
| RESEARCH ARTICLE

Current Snapshot of Business Climate and Sustainable Economy. Does AI Play a Crucial Role?

Hapsari Endras Ayu Novita¹✉ and Wahyu Widarjo²

^{1,2}*Faculty of Economics and Business, Universitas Sebelas Maret, Surakarta, Indonesia*

Corresponding Author: Hapsari Endras Ayu Novita **E-mail:** hapsarinovita@student.uns.ac.id

| ABSTRACT

This study aims to provide an analysis of the business climate on a sustainable economy by considering the effects of AI adoption in the era of global uncertainty (2024). The study obtained data from 50 countries, which were selected based on the specified criteria. The main analysis of this study applied moderation regression analysis, while the additional analysis applied multiple regression analysis. This research uses the EViews 13 application to analyze the data. The main analysis indicates that the business climate has a positive effect on the sustainable economy, and AI does not moderate the influence of the business climate on the sustainable economy. Additional analysis shows consistency that all indicators in the business climate have a positive effect on the sustainable economy. The findings of this study are contributing to the motivation and evaluation of each country to enhance a sustainable economy through the implementation of a stable and supportive business climate, as well as the promotion of the adoption of AI as a catalyst for sustainability in various sectors, specifically business and the economy.

| KEYWORDS

Sustainable Economy, Business Climate, Artificial Intelligence

| ARTICLE INFORMATION

ACCEPTED: 20 November 2025

PUBLISHED: 15 December 2025

DOI: 10.32996/jefas.2025.7.8.3

1. Introduction

Global uncertainty due to negative sentiment from the trade war and geopolitical pressures arising from the US-China trade war, as well as Russia's war in Ukraine, Israel and Palestine, and alliance shifts, has a substantial impact on various sectors, including the world economy. The Economic World Forum demonstrated that the December United Nations report indicated that global trade in 2024 is expected to reach a value of \$33 trillion, representing an increase of \$1 trillion from 2023 and reflecting a growth rate of 3.3%. Trade in services, which rose 7%, drove the expansion in half, while trade in goods grew 2%, still below 2022 (UNCTAD, 2024). However, global trade is still overshadowed by various risks in 2025 that affect a country's economic growth.

Global economic growth will undergo a decline from 2.8% in 2024 to 2.3% in 2025 due to trade tensions and an uncertain situation in which developing countries are the most vulnerable (Sofia, 2025). The economic slowdown that occurs is a significant problem that hinders a country's ability to achieve a sustainable economy. In circumstances where the economic framework of a nation is disrupted, the potentially disastrous consequences for that nation can be considerable. Such consequences may take the form of crises, a decline in welfare, and difficulties in achieving sustainable development goals.

The economic growth of a nation is supported by a business sector that has undergone a period of dynamic expansion. The expansion under discussion is driven by two key factors: firstly, enhancements to the business environment and, secondly, regulatory reforms that have been implemented in that country. Some literature shows that the performance of the business

sector provides beneficial benefits for all countries, both developed and developing countries. Therefore, the business sector is a tool to drive a country's economy.

The World Bank's initiative the Doing Business indicator (EDB), provides a framework that enables the assessment of regulatory reforms implemented by countries with the objective of enhancing the business sector. The scope of the indicator encompasses the facilitation of business establishment, the management of construction permit processes, the streamlining of credit acquisition, and the simplification of electricity access (Bétilla, 2021). Each country is recommended to carry out regulatory transformation according to the direction of the World Bank to stimulate the growth of the business sector and create new businesses. EDB facilitates the establishment of new enterprises that improve the economy of a country (Chambers & Munemo, 2018). The following regulations have been proven to have a positive effect on entrepreneurial empowerment (Fonseca et al., 2001), reducing impoverishment, and promoting equitable (Dwumfour, 2020), contributing to the economic growth of a nation are achieved through investment, innovative practices, and the accumulation of both human and financial capabilities (Hasan & Tucci, 2010). Through the important and strategic role of the business sector in the economy of a country, it is an interesting and important topic to be studied in research.

The World Bank decided to replace the EDB index and adopt the Business Ready (B-ready) index in 2024, due to the criticism it received regarding its methodology. The B-Ready Index proposes a more accurate, practical, and concrete evaluation of the rules and regulations that determine the investment options available to companies (Hardi et al., 2025). The implementation of this index has the potential to serve as a valuable tool for evaluating and assessing a nation's capacity to optimise various main indicators.

The maximization of each indicator in B-ready has a positive impact on a country, especially related to the sustainable economy. Research by Hardi et al., (2025) shows that the business climate has a positive effect on economic development as measured using Foreign Direct Investment. The results of the study are consistent with the conclusions of the research by Bétilla (2021) which demonstrates that the business climate has a positive effect on the sustainable economy in the African country. Business climate affects a sustainable economy, as measured using GDP growth (Khan, 2024). The findings of the study are in contrast to the research by Aliedan (2020) which demonstrates that there is a negative correlation between the business climate and sustainability.

In the contemporary business environment, characterised by an abundance of data, the necessity for a comprehensive, integrated analytics approach is of the utmost importance (Charles et al., 2025b). An analytical and integrated approach can be achieved through the adoption of Artificial Intelligence (AI). Advancements in research, specifically AI, have led to the development of sophisticated tools and techniques that facilitate the modelling and evaluation of the potential benefits, risks, and levels of unpredictability associated with future business endeavours (Jafarzadeh et al., 2025). Business sectors may use AI for managing data, integrating multiple channels, and delivering customised services (Alnofeli et al., 2025). AI adaptation in a country will improve business performance and create a competitive and stable business climate so that it can increase a sustainable economy. In possession of these tools, It is incumbent upon policymakers to devise strategies that are informed by historical trends yet are sufficiently flexible to accommodate evolving economic realities (Abir et al., 2024).

Research related to business climate, AI, and sustainable economics is a very interesting topic and has not been explored by researchers. This research is significant as it offers a contemporary perspective on the notion of a sustainable economy in the context of global uncertainty. It is acknowledged that previous research has not implemented the B-ready index, due to the index's release in 2024. Hence, the present study employs a B-ready index by offering the most recent measurement concepts, which are complex and specific. The selection of AI as a moderation variable is predicated on its significant role within the business sector, thus illustrating the effectiveness of the business climate in a country that has adopted AI, in addition to its impact on the sustainable economy. Research by Charles et al., (2025) provides direction for future research to investigate the potential of scaling AI algorithms to accommodate extensive databases and diversified business landscapes.

Based on the explanation, this study aims to determine the influence of business climate on a sustainable economy by considering AI adaptation. This research involves a cross-country study with a research period of 2024. This study is a quantitative research using moderation regression analysis and multiple regression analysis with E-views tools. This research contributes to providing motivation and evaluation for each country to improve a sustainable economy through the creation of a stable and supportive business climate, and expanding the adoption of AI as a catalyst for sustainability in various sectors, especially business and the economy.

2. Literature Review

In economics, research relating to endogenous growth theory has prompted a multitude of empirical studies investigating how innovation is able to drive a sustainable economy (Hasan & Tucci, 2010). The business climate and AI include innovations created to make it easier for a country to realize sustainable economic goals through the pillars of efficiency, regulation, and effectiveness. However, empirical evidence on these two areas in achieving sustainable economic goals is still very limited.

The acceleration of the globalization process and the increasingly intensive competition between national economies have made sustainable economic growth a critical issue for policymakers and academics all over the world (Liu & Li, 2025). Indicators of sustainable development are fundamental to economic growth (EG), providing a more comprehensive view of development than an exclusive concern with Gross Domestic Product (GDP) (Hussein et al., 2025). Sustainable economics evaluates an economics of the country strength and flexibility by considering factors that promote steadfast growth while protecting the environment and avoiding risky practices (Qazi & Al-Mhdawi, 2024). Consequently, sustainable development embodies the principle of enhancing living standards while ensuring the capacity to fulfil the requirements of future generations, thereby promoting environmental and economic sustainability (Warsiman et al., 2024).

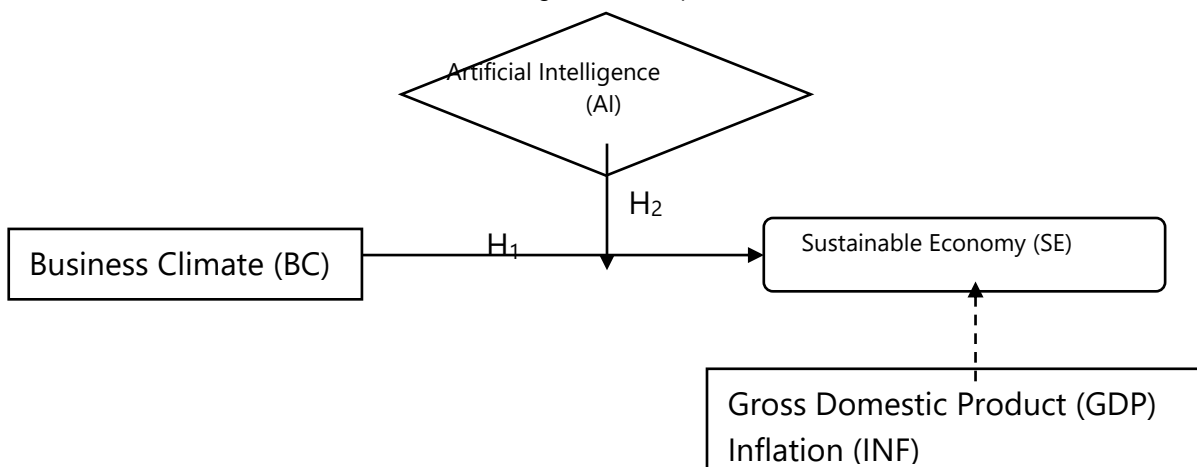
The World Bank's recently introduced B-ready indicator provides a more current and systematic approach than EDBs because B-ready assesses ten critical aspects of business regulatory frameworks, considering both the legal framework (de jure) and its practical application, which offers a more extensive and context-specific analysis (Hardi et al., 2025). These indicators capture detailed and concrete actions on business entry, insolvency, taxation, employment regulation, business location, dispute resolution, financial services, international trade, market competition, and utility services. Therefore, B-ready is the right and relevant proxy for measuring the business climate in a country by considering accurate indicators.

The era of Industry 4.0 and digitalization has made AI experience very rapid development, which has a notable impact on economic development, thus attracting considerable attention from academics (Song et al., 2025). AI is a new, dynamic, and rapidly evolving phenomenon, so its impact on efforts to advance sustainability goals has only emerged and has not been studied in depth (Goralski & Tan, 2020). However, it is undeniable that various sectors of government, industry, and business are also adopting AI to facilitate their flows and transactions. Therefore, AI adoption can affect the business climate in a country, where countries that adopt AI to the maximum have a more stable business climate, so that it is able to support a sustainable economy.

Conceptual Framework

Global uncertainty due to negative sentiment from trade wars and alliance shifts has a substantial impact on various sectors, including the world economy. Therefore, economic growth and sustainability are still doubtful in the future. To support a sustainable economy, a country needs to create a stable business climate so that it is able to attract investment and turn the wheels of the economy. The current digital era requires a business to start adopting AI with the aim of simplifying business processes. Thus, the existence of AI in a country is highly regarded for economic sustainability indirectly. The conceptual framework in this study describes the influence of independent variables in the form of business climate on dependent variables in the form of a sustainable economy, with moderating variables in the form of AI and control variables in the form of gross domestic product and inflation. The conceptual framework in this study can be seen in Figure 1.

Figure 1. Conceptual Framework



Hypothesis Development

Research by Hardi et al., (2025) business liquidation, resolving disputes, international trade, employees' rights, competitiveness in the market, and taxation are essential factors in a country's capability to stimulate foreign investment. Countries can foster investor optimism, mitigate risk, and establish more favourable conditions for sustainable economic growth by enhancing the business climate through purposeful interventions in these critical areas. In the context of business, these findings suggest that navigating a market with effective regulation and a productive business environment can offer a more stable foundation, reduced procedural risk, and unlock new business opportunities. Research by Bétilla (2021) shows that the EDB has a good impact on Africa's economic growth. The implication of these outcomes is that regulatory reform becomes a policy tool designed to help African countries boost the business climate for companies. Therefore, a stable and good business climate in a country is able to support a country's sustainable economy. In consideration of the foregoing description, the hypothesis to be investigated in this study may be formulated as follows:

H₁: Business climate has a positive effect on a sustainable economy

Research by Jafarzadeh et al., (2025) shows that AI adoption provides many benefits for companies, including a better understanding of high-quality decision-making, continuous learning, and good relationships with partners. Business sectors may use AI for managing data, integrating multiple channels, and delivering customised services (Alnofeli et al., 2025). AI enhances the business climate by promoting efficiency, transparency, and inclusivity. This, in the long term, positively contributes to a sustainable economy by promoting green innovation, international competitiveness, equitable growth, and the mitigation of negative environmental and social impacts. In other words, AI strengthens the relationship between the business climate and economic sustainability. In consideration of the foregoing description, the hypothesis to be investigated in this study may be formulated as follows:

H₂: AI moderates the positive influence of business climate on a sustainable economy

3. Research Methods

This research is a quantitative study with cross-country case studies. The population in this study is all countries in the world. The sample selection technique uses a technique of non-probability sampling accompanied by a purposive sampling method. Criteria of the sample were chosen to ensure the completeness of the required data for the research. After conducting the sampling process, we obtained the final sample size of 50 data. The research period chosen is 2024 because it is to find out the current condition of the sustainable economy in an era of global instability. The secondary data utilised in this study were retrieved from the World Bank, Solability, and Oxford Insight. This study uses independent variables in the form of business climate, dependent variables in the form of sustainable economy, moderating variables in the form of AI, and control variables in the form of GDP and inflation. Table 1 explains the description of the variables used in this study.

Table 1. Definition of Variables

Type of Variable	Name	Variable Definition	Hypothesis (Expected Sign)	Source of Data
Dependent	Sustainable Economy (SE)	Economic Sustainability measures through a combination of economic and business indicators related to sustainability (Hui-Kuang & Kun-Huang, 2025)		Annually Published Global Sustainable Competitiveness Report from Solability
Independent	Business Climate (BC)	Composite value of 10 indicators of B-ready. All variables are in their natural logarithmic (Schneider, 2025)	(+)	Annually Published B-ready from the World Bank
Moderating	Artificial Intelligence (AI)	Government AI Readiness Index (Safarolievich, 2022)	(+)	Annually Published GAIRI Reports from Oxford Insights
Control	Gross Domestic Product (GDP)	Gross Domestic Product growth (Ochirova & Miriakov, 2025)	(+)	Annually Published GDP Reports from the World Bank
	Inflation (INF)	Inflation rate (Schneider, 2025)	(+)	Annually Published GSCI Reports from the World Bank

The present study employs a moderation regression analysis, utilising the E-views software programme. Moderation regression analysis is a technique used in multiple linear regression analysis that involves an interaction variable in the regression equation. The following is the regression model used in this study.

$$SE = \alpha + \beta_1 BC + \beta_2 AI + \beta_3 BC \times AI + \beta_4 GDP + \beta_5 INF + \varepsilon \quad (1)$$

Where:

SE	= Sustainable Economy
α	= constant
β	= Regression Coefficient
BC	= Business Climate
AI	= Artificial Intelligence
BCxAI	= BC and AI interaction
GDP	= Gross Domestic Product
INF	= Inflation
ε	= Error

The data analysis applied in this study includes descriptive statistics to determine the minimum, maximum, average, and standard deviation values. The data analysed in this study are required to meet the classical assumption test, namely the normality test, the multicollinearity test, and the heteroscedasticity test. The hypothesis test uses partial tests to determine whether there is an influence of independent variables on dependent variables, and to determine the role of moderation variables. At the end of the analysis, a determination coefficient test was carried out to determine the magnitude of the influence of the variables used on the dependent variables. This study uses additional analysis to test the consistency of research results so that it is able to expand and clarify the main research results. Additional analysis used in this study is in the form of an analysis of 10 indicators in B-ready. The regression model in the supplementary analysis is as follows.

$$SE = \alpha + \beta_1 (BE, BI, BL, DR, FS, IT, LA, MC, TX, US) + \beta_3 GDP + \beta_4 INF + \varepsilon \quad (2-11)$$

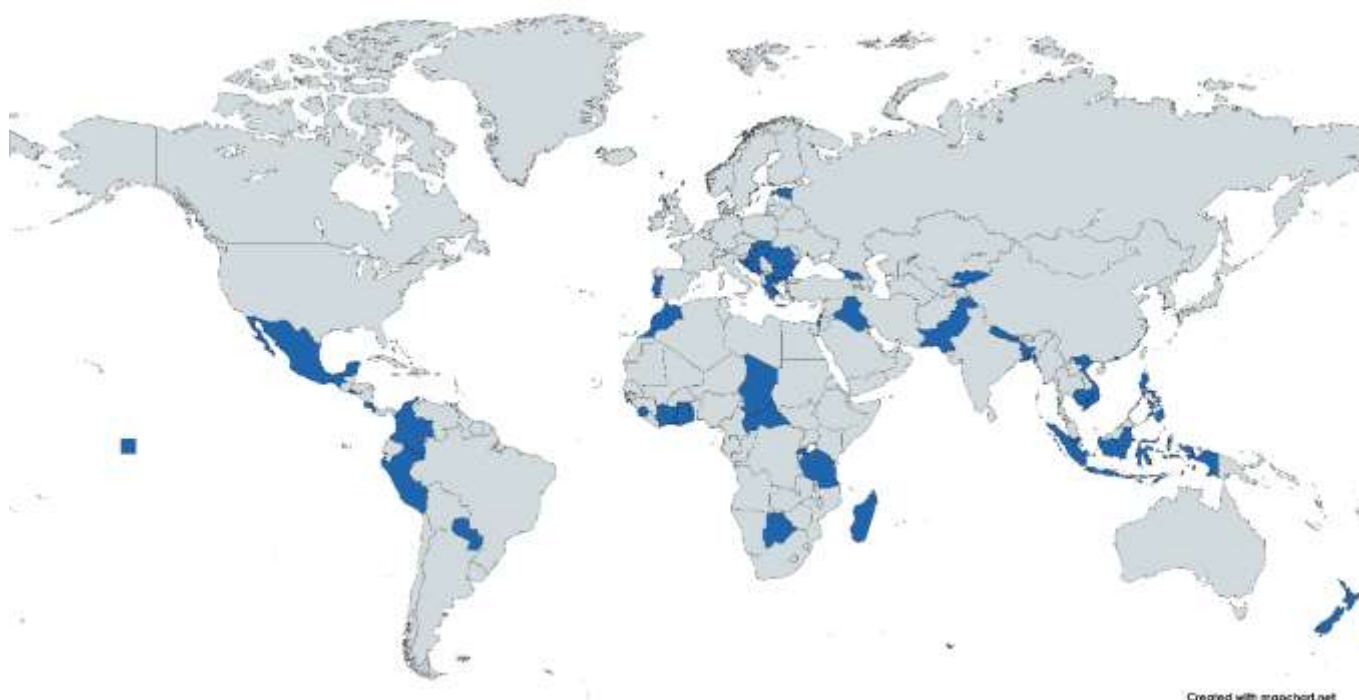
Where:

BE	= Business Entry
BI	= Business Insolvency
BL	= Business Location
DR	= Dispute Resolution
FS	= Financial Services
IT	= International Trade
LB	= Labor
MC	= Market Competition
TX	= Taxation
US	= Utility Services

4. Results

Based on the sample selection process, this study uses data from 50 countries in the world with an observation period of one year, namely 2024. The sample used in this study are Greece, Singapore, Portugal, Botswana, Bulgaria, Pakistan, North Macedonia, Estonia, Colombia, Hungary, Slovak Republic, Hong Kong, Rwanda, New Zealand, Georgia, Montenegro, Romania, Croatia, Barbados, Togo, Morocco, Lesotho, Mauritius, Bangladesh, Samoa, Costa Rica, Tanzania, Nepal, Vietnam, Krgyzstan, Cote d'Ivoire, Indonesia, Peru, Gaza, Madagascar, Mexico, Bosnia, Seychelles, Paraguay, Iraq, Timor Leste, Philippines, Sierra Leone, Chad, Gambia, Central Africa Republic, El Salvador, Vanuatu, Cambodia, Ghana.

Figure 2. Sample Visualization



Source: mapchart.net

Data analysis uses a statistical tool called E-views. The first data analysis is descriptive statistics. The purpose of this analysis is to find out the value of the minimum, maximum, average, and standard deviation. Descriptive statistical analysis can be seen in Table 2.

Table 2. Statistic Descriptive

Variable	Minimum	Maximum	Mean	Median	Std. Dev	Obs
SE	32.60000	57.10000	43.82600	42.65000	6.610777	50
BC	28.53718	43.32532	40.36164	40.86884	2.573675	50
AI	20.26000	84.25000	46.62960	44.03500	14.62371	50
GDP	-26.60000	9.400000	2.978000	3.150000	4.965238	50
INF	-7.500000	25.40000	4.598000	3.750000	5.262594	50
BE	40.99000	96.58000	69.96140	72.23500	16.52456	50
BI	0.010000	89.69000	49.99480	49.61500	19.61295	50
BL	33.42000	83.01000	61.31580	61.85500	12.05724	50
DR	36.47000	82.87000	59.26060	61.54000	12.90597	50
FS	24.82000	86.03000	61.49260	62.10000	13.40150	50
IT	34.82000	90.77000	63.67060	64.16000	14.34625	50
LA	49.22000	83.46000	64.99240	65.20500	8.414168	50
MC	16.69000	68.55000	48.03840	51.42500	14.12028	50
TX	23.28000	71.74000	53.49520	55.64500	10.62467	50
US	35.04000	86.42000	65.12840	65.34500	11.52408	50

Source: E-views 13 generated output

Classical assumption test

The classical assumption test is composed of three constituent tests. Firstly, it is a test of normality, secondly, it is a test for heteroscedasticity, and thirdly, it is a test for multicollinearity. The objective of this test is to ascertain that the data is distributed normally and free from heteroscedasticity and multicollinearity problems. The outcomes of the classical assumption test are presented in the following table.

Table 3. Classic Assumption Test

Variable	Normality Test		Heteroscedasticity Test	Multicollinearity Test	Obs
	Jarque-Bera	Prob.	Prob.	VIF	

BC	2.409643	0.299745	0.8623	3.657567	50
AI	1.992022	0.369350	0.7654	3.040637	50
BCxAI	1.864475	0.393672	0.3983	2.017866	50
GDP	2.718739	0.256823	0.2185	1.068930	50
INF	2.034982	0.361501	0.4382	1.247493	50
BE	2.738838	0.254255	0.6387	2.158384	50
BI	1.481535	0.476748	0.2835	2.331615	50
BL	1.751690	0.416510	0.5000	3.925227	50
DR	0.851923	0.653141	0.6378	3.209543	50
FS	1.794414	0.407707	0.6745	3.195405	50
IT	2.914189	0.232912	0.9883	4.307823	50
LA	2.272319	0.321050	0.1783	1.873135	50
MC	1.984383	0.370763	0.2531	4.887754	50
TX	1.564770	0.457314	0.3685	2.105730	50
US	2.486391	0.288461	0.1707	2.418367	50

Source: E-views 13 generated output

In this study, the normality test implements the Jarque-Bera test. Based on the results of the analysis, the probability value of each variable has shown a value of > 0.05. Therefore, it can be inferred that the data used in this study have been distributed normally.

The heteroscedasticity test in this study used Breusch-Pagan-Godfrey. Based on the results of the analysis, the probability value of each variable has shown a value of > 0.05. Therefore, it can be inferred that the data analysed in this study is not associated with heteroscedasticity issues.

The multicollinearity test in this study used the VIF value. Based on the results of the analysis, the VIF value of each variable has shown values of >1 and <10. Therefore, it can be inferred that the data analysed in this study is not associated with the multicollinearity issues.

Regression analysis

Main analysis

The main analysis in this study uses moderation regression analysis. The results of the moderation regression analysis can be seen in Table 4.

Table 4. Moderation Regression Analysis (1)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-10.03029	14.30403	-0.701222	0.4869
BC	1.076992	0.405653	2.654958	0.0110**
AI	0.221331	0.064130	3.451279	0.0012***
BCxAI	0.044985	0.023378	1.924278	0.0608*
GDP	-0.182860	0.114567	-1.596090	0.1176
INF	-0.099949	0.109145	-0.915747	0.3648
Adjusted R-squared	0.658914			
Observations	50			

Source: E-views 13 generated output

***, **, * is significance at 1%, 5%, 10%, respectively

Based on table 4, the form of the model equation is obtained as follows:

$$SE = -10.03029 + 1.076992BC + 0.221331AI + 0.044985BCxAI + (-0.182860)GDP + (-0.099949)INF + \epsilon$$

Table 4 shows that the business climate variable has a coefficient value of 1.076992 with a significance value of 0.0110 < 0.05. This shows that the business climate has a positive effect on the sustainable economy, so the first hypothesis in this study is **accepted**. The stability of the business climate makes it easier for a country to achieve sustainable economic goals. The creation of innovation in the ten indicators that shape the business climate makes a clear direction for the business world, so that businessmen and investors have no doubts in developing businesses in their countries. A stable business climate provides

predictability, stimulates green investment, promotes innovation, creates entrepreneurial opportunities, and enhances efficiency. These elements all positively reinforce the relationship between a business climate and a sustainable economy. The certainty of the business climate is what encourages economic growth and improves social welfare so that it is able to achieve a sustainable economy. The results of this study are in line with research by Hardi et al., (2025), which shows that the business climate has an effect on economic growth. In the context of business, these findings suggest that navigating a market with effective regulation and a productive business environment can offer a more stable foundation, reduced procedural risk, and unlock new business opportunities. Research by Bétula (2021) shows that the EDB has a good impact on Africa's economic growth. The implication of these outcomes is that regulatory reform and efficiency become a catalyst for a country's sustainable economy through economic growth and prosperity achieved from a stable business climate. In other words, the more favourable a business climate in a country, the better its chances of establishing an inclusivity-driven, environment-friendly, and resilient economy.

Table 4 shows that the interaction variable of business climate and artificial intelligence has a coefficient value of 0.044985 with a significance value of $0.0608 > 0.05$. This shows that AI is unable to moderate the influence of business climate on a sustainable economy, so the second hypothesis in this study is **rejected**. The adoption of AI in a country is not capable of achieving sustainable economic success because not all business sectors implement AI in their operations. Moreover, the business sector that is just being started and is still small-scale that still relies on traditional systems and has not thought about the importance of AI in its business operations. It is true that the presence of AI is able to drive the success of sustainability goals through the reduction of carbon emissions (Al-Fuqaha'a et al., 2025), Economic Effectiveness in the Hospitality Sector (Li et al., 2021), and social welfare triggers (Popescu & Šebestová, 2024), The positive implications are not confirmed in this study. On the other hand, this study provides evidence that AI is currently more of a direct independent variable that has its own impact on a sustainable economy, but is not mature enough to strengthen the influence of the business climate.

Based on data analysis, an adjusted R-squared value of 0.658914 was obtained. This shows that the influence of business climate, artificial intelligence, moderation, gross domestic product, and inflation on the sustainable economy is 65.89%, and the rest is influenced by other variables that are not explained in the study.

Additional Analysis

This study uses additional analysis to confirm and clarify the main findings and to find out the magnitude of the influence of each indicator on the sustainable economy in a country. The additional analysis uses ten indicators that are used to determine the level of business climate. Additional analysis can be seen in Table 5.

Table 5. Multiple Regression Analysis on Additional Analysis (2-11)

Variable	Prob. (Coeff.)									
	2	3	4	5	6	7	8	9	10	11
C	0.0000 (32.44440)	0.0000 (36.01952)	0.0000 (24.73586)	0.0000 (23.89905)	0.0000 (27.88067)	0.0000 (24.00647)	0.0080 (18.19368)	0.0000 (29.80602)	0.0000 (31.95327)	0.0000 (23.87408)
GDP	0.5816 (- 0.096874)	0.0530 (- 0.328451)	0.2717 (- 0.173737)	0.0151 (- 0.373562)	0.2041 (- 0.205926)	0.1363 (- 0.219294)	0.1106 (- 0.276720)	0.0495 (- 0.296036)	0.1360 (- 0.286635)	0.2073 (- 0.206938)
INF	0.4721 (- 0.119365)	0.0833 (- 0.270879)	0.5997 (- 0.077964)	0.6875 (- 0.054681)	0.2271 (- 0.183828)	0.6573 (0.062323)	0.4993 (- 0.106749)	0.5764 (- 0.076664)	0.5133 (- 0.111786)	0.5908 (- 0.082415)
BE*	0.0017 (0.174652)									
BI*		0.0000 (0.200623)								
BL*			0.0000 (0.325626)							
DR*				0.0000 (0.359275)						
FS*					0.0000 (0.283023)					
IT*						0.0000 (0.317038)				
LA*							0.0002 (0.414621)			
MC*								0.0000		

								(0.317539)		
TX*									0.0074 (0.247505)	
US*										0.0000 (0.321628)
Adj. R-squared	0.159848	0.297209	0.329111	0.439233	0.302625	0.428865	0.239233	0.426957	0.109425	0.285934
Obs.	50	50	50	50	50	50	50	50	50	50

Source: E-views 13 generated output

(*) Variables expressed in natural logarithm (ln)

Based on the results of the additional analysis, it can be concluded that all variables have a positive effect on a sustainable economy. Therefore, the results of this additional analysis are consistent with the main analysis results, indicating that the results are robust. When viewed from the adjusted R-squared value, the variable with the largest influence is dispute resolution, which is 43.92% which as measured using the effectiveness, accessibility, and timeliness of the mechanism to resolve commercial disputes. Further, as globalization continues to drive economic integration, the need for an efficient, predictable, and enforceable dispute resolution framework has become clearer (Kurniawan et al., 2025). The results of this study confirm the results of the research by Hardi et al., (2025) and Vučković et al., (2020) shows that an effective legal and institutional system for dealing with business insolvency and supporting the restructuring process has a positive effect on economic growth. Clear dispute resolution makes the business climate better, due to legal certainty, and encourages investment. This will support long-term business stability, which will ultimately be able to create a sustainable economy.

The results of additional analysis in Table 5 show that the tax variable has the smallest adjusted R-squared value, which is 10.94% which as measured using the level of burden, complexity, and compliance requirements of the business tax system. The construction of the tax mechanism is important for economic growth. In times of economic crisis, temporary tax reductions can be introduced to stimulate both private and enterprise expenditure and reduce the negative impact on the economy (Kasisi & Habaazoka, 2025). However, recent studies highlight that the total impact of temporary tax policies is quite limited. In the wider context, the fundamental principles of the tax system are crucial for fostering an environment conducive to investments and innovation, thereby driving sustainable economic (Fuest & Wildgruber, 2017). The correlation between taxation and economic growth has garnered considerable prominence in recent years. Theoretically, the endogenous growth model suggests that the accumulation of productive capital can drive long-term economic growth (sustainable economy) (Kasisi & Habaazoka, 2025).

5. Conclusion and Suggestion

This study involves data collected from 50 countries in the 2024 period. The results of the main analysis show that the business climate has a positive effect on economic sustainability in a country. A stable business climate makes it easier for a country to achieve sustainable economic goals. AI cannot moderate the influence of business climate on economic sustainability because not all business sectors apply AI in their operations. This study provides evidence that AI is currently more of a direct independent variable that has its own impact on a sustainable economy, but is not mature enough to strengthen the influence of the business climate. The results of the additional analysis show consistency that all indicators that shape the business climate have a positive effect on the sustainable economy. This research has limitations, including not considering other factors such as the human growth index and resources that are actually the drivers of a country's economy. This study also does not provide empirical evidence of differences in research results between developed and developing countries to test their consistency. For future research, it is expected to consider several relevant factors and test the consistency of research results through analysis of developed and developing countries.

Funding : This research received no external funding
Conflicts of Interest : The authors declare no conflict of interest
ORCID Id : 0009-0001-2398-2911

References

- [1] Abir, S. I., Al Shiam, S. A., Zakaria, R. M., Shimanto, A. H., Arefeen, S. M. S., Dolon, M. S. A., ... Saha, T. R. (2024). Accelerating BRICS Economic Growth: AI-Driven Data Analytics for Informed Policy and Decision Making. *Journal of Economics, Finance and Accounting Studies*, 102–115. <https://doi.org/10.32996/jefas.2024.6.6.8>
- [2] Al-Fuqaha'a, S., Abu-Soud, M., Al-Hyasat, G., & Alhijawi, B. (2025). Leveraging artificial intelligence and data science for addressing climate change (SDG 13). *Innovation and Technological Advances for Sustainability - Proceedings of the International Conference on Innovation and Technological Advances for Sustainability, ITAS 2023*, (Sdg 13), 332–340. <https://doi.org/10.1201/9781003496724-32>
- [3] Aliedan, M. M. (2020). Overall Business Climate and Its Impact on Environmental Sustainability: Analyzing Evidence From Asean Countries. *Journal of Security and Sustainability Issues*, 10(Oct), 291–302. [https://doi.org/10.9770/jssi.2020.10.Oct\(22\)](https://doi.org/10.9770/jssi.2020.10.Oct(22))
- [4] Alnofeli, K. K., Akter, S., & Yanamandram, V. (2025). Unlocking the Power of AI in CRM: A Comprehensive Multidimensional Exploration. *Journal of Innovation and Knowledge*, 10(3), 100731. <https://doi.org/10.1016/j.jik.2025.100731>
- [5] Bétila, R. R. (2021). The Impact of Ease of Doing Business on Economic Growth: a Dynamic Panel Analysis for African Countries. *SN Business and Economics*, 1(10), 1–34. <https://doi.org/10.1007/s43546-021-00143-9>
- [6] Chambers, D., & Munemo, J. (2018). The Impact of Regulations and Institutional Quality on Entrepreneurship. *SSRN Electronic Journal*, (January). <https://doi.org/10.2139/ssrn.3191521>
- [7] Charles, V., Emrouznejad, A., & Kunz, W. H. (2025a). Advancements in Artificial Intelligence-based Prescriptive and Cognitive Analytics for Business Performance: a Special Issue Editorial. *Journal of Business Research*, 200(June), 1–10. <https://doi.org/10.1016/j.jbusres.2025.115576>
- [8] Charles, V., Emrouznejad, A., & Kunz, W. H. (2025b). Advancements in Artificial Intelligence-Based Prescriptive and Cognitive Analytics for Business Performance: a Special Issue Editorial. *Journal of Business Research*, 200(June), 115576. <https://doi.org/10.1016/j.jbusres.2025.115576>
- [9] Dwumfour, R. A. (2020). Poverty in Sub-Saharan Africa: The Role of Business Regulations, Policies and Institutions. *Social Indicators Research*, 149(3), 861–890. <https://doi.org/10.1007/s11205-020-02277-z>
- [10] Fonseca, R., Lopez-Garcia, P., & Pissarides, C. A. (2001). Entrepreneurship, Start-up Costs and Employment. *European Economic Review*, 45(4–6), 692–705. [https://doi.org/10.1016/S0014-2921\(01\)00131-3](https://doi.org/10.1016/S0014-2921(01)00131-3)
- [11] Fuest, C., & Wildgruber, S. (2017). Taxation and Economic Growth. *Steuerpolitik Und Wirtschaftswachstum*, 97, 4–8. <https://doi.org/https://doi.org/10.1007/s10273-017-2115-4>
- [12] Goralski, M. A., & Tan, T. K. (2020). Artificial intelligence and sustainable development. *International Journal of Management Education*, 18(1). <https://doi.org/10.1016/j.ijme.2019.100330>
- [13] Hardi, I., Çoban, M. N., Maulana, A. R. R., Idroes, G. M., & Mardayanti, U. (2025). Do Business Conditions Drive FDI Inflows? A Decomposition Analysis Using B-READY Indicators. *Indatu Journal of Management and Accounting*, 3(1), 1–16. <https://doi.org/10.60084/ijma.v3i1.303>
- [14] Hasan, I., & Tucci, C. L. (2010). The Innovation-Economic Growth Nexus: Global evidence. *Research Policy*, 39(10), 1264–1276. <https://doi.org/10.1016/j.respol.2010.07.005>
- [15] Hui-Kuang, T. Y., & Kun-Huang, H. (2025). National Competitiveness in the Sustainability Context. *Journal of Competitiveness*, 17(1), 21–37. <https://doi.org/10.7441/joc.2025.01.02>
- [16] Hussein, M. A., Elobeid, D. E., Ahmed, E. M., Elfaki, K. E., & Bashir, M. S. (2025). Sustainable Development Indicators Implications on Saudi Sustainable Economic Growth. *Journal of Open Innovation: Technology, Market, and Complexity*, 11(3), 100587. <https://doi.org/10.1016/j.joitmc.2025.100587>
- [17] Jafarzadeh, P., Vähämäki, T., Nevalainen, P., Tuomisto, A., & Heikkonen, J. (2025). Supporting SME Companies in Mapping

out AI Potential: a Finnish AI Development Case. *Journal of Technology Transfer*, 50(3), 1016–1035.
<https://doi.org/10.1007/s10961-024-10122-5>

- [18] Kasisi, K., & Habaazoka, L. (2025). A study of the Effect of Taxation on Economic Growth Amidst the Debt Crisis in Zambia, 1995 - 2023. *East African Finance Journal*, 4(2), 55–76. <https://doi.org/10.59413/eafj/v4.i2.4>
- [19] Khan, M. N. (2024). Assessment of Impact of Country Business Ranking on Economic Development: An Empirical Analysis. *Global Business and Finance Review*, 29(3), 30–41. <https://doi.org/10.17549/gbfr.2024.29.3.30>
- [20] Kurniawan, I. G. A., Samsithawrati, P. A., Dharmawan, N. K. S., Disantara, F. P., & Chansrakao, R. (2025). Legal Reform in Business Dispute Resolution: A Study of Legal Pluralism in Indonesia, Vietnam, and Thailand. *Journal of Law and Legal Reform*, 6(2), 69–116. <https://doi.org/10.15294/jllr.v6i2.21128>
- [21] Li, M., Yin, D., Qiu, H., & Bai, B. (2021). A systematic review of AI technology-based service encounters: Implications for hospitality and tourism operations. *International Journal of Hospitality Management*, 95(July 2020), 102930. <https://doi.org/10.1016/j.ijhm.2021.102930>
- [22] Liu, J., & Li, J. (2025). Educational Equity, Inclusive Finance, and Sustainable Economic Growth. *Finance Research Letters*, 6(77). <https://doi.org/https://doi.org/10.1016/j.frl.2025.106966>
- [23] Ochirova, E., & Miriakov, M. (2025). The Effect of Fintech M&As on Short-Term Stock Return in the Context of Macroeconomic Environment. *Financial Innovation*, 11(1). <https://doi.org/10.1186/s40854-024-00673-9>
- [24] Popescu, C. R. G., & Šebestová, J. D. (2024). The impact of artificial intelligence on intellectual capital development: Shifting requirements for professions and processes in the non-profit sector. *Journal of Infrastructure, Policy and Development*, 8(10), 1–17. <https://doi.org/10.24294/jipd.v8i10.3899>
- [25] Qazi, A., & Al-Mhdawi, M. K. . (2024). Exploring the Relative Importance of Sustainable Competitiveness Pillars. *Journal of Cleaner Production*, 443. <https://doi.org/https://doi.org/10.1016/j.jclepro.2024.140986>
- [26] Safarolievich, D. D. (2022). The Impact of Wages, Unemployment and Economic Growth on Artificial Intelligence: Evidence from Countries Divided into Three Groups in the Government Artificial Intelligence Readiness Index. *Review of Economics and Finance*, 20, 797–804. <https://doi.org/10.55365/1923.x2022.20.90>
- [27] Schneider, M. (2025). What Contributes to Consumer Price Inflation? A Novel Decomposition Framework with an Application to Austria. *Journal of Economic Structures*, 14(1), 1–26. <https://doi.org/10.1186/s40008-024-00342-1>
- [28] Sofia, H. (2025). Ekonomi Global Diperkirakan Melambat 2,3 Persen Akibat Perang Dagang. Retrieved from ANTARA website: <https://www.antaranews.com/berita/4775549/ekonomi-global-diperkirakan-melambat-23-persen-akibat-perang-dagang>
- [29] Song, M., Yu, M., Chen, X. L., Lobont, O. R., & Du, J. (2025). Made in China 2025: Artificial Intelligence Intervention and Urban Green Economy Development. *Journal of Environmental Management*, 391(May), 126411. <https://doi.org/10.1016/j.jenvman.2025.126411>
- [30] UNCTAD. (2024). Global Trade to Hit Record \$33 Trillion in 2024, but Uncertainties Over Tariffs Loom. Retrieved from UN News website: <https://news.un.org/en/story/2024/12/1157826>
- [31] Vučković, M., Bobek, V., Maček, A., Skoko, H., & Horvat, T. (2020). Business Environment and Foreign Direct Investments: the Case of Selected European Emerging Economies. *Economic Research-Ekonomska Istrazivanja*, 33(1), 243–266. <https://doi.org/10.1080/1331677X.2019.1710228>
- [32] Warsiman, W., Ekowati, D., Kholisoh, L., Supardi, S., & Susilawati, R. (2024). The Influence of Entrepreneurship and Digital Marketing on Sustainable Economic Development. *IJBE (Integrated Journal of Business and Economics)*, 8(1), 667–679. <https://doi.org/10.33019/ijbe.v8i1.816>