

In this study, we analyzed the factors affecting EAID of the FDI sector in Vietnam, combining the TPB, stakeholder theory and agency theory to build a model with hypotheses. According to the literature review, there is a lack of studies analyzing the

factors affecting EAID based on multi-theoretical and multi-mode integration models. Our study has addressed that gap and found 10 factors affecting EAID. These factors belong to all three theories showing that the combination of models is satisfactory and enhances the power in explaining the drivers of EAID in the context of Vietnam.

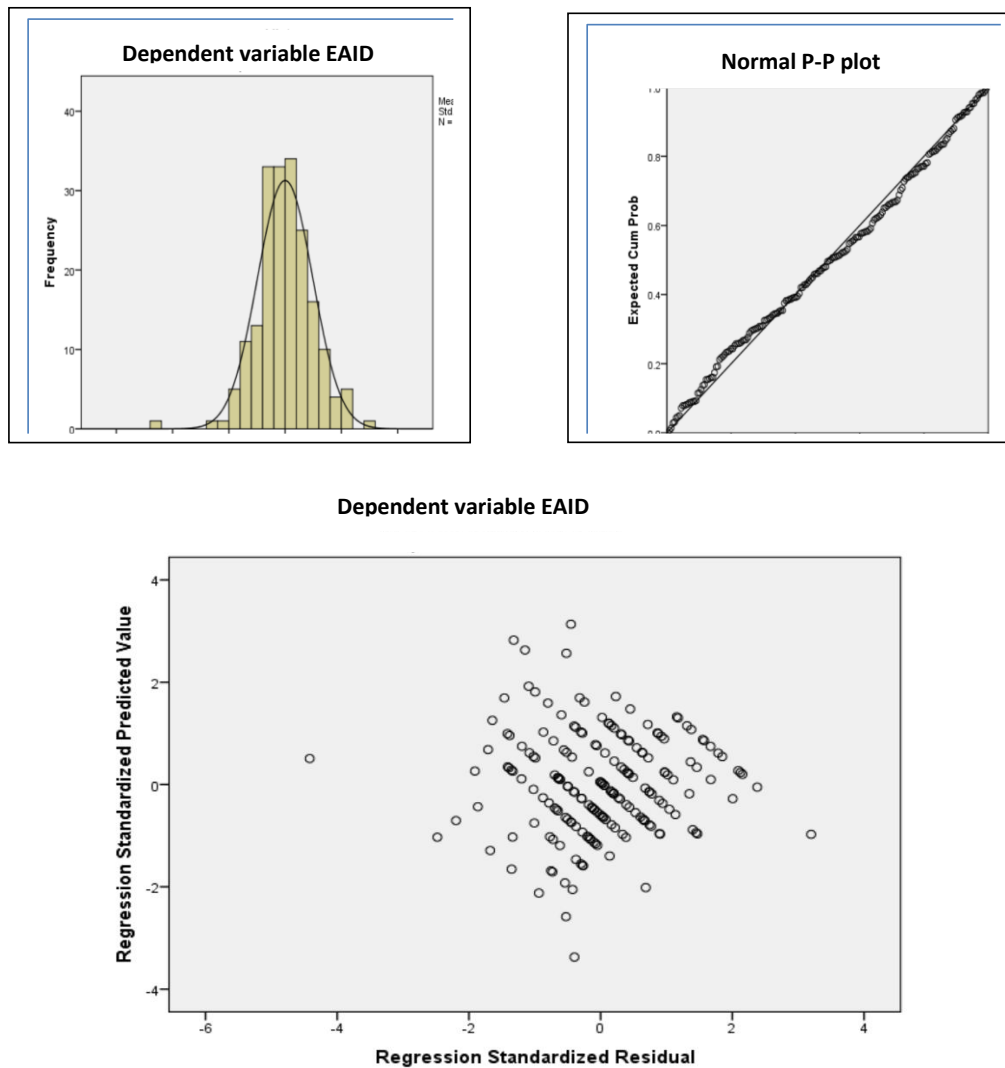


Figure 3. Uneven variance test diagram. Source: Research results (2024)

First of all, all 5 factors in the TPB theory have a positive and significant impact on EAID, in which ATT is the strongest impact factor. This means that the higher the awareness of enterprises about EAID, the higher the intention to implement EAID. This result is consistent with many previous studies on the role of ATT on CSA behaviors in general and EAID in particular (Khan et al., 2013; Mudiyansele, 2018; Kouloukoui, et al., 2019; Kong et al., 2019). Attitude is the decisive factor because it is the perception of businesses about EAID, the attitude expressed. PB is the second strongest factor affecting EAID. Implementing EAID brings financial and non-financial benefits, including improving social image and enhancing positive communication with the market, investors, customers and stakeholders in the supply chain. When businesses recognize these potential benefits, the possibility to applying EAID will be higher.

Therefore, the role of communication and social marketing is needed to increase understanding, thereby leading to changes in business attitudes and behaviors. Previous studies have also had similar findings and implications (Dienes et al., 2016; Ismail and Ibrahim, 2018; Ismael and Zkaria, 2020). Subjective norms are also an important factor influencing EAID in this study, similar to studies by Gupta (2020), Ding et al. (2022), and Nguyen et al. (2022). Subjective norms refer to the perception of relevant individuals or groups such as industry standards, the behavior of other businesses, or friends that may influence a person's performance of a behavior. Ajzen (1991) defined subjective norms as "perceived social pressures to perform or not perform a behavior." According to TPB, people develop certain beliefs or normative beliefs about whether certain behaviors are acceptable. These beliefs shape a person's perception of the behavior and determine a person's intention to perform or not perform the behavior. Improving subjective norms can lead to behavioral changes that lead to EAID. PBC also has a positive impact on EAID, which suggests that when firms perceive conditions that support the implementation of a behavior, they are more likely to implement that behavior, similar to previous studies of CSR disclosure in developing countries (Bayar and Remeikiene, 2019; Nobili and Cappellaro, 2021; Bussy and Huanhuan, 2023; Phuong et al., 2024).

In this study, variables in the agency and stakeholder theoretical models also have impacts on EAID. First, financial performance (ROA) is positively related to the EAID disclosure variable. This means that firms with higher asset utilization efficiency tend to disclose more information. This result of the study coincides with the results of studies by other authors (Dilling, 2010; Agyemang et al., 2023). This result contributes to the stakeholder theory in explaining CSR disclosure behavior, in which only financially efficient enterprises are more likely to meet social demands and these enterprises are also subject to political pressure and community supervision. Similarly, the strategic management variable is positively related to EAID. This means that enterprises that pay attention to CSR in their operational strategies are more likely to disclose CSR information than other enterprises. This result of the study coincides with previous results (Hasan and Hosain, 2015; Osei et al., 2019; Wang et al., 2020) showing that if an enterprise has a strategic vision to proactively affirm its position with stakeholders through the development of CSR programs, information disclosure is institutionalized according to specific standards. The business sector variable is positively related to EAID. This means that manufacturing enterprises tend to disclose more information than enterprises in other industries such as trade or services. This result is similar to the result of Kouloukoui et al. (2019), Wang et al. (2020), Momin and Parker (2023). The difference between these two types of enterprises can be explained by the reason: there is a difference in the pressure from stakeholders on manufacturing enterprises because these enterprises are considered to have a strong influence on the community, safety and health. Finally, the FS variable has no impact on EAID in this study and this result is contrary to the findings of some studies such as Mathuva and Kiweu (2016), Mudiyansele (2018), Saleh and Jawabreh (2020).

Conclusions

This study analyzed the factors affecting EAID in the FDI sector in Vietnam. We applied 3 theories: TPB, Agency theory and stakeholder theory to explain the efforts and responsibilities of enterprises in environmental information disclosure. Through the

study, 7 factors were identified and 25 observed variables were built to measure 7 factors affecting EAID. Through testing the reliability of the scale, the study eliminated 1 observed variable. The results of the exploratory factor analysis identified a research model consisting of 6 factors in decreasing order of impact as follows: (1) There is supervision by management agencies on environmental protection measures at enterprises (2) Level of understanding of environmental accounting of accountants (3) Supportive attitude of managers on environmental protection (4) There is guidance on implementing environmental accounting (5) Pressure from the government, importers, investors, financial institutions, and the community on environmental information (6) Benefits of implementing environmental accounting. The factors have been inherited from previous studies and developed with more specific content in the research context at FDI Vietnam. The biggest contribution of the study is the combination of theoretical models and the construction of models of influencing factors and observed variables measuring the level of influence of influencing factors on EAID. EAID is an important strategy for businesses to move towards transparency and sustainable development; however, in Vietnam, this is still a new issue and the FDI sector is still facing many challenges in implementation. From the results, we propose the following implications to improve EAID.

For the state sector, the State has gradually institutionalized the disclosure of CSR and EAID in the Vietnamese legal system, including this in the Enterprise Law as a mandatory responsibility. The results of this study show that after Circular No. 155/2015/TT-BTC requiring enterprises to report on environmental and social impacts, the level of CSR disclosure by enterprises has increased significantly. This shows that when the requirements are legalized, the level of compliance is higher. The State should also promote enterprises to implement EAID through support such as finance, information and technology. In particular, detailed instructions on EAID practices, especially for listed FDI enterprises, to meet common market standards and international practices. For enterprises, it is necessary to continue to raise the awareness of FDI enterprises on CSR practices and EAID through observing, learning, and exchanging experiences from enterprises with good financial performance and clear CSR strategies. It is also critical for building and perfecting the accounting information system to serve as foundation for EAID technically. Enterprises implement CSR with the aim of meeting the requirements of the enterprise's stakeholders. However, in order to provide complete and appropriate information to different audiences about CSR activities, enterprises need to classify and process information about these activities from the beginning. Therefore, building and perfecting the accounting information system to provide complete and quality information about the enterprise's CSR practices is necessary. Therefore, in this study, the author recommends that FDI enterprises should organize CSR accounting to perfect the accounting information system at the enterprise. In addition, EAID is also considered a tool for FDI enterprises to convey information about the enterprise's activities for the benefit of the social community. Investors should have more professional investment activities, not only relying on financial information to make decisions but also relying on the EAID of the enterprise to minimize unnecessary risks that may be encountered during the investment process, such as the enterprise being suspended due to environmental pollution, the enterprise's products being boycotted due to the production of dirty food. The results of this study suggest that investors, in order to minimize risks during the investment process, should pay attention to enterprises with good financial performance, a clear

strategic vision on CSR as well as a commitment to dedicating resources to implementing CSR in general and EAID in particular.

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