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The Influence of Digital Technology On The Economy In ASEAN Countries

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Abstract

The development of digital technology continues to revolutionize from year to year, starting from the development of computers, the internet, world wide websites, mobile application devices and now the era of big data and artificial intelligence. The existence of technological developments changes and affects aspects of people's lives, industries and countries. This study aims to determine the effect of ICT, Innovation, E-commerce and Foreign Direct Investment on the Economy in ASEAN countries in 2017-2023. This study uses a quantitative approach and research data using secondary data from 7 (seven) ASEAN countries namely Indonesia, Malaysia, Singapore, Thailand, the Philippines, Vietnam and Cambodia. The results of this study using the Fixed Effect Model (FEM) panel data show that partially the ICT variable (X1) is positive but insignificant to the economy in ASEAN while the Innovation variable (X2) and E-commerce (X3) show a positive and significant value to the economy in ASEAN countries. The Foreign Direct Investment variable (X4) shows a negative and insignificant effect on the economy in ASEAN countries in 2017-2023. Simultaneously, the combined variables show a significant influence on the economy in ASEAN countries.

Keywords: Economy; ICT; Innovation; E-Commerce; Foreign Investment Direct.

1. Introduction

Digital technologies are systems and tools designed to manage data in digital formats that allow for the processing, storage, and transmission of information in a more efficient and faster manner than traditional analog methods. Developments in digital technology have accelerated since the end of the 20th century which continues to evolve over time starting from the development of computers (1980s), the Internet and World Wide Web (1990s), mobile devices and applications (2000s), and the current era of Big Data and Artificial Intelligence (2010 - Present). The development of digital technology is now changing and influencing aspects of people's lives, industries and countries. In the context of society, technology has made tremendous changes in the way individuals interact, communicate and gather information, with the use of social media being a prime example that can be directly felt.

According to the [1], globalization changes the nature of dependence and interaction between countries and societies in the international world. In this situation, digital technology has played an important role in economic transformation, allowing countries to increase their competitiveness in the global market. This will have a huge impact on GDP in ASEAN countries, because easy access to information and entry into the market can make ASEAN countries further develop the potential of natural resources in their countries.

Table 1. GDP (billion USD) in ASEAN Countries

Regency	Indonesia	Singapura	Thailand	Vietnam	Filipina	Malaysia	Kamboja
2019	10493.30	349.82	460.21	314.95	396.22	364.4	33.1
2020	10276.60	336.28	432.37	323.97	358.51	344.71	31.92
2021	10657.10	368.87	439.15	332.25	379.00	356.14	32.91
2022	11222.70	383.03	449.97	359.24	407.73	387.7	34.59

Source: The World Bank

Based on the diagram above, it shows that the highest addition to GDP is Indonesia among countries in ASEAN. This is also influenced by the large territory and population of Indonesia compared to other countries in ASEAN, where a large population will also make consumption of goods and services experience a large increase. The addition of GDP in 2019- 2022 in Southeast Asian countries shows an unstable figure, especially in 2020, at which time all countries were affected by the co-19 pandemic. This pandemic has made many countries, especially countries in Southeast Asia, experience difficulties in all respects due to the limited activities carried out, so that the productivity of individuals, industries and countries has decreased dramatically. During the covid-19 pandemic, there was an acceleration of digital transformation to reduce activity limitations.

ASEAN countries can accelerate their economic recovery after the pandemic by integrating digital technology. They can also build a stronger foundation for sustainable growth in the future. According to the[2], digital and technological literacy education must be provided to support existing internet users. The issue of inequality in technology adoption among ASEAN countries is becoming an increasingly pressing concern, due to limited access to technology or lack of skills to use it according to the[3]. Although some ASEAN countries have made great progress in the use of technology, there are still some challenges to overcome.

Innovation will help the development of digital technologies that will play a pivotal role in transforming the economy in the ASEAN region, such as blockchain, artificial intelligence (AI), and the Internet of Things (IoT). These technologies not only offer new solutions to problems faced by various industries, but also enable increased efficiency and productivity and enhance industrial competitiveness in ASEAN member countries. For example, several countries in ASEAN have innovated blockchain technology to improve the security and transparency of business transactions. One example is Singapore, where companies have been working together to develop a blockchain-based platform that will enable real-time supply chain tracking. These developments increase business confidence and reduce the growing risk of fraud which, in turn, increases operational efficiency at the company.

Table 2. Innovation in ASEAN Countries in 2023

Country	Score
Indonesia	30.3
Malaysia	40.9
Thailand	37.1
Singapura	61.5
Vietnam	36
Filipina	32.2
Kamboja	20.8

Source: World Intellectual Property Organization

The table shows that Singapore's state innovation score is highly superior compared to other countries in Southeast Asia, especially when compared to Cambodia, which shows a very low level of innovation. This reflects the strength of Singapore's technological renewal, which can be seen in the various initiatives they have launched. One example is the development of businesses that utilize blockchain technology to improve security and transparency in business transactions. These initiatives not only strengthen Singapore's position as an innovation hub in the Southeast Asian Region and even the World, but also demonstrate their commitment to driving sustainable economic growth through advanced technology. As such, Singapore sets an example for other countries in terms of applying technology to drive innovation and efficiency in the business world. According to the [4], concluded that their research results show innovation has an influence on economic growth.

The use of technology is a very important thing to influence the economy because it will increase operational efficiency and productivity in society, industry and the country. Companies, especially SMEs, can access the global market thanks to digital technology. Businesses can reach customers around the world without having to visit them in person through E-commerce platforms

and social media. This increases sales and revenue. According to the theory of economic growth proposed by Solow, technological progress is seen to have a positive effect on economic growth [5].

2. Literature Review

2.1 Economy Digital

According to the [6], explains that digital technology includes all forms of technology that store, process, or transmit information using digital signals. The technology that converts it into a signal makes it easy to communicate and find information very easily. In the book [7], including hardware, software, and networks, to manage and process data in digital form. The development of technology changes all systems in human life because it is able to create new opportunities in the economic, social, political and cultural sectors. As in the economy, digital technology provides benefits such as transforming global markets that provide access to information for everyone to enter the global market. the impact of digital technology creates new challenges and opportunities for all sectors including the economic sector.

Companies or individuals who are able to adapt and make good use of digital technology will have a significant competitive advantage in an increasingly connected global market that will shape consumer behavior, business interactions, and existing business models. According to the [8], it is said that the United States has higher productivity than the United Kingdom because the two countries have differences in the use of digital technology. The United States adopts technology better than England which has an impact on the amount of output and input issued by the United States which is almost the same. Technological change is the main driver in the process of economic growth, because it changes the way of production and creates new opportunities that can be utilized by various industrial sectors. This shows how important it is for countries and companies to continue investing in innovation and research to ensure sustainability and economic progress in the future [9].

2.2 Information and Communication Technology

Information and Communication Technology is a term that covers the technology used to process and manage information and communication. This technology includes several aspects such as hardware, software, networks and infrastructure as well as communication services. ICT is a very important component in the development of digital technology. At this time the development of ICT has a vital role in the economy that provides innovation in products and services in all sub-sectors.

According to the [10], found that information and communication technology (ICT) infrastructure, especially telecommunications and mobile phone usage, has a significant positive impact on GDP per capita in sub-Saharan Africa. ICT helps the country's economic growth, regardless of whether the country is developed or developing [11].

2.3 Innovation

According to the [12], innovation is a process of renewal of existing resources that provide very important benefits to humans for the future. With the development of resources, it will make progress and convenience for humans, such as the existence of technology that continues to develop due to the creation of new ideas that have a tremendous impact on economic growth.

According to the [13], concluded that innovation has a significant effect on economic growth. In research also states that innovation drives very strong economic growth due to the development carried out [14]. Who analyzed the relationship between innovation and economic growth per capita in 19 European countries which showed a positive and significant effect on economic growth per capita. Therefore, innovation is an important pillar for human life to continue to develop all sectors in order to continue to provide convenience for human life and not experience fixed conditions.

2.4 The Economy

An economy can be defined as a complex and organized system responsible for managing the production, distribution, and consumption of goods and services within a country. The economy not only includes day-to-day economic activities, but also involves various interacting elements such as government policies, consumer behavior, and market dynamics. One of the important points in the economy is the management of resources because it includes labor, capital and raw materials that play a very important role in meeting the needs and desires of the community. the economy is also influenced by external factors, such as global conditions, technology, and social change.

A country's economy can be measured and analyzed through Gross Domestic Product (GDP) indicators. Gross Domestic Product (GDP) refers to the total amount of income generated and total expenditure made in a country, which includes all goods and services produced during a certain period of time. Gross Domestic Product (GDP) serves as one of the main indicators to assess the economic development of a country. An economy is considered to be growing when people's real income in a given year exceeds the real

income achieved in the previous year. In other words, if there is an increase in the total value of goods and services produced, as well as the income received by individuals and households, then this indicates that the economy is on a positive growth path. This indicator is very important as it reflects the well-being of society and the ability of the economy to expand over time. An increase in the economy is usually accompanied by an increase in investment, both domestic and foreign. This investment contributes to the development of infrastructure, technology and human resources, which in turn increases productivity and efficiency in various sectors.

According to Solow, economic growth can be caused by three main factors: technological progress, population growth, and capital accumulation [15]. Although these factors are correlated with each other, Solow emphasized that technological progress is still considered an exogenous factor in his model, meaning that it is considered a variable that is not influenced by the economic process itself. While the theory conveyed by Paul Romer states that technology is an endogenous factor, in this case Romer believes that investment in research and development of knowledge and technology is a key sector of economic growth.

2.5 E-Commerce

According to the [16], E-commerce is a buying and selling process that is carried out online. E-commerce is also defined as a series of activities that include development, marketing, maintenance, and payment transactions for goods or services sold over the internet [17]. The development of better digital technology also has an impact on the rapid increase in E-commerce, because the online buying and selling process makes it easier for humans to meet their needs and change consumption patterns to a higher level.

E-commerce is expected to act as one of the key indicators in the digital economy that can contribute to economic development in the region. E-commerce is one thing that is very useful for increasing economic growth because people's consumption patterns change due to the ease of getting the products or services they want.

According to the [18], the value of E-commerce transactions and the number of E-commerce businesses have a positive influence on economic growth in 34 provinces in Indonesia. The value of E-commerce transactions has a significant effect on GDP in the short and long term.

2.6 Foreign Direct Investment

Foreign investment is investment made by individuals or organizations from foreign countries. According to [19], international direct investment (FDI) is the investment of private capital abroad or from one country to another on behalf of the investing government. Foreign investment also makes the relationship between cooperating countries closer. According to the [20], investment has a large and diverse influence on economic growth, especially in the long run.

According to the [21], concluded that Foreign Direct Investment has a positive and significant effect on economic growth in Vietnam. This indicates that the greater the investment received by the country, the better the economic growth as evidenced by more labor income and a higher increase in human resources with the adoption of good technology.

3. Research Method

In this study, researchers adopted a quantitative approach to analyze the impact of ICT Access, Innovation, E-commerce and Foreign Direct Investment on the economy in ASEAN countries. This research was conducted in 7 (seven) ASEAN countries, namely Indonesia, Malaysia, Singapore, Thailand, the Philippines, Vietnam and Cambodia. The data used by researchers to see the effect of the variables used in the seven countries is data from 2017-2023. This study uses two types of data, namely time series and cross-section, to investigate the effect of digital technology on the economy in seven ASEAN member countries. researchers use secondary data derived from various reliable sources such as annual reports from the World Bank, World Intellectual Property Organization, Statista and national statistical agencies of member countries.

To analyze the phenomenon studied in this study, a panel data regression model was used. In this situation, the economy is considered as the dependent variable to be evaluated through the panel data regression model. Gujarati and Porter (2009) said that panel data can be referred to as longitudinal data, micro panel data, or cohort analysis. The general mathematical model for panel data is as follows:

$$Pe_{it} = \beta_0 + \beta_1 Ic_{it} + \beta_2 In_{it} + \beta_3 EC_{it} + \beta_4 Ia_{it} + e_{it}$$

In panel data analysis, each model has different characteristics and assumptions. The method in the panel data estimation model allows researchers to understand the dynamics that occur in data that integrates the time dimension and variations between individuals. The panel data estimation model uses the following approach method:

a. Common Effect Model

In panel data analysis, the Common Effect Model (CEM) combines cross-sectional and time series data with the assumption that the intercept for each individual is the same, meaning that the effects of the independent variables are considered to be the same across all individuals. In this model, the variation among individuals is not explicitly accounted for, and all observations are treated as components of a single population.

b. Fixed Effect Model

Variation among individuals is considered a factor that remains constant over time, and the Fixed Effect Model (FEM) analysis focuses on the changes in independent and dependent variables within individuals. This approach is used to address individual-specific differences by providing different intercepts for each individual, allowing it to capture unobserved fixed effects that influence the dependent variable. The Least Square Dummy Variable (LSDV) estimation approach is used to generate the fixed effects model.

c. Random Effect Model

The Random Effect Model (REM) analyzes panel data with the assumption that the differences among individuals can be modeled as part of the error term, meaning that the intercept is considered a random variable that varies among individuals. This method divides the error into three categories: time component error, individual component error, and combined error. For random effects, this method is also referred to as the Generalized Least Square (GLS) estimation method.

4. Results and Discussion

4.1 Chow Test

The testing conducted aims to determine the selected model between the Common Effect Model (CEM) and the Fixed Effect Model (FEM) by examining the cross-section probability at a significance level of 5% or 0.05.

The Chow test hypotheses are as follows:

(H₀): If the probability value > α (0.05), then the Common Effect Model (CEM) is accepted.

(H₁): If the probability value < α (0.05), then the Fixed Effect Model (FEM) is accepted.

Table 2. Result of Chow Test

Effect Test	Statistic	d.f	Prob.
Cross Section F	1027.044969	(6.38)	0.0000
Cross Section Chi Square	249.643335	(6)	0.0000

Source: Result Output E-views 10 (2025)

Based on the results in the table above, the cross-section chi-square probability value is 0.0000, which is less than the significance level of 5% or 0.05. Therefore, it can be concluded that the selected model in the Chow test is the Fixed Effect Model (FEM).

4.2 Hausman Test

The testing conducted aims to determine the selected model between the Random Effect Model (REM) and the Fixed Effect Model (FEM) by examining the cross-section probability at a significance level of 5% or 0.05. The Hausman test hypotheses are as follows:

(H₀) : If the probability value > α (0.05), then the Random Effect Model (REM) is accepted.

(H₁) : If the probability value < α (0.05), then the Fixed Effect Model (FEM) is accepted.

Table 3. Hausman Test

Effect Test	Statistic	d.f	Prob.
Cross Section Chi Square	89.512720	(4)	0.0000

Source: Result Output E-views 10 (2025)

4.3 Regression Panel Data

Based on the selection of the panel data regression model using the Chow test and the Hausman test, it can be determined that the best model to use in this research is the Fixed Effect Model (FEM). Below are the results of the regression testing based on the Fixed Effect Model:

Table 4. Regression Fixed Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-187.5959	752.1137	-0.249425	0.8044
X ₁	5.546837	4.534050	1.223374	0.2287
X ₂	38.01074	16.86563	2.253740	0.0301
X ₃	29.53111	5.968445	4.947873	0.0000
X ₄	-8.623629	24.75849	-0.348310	0.7295

Source: Result Output E-Views 10 (2025)

from the table above, the regression equation results can be obtained as follows $Y = -187.596 + 5.547 * X_1 + 38.011 * X_2 + 29.531 * X_3 - 8.624 * X_4$. The regression equation that has been mentioned can be explained as follows:

1. The value of the ICT variable is positive at 5.547, indicating that the variable has a positive relationship with the economy, which means that every 1point increase in ICT means that the economy has increased by 5.5 billion USD.
2. The value of the Innovation variable is positive at 38.011, indicating that the variable has a positive relationship to the economy, which means that every 1 point increase in innovation, the economy will increase by 38.01 billion USD.
3. The value of the E-commerce variable is positive at 29,531, indicating that the variable has a positive relationship to the economy, which means that every 1 billion USD increase in E-commerce, the economy will increase by 29.5 billion USD.
4. The value of the Foreign Direct Investment variable is negative at 8,624, indicating that the variable has a negative relationship with the economy, which means that every 1 percent increase in foreign direct investment, the economy will experience a decrease of 8.6 billion USD.

not all classical assumption tests need to be applied to the panel data regression model because it has a number of advantages. In this study, the classic assumptions used are only multicollinearity and heterocedacity.

Table 5. Multicollinearity Test

	X ₁	X ₂	X ₃	X ₄
X ₁	1.0000000	0.7696823	0.1203773	0.3396757
X ₂	0.7696823	1.0000000	-0.2806642	0.6037536
X ₃	0.1203773	-0.280664267	1.0000000	-0.4051677
X ₄	0.3396757	0.6037536	-0.4051677	1.0000000

Source: Result Ouput E-views (10)

Based on table how that the correlation coefficient value between independent variables is less than (<0.90) which can be concluded that there is no correlation in the independent variables (ICT, Innovation, E-commerce and Foreign Direct Investment) or it can be said to be free from multicollinearity.

Table 6. Heteroscedasticity Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-403.3363	362.7173	-1.111985	0.2731
X ₁	0.122668	2.186609	0.056100	0.9556
X ₂	12.16027	8.133686	1.495050	0.1432
X ₃	3.950079	2.878366	1.372334	0.1780
X ₄	2.150644	11.94013	0.180119	0.8580

Source: Result Output E-Views 10 (2025)

Based on the test results table, it is known that the prob value on all independent variables is greater than the significance value of 5% or 0.05. It can be concluded from the test criteria that there are no symptoms of heteroscedasticity in this research test or it can be said that it escapes heteroscedasticity.

4.4 Hypothesis Testing

Tests are carried out to determine whether or not all variables have an influence on the dependent variable as a whole (simultaneously). Simultaneous testing is carried out using a significance value of 5% or 0.05. In this analysis, we also need to calculate the F_{table} value which is used as a reference to determine the significance of the test results. The formula used to find F_{table} is: $F = (K; n-K) = (4; 49-4) = (4; 45)$, so the F-table value is 2.58 (can be seen in the F_{table}).

Table 7. Simultaneous Test (F-test)

F-statistic	1917.310
Prob(F-statistic)	0.000000

Source: Result Output E-views 10 (2025)

Based on table shows the results of the F test that the value of F count > F table, namely $1917.310 > 2.58$ or the prob value (F-statistic) of 0.00000 which is smaller than 0.05, this indicates that all independent variables (ICT, Innovation, E-commerce and Foreign Direct Investment) affect the economy. Thus, it can be concluded that the simultaneous influence of these variables is very strong and relevant in influencing the economy.

Table 8. Partial Test (T-test)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-187.5959	752.1137	-0.249425	0.8044
X ₁	5.546837	4.534050	1.223374	0.2287
X ₂	38.01074	16.86563	2.253740	0.0301
X ₃	29.53111	5.968445	4.947873	0.0000
X ₄	-8.623629	24.75849	-0.348310	0.7295

Source: Result Output E-views 10 (2025)

The table shows the results of the T test, it can be seen the effect of each independent variable on the dependent variable as follows:

1. The T test results above show Tcount of 1.2233 that Tcount < Ttable, namely $1.2233 < 2.01537$ while the prob value of X₁ is 0.2287 which is greater than 0.05, meaning that ICT has no significant effect on the economy.
2. The T test results above show Tcount of 2.2537 that Tcount > Ttable, namely $2.2537 > 2.01537$ while the prob value of X₂ is 0.0301 which is smaller than 0.05, meaning that innovation has a significant effect on the economy.
3. The T test results above show Tcount of 4.9478 that Tcount > Ttable, namely $4.9478 > 2.01537$ while the prob value of X₃ is 0.0000 which is smaller than 0.05, meaning that E-commerce has a significant effect on the economy.
4. The T test results above show Tcount of -0.3483 that Tcount < T table, namely $-0.3483 < 2.01537$, the prob value of X₄ is 0.7295 which is greater than 0.05, meaning that Foreign Direct Investment has no significant effect on the economy.
- 5.

Table 9. R-Square test

R-squared	0.998022
Adjusted R-squared	0.997501

Source: Result Output E-views 10 (2025)

Based on the table, the results of the coefficient of determination on Adjusted R-squared are 0.997. This shows that the dependent variable can be explained and influenced by the independent variable by 99.7 percent, while the remaining 0.03 percent is explained by other variables outside the research variables.

Effect of ICT on the Economy

Based on the regression results and partial tests conducted, it shows that ICT is positive but insignificant to the economy in ASEAN countries in 2017-2023. This indicates that although ICT has the potential to contribute to the economy, other factors may be more dominant in influencing these dynamics in the ASEAN region.

The results of this study are not in line with previous research revealed by Girmay Hiday Hafu (2019) who in their research stated that ICT has a positive and significant effect on GDP in Sub-saharan Africa and Andini's research (2019) also stated that ICT has a positive and significant value on GDP in several ASEAN countries in 2008-2017. However, in the context of the results of this study, it shows that ICT has a positive and insignificant value on GDP in 2017-2023. The difference in results occurs because the condition of ICT in ASEAN is not evenly distributed throughout the country. ICT shows a clear difference in this region which can be seen from the highest index is Singapore at 94.5 points in 2023, indicating that almost all regions are very advanced in ICT development while the lowest index is Cambodia at 49.9 points in 2023 which still illustrates that this country still has challenges in ICT development. The results of this study are also in line with research conducted by Saadatul and colleagues (2021) which shows that ICT has no significant effect on economic growth in the country of Indonesia and also the results of research by Hulu and Wahyunni (2021), showing that the ICT coefficient value is 0.0006 and a probability value of 0.7769 which means that telecommunications infrastructure has a positive, but insignificant effect on GRDP in 34 provinces in Indonesia during the 2011-2019 period.

Effect of Innovation on the Economy

Based on the regression results and partial tests conducted, it shows that innovation is positive and significant to the economy in ASEAN countries in 2017-2023. This shows that a 1-point increase in innovation will increase the economy by 38.01 billion USD. Innovation not only drives efficiency and productivity, but also creates new opportunities for investment and industrial development.

The results of this study are also in line with Dini Arini's research (2022) which shows that innovation has a significant and positive effect on economic growth in APEC countries as well as Siti Maryam's research (2024) which shows that innovation has a positive and significant value on the digital economy in 6 (six) countries in ASEAN. In Yuliantari and Pramuki's research (2021) explains that innovation greatly contributes to improving the performance of SMEs in Bali. The research highlights the importance of innovation as a key driver in advancing the digital sector, which in turn can increase competitiveness and economic growth in the region. Innovation is also not just an option, but a necessity for sustainable economic development, both at the regional and national levels.

Effect of E-Commerce on the Economy

Based on the regression results and partial tests in this study, it shows that E-commerce has a positive and significant value on the economy in ASEAN countries in 2017-2023. This shows a positive result which means that every increase in the value of E-commerce transactions of 1 billion USD, the economy will increase by 29.5 billion USD. This figure shows that E-commerce is an important pillar in driving the economy in ASEAN countries. With a rapidly growing economy in online transactions, E-commerce not only creates new jobs, but also increases efficiency in the distribution of goods and services.

The results of this study are in line with Ahmad Albar and colleagues (2022) who state that the value of E-commerce transactions is positive and significant to economic growth in 34 provinces of Indonesia in 2018-2020. Ni Made Yulia's research (2023) also shows that the value of E-commerce transactions in the long term in Indonesia has a positive and significant value on economic growth. This indicates that the E-commerce sector not only contributes to overall economic growth, but also has a significant impact on various aspects, such as job creation, increasing distribution efficiency, and market accessibility for businesses.

Effect of Foreign Direct Investment on the Economy

Based on the regression results and partial tests, it shows that Foreign Direct Investment has a negative and insignificant value on the economy in ASEAN countries in 2017-2023. This finding indicates that although foreign investment is often considered as one of the main drivers of production, in the context of this study, FDI does not make the expected contribution to increasing total output in ASEAN. Research results are not in line with Hieu Huu Nguyen (2020) which states that FDI is positive and significant to economic growth in Vietnam. This difference highlights the complexity and variation in the impact of FDI in different countries. Aya Shopia's research (2018) also states that foreign direct investment in Malaysia and Thailand has a positive value and significant effect on economic growth. success in attracting foreign investment may be influenced by pro-investment policies, relatively good infrastructure, and favorable political stability. In contrast, other ASEAN countries may face challenges that hinder the effectiveness of FDI.

The results of this study are also in line with research by Fakhrizal and colleagues (2023) which also states that FDI is

negative and insignificant to economic growth in Indonesia and also in research by Rosda and Rahmat (2024) also found that foreign direct investment in the Philippines has a negative value on economic growth. In Cambodia, foreign direct investment has a negative impact in the long run on economic growth according to research by Seng Sothan (2017). From the results of this study it can be concluded that countries in ASEAN in building infrastructure, creating jobs, and increasing economic output still have not reached the expected level due to the use of foreign direct investment that is not on target.

5. Conclusions

The conclusion of the research conducted to determine the effect of digital technology on the economy in ASEAN countries. Based on the results of research conducted by taking a sample of 7 countries in Southeast Asia from 2017-2023, it can be concluded that:

1. ICT shows a positive but insignificant value on the economy in ASEAN countries. Despite the positive relationship between ICT and the economy, this relationship is not sufficient to provide an explanation for the overall economy.
2. Innovation shows a positive value and has a significant effect on the economy in ASEAN countries, which means that any increase in innovation will also increase the economy or vice versa.
3. E-commerce shows a positive value and has a significant effect on the economy in ASEAN countries. This states that any increase experienced by E-commerce will increase the economy or vice versa.
4. Foreign Direct Investment shows a negative and insignificant effect on the economy in ASEAN countries. Although foreign investment is often considered as one of the drivers of economic improvement, in the context of ASEAN countries the data shows that foreign investment does not affect the economy.

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