

## **Influence Of Business Trust, Consumer Trust, Rule of Law and Technology on Economic Growth**

*Hardiansa Nur Syahputra*  
*Universitas Lampung*  
*Email: hardiansa73@gmail.com*

*Maselina*  
*Universitas Lampung*  
*Email: marselina@feb.unila.ac.id*

*Neli Aida*  
*Universitas Lampung*  
*Email: neliaida422@gmail.com*

### **Abstract**

This study aims to analyze the condition of business trust, consumer trust, rule of law, developments in technology, information, and communication, and their influence on ASEAN economic growth. The data used is panel data consisting of time series data for 2009 – 2020 and a cross-section of 10 countries with the highest level of business confidence in G20 Member countries. The variables used are economic growth, conditions of business trust, consumer confidence, rule of law, development of technology, information, and communication. The analytical tool used is panel data regression, namely the Fixed Effect Model (FEM). An increase in business confidence and consumer confidence will have an impact on increasing economic growth. In the research results, business trust has the most influence.

**Keywords:** Economic Growth, Conditions of Business Trust, and Consumer Confidence.

### **Abstrak**

Penelitian ini bertujuan untuk menganalisis kondisi kepercayaan bisnis, kepercayaan konsumen, supremasi hukum, perkembangan teknologi, informasi, dan komunikasi, serta pengaruhnya terhadap pertumbuhan ekonomi ASEAN. Data yang digunakan adalah data panel yang terdiri dari data time series tahun 2009 – 2020 dan cross section dari 10 negara dengan tingkat kepercayaan bisnis tertinggi di negara-negara Anggota G20. Variabel yang digunakan adalah pertumbuhan ekonomi, kondisi kepercayaan bisnis, kepercayaan konsumen, supremasi hukum, perkembangan teknologi, informasi, dan komunikasi. Alat analisis yang digunakan adalah regresi data panel yaitu Fixed Effect Model (FEM). Meningkatnya kepercayaan bisnis dan kepercayaan konsumen akan berdampak pada peningkatan pertumbuhan ekonomi. Dalam hasil penelitian, kepercayaan bisnis memiliki pengaruh paling besar.

**Kata Kunci:** Pertumbuhan Ekonomi, Kepercayaan Bisnis, dan Kepercayaan Konsumen.

## **1. Introduction**

Social capital is needed for sustainable economic growth. One of the social capital that has a fairly high contribution compared to other sub-dimensions of social capital is trust (Suryanggono, 2013). According to Bjørnskov (2012) trust can directly affect the level of investment and the rule of law, thereby increasing the rate of economic growth.

According to Luong & Vixathep, (2016), the main indicator in the economy is trust. Trust consists of two types, namely business trust and consumer trust. Business confidence is one of the important indicators with the measuring instrument used is the business confidence index. Business confidence describes the level of optimism of business people regarding their future income prospects in a country, while consumer confidence is one of the fundamental indicators of a consumer in designing their demand which will have a high impact on the movement of a country's currency. The measurement tool is called the consumer confidence index.

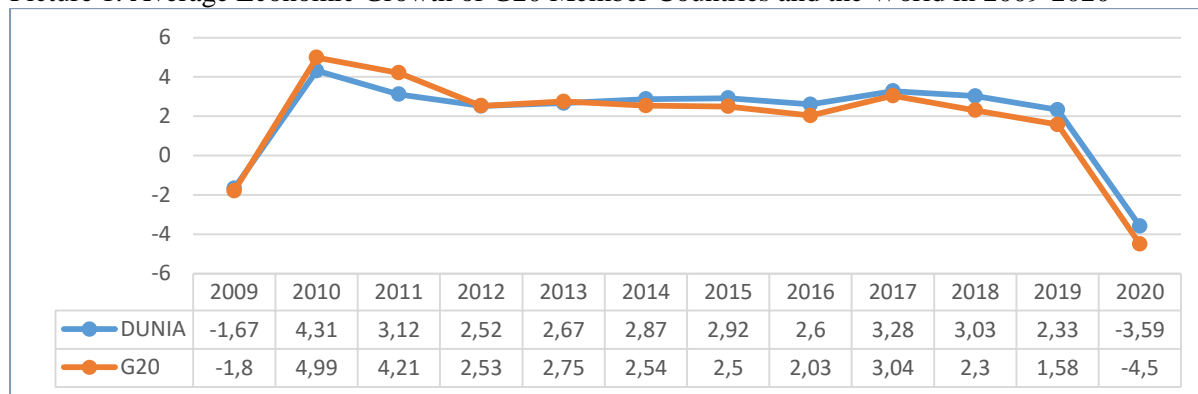
Business confidence shows the level of optimism that business managers have about the prospects for economic conditions in a country or region. Business confidence can also be used as an overview of how businesspeople estimate the economic condition of a country. Business confidence can influence business people in deciding to invest in a country. Low business confidence tends to make the low investment, conversely, if business trust is high then investment will be high, because the company will spend more on investment, believing that the future payment of its investment will be much greater. Investment is an important factor that has two roles at once in influencing economic growth. First,

According to Luong & Vixathep (2016), business confidence can be an early warning system in the short term to forecast future economic trends. This business confidence index is very useful in calculating and estimating the rate of economic growth in the short term (Coetzee, 2014). Several empirical studies on the relationship of business trust to economic growth, among others, were carried out by Luong & Vixathep (2016) who found that business trust had a significant impact on economic activity in various research sectors conducted in Vietnam. Furthermore, Jongh & Mncayi (2018) stated that business confidence has a positive effect on economic growth in South Africa.

In addition to the business trust, consumer confidence also has an important role in economic growth (Madlopha, 2019). Consumer confidence reflects macroeconomic realities. If consumer confidence is high when the economy is growing rapidly and low during times of recession. Consumer confidence fluctuates due to politics, the risk of war, foreign policy, pessimistic predictions. A head of state who offers economic pessimism will risk triggering a decline in consumption and investment confidence in his country so that it will suppress aggregate demand so that it has an impact on decreasing economic growth (Marshall, 2013). Consumer confidence is measured by the consumer confidence index. The consumer confidence index is an economic indicator designed to evaluate consumer optimism or pessimism about a country's economic condition (OECD, 2020). The consumer confidence index shows the component level of consumption for economic growth.

The concept of trust associated with economic growth will be an interesting discussion in the world economy. The Group of Twenty (G20) was chosen as the object of research because the G20 countries have an important role in the world economy. The Organization for Economic Co-operation and Development (OECD) as the official institution that releases data on business confidence index and consumer confidence index is limited to OECD Member Countries, European Union, Euro Area, The Group of Seven (G7), and The Group of Twenty (G20). The G20 countries consist of 20 countries namely Indonesia, Argentina, Australia, Brazil, Canada, China, France, Germany, India, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, South Korea, Turkey, United Kingdom, America United States, and the European Union.

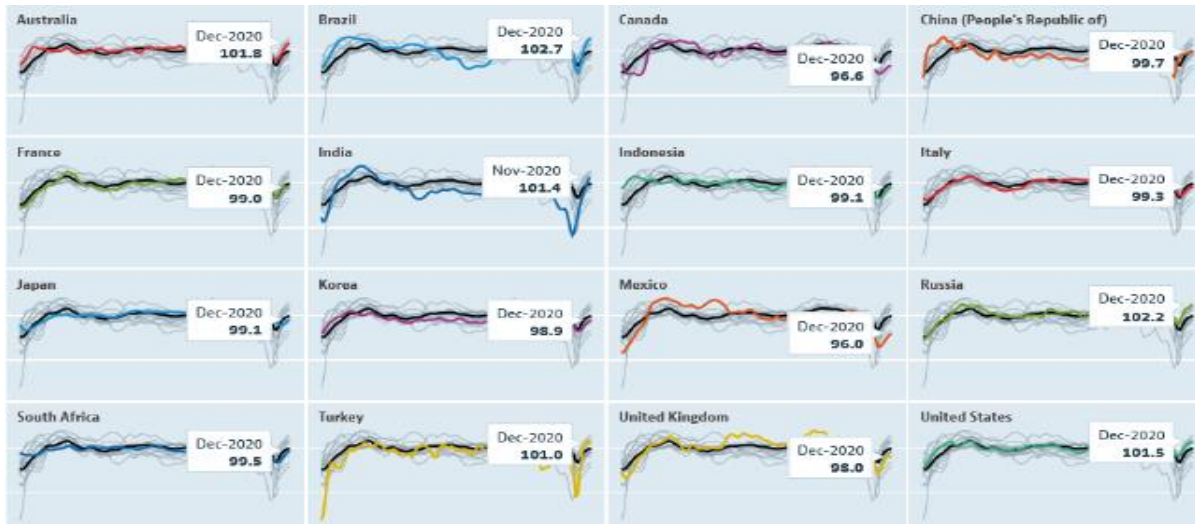
Picture 1. Average Economic Growth of G20 Member Countries and the World in 2009-2020



Source: World Bank, 2021

During the current pandemic, almost all countries are experiencing an economic recession. Overall, the average world economic growth in 2020 experienced a recession of -3.59% while the average growth of the G20 economy is -4.5%. The recession that occurred in 2020 was even worse than the global economic recession that occurred in 2009 which occurred due to the impact of the economic crisis in 2008.

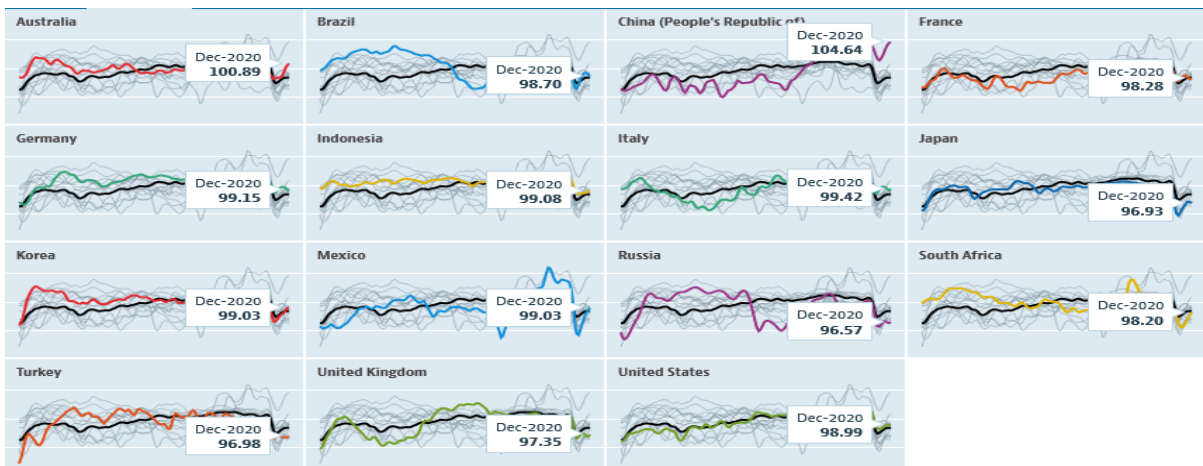
Picture 2. G20 Member Countries Business Confidence Index 2009-2020



Sources: *The Organization for Economic Co-operation and Development, 2020*

The business confidence of each G20 member country is not the same, almost all countries experience fluctuations in business confidence and tend to experience a decline. Turkey is one of the countries with the lowest business confidence compared to other G20 countries. In January 2009 Turkey's business confidence index was at the index of 84.73, which means that there was a decline in confidence in business performance in Turkey. While the highest business confidence index in early 2009 was Indonesia, Indonesia's business confidence index is still relatively stable. Indonesia's business confidence index in January 2009 was 99.51, which means that there was a bit of pessimism among business people in Indonesia, but business confidence in Indonesia is still much higher than in other G20 countries.

Picture 3. G20 Member Countries Consumer Confidence Index 2009-2020



Sources: *The Organization for Economic Co-operation and Development, 2020*

The consumer confidence index is an economic indicator designed to evaluate consumer optimism or pessimism about a country's economic condition (OECD, 2020). Figure 3 shows that consumer confidence is still relatively more stable than business confidence. Russia became the country with the lowest consumer confidence in early 2009 with an index of 94.68. Consumer confidence in January 2009 in Russia was lower when compared to business confidence in the same period. So that in general it can be seen that trust had a role in the economic recession in Russia in 2009.

Several empirical studies on consumer confidence in economic growth were carried out by, among others, Madlopha (2019), Ibrahim, et al., (2015), Coetzee (2014), and Sergeant et al. (2012) in their research which stated that increasing consumer confidence had an impact on positive on economic growth. In line with Islam (2016) which states that there is a long-term relationship between consumer confidence and economic growth in Europe. Meanwhile, this result contradicts Utaka (2003) who stated that in the long term consumer confidence does not affect economic growth in Japan.

Mankiw et al.'s (1992) economic growth model, is designed to show the interaction between capital growth, labor force, human capital accumulation, and technological progress in the economy. Technology, information, and communication (ICT) is the key to the economic growth of a country. According to Sassi & Goaiad (2013), ICT affects economic growth in three different ways. First, it can help the diffusion and innovation of technology around the world. Second, it can improve the quality of decision-making by economic actors. And finally, it can increase the level of output by creating a new demand for goods and services by lowering the cost of production.

The level of progress of a country's Information and Communication Technology (ICT) can be shown through the Technology, Information, and Communication Development Index (IP ICT). IP and ICT were developed by the International Telecommunication Union (ITU) in 2008. This index is a composite index composed of 11 indicators which are divided into 3 sub-indices, namely the access and infrastructure sub-index, usage sub-index, and expertise sub-index. The access and infrastructure sub-index is composed of 5 indicators, namely fixed telephone subscribers per 100 population, cellular telephone subscribers per 100 population, international internet bandwidth per user, percentage of households with computers, and percentage of households with internet access.

Then, the usage sub-index is compiled with 3 indicators, namely the percentage of the population accessing the internet, fixed cable broadband internet subscribers per 100 residents, and wireless broadband internet subscribers per 100 residents. Furthermore, the skills sub-index is compiled with 3 indicators, namely the average length of schooling, the secondary gross enrollment rate, and the tertiary gross enrollment rate. The higher the index value, the better the development of ICT in a region. On the contrary, the lower the index value, the development of ICT in a region is still relatively slow.

Nasab & Aghaei (2009) in their research, stated that ICT has a great contribution to economic growth, wherein business processes, the use of technology can make each process faster and cheaper and also increase production. The skill sub-index is compiled with 3 indicators, namely the average length of schooling, the secondary gross enrollment rate, and the tertiary gross enrollment rate. The higher the index value, the better the development of ICT in a region. On the contrary, the lower the index value, the development of ICT in a region is still relatively slow.

Nasab & Aghaei (2009) in their research, stated that ICT has a great contribution to economic growth, wherein business processes, the use of technology can make each process faster and cheaper and also increase production. The skill sub-index is compiled with 3 indicators, namely the average length of schooling, the secondary gross enrollment rate, and the tertiary gross enrollment rate. The higher the index value, the better the development of ICT in a region. On the contrary, the lower the index value, the development of ICT in a region is still relatively slow. Nasab & Aghaei (2009) in their research,

stated that ICT has a great contribution to economic growth, wherein business processes, the use of technology can make each process faster and cheaper and also increase production. the lower the index value indicates the development of ICT in an area is still relatively slow. Nasab & Aghaei (2009) in their research, states that ICT has a major contribution to economic growth, wherein business processes, the use of technology can make each process faster and cheaper and also increase production.

Research on ICT includes Rath & Hermawan (2019) Ahmed & Ridzuan (2013), Cortés & Navarro (2011), and Niebel (2018) in their research results agree that ICT has a positive and significant effect on economic growth. Toader et al. (2018) in their research stated that the ICT development index has a positive effect on economic growth in the member countries of the European Union. The results of this study are paradoxical with productivity which states that ICT does not affect productivity growth. This means that ICT does not affect economic growth. Based on the description above, independent variables are used consisting of business trust, consumer confidence, and Information and Communication Technology on the economic growth of G20 countries with the research year 2009 to 2020.

## **2. Literature Review**

### *2.1 Economic Growth*

An economy can be said to experience economic growth if the output of goods and services increases. The number of goods and services in a country's economy can be interpreted as the value of Gross Domestic Product (GDP). The value of GDP is used to measure the percentage of a country's economic growth. Changes in the value of GDP can show changes in the number of goods and services produced during a certain period. In addition to GDP, a country is also known for the size of GNP (Gross National Product) and National Income. Economic growth calculations usually use quarterly and annual GDP data (Mankiw, 2018).

The neoclassical growth theory was developed by Solow and Swan (1956). The Solow-Swan model uses elements of population growth, capital accumulation, technological progress (exogenous), and the amount of output that interact with each other. Mankiw et al. (1992) added about Solow's theory that capital and population growth affect a country's income, especially if a country has conducted international trade, but Solow's theory only predicts the effect of capital and population growth but does not predict how big the effect is.

The effect of capital and population growth is enormous, for two reasons. First, if there is an increase in capital and population growth, which increase is greater between the two. Second, HR accumulation may be correlated with capital and growth rates (this condition implies that it removes the bias in the estimation model). To add to the Solow model, Mankiw et al. (1992) included a proxy for human capital accumulation as an additional explanatory variable. It was found that there is a correlation between the accumulation of human capital and population growth capital, including the accumulation of human capital that decreases the estimated effect of capital and population growth predicted by Solow's Theory. The emergence of a problem that has received a lot of attention in recent years is because countries are not able to increase per capita income.

### *2.2 Business Confidence*

Business confidence is one of the most important warning indicators where the measurement tool is called the business confidence index. The business confidence index is calculated based on monthly and quarterly surveys of business conditions and expectations of entrepreneurs or what is known as a business confidence survey. The business confidence index is a short-term early warning system to forecast future economic trends (Luong & Vixatsep, 2016).

The business confidence index is very popular in many countries, including East Asian countries, OECD member countries, and non-OECD member countries. The implementation of business confidence surveys is becoming more standardized, as the OECD developed a harmonized business trend survey system, which has been implemented in many transitional countries in Europe and adopted by many other countries (OECD, 2003). Low business confidence tends to make investment low, on the contrary, if trust is high then investment will be high, because the company will spend more on investment, believing that future payments from its investment will be much larger. Investment is an important factor that has two roles at once in influencing economic growth.

### *2.3 Consumer Trust*

The consumer confidence index is one of the fundamental indicators that have a high impact on the movement of a country's currency. The Consumer Confidence Index (CCI) is an economic indicator designed to measure consumer optimism or pessimism about a country's economic condition. CCI is monitored by many parties and can have a medium-high impact on the movement of a country's currency because high or low consumer interest in shopping can affect business and industrial activities in a country, thus indirectly having an impact on the pace of economic growth (OECD, 2020).

Almost every developed industrial country releases consumer confidence index data every month based on the results of previous surveys. In Indonesia, this survey has been tabulated since 1999 and is still handled by the central bank (Bank Indonesia) now. In other countries, research to produce a consumer confidence index can be managed by independent institutions or related government agencies. The consumer confidence index reflects the level of optimism in the country's economy as indicated by the level of consumer savings and spending. Consumer confidence fluctuates because it is related to politics, the risk of war, foreign policy, pessimistic predictions. Ahead of a state who offers economic pessimism will risk triggering a decline in consumption and investment confidence in his country so that it will suppress aggregate demand so that it has an impact on decreasing economic growth.

### *2.4 Rules of Law*

The rule of law is a concept that describes the highest legal authority for government actions and individual behavior. This corresponds to situations in which governments and individuals are bound by law and abide by it. This is the antithesis of tyrannical or arbitrary rule. The rule of law is the product of centuries of historical development and is associated with the rise of liberal democratic forms of government in the West (Valcke, 2012).

An effective rule of law can reduce corruption, fight poverty and disease, and protect people from injustices big and small. It is the foundation for a community of justice, opportunity, and peace that supports development, a responsible government, and respect for basic rights. Traditionally, the rule of law has been seen as the domain of lawyers and judges. But everyday issues of safety, rights, justice, and governance affect all of us, everyone is a stakeholder in the rule of law (World Justice Project, 2020). Haggard & Tiede (2011) the relationship between the rule of law and economic growth has centered on property rights and the institutions needed to enforce them, such as oversight of government and judicial independence. These models often explicitly or implicitly identify as the main constraint to economic growth.

### *2.5 Development of Technology, Information, and Communication*

Information and Communication Technology (ICT) is a broader term for Information Technology (IT), which refers to all communication technologies, including the internet, wireless networks, cell phones, computers, software, middleware, video conferencing, social networks, and others. media

applications and services enable users to access, retrieve, store, transmit, and manipulate information in digital form. ICT is also used to refer to the convergence of media technologies such as audio-visual and telephone networks with computer networks, through integrated cabling systems (including signal distribution and management) or link systems. However, there is no universally accepted definition of ICT given that the concepts, methods, and tools involved in ICT are evolving almost daily. To define professional skill levels for ICT professional education products, the IEEE Computer Society has adopted, for example, the Skills Framework for Information Age (SFIA) (International Telecommunication Union, 2020). According to Sassi & Goaid (2013), ICT affects economic growth in three different ways. First, it can help the diffusion and innovation of technology around the world. Second, it can improve the quality of decision-making by economic actors. And finally, it can increase the level of output by creating a new demand for goods and services by lowering the cost of production which in turn will increase economic growth.

Based on this explanation, the hypothesis that is built is that it is suspected that business trust, consumer trust, rule of law, and ICT developments have a significant effect on economic growth in G20 countries in 2009-2019.

### 3. Research Method

#### 3.1 Definition and Operational Variable

The economic growth data used is GDP growth data in the form of annual data with percent figures obtained from the World Bank from 2009 - 2020. The business trust and consumer trust data used are annual data in the form of an index obtained from *The Organization for Economic Co-operation and Development* (OECD), the rule of law data used is annual data in the form of an index obtained from the World Bank, and data on the development of technology, information, and communication used is annual data in the form of an index obtained from the International Communication Union.

#### 3.2 Economic Model Specification

Based on the literature study, the model used in this research is the growth model of Mankiw, Romer, & Weil (1992) which was modified to answer this research with the following model:

$$Y = f(K, L, A)$$

Where,

K = Capital

L = Labor

A = Technology

The capital component (K) in this study is proxied on business trust, labor (L) is proxied on consumer trust, while technology (A) is proxied on the development of information and communication technology. Based on the growth model, the regression model equation used is formulated as follows:

$$PE_{it} = \beta_0 + \beta_1 KB_{it} + \beta_2 KK_{it} + \beta_3 RL_{it} + \beta_4 TIK_{it} + \mu_{it}$$

Information:

PE = Economic Growth (percen)

KB = Business confidence (index)

KK = Consumer confidence (index)

RL = Rule of law (index)

ICT = ICT development (index)

i = Country i (1, 2, ... n)

t = Year of Observation (2009, 2010, ....., 2019)

$\mu$  = Error Term

### 3.3 Data analysis method

According to Baltagi (2015), panel data is a combination of time series and cross-section data. Time series data is data arranged in time order, such as daily, monthly, quarterly or yearly data. Meanwhile, cross-section data is data collected at the same time from several regions, companies, or individuals. This kind of data is called panel data. In panel data model analysis, there are three approaches which consist of Common Effect, Fixed Effect, and Random Effect.

Panel data estimation consists of 3 methods, namely Common Effect (PLS), Fixed Effect (FEM), and Random Effect (REM). Of course, in testing, it is necessary to choose the best model. So there are two commonly used test methods, namely the Chow test and the Hausman test. In the classical assumption test, normality, multicollinearity, heteroscedasticity, and autocorrelation tests were performed (Greene, 2018).

## 4. Discussion

### 4.1 Classical Assumption Test

The Jarque-Berra probability value of 0.1149 is greater than = 5% (0.05), it can be concluded that the data are normally distributed and pass all classical assumption tests.

Table 1. Multicollinearity Test Results

Variable	KB	KK	RL	TIK
KB	1.000000	0.387130	0.041094	0.219890
KK	0.387130	1.000000	0.017604	-0.038787
RL	0.041094	0.017604	1.000000	0.806957
TIK	0.219890	-0.038787	0.806957	1.000000

Source: Output Eviews 9, 2021

From the multicollinearity test that has been carried out on the results that no variable has a value of more than 0.85, this means that it can be concluded that there is no multicollinearity in the variables used or in other words there is no linear relationship between the independent variables used. in this research.

Table 2. Heteroscedasticity Test Results

Dependent Variable	Chi-Square Count	Chi-Square Table	Conclusion
1	6,1898	9,488	Homoscedasticity

Source: Output Eviews 9, 2021

In Table 2, it is shown that the Chi-Square count (6.1898) > Chi-Square Table (9.488) in df of the independent variable = 4, and the significance level is 5%. This means that if you accept H0 then there is no heteroscedasticity problem in the equation.

Table 3. Autocorrelation Test Results

Dependent Variable	Chi-Square Count	Chi-Square Table	Conclusion
1	1,3309	5,991	Autocorrelation Free

Source: Output Eviews 9, 2021

In Table 9, it is shown that the Chi-Square count (1.3309) > Chi-Square Table (5.991) at df for the variable lag = 2, and the significance level is 5%. This means that if you accept H0 then there is no autocorrelation problem in the equation.



#### 4.2 Regression Results

Table 4. Chow Test Results

Effects Test	Statistics	df	Prob.
Cross-section F	6,257	(9.96)	0.000
Cross-section Chi-square	50.776	9	0.000

Source: Output Eviews 9, 2021

Prob value. Cross-section F of 0.0000 is smaller than the significance level ( $\alpha$ ) 5 percent, (0.0000 < 0.05) then  $H_0$  is rejected and  $H_a$  accepts so that it can be concluded that the Fixed Effect Model (FEM) method is better than the Fixed Effect Model (FEM) method. Common Effect Model (CEM).

Table 5. Hausman Test Results

Test Summary	Chi-Sq. Statistics	Chi-Sq. df	Prob.
Cross-section random	9.7689	4	0.044

Source: Output Eviews 9, 2021

The p-value of 0.0000 is smaller than the significance level of 5% (0.05), so it can be concluded that the fixed effect (FEM) method is better used than the random effect (REM) method in this study.

Table 6. Fixed Effect Model Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-124.6874	12.9227	-9.6487	0.0000
KB	0.9785	0.1207	8.1066	0.0000
KK	0.2692	0.1020	2.6384	0.0097
RL	-0.0131	0.0620	-0.2113	0.8331
ICT	0.3348	0.3018	1.1093	0.2701
R-Squared 0.7313		Prob (F-statistic) 0.000000		
Adjusted R-squared 0.6949		Durbin-Watson stat 1.8187		

Source: Output Eviews 9, 2021

The constant-coefficient is -124.6874, this shows that if all the independent variables used are equal to 0 (zero), then the economic growth in 10 G20 countries is -124.69 percent. The variable of an increase in business confidence and consumer confidence causes an increase in the economic growth of G20 member countries, while an increase in the level of legal compliance and technological developments does not affect economic growth.

Countries with above-average economic growth are Indonesia at 5.02 percent, the United States at 2.33 percent, and Australia at 1.90 percent. Meanwhile, below-average economic growth includes France 1.51 percent, United Kingdom 1.41 percent, Russia 1.34 percent, Japan 0.65 percent, Germany 0.56 percent, Italy 0.30 percent, and Mexico - 0.15 percent. The business confidence level above the average in 2019 was Australia 101.24 points, Russia 101.17 points, Japan 100.70 points, and France 100.38 points, while the country with below-average business confidence is Italy 100.32 points, Mexico 100.08 points, Germany 99.92 points, Great Britain 99.56 points, United States 99.54 points, and Indonesia 99.11 points. Furthermore, the average consumer confidence is 99.71 points. Countries that have above average consumer confidence are Mexico 103.64 points, Indonesia 102.31 points, the United States 101.25 points, Germany 101.20, Great Britain 99.89 points, France 99.81 points, and Australia has 99.73 points, while countries with below-average consumer confidence are Russia with 99.51 points, and Japan with 98.99 points.

Countries that have a rule of law above the 2019 average are Australia 93 percent, Germany 92 percent, Great Britain 91 percent, Japan 90 percent, the United States 90 percent, and France 89

percent, while countries that have rule of law below the average are Italy 62 percent, Indonesia 42 percent, Mexico 27 percent, and Russia 25 percent. Furthermore, the average information and communication technology is 6.76 percent. Countries that have information and communication technology above the average are Great Britain 8.08 percent, Japan 8.01 percent, Australia 7.74 percent, the United States 7.71 percent, Germany 7.65 percent, and France 7.60 percent, while countries with information and communication technology below the average are Italy 6.64 percent, Russia 6.34 percent, Mexico 4.04 percent, and Indonesia 3.53 percent. However, when viewed by country, the highest information and communication technology in the United Kingdom and the lowest is in Indonesia.

According to Ibrahim et al. (2015), the main indicators in the economy are business confidence and consumer confidence. The business confidence index shows the level of optimism that business managers have about the prospects for economic conditions in a country or region. Business confidence can also be used as an overview of how businesspeople estimate the economic condition of a country. Business confidence can influence business people in deciding to invest in a country which causes the movement of economic growth in a positive direction.

According to Luong & Vixathap (2016), business confidence is a short-term early warning system to forecast future economic trends. This business confidence index is very useful in calculating and estimating the rate of economic growth in the short term (Cortés & Navarro, 2011). Luong & Vixathap (2016) found that business confidence has a significant impact on economic activity in various research sectors conducted in Vietnam. Jongh & Mncayi (2018) stated that business confidence has a positive effect on economic growth in South Africa.

## 5. Conclusion

Low business confidence tends to make the low investment, conversely, if business trust is high then investment will be high, because the company will spend more on investment, believing that the future payment of its investment will be much greater. Investment is an important factor that has two roles at once in influencing the economy. First, investment acts as a factor that can create income, meaning that investment affects the demand side, secondly, investment can increase the production capacity of the economy by increasing the capital stock, meaning that investors will affect economic growth.

## 6. References

- Ahmed, E. M., & Ridzuan, R. (2013). The Impact of ICT on East Asian Economic Growth: Panel Estimation Approach. *Journal of the Knowledge Economy*, 4(4), 540–555. <https://doi.org/10.1007/s13132-012-0096-5>
- Baltagi, B. H. (2015). *The Oxford Handbook of Panel Data*. Oxford University Press.
- Bjørnskov, C. (2012). How Does Social Trust Affect Economic Growth? *Southern Economic Journal*, 78(4), 1346–1368. <https://doi.org/10.4284/0038-4038-78.4.1346>
- Coetsee, C. (2014). *Relationship between Business Confidence Indicators and Real GDP? - A Regional Spatial Panel Approach*. September. <https://doi.org/10.13140/2.1.4446.8489>
- Cortés, E. A., & Navarro, J. L. A. (2011). Do ICT Influence Economic Growth and Human Development in European Union Countries? *International Advances in Economic Research*, 17(1), 28–44. <https://doi.org/10.1007/s11294-010-9289-5>
- Greene, W. H. (2018). *Econometric Analysis* (8th ed.). New York University.
- Haggard, S., & Tiede, L. (2011). The Rule of Law and Economic Growth: Where are We? *World Development*, 39(5), 673–685. <https://doi.org/10.1016/j.worlddev.2010.10.007>
- Ibrahim, A., Bawa, S., Abdullahi, I. S., Didigu, C. E., & Mainasara, S. S. (2015). *Consumer Confidence Indicators and Economic Fluctuations in Nigeria*. 6(1), 285–300.
- Islam, T. U. (2016). Consumer Confidence Index and Economic Growth : An Empirical Analysis of EuroEconomica Consumer Confidence Index and Economic Growth : An Empirical Analysis of

- EU Countries. *EuroEconomica*, 35(2).
- Jongh, J. de, & Mncayi, P. (2018). An econometric analysis on the impact of business confidence and investment on economic growth in post-apartheid South Africa. *International Journal of Economics and Finance Studies*, 10(1), 115–133.
- Luong, K. Van, & Vixathep, S. (2016). Business Confidence Index : A Reflection of Business Sentiment in Viet Nam. *Journal of International Cooperation Studies*, 23(2), 1–28.
- Madlopha, K. (2019). The Nexus between Consumer Confidence and Economic Growth in South Africa: An ARDL Bounds Testing Approach. *Journal of Economics and Behavioral Studies*, 11(2(J)), 15–22. [https://doi.org/10.22610/jebis.v11i2\(j\).2814](https://doi.org/10.22610/jebis.v11i2(j).2814)
- Mankiw, G. N. (2018). Principles of Microeconomics. *Cengage Learning*.
- Mankiw, G. N., Romer, D., & Weil, D. N. (1992). A contribution to the empirics of economic growth. *Quarterly Journal of Economics*, 107(2), 407–437. <https://doi.org/10.2307/2118477>
- Marshall, A. (2013). Principle of Economics. In *Palgrave Macmillan* (8th ed.).
- Nasab, E. H., & Aghaei, M. (2009). The Effect of ICT on Economic Growth: Further Evidence. *International Bulletin of Business Administration*, 10(5), 46–56.
- Niebel, T. (2018). ICT and economic growth – Comparing developing, emerging, and developed countries. *World Development*, 104, 197–211. <https://doi.org/10.1016/j.worlddev.2017.11.024>
- Rath, B. N., & Hermawan, D. (2019). Do information and communication technologies foster economic growth in Indonesia? *Buletin Ekonomi Moneter Dan Perbankan*, 22(1), 103–121. <https://doi.org/10.21098/bemp.v22i1.1041>
- Sassi, S., & Goaid, M. (2013). Financial development, ICT diffusion, and economic growth: Lessons from MENA region. *Telecommunications Policy*, 37(4–5), 252–261. <https://doi.org/10.1016/j.telpol.2012.12.004>
- Sergeant, K. A., Lugay, B., & Dookie, M. (2012). Consumer confidence and economic growth: case studies of Jamaica and Trinidad and Tobago. *Project Document*, 1–29.
- Suryanggono, B. (2013). Pengaruh Modal Sosial Terhadap Pertumbuhan Ekonomi Provinsi Di Indonesia : Analisis Data Susenas 2009. *Kinerja*, 17(2), 145–157.
- Toader, E., Firtescu, B. N., Roman, A., & Anton, S. G. (2018). Impact of information and communication technology infrastructure on economic growth: An empirical assessment for the EU countries. *Sustainability (Switzerland)*, 10(10), 1–22. <https://doi.org/10.3390/su10103750>
- Utaka, A. (2003). Confidence and the real economy - The Japanese case. *Applied Economics*, 35(3), 337–342. <https://doi.org/10.1080/00036840210135205>
- Valcke, A. (2012). The Rule of Law: Its Origins and Meanings (A Short Guide for Practitioners). *Encyclopedia of Global Social Science Issues*. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2042336](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2042336)

### Copyright Disclaimer

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.