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To cite this article: Zhihua Lian (2022) The nexus between CSR disclosure, effective tax rate, corruption, and sustainable business performance: evidence from ASEAN countries, Economic Research-Ekonomika Istraživanja, 35:1, 5357-5378, DOI: [10.1080/1331677X.2022.2026242](https://doi.org/10.1080/1331677X.2022.2026242)

To link to this article: <https://doi.org/10.1080/1331677X.2022.2026242>



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Published online: 07 Feb 2022.



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The nexus between CSR disclosure, effective tax rate, corruption, and sustainable business performance: evidence from ASEAN countries

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ABSTRACT

Sustainable business performance is the foremost requirement for the organization and could be affected by many factors that gained the attention of recent studies and regulators. Therefore, the present study is also examining the impact of corporate social responsibilities (CSR) disclosure, the effective rate of tax, and corruption on the sustainable business performance of the ASEAN country's listed firms. The data has been gathered by using the quantitative method and using the secondary source of data collection. The data has been extracted from the financial statement along with CSR disclosure reports of the listed firm of ASEAN countries from 2015 to 2019. This study has executed the fixed effect model (FEM) and generalized method of moments (GMM) to examine the relationships among the variables. The results revealed that CSR disclosure and tax-effective rate, along with control variables such as leverage and firm size, have a positive association with the sustainable business performance of firms in ASEAN countries. The results also exposed that corruption has a negative association with the sustainable business performance of firms in ASEAN countries. These outcomes are suitable for the regulators who want to formulate policies related to CSR and sustainable business performance.

ARTICLE HISTORY

Received 30 October 2021
Accepted 1 January 2022

KEYWORDS

Corporate social responsibilities (CSR) disclosure; effective rate of tax; corruption; sustainable business performance; ASEAN countries

JEL CODES

G32; G34; G41

Introduction

The success or failure of any country's financial performance strongly depends upon the policies of the country's government formulated to support its financial health. The ultimate aim of the government policies is to gain sustainable growth in the country's economy as there are several forces that stand behind the success or failure of the country's economy. While formulating the policies, the government keeps all the stakeholder's benefits, whether internal or external, in view as the economy of any country is the combination of the country's different industries' performance. The performance of these industries decides the future of the economy. The private

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business sector is one of the important pillars of the country's economy as it is also one of the largest contributors to the economy in terms of taxation. The term performance is very important for every aspect of the country. The future of any activity of either government or the community depends upon its performance (Chien et al., 2021a; Shakil Mohammad et al., 2019). In the case of the business domain of the country, the importance of this phenomenon gets more important. In the same way, the societal, as well as environmental factors, are getting more important as enforced by the community. In the past, the communal and environmental factors were not important for organizations as they got no pressure in this regard. Now with the passage of time, societal factors have become the prime important elements. Society never ever compromises its interests at any cost. Similar is the case with the environmental factors. In addition to the society, the governments are also enforcing the business society to ensure social welfare. The term Corporate Social Responsibility (CSR) has become part of the mandatory policies of firms (Baloch et al., 2021). CSR is a self-regulating business concept which is of great importance to the leading business organizations. It motivates the organization to be accountable to itself, its stakeholders, and general public. CSR common practices include community welfare, responsibilities to employees, ethical marketing, and environmental responsibilities. With the effective implementation of all CSR practices and its closure, is helpful to attain highly sustainable business performance with all its three fillers like social, environmental, and economic performance (Hou, 2019). Initially, the firms just document it and avoid exercising corporate social responsibility to save the firm cost, but now the government, as well as the society, ensures its disclosure. There is a close association between corporate social responsibility (CSR) and sustainable business performance (Lopatta et al., 2017; López, 2020; Torugsa et al., 2012).

In addition to this, the other factor which is the prime need of any country's government is the revenue collection system. The performance of the government depends upon the revenue collected. The governments in every budgetary year settled the targets for revenue collection. While setting these targets, the government keeps all its expenses in view. Once the target is settled in the second step, the government ensures its maximum efforts to achieve the settled target. As the collection of taxation to meet its expenditures is the prime aim of any government. The government ensures maximum application and collection of taxes, but at some stages, the government performs vice versa (Baiardi et al., 2019; Heinrich et al., 2020; Kennedy et al., 2017).

The government always prefers to promote the private business sector in the country by having different reasons like a collection of taxation, employment creation, foreign direct investment, etc. Many times, the governments reduce the taxation ratio for private clients in the country to promote the business (Chien et al., 2021b; Madzivhandila & Niyimbanira, 2020). On the other hand, the government must look at the performance of government officials and their conduct in the organization. Honesty and sincerity are needed on the part of every employee or group of employees. The corruption on the part of employees not only affects the performance of the organization but also the country's welfare, its environmental quality, human welfare, and sustainable business performance. In addition to the taxation system, there are

some other factors, i.e., corruption, etc. which are considered as the major hurdle in the betterment of sustainable business performance in the country. The phenomenon of corruption is considered one of the major threats to the financial prosperity of the country (Chien et al., 2021c; Danielle & Masilela, 2020; Haider et al., 2018; Van Vu et al., 2018). Many of the time, the countries not only internally but also externally exercise the adverse effects of corruption. It is the urgent need of the current era to discuss and explore factor-like corruption to ensure some remedies against it. Although the Financial Action Taskforce (FATF) is an international body trying its best to control it, collective efforts are needed to address it. Thus, the present investigation aimed to address the literature gap regarding taxation, corporate social disclosure, corruption in ASEAN countries.

Similarly, very often, the government also offers special benefits with the tax compliance in this regard. Like all around the globe, the ASEAN countries are also paying special attention to tax collection. In the last decade, the average incidence of Corporate Income Tax (CIT) in ASEAN has decreased significantly. The regional bloc governments have significantly reduced CIT to increase long-term growth and differentiate themselves from the rapidly converging tariff systems of the world. A government often utilizes lowered CIT rates to render the country more appealing to foreign investors. Governments are also leveraging tax (and non-tax) incentives to substantially reduce the competitive tax rate in those industries by attracting FDIs in tax decreases, accelerated depreciation, or spending allowances. This opportunity relies on specific economic priorities that vary in compliance with the economic structure of the economy. Some countries wish to see FDI generating optimistic disruptions in strategic industries; some are inviting FDI to improve technology and transfer knowledge. Most ASEAN nations adopt standard CIT rates down by some percentage points from the 23 percent level to about 26 percent a decade earlier. Of the 10 Member Nations, Singapore imposes 17% of the lowest CIT rate on taxable income. It also offers concessional tax rates for new companies under the partial exemption programmer. Under this scheme, a chargeable company of S\$300,000 is subject to an effective tax rate of just 8.36%, smaller than half of the actual CIT cap. The low CIT rate and other advantages substantially reduce the competitive tax rate and, therefore, the overall market expense. The ASEAN average tax returns for domestic and foreign investors stay below the ASEAN average. The Philippines sets a cumulative CIT of 30 percent of a corporation's taxable income. CIT rates of ASEAN countries are given in [Figure 1](#).

ASEAN economies are the developing countries in the Asian region. But, the sustainable performance of businesses operating in the country, which determines the country's economic growth, is still in confusion. The reason behind this is the population growth getting larger than earlier, traditional ways of business, lack of supervision, and lack of subsidies on the part of the government (Dlalisa & Govender, 2020; Flores & Chang, 2019; Iqbal et al., 2020). But, sustainability in business performance needs sustainable financial resources, sustainable natural resources, and sincere and active human resources (Khan et al., 2020). For the welfare of future generations, researchers and scholars must focus on sustainability in business performance. The current study is a step towards this critical need. The aim of the study is to analyze



Figure 1. Corporate income tax rates in ASEAN economies.

Source : ASEAN Stats, Ministry of Commerce of China, General Administration of Customs of China, EY analysis.

the influences of CSR disclosure, tax-effective rates, and corruption along with two control factors like leverage and firm size on sustainable business performance. In the past studies, CSR disclosure, tax-effective rates, and corruption have been discussed as the predictors of business performance, but these all concepts with relation to sustainable business performance have been discussed separately. The current study collectively investigates the impacts of CSR disclosure, tax-effective rates, and corruption on sustainable business performance. The authors in the existing consider CSR disclosure, tax-effective rates, and corruption as the three different business concepts affecting business performance. The present study combines CSR disclosure, tax-effective rates, and corruption as three managerial factors necessary for getting sustainable business performance which is a great contribution to the literature. In addition, the current study examines the nexus among the CSR disclosure, tax-effective rates, and corruption and sustainable performance in ASEAN, while in the past, the studies have discussed the nexus among these factors in one or two countries.

This study is comprised of several parts: The next part provides evidence from past studies for the nexus among the CSR disclosure, tax-effective rates, and corruption along with leverage and firm size and sustainable business performance. Then, the procedures of acquiring data and relationship analysis are described. The results extracted from this investigation are compared with a previous study supporting. The study discussions are followed by study implications and conclusions.

Literature review

Across the globe, sustainable business performance is analyzed from various perspectives such as social, environmental, and economic performance. For evaluating the sustainable business performance in any sector of the country, some factors dominate which have contributed towards it. These factors vary with the conditions of the economy and have a significant impact on the practices of corporate social responsibility like environmental responsibility, ethical marketing, community welfare, and responsibilities towards employees. Its disclosure is always required with effective practices to analyze the actual sustainable business performance in any country

(Issarawornrawanich & Wuttichindanon, 2019; Koloba, 2020; Li et al., 2021a). Many ASEAN countries are adapted with the corporate social responsibility disclosures, which strongly impacts the sustainable business performance of economies and companies. These have an anticipation of various patterns and strategies that engages companies to perform in a regularized manner for asserting better sustainable business performance.

It is usually important for every organization to induce the first instance of profit by different means. These means include the dominance of CSR disclosure which endorse eminent impact on the sustainable business performance of organizations. There are strong linkages between earning management and corporate social responsibility disclosure with a completing and substitute mechanism (Faisal et al., 2018; Mohsin, Kamran, Nawaz, Hussain, & Dahri, Nawaz et al., 2021; NgoNdjama et al., 2020). These mechanisms are defined by the concerned effects of listing companies. Mostly, the ASEAN countries have vast companies that are performing the functions of CSR disclosure to attain sustainable business performance. This disclosure not only succeeded in many ways for profits but also sustained the environment of organizations in emerging markets.

Companies have introduced a variety of measures like sustainable relations with stakeholders, consistency in the availability of resources (informative, physical, and human resources), and stable marketing, etc., to sustain and enhance sustainable business performance. These measures vary with certain instances of social structures where CSR disclosure primarily plays an important role. Due to the instant induction of this factor of SCR disclosure, the sustainable business performance of many companies has been significantly enhanced in ASEAN countries. While comparing the stock exchange of certain countries, the strong contribution of corporate profitability and corporate governance is depicted (Malla & Brewin, 2020; Mohsin et al., 2021; Purbawangsa Ida Bagus et al., 2019). This contribution clearly indicated the implication of corporate social responsibility disclosure by different parts. The parts usually include the commission of audit and independent commissioners, which are important in analyzing the disclosure of CSR among the sustainable business performance. Within the organizations, different perspectives are a highlight with the emerging economies. These perspectives have provided broader senses of enabling better sustainable business performance in the competing environments. With the advancement of innovation and technology, sustainable business performance has increased, but the negative implications have also been seen. Corporate social responsibility disclosure is significantly correlated with sustainable business performance. There is a significant relationship between sustainable business performance and different analytics of enhancing sustainability (Ali et al., 2020; Kikulwe & Asindu, 2020; Nawaz et al., 2021; Shakil Mohammad et al., 2019). It is only by the sustainable capabilities of organizations, usually in certain ASEAN countries, that have achieved operational efficiencies in financial environments.

Organizations make a profit from different projects and innovations in various sectors of ASEAN countries. It is only for the benefit of people and to manage the expenses of government that are occurred for the good initiatives of people. The effectiveness of tax rates has been dominant in recent years and has a significant

contribution toward sustainable business performance. Over the past few years, the tax rates have been frequently changed with certain implications of corporate effectiveness with relevance to sustainable business performance (Dyreng et al., 2017; Nawaz et al., 2021; Sun et al., 2020). Various multinational and local firms have faced the impacts of tax changes which robustly affected the sustainable business performance with a statutory foreign decline and slight replications. Numerous conventional measures are usually contrary to the changes in tax rates. These examples have certainly described the wisdom of tax rates which have been introduced by the governments to facilitate people. It is implicated on all people while emphasizing the middle and high-income countries, especially ASEAN countries. The size of a firm with relevance to sustainable business performance and the effectiveness of tax rates are positively linked with each other (Mascagni & Mengistu, 2019; Shair et al., Nawaz et al., 2021). This provides a wide investigation of tax-effective rates disclosure with distributional effects on the sustainable business performance of countries. Mostly, the larger firms are countered to bear the effects of higher tax rates which are proportionated with the relevance of small firms.

The stunning influence of tax-effective rates has been illustrating the actual sustainable business performance of firms. Due to some instability in economic conditions, sustainable business performance relies on various factors that are described in various financial momentums. The ASEAN commercial banks are especially highlighted in the divisions of sustainable business performance and tax rates. It has a vast impact on the sustainable business performance of such banks due to various policymaking and strategies. The influences are clear about the exchange rates, tunneling incentives, and effective tax rates dominating the decision of companies (Abbas & Eksandy, 2020; Xiang et al., 2021; Zhuang et al., 2021). It decreases sustainable business performance through the positive effects of asset pricing and harmed exchange rates. Clear nexus among the effective tax rates and sustainable business performance is in need of understanding. This could be availed by inducing a variety of factors associated with sustainable business performance and effective tax rates. It is usual that some corresponding elements of sustainable business performance, as well as the tax rates, dominate over the economic conditions. While stating the structures of ownership in an organization, the sustainable business performance and diversification of income is a matter of examination (Ehsanullah et al., 2021; Luu Hiep et al., 2019). This is only possible by the conditioned elements of ownership and experiences that have diversified implications toward the sustainable business performance of organizations.

It is clear that macrocosmic events are important to the sustainable business performance of an organization. The financial conditions are though important in the prevailing context. Therefore, corruption has been induced as dominating element, which not only disrupts the sustainable business performance but also decreases the administration. The qualities of institutions are linked to the transitional economies by inserting the significant relationship between sustainable business performance, types of corruption, and corruption (Chien et al., 2021d; Hsu et al., 2021; Van Vu et al., 2018). Corruption has surprisingly affected the dynamics of organizations from different forms while stating dummy factors (Chien et al., 2021e; Huang et al.,

2021b). The intensity of impact is usually overlooked in many organizations due to the lack of anti-corruption measures. The levels of risks are different with the incorporation of companies in various sectors. Therefore, the examination of sustainable business performance is also linked with corruption which could threaten organizational performance. While defining the stages of corruption, the levels of risks are also required to be analyzed and arranged with respective manners of sustainable business performance. It could be induced over the international level of firms by instigating the relationship among financial constraints, corporate social responsibility, and corruption (Huang et al., 2021a; Lopatta et al., 2017). It is important to define the independence of the board to counter elements of corruption. This is by the applicability of robust measures that have been implemented over the prevalent corruption.

Countries vary with the policies designed to control corruption. These are usually maintainable when the proper implications are stated in the monetary policies for organizations. Organizations are also bound to adhere to the guided implications of corruption to counter the effects on sustainable business performance. While reviewing the international context, corporate performance is significantly linked with corruption, financial constraints, and government ownership (Haider et al., 2018). Capital is always introduced in businesses, but the lack of security measures always results in heavy losses, which render the concentration and management involvement. Institutional performance is based on different measurement tools, while the factors also play an important role. This is the matter of inducing resources that could help to tackle the rigid situations of corruption among the organizations. Certain facilities are also introduced in ASEAN companies which have been considered as a profound element to eliminate the discrepancies. This could only be availed while stating the connection between market value, sustainable business performance, and intellectual capital (Huang et al., 2020; Sardo & Serrasqueiro, 2017). The business strategies, its decisions about the resources allocation, its operations, its productive channel, and marketing ways all are affecting the business performance in a positive or negative manner, but admissibly, the ownership administration can assert a lot of contribution towards the sustainable business performance.

Sustainable business performance is examined in various economic sectors with the relevance of some financial elements like loan strategies, investment patterns, and spending on organizational resources. These financial elements are widely elaborated in the ASEAN organizations, which induces a significant portion of the effects on the economies too. Although, many benefits are ascertained in the initial stages due to the prominence of these financial factors. It comprises leverage and various instances of returns that could provide positive results. The impacts in the enterprises of real estate and property are checked with the inducement of leverage and liquidity (Daryanto et al., 2018; Li et al., 2021b). It directly posed the influences in negative and positive aspects on the sustainable business performance of these enterprises. Some events are prominent in the economic conditions, which also affect the sustainable business performance of organizations. Such events not only help to prevent the losses at initial steps but also refer to the strong grounds for governments to take appropriate measures. These events relate to the macroeconomy as well as financial instability, specifically in ASEAN sectors. While quoting the manufacturing sector,

sustainable business performance has profound effects on firm characteristics and macroeconomic elements (Egbunike Chinedu & Okerekeoti Chinedu, 2018; Liu et al., 2021). GDP, inflation, interest rates, and many other elements have a dominant impact on the financial conditions of companies. This could determine the actual profitability of companies at various stages among the developing and developed countries.

In order to analyze the importance of leverage in organizations, the financial conditions are required to be analyzed. The respective share of leverage denotes the importance of returns which could lead to stability of sustainable business performance. This is widely stated by the complex measures that are indicated by the audit ratings and various wealth implications. The effects of audit findings, government complexity, leverage, and regional characteristics are clearly important for the evaluation of sustainable business performance (Sadiq et al., 2021c; Wijayanti & Suryandari, 2020). Numerous factors are prevalent in the financial conditions of organizations which could take the companies at peak performances and also benefits the economic stability. For getting highly sustainable business performance, the financial factors regarding the fulfillment of financial needs of the firms through borrowing (personal or commercial), additional investment, creating reserves, and issuing more shares or debentures. This clearly indicates the importance of leverage among the companies' performance which induces its impact on economic conditions. Some significant factors that are comprised of liquidity returns and leverage play a significant role in the evaluation of sustainable business performance for companies and countries. ASEAN organizations use leverage as a primary factor for the examination of financial sustainability and performance. This also includes growth opportunities, intellectual capital, and sustainable business performance among the global markets where competitive advantage is taken (Othman et al., 2020; Sardo & Serrasqueiro, 2018). Therefore, the efficiency of sustainable business performance states positive indications toward the concentration of ownership and opportunities for growth.

The characteristics of firms are important in the organizations to interpret the performance. Many ascertainties are prevailing in the organizational structures to evaluate the performance, but the firm size is important among them. This states the effective role among thresholds of organizations by inducing the optimal size and its linkage with leverage. While ascertaining the size of the firm, the leverage and sustainable business performance are robustly linked with each other (Ibhagui & Olokoyo, 2018). This denotes strong evidence for the growth of the firm in emerging markets where the profits are evaluated on the basis of ratios. Some negative implications are also endorsed, which diminishes the size of a firm due to inconsistent growth in competitive environments. Various elements of firms are important for the evaluation of performance. These elements comprise the macroeconomy as well as the financial conditions. It is the proper inducement of these factors which could impact the sustainable business performance of organizations in different ways. A strong relationship prevails among the firm size, which is measured after the empirical examination of corporate sustainable business performance (Dang et al., 2018; Sadiq et al., 2021b). Firm size has a strong contribution toward sustainable business performance with a significant proportion in stating the variety of dealings in markets. Total sales, assets, and capitalization of markets are elected factors in some

implications for sustainable business performance. Therefore, the signs are important that assert the firm size to evaluate sustainable business performance.

Board size is also considered a strong dimension of firm size. It includes a variety of items like financial resources, business management role, human capital applied, the nature of business, goodwill, marketing scope, and profitability that are helpful in developing sustainability in the performance of organizations (social, environmental, and economic performance). ASEAN organizations emphasized the importance of firm size, which is evaluated by the inducement of gender diversity, foreign directors, board skills, and board size. The corresponding elements of firm size play a vital role in the increment of sustainable business performance. In many firms, the board characteristics like the number of board members, authority inboard, and the role of male or female members, etc., significantly influence sustainable business performance (Assenga Modest et al., 2018; Sadiq et al., 2021a). It is among the separation of elements that are bifurcated with the relevance of qualifications of elected factors. Therefore, it depicts the wide association between sustainable business performance and firm size, stating different proxy factors. In most organizations, the firm size plays an important role not only for higher profits but also in attaining the satisfaction of customers. Although customer satisfaction is linked with corporate social responsibility disclosure, the firm size is also important for the establishment of satisfaction measures. ASEAN countries emphasized customer satisfaction in some organizations to attain better sustainable business performance. Positive relation is also depicted among the factors of customer satisfaction and sustainable business performance (Golovkova et al., 2019; Xueying et al., 2021). Higher firm size dominantly influences the perception of customers while striving in the emerging markets. Mostly, the banking sector in many countries is widely focusing on the higher firm sizes to dominate over their competitors.

The current investigation is aimed at exploring the impacts of CSR disclosure, tax-effective rates, and corruption on sustainable business performance. Its objective is also to examine the influences of leverage and firm size on sustainable business performance. The study checks the nexus among CSR disclosure, tax-effective rates, corruption, leverage, and firm size, and sustainable business performance in this light of literary reviews. Though the current study integrates this relationship among these factors out of the literary studies, it does a lot of novel things which will constitute modern literature. Long research with different intensity and duration has been made on the relationship between CSR disclosure, tax-effective rates, corruption, leverage, and firm size, and sustainable business performance. This paper removes this literary gap and provides single research which covers all these factors and their impacts on sustainable business performance. Mostly, the authors are read as writing about the implementation of CSR business concept based on the three P's (planet, profits, and prosperity) of the sustainable business performance. This article contributes to the literature by analyzing CSR disclosure as the predictor of sustainable business performance. Moreover, sustainable business performance is possible in the case of the high environmental performance of the firms, but leverage and firm size are mostly linked with the financial performance of the firms. But, our study examines the contribution of leverage and firm size to the environmental and financial performance of the firm, which collectively constitutes sustainable business performance.

Methodology

The goal of the present study is to examine the impact of CSR disclosure, the effective rate of tax, and corruption on the sustainable business performance of the ASEAN country's listed firms. The data has been gathered by using the quantitative method and using the secondary source of data collection. The data has been extracted from the financial statement along with CSR disclosure reports of the listed firm of ASEAN countries. This study has selected five top manufacturing firms from each country according to their share market value. Thus a total of fifty firms are selected and extracted the data from 2015 to 2019. This study has taken CSR disclosure, the effective rate of tax, and corruption as predictors, while leverage and firm size have been used as control variables, and sustainable business performance has been taken as a predictive variable of the study. This study has executed the FEM and GMM to examine the relationships among the variables. Based on the literature review, the present study has developed the following equation:

$$SBP_{it} = \alpha_0 + \beta_1 CSR_{it} + \beta_2 TER_{it} + \beta_3 CRP_{it} + \beta_4 LEV_{it} + \beta_5 FS_{it} + e_{it}$$

where SBP is the Sustainable Business Performance, i is the firm, t is the time period, CERD is the Corporate Social Responsibilities Disclosure, TER is the Tax Effective Rates, CRP is the corruption, LEV is the leverage, and FS is the firm size.

This study has used sustainable business performance as a predictive variable and measured as the percentage of expenditure on social and environmental activities. In addition, CSR disclosure is used as a predictor and measured as the value 0 for CSR not reporting firm and 1 for CSR reporting firm. Moreover, tax-effective rates are also used as a predictor and measured as the current tax expense/pretax income, and corruption is also used as independent variables and measured as the time wasted by workers divided by total duty time. Employees productivity depends upon the effective time spent at workplace. The wastage of time will lead to words low productivity of the employees that are considered as the corruption at the workplace from the employees (Vickers, 2014). The data regarding wastage of time measured in hours. Thus, it is considered as the appropriate measurement for corruption. In addition, leverage and firm size have been used as control variables and measured as the long-term debt/total asset and log of total assets, respectively. These variables with measurement are shown in Table 1.

The present study has included the correlation matrix to examine the nexus among the variables and the Hausman test to examine the appropriate model for the analysis and suggested that FEM is appropriate for the study. FEM uses only data on individuals that have multiple observations and evaluates effects only the variables that change across these observations. FEM assumes that the effects of unmeasured constructs can be taken by time-invariant individual-specific variables. FEM are used to control the effects of unmeasured constructs if these constructs are correlated with the predictors of primary interest.

The subscript (i) exposed the individual country intercepts that may be diverse due to the individual country's different structures, and β_{1i} in the model represented it. By adding the understudy variables, the present study has developed the following equation:

Table 1. Measurements of variables.

S#	Variables	Measurements
01	Sustainable Business Performance	Percentage of expenditure on social and environmental activities to total expenditures
02	Corporate Social Responsibilities Disclosure	Value 0 for CSR not reporting firm and 1 for CSR reporting firm
03	Tax Effective Rates	Current tax expense/pretax income
04	Corruption	Time wasted by workers divided by the total time of duty
05	Leverage	Long term debt/Total asset
06	Firm Size	Log of total assets

Source: The Authors.

$$SBP_{it} = \beta_{1i} + \beta_2 CSR_{Dit} + \beta_3 TER_{it} + \beta_4 CRP_{it} + \beta_5 LEV_{it} + \beta_6 FS_{it} + u_{it} \quad (2)$$

The present study also used the GMM model to examine the nexus among the variables and the basic characteristic of the GMM model that it controls over the issue of heteroscedasticity in the model. In addition, GMM is most commonly used technique when the study have endogeneity between the dependent constructs. Additionally, dynamic panel models cannot be estimated by OLS, which in those cases is biased. Instead, the authors should employ GMM. Moreover, Arellano and Bond (1991) established a GMM estimator that provides “consistent parameter estimates” for models. This GMM estimator eliminates the “unobserved firm-specific heterogeneity” using a “first differencing” transformation. This removes the country and firm-specific effects. The estimation equation of GMM is as follow:

$$Y_{it} = \delta Y_{i, t-1} + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + u_{it} + \varepsilon_{it} \quad (3)$$

In this equation, $\delta Y_{i, t-1}$ is shown as the lag value of the predictive variable and based on understudy variables. In addition, the researchers executed the Sargan test that identified the restriction. The rejection of the Sargan test indicated that the instruments or model might be miss-specified. The thumb rule of the Sargan test is that its probability value should not be less than 0.05 and also not greater than 0.10. In addition, the greater the Sargan test probability values, the better the model used by the researchers. In addition, the present study also used the second-order autocorrelation AR (2) test because first-order autocorrelation (AR1) usually exists in the model. The thumb rule is that the probability value of AR (2) should be greater than 0.05 that shows no second-order autocorrelation in the model. The present study has formulated the following equation for the GMM model:

$$SBP_{it} = \delta SBP_{i, t-1} + \beta_1 SCRD_{it} + \beta_2 TER_{it} + \beta_3 CRP_{it} + \beta_4 LEV_{it} + \beta_5 FS_{it} + u_{it} + \varepsilon_{it} \quad (4)$$

Results

The results show the descriptive statistics, and the figures highlight the mean along with maximum and minimum values. The figures have shown that the mean value of return on equity is 0.657 while the average value of TER is 1.603. In addition, the

Table 2. Descriptive statistics.

Variable	Obs.	Mean	Min	Max
SBP	250	0.157	0.129	0.437
TER	250	1.603	0.645	79.319
CSRD	250	0.817	0	1
LEV	250	0.314	0.110	0.512
CRP	250	0.172	0.156	0.399
FS	250	26.177	12.590	94.36

Source: The Authors.

Table 3. Correlation matrix.

Variables	SBP	TER	CSRD	LEV	CRP	FS
SBP	1.000					
TER	0.036	1.000				
CSRD	0.184	0.040	1.000			
LEV	0.301	0.009	0.114	1.000		
CRP	-0.095	0.083	0.011	0.400	1.000	
FS	0.358	-0.020	-0.131	0.003	-0.246	1.000

Source: The Authors.

mean value of CSRD is 0.817, while the average value of leverage is 0.134. Moreover, the mean value of CRP is 0.172, and the average value of FS is 26.177. These values are shown in [Table 2](#).

The correlation matrix has shown that no high correlation among the variables because the values are less than 0.85. The results also show that TER, CSRD, LEV, and FS positively associate with SBP while CRP has a negative association with SBP. These values are shown in [Table 3](#).

The results of the Hausman test have been executed to check the appropriate model, and the results show that the FEM is appropriate because the probability value is higher than 0.05 that rejects the null hypothesis about the random model is appropriate. These values are shown in [Table 4](#).

This study has also executed the FEM to examine the nexus among the variables, and the results revealed that CSR disclosure and tax-effective rate, along with control variables such as leverage and firm size, have a positive association with the sustainable business performance of firms in ASEAN countries. However, the results also exposed that corruption has a negative association with the sustainable business performance of firms in ASEAN countries. In addition, the one unit change in the TER, the SBP also change by 0.101 units in the same direction. Moreover, a one-unit increase in CSRD, SBP will also increase by 0.149 units. Additionally, the one unit change in the LEV, the SBP also change by 0.276 units in the same direction. Furthermore, a one-unit increase in CRP will cause a 0.435 units decrease in SBP. Finally, if the firm size increase by one unit, the SBP fill increases by 0.010 units. R square vale shows that the 49.8 percent variation among the SBP due to the selected variables. This nexus is highlighted in [Table 5](#).

The study result shows the AR (2) tests and findings indicated that no evidence of autocorrelation in the model. In addition, the Sargan tests also showed in the results and indicated that no evidence of misspecification at “conventional significance levels.” These findings exposed that the dynamic panel GMM model is a good specification. Moreover, this study has also executed the GMM to examine the nexus among

Table 4. Hausman test.

	Coef.
Chi-square test value	2.91
<i>p</i> -value	0.714

Source: The Authors.

Table 5. Fixed effect model (FEM).

SBP	Beta	S.D.	t-value	p-value	L.L.	U.L.	Sig
TER	0.101	0.046	2.20	0.024	0.011	1.012	**
CSR	0.149	0.089	1.69	0.094	−.026	.324	*
LEV	0.276	0.072	3.83	0.000	0.133	.418	***
CRP	−0.435	0.169	−2.58	0.011	−0.768	−.101	**
FS	0.010	0.002	5.07	0.000	0.013	1.006	***
Constant	3.757	.928	4.05	0.000	1.923	5.592	***
R-squared	0.498		Prob > F		0.000		

*** $p < .01$, ** $p < .05$, * $p < .1$.

Source: The Authors.

Table 6. Generalized method moment (GMM).

SBP	Beta	S.D.	t-value	p-value	L.L.	U.L.	Sig
TER	0.101	0.015	6.73	0.000	0.031	1.003	***
CSR	0.402	0.195	2.07	0.040	0.018	0.787	**
LEV	0.407	0.122	3.33	0.001	0.165	0.649	***
CRP	−0.551	0.231	−2.39	0.018	−1.008	−0.095	**
FS	0.009	0.002	3.82	0.000	0.013	1.004	***
Sargan test <i>p</i> -value		0.910					
AR (2) test <i>p</i> -value		0.583					

*** $p < .01$, ** $p < .05$, * $p < .1$.

Source: The Authors.

the variables, and the results revealed that CSR disclosure and tax-effective rate along with control variables such as leverage and firm size have a positive association with the sustainable business performance of firms in ASEAN countries. The results also exposed that corruption has a negative association with the sustainable business performance of firms in ASEAN countries. In addition, the one percent change in the TER, the SBP also change by 10.1 percent in the same direction. Moreover, a one percent increase in CSR will cause a 40.2 percent increase in SBP. Additionally, the one percent change in the LEV, the SBP also change by 40.7 percent in the same direction. Furthermore, a one percent increase in CRP will cause a 55.1 percent decrease in SBP. Finally, if the firm size increase by one unit, the SBP fill increases by 0.009 units. This nexus is highlighted in [Table 6](#).

Discussions

The research has been conducted to investigate various elements which affect sustainable business performance. It is observed that most of the factors affect sustainable business performance, but corporate social responsibility disclosure, effective tax rate, corruption, leverage, firm size is most prominent among them. After analyzing gathered data, it explores a significant positive relationship between CSR disclosure and sustainable business performance in top listed firms situated in ASEAN countries. During the research, it has come to know that top listed ASEAN companies are aware

of CSR disclosure and want to disclose their reports in public, which will cause to enhance and boost their goodwill. Goodwill is considered a more critical asset in the financial statement. To disclose CSR, the company get many benefits such as an increase in employee satisfaction, companies involve themselves with their interested stakeholders in a better position, they know about their decisions, the company can get a competitive advantage, provision better strategic market positioning, investors motivate with their performance, and ultimately companies experienced efficiency and profitability.

The results indicated that effective tax rates have a positive association with sustainable business performance, and this association is matched with the outcomes of Panda and Nanda (2021), who also investigated the positive association between effective tax rate and sustainable business performance. In addition, the results also indicated that CSRD also has a positive and significant nexus with sustainable business performance, and this output is in line with the output of Pham and Tran (2020), who also exposed a positive association between CSR disclosure and sustainable business performance. Additionally, the current study also investigated the positive association between leverage and sustainable business performance. This outcome is also similar to the results of Iqbal and Usman (2018), who also investigated leverage's positive impact on sustainable business performance. Furthermore, the results show a negative association between corruption and sustainable business performance that similar to the findings of Kong et al. (2017), who also investigated the negative relation between corruption and firm performance. Finally, the present study results also show the firm size's positive impact on sustainable business performance that matched with the past study outcomes such as Alabdullah et al. (2018). Many arguments are presented regarding CSR initiatives which show the positive linkage between sustainable business performance and CSR disclosure (Jizi et al., 2016). It is stated that to perform CSR activities, the company gets many advantages in the form of customer loyalty, customer satisfaction, and the most important financial benefits. Companies carrying CSR activities and disclosure reports; ultimately, they avail efficient financial position. The result is also with the support of the study by (Chien et al., 2021f; Liu et al., 2020). In different countries of the world, the trend has been going to change that CSR practices are included in companies' agendas. Companies will adopt value-based governance to involve the primary and secondary stakeholders in their strategic management. This new trend of companies having a vast number of stakeholders with the involvement of corporate social responsibility (CSR) disclosure argued fruitful result in customer loyalty, willingness to pay premium prices and lower reputational risk during times of crisis. This shows the nexus of corporate social responsibility (CSR) and sustainable business performance which is significantly positive. To determine the firm's sustainable business performance, corruption as an independent variable is also studied. In this study, corruption has been measured in a sense of operational, functional, and managerial matters. The firms in which Directors or managers do not perform their duties with honesty commit corruption. If they are not loyal to the firm's operation and interested in dividends or earnings, they are considered corrupt personnel. When they do not perform their responsibilities and do not give proper time to their tasks, it badly impacts the firm's sustainable

business performance. Therefore, the connection between corruption and sustainable business performance is negative. In addition, Van Vu et al. (2018) described many forms of corruption. The result is the same as in this study examined the negative impact of corruption on sustainable business performance.

This study found that the tax-effective rate has a significant positive impact on the firm's sustainable business performance. This is in line with the findings of the study by Chien et al., (2021g); Thanjunpong and Awirothananon (2019) examined that an effective tax rate has a significant positive impact on sustainable business performance. Financial leverage has closely related to the profitability of the financial firm. This study examined the significant positive relationship between sustainable business performance and leverage ratio. It has been measured the impact of leverage on economic performance in profitability by using ROA, ROE, ROI, and EPS as performance indicators. Analysis indicates the significant positive relation between leverage and sustainable business performance. In the study, it is found a significant relationship between leverage measured by debt ratio with the profitability of firms (Shamaileh & Khanfar, 2014). In addition, Ali (2020) analyzed the result and found that leverage significantly affects sustainable business performance. This study mentioned the closer relation of leverage with profitability rather than the relationship with international diversification. However, this study did not find the specific type of leveraging, either operating leverage or combined leverage with profitability.

The firms' sustainable business performance is not only affected by the leverage; therefore, but firm size has also been used in this study as a control variable. It is explored that firm size has also been positively affected the financial position of the company. Statistically, the total assets of the company are used to determine the firm's size. As sustainable development potentially benefits. A dilemma for companies is that implementing the initiatives can be a very costly and time-consuming procedure. In other words, CSR initiatives require maximum cash and non-cash resources. In this scenario, it can be said that firms that incorporate stakeholder and sustainability strategies are usually MNEs and large-scaled enterprises that can sacrifice their profits for maintaining or promoting social interest.

Conclusion, implications, and limitations

The performance of a country depends on the performance of the individual business units in different economic sectors. ASEAN countries have developing economies. Though at present these economies are making fast progress, still sustainable performance is endangered because of the negative social and environmental impacts of business activities and weak financial management. This study addressed this significant economic issue. This study was intended to examine the influences of CSR disclosure, tax-effective rates, and corruption along with the leverage and firm size on sustainable business performance. Authors sort out the financial statements of business enterprises in ASEAN economies to gather quantitative data about the role of CSR disclosure, tax-effective rates, corruption, leverage, and firm size in achieving sustainable business performance. The results of the study in the light of empirical analysis show a significant relationship among CSR disclosure, tax-effective rates,

corruption, leverage and firm size, and sustainable business performance. The results indicated that the effective implementation of CSR practices like community welfare, employee relationship, environmental responsibilities, and ethical marketing, and the disclosure of the performing these practices within the financial reports, at one side improves the social and environmental performance while on the other hand raising goodwill and marketing, enhances the economic performance of the firm. Thus, CSR disclosure develops sustainability in business performance. The results also stated that the tax-effective rates could affect sustainable business performance in the sense that as taxes are the sources of government revenues, the government show efforts to encourage business development activities at the private level so that high revenues can be generated. Thus, an increase in taxes determines sustainable business performance. The results showed that sustainable business performance is affected by the sustainable financial position or sustainable profitability while these all are unable in case of spreading corruption. The study concluded that the leverage power and large firm size of the firms help meet sudden financial in the way to sustainable business performance.

The current study has great significance in emerging countries as it assures consistent growth in their performance. This study is useful for various business stakeholders such as government, society, organizational personnel, customers, etc., if it is adopted in practical life on the part of policymakers at the level of organization or state authorities. The individual business units and government can follow this literary guideline and design their financial and managerial policies in such a way that they can develop sustainable business performance. The study suggests that sustainable business performance can be achieved with CSR disclosure, management of tax-effective rates, and business administration to control corruption, enhancing leverage rate and firm size. This study motivates the business organization to integrate CSR practices in their financial and administrative policies and disclose them periodically through audit reports or prospects. This study guides how, through effective financial policies, leverage rate and firm size can be enhanced, which leads to sustainable business performance. This study guides the governments to draft tax policies to promote sustainable business performance, and they design the laws and regulations to be imposed in the businesses carried on within the country to control corruption.

This study has some limitations by focusing only on the companies located in ASEAN countries. Sample data were collected from financial reports of listed companies under the stock exchange of ASEAN countries. As the sample size of this study is small, this study's results cannot be generalized for all the economic sectors. Thus, future authors are required to acquire the data in support of this investigation from countries other than ASEAN. The results may be different from the current results if we take a large sample size. This study is consulted only limited period which is 2015 to 2020; in this time boundary, we cannot predict the financial result for an extended period. We cannot say that sustainable business performance will be the same for a long time. In the present study, only three types of leverage have been examined the effect on sustainable business performance, but some other factors such as liquidity, working capital management may also be affecting. In this study, the sustainable business performance has been measured using ROE, but the other variables like EPS,

ROA, etc., may also be used to measure. So, there is a need for more study to examine companies' sustainable business performance beyond these limitations.

Disclosure statement

We declare that there is no conflict of interest.

Ethical approval and consent to participate

The author declares that they have no known competing financial interests or personal relationships that seem to affect the work reported in this article. It has been declared that there are no human participants or human data.

Funding

This research was supported in part by the project grants from the New Century Excellent Talents Support Plan of Fujian Colleges and Universities (grant number 2018047).

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