



## Investment, Debt Instruments and Economic Growth: Their Impact on the Unemployment Rate of OIC Countries in the Asian Region

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### Abstracts:

This study aims to determine the effect of investment, total debt, net debt, and real GDP growth on unemployment rates in the Asian OIC countries. This research uses a quantitative method with panel data regression. By using common effect model, the results shows investment had a significant effect on reducing the unemployment rate, while the total debt, net debt, and real GDP growth variables had no significant effect.

**Keywords: Investment, Total Debt, Net Debt, Real GDP Growth, Unemployment, OIC Countries, CEM**

### 1. Introduction

The Indonesian economy in 2019 as measured by Gross Domestic Product (GDP) at the current price reached IDR 15 833.9 trillion and a GDP per capita reached IDR 59.1 million or US \$ 4 174.9. The Indonesian economy in 2019 grew 5.02 percent, lower than the 2018 achievement of 5.17 percent. From the production side, the highest growth was achieved by Other Service Business Fields at 10.55 percent. From the expenditure side, the highest growth was achieved by the Non-profit Institution Consumption Expenditure Component serving Households (PK-LNPRT) amounting to 10.62 percent. The spatial structure of the Indonesian economy in 2019 is dominated by a group of provinces in Java and Sumatra. Java Island gave the largest contribution to Gross Domestic Product, amounting to 59.00 percent, followed by Sumatra Island at 21.32 percent, and Kalimantan Island at 8.05 percent. (Badan Pusat Statistik, 2019).

These improvements in the Indonesian economy, accompanied by development achievements and existing infrastructure are quite impressive, have happened to Indonesia. However, when examined further, the increase that occurred does not simulta-

neously answer the question “whether this country has been more prosperous”. The figures shown in the first paragraph do not deny that there are still a lot of economic problems which have not been completely resolved; economic disparities, employment, corruption and others, whose urgency also gives an important meaning to the definition of economic development. In fact, the same thing applies not only to the Indonesian state but also globally throughout the world.

As science develops, academics have found that economic development is a complex phrase in which there are many benchmarks which always evolve over time. Previous economic development researchers like (Rostow, 1960), (Ishola Mobolaji & Omoteso, 2009), (Hanusch, 2013) they also agree that the measurement of economic development is more than just calculate the level of production and consumption. One of the important problems in the issue of national economic development is unemployment.

Unemployment is not a new problem in the sphere of economy. Nevertheless, it remains one thing that always haunt the national economy of a country. Sukirno (2000) He defined unemployment as a condition in which a person belonging to the labor force wants to get a job but has not been able to get it. The problem related to unemployment is one of the complex economic problems that always plague every country, both developing and developed countries. As also explained in the latest released misery index, even the main problem plaguing the most prosperous country is unemployment. It is known as a complex problem, because the unemployment has many causes behind them, in terms of social and economic; like property prices (Irandoust, 2019; Asal, 2018), market forces (Peretto, 2011), education (Weber et.al., 2002), criminality (Fallahi et.al., 2012) and various other factors, either directly or indirectly, where basically this phenomenon occurs due to an imbalance between the labor market and the availability of the workforce in the scope of society of a country. Therefore, research on unemployment is one of the efforts of academics in finding solutions to increasingly complex economic problems.

Investment, total debt, net debt, and economic growth were chosen as the variables tested for the unemployment variable because these four variables are considered to have similar characteristics as a reflection of the financial performance of a country. This research was conducted in Asian countries that are members of the Organization of Islamic Cooperation (OIC).

By examining the OIC countries in Asia, it is hoped that they will be able to explain the phenomenon of unemployment in countries with similar economic conditions. As various previous studies identified from academics such as Economou et.al (2016), Beaton K. (2010), Cazes, S. and Verick, S. (2011), Jardin, M. and Stephan, G. (2012) and others, the discussion about unemployment as well, especially how the phenomenon of Okun's law in practice also has been studied. However, these studies more lift western countries with a pattern of conventional economics as a research object, so that through this study, the authors tried to raise an assessment by the countries belonging to the Organization of Islamic Cooperation (OIC) as a focus of the update.

## **2. Literature Review**

### **2.1 Unemployment and Unemployment Theory**

Unemployment is a situation where a person belonging to the labor force wants to get a job but they have not been able to obtain such work (Sukirno, 1994). Unemployment occurs because the growth in employment is not as high as the growth in the labor force so that the available job opportunities cannot accommodate all of the existing workforce. According to BPS, the open unemployment rate is a measure that shows how much of the workforce is actively looking for work, it can be calculated as follows:

$$\text{Unemployment Rate} = \frac{\text{number of job seekers}}{\text{labor force}} \times 100$$

An unemployed person can be defined as a person who is not working and is actively looking for work for the previous 4 weeks, is waiting for a call back for a job after being laid off or is waiting to report for a new job within 4 weeks (Dharmakusuma, 1998:45). Open unemployment is the part of the workforce that is currently unemployed and is actively looking for work. Meanwhile, unemployed is divided into two groups, namely:

1. Visible unemployment, namely those who work less than 35 hours a week
2. Invisible unemployment, namely those with low work productivity and income (Simanjutak, 1985).

According to Gilarso (2004), there are two basic theories that explain the phenomenon of unemployment.

## 1. Classical Theory

The Classical Theory provides an explanation that unemployment can be prevented by providing a stimulus on the supply side and a price mechanism in the free market in order to guarantee the creation of demand that will absorb all supply. According to the classical view, unemployment occurs because of temporary misallocation of resources because it can then be overcome by a price mechanism.

## 2. Keynes Theory

In addressing the problem of unemployment, Keynes's Theory provides a different attitude from Classical Theory. It is explained in Keynes's Theory, that basically the problem of unemployment is caused by low aggregate demand. So that the inhibition of economic growth is not caused by low production but low consumption. According to Keynes, this cannot be transferred to free market mechanisms. When labor increases, wages will fall and this will be detrimental, because a decrease in wages means a decrease in the level of people's purchasing power for various commodities. In the end, the impact will cause producers to suffer losses and decrease labor absorption.

### 2.2 Investment and Unemployment

According to Salim and Budi Sutrisno (2008), investment is investment made by investors, both foreign (foreign) and domestic (domestic) investors in various business fields that are open to investment, with the aim of making a profit. Meanwhile, according to A. Abdurrahman, suggested that investment (investment) has two meanings, namely: investment means the purchase of stocks, bonds and immovable objects, after an analysis is carried out it will guarantee the invested capital and provide satisfactory results. These factors differentiate investment from speculation. Second, in economic theory, investment means the purchase of means of production (including goods for sale) with capital in the form of money.

Investment in general is a term with several meanings related to finance and economics, to use (money) make more money out of something that expected to increase in value. The term relates to the accumulation of a form of asset with the hope of obtaining future benefits. Sometimes, investment is also called as capital investment (Azis, 2010).

According to Mannan (2012), investment is divided into several

divisions, namely:

#### 1. Investments based on assets

This investment is an investment classification from the aspect of capital or wealth. This investment is divided into two types: first, real assets are tangible investments such as buildings and vehicles; second, financial assets in the form of documents (securities) traded in the money market such as deposits, commercial paper, Money Market Securities (SBPU), and so on. Financial assets are also traded in the capital market such as stocks, bonds, warrants, options and so on.

#### 2. Investments based on leverage

This investment model is an investment that is based on factors and circumstances that affect or do not affect investment activities. Influence-based investment is divided into two, namely, first, autonomous investment, ie investment that is not influenced by income levels, is speculative, for example buying securities; second, induced investment, namely investment that is influenced by an increase in demand for goods and services and the level of income, for example transitory income (income earned other than work), namely savings interest and so on.

#### 3. Investments based on sources of financing

This investment is based on the original financier or the origin of the investment from which the funds were obtained. This investment is divided into two types: first, investment that comes from domestic funds (PMDN), investors from within the country; second, investment that comes from foreign capital, investment financing comes from foreign investors.

#### 4. Investment based on the form of investment

Investments that are based on how to invest. This capital investment is divided into two forms, first, direct investment carried out by the owner himself, such as building a factory, building a building as a contractor, buying a total, or acquiring a company; second, indirect investment is called portfolio investment, indirect investment is made through the capital market using securities instruments such as stocks, bonds, mutual funds and their derivatives.

#### 5. Time based investment

Time based investment is divided into two, namely: investment based on short term and investment based on long term. Short-

term investment is investment by someone with a relatively short term, for example a year, or two years. For example savings in banks, deposits, money market instruments, etc. Meanwhile, long-term investment is the investment or participation of a portion of the assets of a company with the intention of obtaining fixed income and to control or control the company for 5 years and so on. For example, stocks, mutual funds, bonds, gold bullion, property, collectibles, etc.

In modern economics (the Keynesian system), investment is expressed as a function that is negatively correlated with interest rates. The lower the interest rate in an economy, then this will encourage increased investment and vice versa. But in Islamic economics, investment is not determined as a function of interest rates, because loan interest is seen as a form of usury. Thus, investment is expressed as a function that is influenced by other factors, such as a function of profit and equity (Hoetoro, 2017).

As we all know that investment is one of the aspects that affect economic growth. However, when a study combines the two things in one study, the multiplier effect caused by investment and economic growth is very likely to be different, because investment and economic growth have different structures and complexities. The relation in its effect on unemployment, Lacovoiu (2012) explained that the investment effect does not only depend on the size, but also very much depends on various things such as the accuracy of the allocation of investment funds in various existing fields, existing socio-economic conditions and the contribution of investors to the continuous formation of business land. This statement is based on his research on the phenomenon of investment and unemployment in Romania in 2004-2012. The results showed that investment has a positive effect on unemployment. This is also confirmed by the economic shocks that hit Romania in 2009, which revealed that the ups and downs of investment were followed by the ups and downs of unemployment. Investment is one aspect that stimulates an increase in economic activity, an expansion of the workforce and a reduction in the volume of middle assets (Iacovoiu, 2012).

### **2.3 Debt Instruments and Unemployment**

Debt based on the meaning of the economic term is “money, goods or services owed to another person as a result of an

agreement that creates a legal obligation to pay” (Dannawan et al., 1984). In terms of macroeconomics, total debt includes all payment obligations held by other countries originating from various domestic and foreign parties in the form of state institutions, investors, or organizations such as the IMF and so on. Meanwhile, based on the definition of Kamus Bisnis dan Bank (The Business and Bank Dictionary), net debt is the amount of fixed and current debt minus repayment funds and cash or other assets specially prepared for payment; as applied to regional or government finance, the term means the amount financed and the floating debt balance less any existing repayment funds (Banking Smart System, n.d.)

Debt is a Consequence of Expansive State Expenditures. An expansive spending policy is implemented by prioritizing productive spending in the infrastructure, education and health sectors. The amount of government spending is intended to provide a stimulus for the economy, and it is still not fully fulfilled from state revenues (Taxation, Customs, PNBP, and Grants). The consequence of the deficit between state revenue and expenditure is a deficit in the state budget. State revenue consists of taxation, customs duties, non-tax state revenue (PNBP), and grants.

State expenditures consist of Central Government Expenditures and Transfers to Regions & Village Funds. The form of expansionary fiscal includes accelerating infrastructure projects through increasing spending by ministries or institutions, increasing transfer funds to regions and village funds, and government investment (PMN and LMAN). Government debt is used for general financing and to finance certain activities and projects. For general financing, debt is used, among others, to finance productive expenditures and State Capital Participation (PMN). The provision of PMN provides greater room for SOEs to leverage when compared to state spending. Productive use of state debt as well as efficient and low-risk sources of financing will ease the burden on future generations (DJPPR Kemenkeu, n.d.).

Omoruyi (2005) argues that many economies will experience an economic downturn in their quest to bridge the gap unless the country relies on external sources of finance (Chenery, 1996). The attractiveness of foreign capital inflows into the economy which is marked by the investment-saving gap will fulfill efforts to increase the saving rate and ultimately investment in the country which will spur economic growth (Hunt, 2007).

Keynesians assume that debt has a positive relationship to the number of unemployed, high unemployment is one of the effects of a shortage on the demand side or a recession. And this can be overcome by absorbing labor (increasing productivity) through debt instruments (Topal & Bostan, 2018). However, based on research conducted in Portugal, Ireland, Greece, Spain and Italy in the period 1990-2015 by Topal & Bostan (2018) reveals the opposite. In their conclusion, they explained that different results might occur due to several factors, such as the inefficiency of policies carried out by the governments of each country and the changing pattern of the global economy compared to previous studies.

In another study, conducted by Garcia-Jimenez & Mishra (2010) the results they obtained show that in the USA, debt for less than four years will have a negative effect on the workforce. And conversely, debt instruments for a period of more than four years will have a positive impact on labor. The existence of these results makes us unable to immediately deny the Keynesian assumption that has been explained earlier, since in the presumption presented, it is not clearly stated regarding the time period factor.

## **2.4 Economic Growth and Unemployment**

Nowadays, the developments of various studies have described economic growth indicators with a wider variety of variables, so that there are various benchmarks that must be considered. On the other hand, the existence of economic growth is also an important indicator to measure various existing phenomena, various studies have used complex economic growth variables as exogenous variables. One of them is to influence the unemployment rate.

Rostow (1960), provides an understanding of economic growth as a process that causes changes in the structure of society; politically, social structure, social value and structure of economic activity. In his theory entitled "The Five Stages of Growth", Rostow divides the country according to five categories of economic stages:

1. The traditional society;
2. The preconditions for take-off;
3. The take-off;
4. The drive to maturity; and

## 5. The age of high mass-consumption.

In the stages mentioned above, he explains how to characterize society in a complex manner both from a social and economic perspective. Although it does not explicitly state the standards that must be met, it can be understood that it is able to describe the existing features of society quite clearly. In the division of countries that he explained, the productivity aspect of society is one of the aspects that are held; types of products produced by the community, focus and intensity. Where in understanding language, we understand that the meaning of productivity is closely related to aspects of labor; the lower the productivity of society, the closer a country will be to the Rostow "traditional society" classification.

Yuliandi (2018), mentioned that the high level of unemployment is a reflection of the inefficiency of a country's economy, Hanusch (2013) tested economic growth and unemployment using eight East Asian countries during the period 1997-2011 and found that economic growth has an effect on the level of unemployment, but in each country, there are other variations that also affect it. Economic growth variables affect employment, although not in the aggregate, but affect their composition. In addition, from the research in the eight Asian countries, it was found that employment in the agricultural sector moves counter-cyclically. Interesting findings come from research conducted by Lee et al. (2013) and Knotek (2007) whereas in each of the two studies they conducted stated that economic growth did not significantly affect the unemployment rate, the two researchers also raised doubts on the truth of Okun's Law.

Gross Domestic Product (GDP) is an important indicator to measure the condition of a country's economy. Taken from the official website of the Central Bureau of Statistics, GDP is an important indicator to determine the economic conditions in a country in a certain period. GDP is basically the amount of added value generated by all business units in a country. Or is the total value of the final goods and services produced by all economic units. In short, GDP is one of the methods for calculating national income.

Ricky W Griffin (2007), says that nominal GDP does not take into account inflation while real GDP takes into account the inflation that occurs. Nominal GDP measures the value of goods and services produced in a certain period of time, using the

prices at that time. The price level can generally increase due to inflation, which causes an increase in nominal GDP even though the amount of goods and services produced does not change. This is where real GDP comes into play. To measure annual GDP, real GDP is usually used because this data provides a more accurate picture of the country's economy. GDP affects society. The economy of a country is said to be good or healthy if the unemployment rate is low and wages increase. This is because the business sector needs more workers to meet increased production needs due to economic growth. If GDP growth is too fast, the central bank will raise interest rates to offset the rate of inflation (prices for goods and services increase). This means that the interest required in vehicle and housing loans will also increase. The business sector will also feel the impact, where there will be an increase in costs for capital loans and wages. Conversely, if GDP slows down, it will trigger fears of a recession which could result in an increase in the number of job cuts and a decrease in business income and public spending.

To calculate the GDP figures, these three approaches can be used, namely:

1. Production approach. GDP is the amount of added value for goods and services produced by various production units in a region or country within a certain period of time (usually in one year). The production units in this presentation are grouped into 9 sectors, namely: Agriculture, livestock, forestry, and fisheries, mining and quarrying, processing industry, electricity, gas and clean water, construction, trade, hotels and restaurants, transportation and communications, finance, real estate and corporate services, government services.
2. Income approach. GDP is the amount of remuneration received by production factors that participate in the production process in a country within a certain period of time. Production factor remuneration in question is wages and salaries, land rent, capital interest and profit. Everything before deducting income tax and direct tax. Here, GDP includes depreciation and net indirect taxes.
3. The GDP spending approach, which is all components of final demand, consists of:
  - a. Household consumption expenditure. Represents ex-

penditure on goods and services by households for consumption purposes. Households become the end users of various types of goods and services provided in a country's economy. Households are defined as individuals or groups of individuals who live together in a residential building. They collect income, have assets and liabilities, and consume goods and services together, especially the food and housing groups.

b. Government consumption expenditure Is the value of all types of government output minus the value of output for the formation of own capital minus the value of the sale of goods or services plus the value of goods or services purchased from market producers to be given to households for free or at prices that are not economically significant.

c. Gross fixed capital formation. Defined as the expenditure of a production unit to increase fixed assets less the reduction of used fixed assets. It is referred to as gross fixed capital formation because it describes the addition and reduction of capital goods in a certain period. Capital goods have a shelf life of more than one year and will experience depreciation or the term "gross". Depreciation or consumption of capital goods illustrates the decrease in the value of capital goods used in normal production processes during a period.

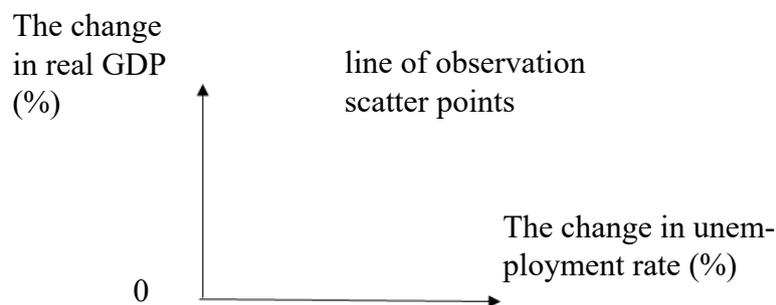
d. Inventory. Inventories held by the producing unit for use in further processing, sale, or delivery to another party. It can also be interpreted as inventory originating from other parties, which will be used as input or resold without further processing.

e. Export-import, which is generally the concept of export-import abroad, refers to the 1933 System of National Accounts (SNA). Goods export transactions are defined as transactions of the transfer of economic ownership of goods from the resident of a province to foreign economic actors. Imports of goods are defined as transactions of transfer of economic ownership to residents of a province (Gischa, 2019)

## 2.5 Okun's Law Phenomenon

Okun's Law begins with an idea that was born in 1962, where in his writings, Arthur Melvin Okun presents two empirical re-

relationships that connect GDP growth and the unemployment rate. The findings obtained from Okun's research have become a benchmark since its appearance at that time. This research is based on his observation that more labor is usually needed when a country's economy is producing more goods and services. The meaning of "more workforce" is defined as employees who work longer hours or recruit more employees. However, in the long-term research results obtained, the results obtained by Okun actually reveal the opposite. To simplify the analysis, Okun assumes that the unemployment rate can function as a variable substitute for the amount of labor used in the economy.



In general, the Okun Curve coefficient is the slope value obtained in analyzing the relationship between GDP and unemployment, which shows the magnitude of the change in the GDP component from the change in the unemployment component by one unit, or vice versa. This law states that every two percent increase in real GDP will result in unemployment of one percent.

On the other hand, as an economic "law", it turns out that many corrections have been made by various researchers as also mentioned earlier, namely Economou et.al. (2016), Beaton K. (2010), Cazes, S. and Verick, S. (2011), Jardin, M. and Stephan, G. (2012) and others. Some of these researchers also wrote related articles by making various European and American countries as their research objects. Simultaneous doubts from academics point to the result that GDP affects the unemployment rate, but this does not significantly mean that this law needs to be revised again.

### 3. Research Methods

In order to process the data obtained, this study uses panel data regression as a research method. In a similar research model, panel data regression was also used by some academics in their research; Apurv Rohit, S. Uzma (2020), Lopez et.al (2019) and others. This clearly has a lot to do with the form of the data obtained and the purpose to see the relationship. Nonetheless, A. Economou, I. Psarianos (2016), Beaton K. (2010) and other researchers mentioned earlier have similarities in the research not using panel data regression, this is because the form of the data obtained cannot be processed with panel data. To be sure, with different methods, this and previous studies still use the regression approach in order to obtain the desired results.

Furthermore, the Common Effect Model (CEM) was chosen taking into account the results shown through the Chow Test which had previously been carried out, where the results of the test indicated that CEM was more suitable as a research model. According to Baltagi (Baltagi, 2005) the model without individual influence (common effect) is an estimation that combines (pooled) all time series and cross section data and uses the OLS (Ordinary Least Square) approach to estimate its parameters. The OLS method is a popular method for estimating parameter values in linear regression equations.

In general, the form of regression in this study can be described by the following equation:

$$Y_t = \alpha + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + \beta_4 X_{4t} \dots + e_t$$

Information:

Y = Dependent Variable

$\beta$  = Independent Variable Coefficient

X = Independent Variable

t = Time to t

e = Variable Error

The variables used in this study include:

1. (Y) The unemployment rate (UNEM) in each OIC member country in the Asian region as mentioned, during the 2014-2017 period, is an endogenous variable.
2. (X1) Investment (INV), in each OIC member country in

the Asian region as mentioned, during the 2014-2017 period, as an exogenous variable.

3. (X2) Total debt (TOD) of each OIC member country in the Asian region as mentioned, during the 2014-2017 period, as an exogenous variable.

4. (X3) Net debt (NED) in each OIC member country in the Asian region as already mentioned, during the 2014-2017 period, as an exogenous variable.

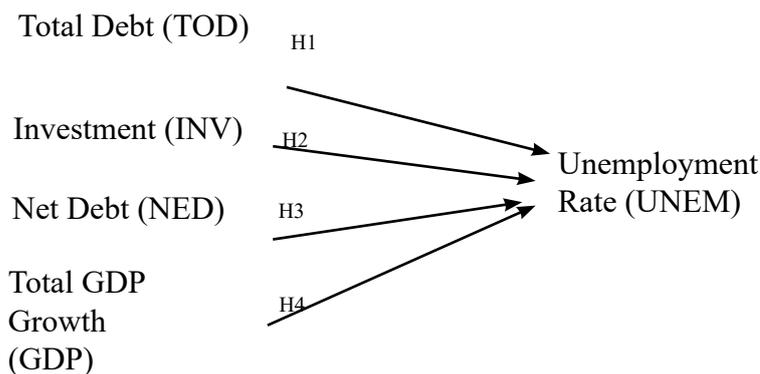
5. (X4) Total GDP Growth (GDP) The unemployment rate in each OIC member country in the Asian region as mentioned, during the period 2014-2017, as an exogenous variable.

By using multiple linear analysis method analysis tools panel data, the equations formed from these variables are as follows:

$$UNEM = \alpha + \beta_1 INV_t + \beta_2 NED_t + \beta_3 IM_t + \beta_4 GDP_t \dots + e_t$$

From the description that has been explained, a research model and hypothesis are obtained as follows:

- H1: Investment affects unemployment
- H2: Total debt affects unemployment
- H3: Net debt affects unemployment
- H4: Real GDP affects unemployment



#### 4. Results and Discussion

Based on the interpretation of existing data processing using the Eviews 11 application using the common effect model (CEM), several important discussions can be drawn as follows.

### 1. The Normality Test

The normality test shows that the p-value is at 0.418, which is more than 0.05, this indicates that the data used is normal.

2. In this test there is no need for a stationary test or unit root test, this is due to the amount of data that does not reach 50. This is in accordance with what was described by Cochrane in his 1991 study regarding the application of the unit root test.

### 3. The Multicollinearity Test

The multicollinearity test results show that all values between the independent variables are below 0.8, so this indicates that there is no multicollinearity.

	<b>X1INV</b>	<b>X2TOD</b>	<b>X3NED</b>	<b>X4GDP</b>
<b>X1INV</b>	1.0000000	0.080342	-0.001395	-0.037647
<b>X2TOD</b>	0.080342	1.0000000	0.69299	0.130737
<b>X3NED</b>	-0.001395	0.69299	1.0000000	0.212968
<b>X4GDP</b>	-0.037647	0.130737	0.212968	1.0000000

### Common Effect Model

In the table below, it shows that the investment variable (X1INV) in the T test results shows that it has a T-statistics of 2.312169 which is greater than the T-table and has a p-value of 0.0276 which is less than 0.05, then hereby H1 is accepted. These results indicate that the investment variable has a significant negative effect on the unemployment rate. Where every one point increase in investment will reduce the unemployment rate by 0.157396 points.

<b>Variable</b>	<b>Coefficient</b>	<b>Std. Error</b>	<b>t-Statistic</b>	<b>Prob.</b>
C	11.07128	1.992102	5.55759	0
X1INV	-0.157396	0.068073	-2.312169	0.0276
X2TOD	-0.006733	0.007029	-0.95795	0.3455
X3NED	-0.004755	0.011653	-0.408048	0.686
X4GDP	0.042235	0.179971	0.234676	0.816
Root MSE	2.364158	R-squared		0.226238

Mean dependent Var    6.165556    Adjusted R-squared    0.126398

S.D. dependent Var	2.725776	S.E. of regression		2.547692
Akaike info Criterion	4.836499	Sum squared resid		201.2128
Schwarz Criterion	5.056432	Log likelihood		-82.057
Hannan-Quinn criter.	4.913262	F-statistic		2.266003
Durbin-Watson stat	0.049228	Prob (F-statistic)		0.084581

Meanwhile, the total debt (X2TOD), net debt (X3NED) and real GDP growth (X4GDP) variables have a p-value  $<0.05$ , this indicates that these three variables do not have a significant effect on the unemployment rate. It means that H2, H3, and H4 are rejected.

Then the independent variables used in this study have a significant joint effect on the 95% confidence level. Adjusted R-squared shows a value of 0.126, which means that all independent variables can explain the growth of the dependent variable by 12.6%, while the remaining 87.4% is the influence of other factors not included in this model.

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As discussed in the discussion chapter, the existing findings also confirm what was conveyed by Lee (2000), Knotek (2007) and Economou (2016) and other researchers mentioned at the beginning who think that economic growth does not significantly affect unemployment, especially also provide support to the

doubts they convey about the Okun law which discusses the relationship of economic growth to unemployment. The discussion of previous research which mostly uses conventional economic approaches, gives an important meaning that both countries that adopt the Islamic economic system or not, at the macro level the unemployment phenomenon still has the same implications in the country's economic system.

The results of research from nine OIC countries in the Asian region also indirectly confirm what is conveyed by the Unemployment Theory (Keynesian) which assumes that unemployment is more influenced by low aggregate demand. Researchers chose the sentence "indirectly" because in this study it was not tested empirically whether there was a significant effect of aggregate demand on the number of unemployed.

## **5. Conclusion**

From the research that has been done, conclusions can be drawn. First, investment affects a country's unemployment, so H1 is accepted. Second, hypothesis H2, H3, H4 are rejected because there is no influence between total debt, net debt and real GDP growth and unemployment.

The country's economic growth, can be measured by many approaches from various existing indicators, further research is expected to involve a wider scope and use more holistic data and also take into account the various kinds of variables that influence in terms of policies of each country as well as in terms of global policies. This is because countries with different economic patterns have different yield trends. In addition, the limitation of this research is that even if not all countries are members of the OIC, or more precisely each country still has a different economic system (conventional or Islam) so that in addition to the above expectations, it departs from In this research, future studies can be sharpened by categorizing countries with similar economic characteristics and economic systems, so that the results obtained can be even more specific.

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### Country Data Appendix

Country	Year	GDP	NED	TOD	INV	UNEM
Kyrgyzstan	2014	4.024	71.0	97.172	36.4	8.046
	2015	3.469	85.7	112.365	34.3	7.554

	<b>2016</b>	3.767	94.8	124.9	33.4	7.211
	<b>2017</b>	3.504	88.6	122.6	33.9	7.12
<b>Kazakh- stan</b>	<b>2014</b>	4.3	58.8	176.4	25.8	5.042
	<b>2015</b>	1.2	70.5	278.281	29.3	4.971
	<b>2016</b>	1.083	102.3	356	28.7	4.951
	<b>2017</b>	3.331	88.3	291.5	28.1	4.951
<b>Azerbai- jan</b>	<b>2014</b>	2.657	-5.0	15.666	23.8	4.913
	<b>2015</b>	0.648	10.0	24.899	22.6	4.958
	<b>2016</b>	-3.1	17.7	36.5	21.6	5.043
	<b>2017</b>	-1.04	18.1	28.9	23.1	5.041
<b>Malaysia</b>	<b>2014</b>	6.007	23.9	58.151	25	2.85
	<b>2015</b>	5.028	32.3	64.416	25.1	3.15
	<b>2016</b>	4.22	34.0	65.9	25.9	3.45
	<b>2017</b>	5.43	38.7	70.6	25.5	3.425
<b>Indonesia</b>	<b>2014</b>	5.0007	20.3	32.898	34.6	5.94
	<b>2015</b>	4.876	23.5	35.833	34.2	6.18
	<b>2016</b>	5.016	21.5	34	34.3	5.61
	<b>2017</b>	5.2	19.8	31.9	34.3	5.4

<b>Brunei Darus-salam</b>	<b>2014</b>	-2.508	0.0	0.0	27.4	6.9
	<b>2015</b>	-0.405	0.0	0.0	35.2	6.9
	<b>2016</b>	-2.465	0.0	0.0	34.6	6.9
	<b>2017</b>	-1.265	0.0	0.0	34.7	6.9
<b>Saudi Arabia</b>	<b>2014</b>	2.678	-74.9	22.0	28.8	5.721
	<b>2015</b>	4.106	-68.0	26.2	34.7	5.591
	<b>2016</b>	1.742	-53.6	29.3	29.5	5.6
	<b>2017</b>	0.131	-43.0	30.9	28.1	6
<b>Bahrain</b>	<b>2014</b>	4.351	110.3	128.4	26.8	3.767
	<b>2015</b>	2.863	117.9	128.7	24.4	3.358
	<b>2016</b>	2.973	122.7	132.3	25.7	3.7
	<b>2017</b>	2.48	127.2	133.9	23.6	3.643
<b>Egypt</b>	<b>2014</b>	2.916	8.8	13.5	13.6	13.365
	<b>2015</b>	4.372	10.6	15.9	14.3	12.859
	<b>2016</b>	4.298	17.2	27.5	15	12.705
	<b>2017</b>	4.1	20.0	36.2	15.6	12.245