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# The Effect Of Investment Financing, Non Investment And Consumer Price Index On Economic Growth In Indonesia: A Simulation Model Approach

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**Abstract** This study aims to analyze the effect of Islamic finance and consumer price indexes on economic growth in Indonesia. This study was conducted in 33 provinces for 7 years from 2011-2017. The research model uses the panel data model. The result regarding Financing shows that Financing provided by Islamic Commercial Banks are very useful in promoting economic growth, especially if the proportion of investment financing is greater than non-investment. Research also shows that most Indonesian provinces are still in quadrants II, III and IV. It shows that the allocation of investment financing in each province is still relatively low. However, there is sufficient evidence that investment financing can improve economic growth. Furthermore, non-investment financing has a negative effect. Meanwhile, the consumer price index has a positive effect on economic growth in Indonesia. The recommendations of this study are government and related agencies should focus on increasing investment financing to increase a higher economy as well as it is necessary to control the Consumer Price Index.

Keywords: Financing, Consumer Price Index, Panel Data.

### 1. Introduction

Economic growth is one of the important indicators in measuring the progress or welfare of a country. In general, the direct factor affecting economic growth is the macro indicator. Macroeconomic indicators include labor force participation, inflation, and human development index, poverty, unemployment, domestic income, per capita gross regional product and per capita consumption, in addition, economic growth cannot be separated from indirect factors. They are also an important indicator that influences economic growth. This was revealed by Florin Teodor Boldeanu and Liliana Constantinescu (2015). These indirect factors are related to financial institutions, private administration, etc, the size of aggregate demand, saving and investment levels, financial system efficiency, budget and fiscal policies, labor, and capital migration and government efficiency.

Indirect factors are generally related to financing. Financing is an activity carried out by the financial sector serves under the Islamic economic system. Financing as an alternative in all transactions based on risk and profit-sharing (Prastowo, 2018). In the Indonesian context, the development of financing carried out by Islamic banking has a rapid development. Furqani and Mulyani (2009) said that at least this development was driven by demand and supply consequently economic growth was also encouraged. Almost all provinces in Indonesia hitherto carry out this financing activity. The speed of financing is expected to be able to provide sustainable solutions for both in the short and long term (Tabash & Dhankar, 2014).

On the other hand, Sharia Banking Statistics indicates the total number of sharia bank offices, Sharia Commercial Banks (BUS), Sharia Business Units (UUS) and Sharia Citizen Financing Banks (BPRS) have reached 2470 offices spread throughout Indonesia until August 2018 (OJK, 2018). Moreover, financing of various types of contracts provided by BUS and UUS has reached 303.5 Trillion Rupiah within the same period. 27.65% of total financing is allocated for working capital, another 21.87% is allocated for investment and the remainder is for consumption purposes. When we specifically look at this particular education sector, unfortunately, it has, a very small portion only 1.69% of the total funding is shared in this sector.

Other data according to BPS Indonesia shows that there was an increase in financing in Indonesia during the period 2010-2017.

Table 1. Average Economic Growth, Financing and Inflation 2010-2017

1.51									
	Year	Economic Growth (%)	Investment financing (Rp M)	Non investment financing (Rp M)	Inflation (%)				
	2010	6.85	2.494	2.599	7.37				
	2011	4.16	8.484	8.085	3.98				
	2012	4.41	17.219	18.365	4.64				
	2013	4.33	23.213	26.47	8.15				
	2014	3.71	27.284	27.481	8.19				
	2015	4.15	12.003	28.08	3.75				
	2016	3.78	29.318	31.289	3.16				
	2017	3.61	32.916	38.641	3.27				
Sc	Source : Badan Pusat Statistik, 2010-2017								

Based on table 1, there is a declining trend of economic growth in 33 provinces in Indonesia. However, investment financing (working capital) continues to increase. The same pattern also happens to non-investment financing of which continues to increase as well. On the other hand, inflation has tended to decline since 2010-2017, in line with economic growth. But the decline is faster than economic growth, although it tends to fluctuate. Variations in inflation among provinces also gradually diminished, not much different from variations in economic growth among provinces. This situation shows there is a significant contribution of financing to economic growth in Indonesia.

## 2. Literatur review

### 2.1. The Effect of Financing on Economic Growth

Farahani and Sadr (2012) investigate the relationship of Islamic banks and economic growth in Indonesia and Iran both in short-run and long-run using the bound testing approach of cointegration and error correction models, developed in the autoregressive distributed lag (ARDL) framework. The results show a significant short-run and long-run relationship between Islamic banks and economic growth in Indonesia and Iran. They further said that this relationship is a bi-directional relationship.

Farahani and Dastan (2013) examine the relationship of Islamic banks and economic growth in several countries such as Malaysia, Indonesia, Bahrain, UAE, Saudi Arabia, Egypt, Kuwait, Qatar and Yemen using the cointegration approach models framework panel. In general the results show a positive and significant relationship between Islamic banks and economic growth in these countries. They further said that this relationship was stronger in the long run compared to the short run.

# 2.2. The Effect of Inflation / CPI on Economic Growth

Muhamad Abduh and Mohd Azmi Omar (2012) investigate the relationship of Islamic banks and economic growth in Indonesia both in the short-run and long-run using the bounds testing approach of cointegration and error correction models, developed in the autoregressive distributed lag (ARDL) framework. The results show a significant short-run and long-run relationship between Islamic banks and economic growth in Indonesia. They further said that there is a bidirectional relationship both in Schumpeter's supply-leading and Robinson's demand-following between Islamic banks and economic growth in Indonesia.

Furqani and Mulyany (2009) examine the dynamic relationship between Islamic banks and economic growth in Malaysia using a cointegration test and vector error correction model. The results show only the fixed investment granger cause Islamic banks for the period 1997:1 until 2005:4. In the long run, there is evidence of the bi-directional relationship between Islamic banks and fixed investment in Malaysia. They further said that there was evidence that an increase in GDP would develop Islamic banks and not vice versa.

Many central banks in the world use monetary policy with particular attention directed to price stability nowadays. They and researchers believe that inflation is expensive. Businessman and public are predicted to be in trouble in general when higher and unpredictable inflation is taken place (2013)

Gokal and Hanif (2004) also have the same opinion where they argue the Fiji country, as well as other countries in the world, both developed and developing countries, one of the fundamental objectives of macroeconomic policy in Fiji, is maintaining the momentum of high economic growth that is while controlling a low level of inflation. They also realize that there is a huge debate regarding the relationship between economic growth and inflation. However, in general, a low level of inflation is believed as the foundation of a country's economic growth.

Hossin (2013) investigates the relationship between inflation and economic growth in Bangladesh. Using annual Gross Domestic Product Deflator (GDPD) data from 1961 to 2013, he conducted an empirical analysis using co-integration tests, error correction models and Granger Causality tests. Empirical results of his research indicate a significant negative relationship in the long run between inflation and economic growth in Bangladesh as shown by a significant negative relationship, in the long run, Gross Domestic Product Deflator (GDPD) to GDP. Furthermore, empirical results from his research also indicate a significant positive relationship in the long term of GDP to Gross Domestic Product Deflator (GDPD). In addition, economic growth has a positive impact on inflation. However, if the inflation rate rises far higher than the inflation level threshold, then the inflation will have a negative impact on Bangladesh's economic growth.

Barro (2013) in his study in which manages to have data sets covering 100 countries in the world from 1960 to 1990. Empirical results of his research show a significant negative relationship between inflation and economic growth if a number of country characteristics are kept constant for instance fertility rates, education levels, etc. For every 10 percent increase in inflation level per year will cause a decline in GDP growth by 0.2-0.3 percent. In the long run, this decline will affect community standards of living.

Bruno and Easterly (1995) test the determinants of economic growth using inflation data in 26 countries in the world in which experienced an inflation crisis from 1961 to 1992. Empirical results from their research set 40 percent of inflation and above as the threshold level of the inflation crisis in a country is taking place. The impact of inflation on economic growth is not very clear or there is an inconclusive relationship between inflation and economic growth below that threshold level. They further state that a significant negative relationship

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between inflation and economic growth if inflation is higher than the threshold level. The results of empirical robustness from their research have been tested by controlling other factors especially shocks such as trade shocks, political crises, and war. Furthermore, they argue that 26 countries in the world experiencing an inflation crisis would be able to overcome the pre-crisis economic growth if they were able to reduce inflation. Other results also show that the short-term inflation crisis did not create permanent devastation on economic growth.

Malla (1997) conducted an empirical analysis using a data sets consisting a number of Asian countries and countries that are members of the Organization for Economic Cooperation and Development (OECD). Empirical results from his research show a significant negative relationship between inflation and economic growth including the first difference for countries that are members of the OECD by controlling other factors such as labor and capital inputs. However results of some developing Asian countries are not significant. A crucial empirical analysis results from his research show an inconclusive relationship between inflation and long-term economic growth through cross-country analysis using time-series regressions with different countries and time periods.

Mallik and Chowdhury (2001) examine the relationship between inflation and both short-term and longterm economic growth in four South Asian economies namely Bangladesh, India, Pakistan, and Sri Lanka. By using cointegration and error correction models and annual data released by the International Monetary Fund (IMF) International Financial Statistics (IFS), the empirical results of their research generate two propositions. The first empirical results show a positive and significant relationship between inflation and economic growth in four South Asian countries. Their second interesting empirical result is the sensitivity of economic growth to changes in the inflation rate turns out to be lower than the sensitivity of inflation to changes in the rate of economic growth. This empirical result has an important policy implication that although a low level of inflation can increase economic growth, a high increase in economic growth will have a detrimental impact with increased inflation through overheating economy.

## 3. Research Methods

This research was conducted using the quadrant approach and panel data approach consisting of 33 provinces and 7 years from 2011-2017, so there were 231 observations. The quadrant approach is an approach to analyze economic growth and financing of high and low positions in each province in Indonesia. After the quadrant approach is done then followed by panel regression approach. The description of the variables and operational definitions of the study are listed in the following Table 2.

### Table 2. Description of Variables

Variables	Symbol	Description	Correlation	Source
Economic growth	Eco	2010 ADHK Economic growth rate (percent)	NA	https://www.bps.go.id/
Investment financing	LnPI	The amount of investment financing channeled by banks in units of Rupiah (Natural Logarithm)	+	https://www.ojk.go.id
Non- Investment financing	LnPIN	The amount of Non-Investment financing channeled by banks in units of Rupiah (Natural Logarithm)	+	www.ojk.go.id
Inflation	Inflasihk	Consumer price index	+/-	https://www.bps.go.id,

This study is a panel data research model in testing the effect of financing and other factors on economic growth in Indonesia in the period 2011-2017. Applying panel data provides statistical and economic theory benefits such as informative data, increasing degrees of freedom, more efficient, and reducing colinearity between variables. It also enables us to analyze several crucial economic problems that cannot be answered by time series or cross-section data analysis. It can also calculate the level of heterogeneity of which is characteristic of intertemporal individuals. As well as high flexibility in modeling behavioral differences between individuals compared to cross-section data (Baltagi, 1995).

In estimating through panel model approach, there are at least 3 types of models namely: pooled least square, fixedeffect model, and random effect model. Chow and Hausman's test is used to choose the best model in the panel model. The Chow test was carried out in selecting a pooled least square model with a fixed-effect model. If the Chi-square value is significant then the best model chosen is the fixed-effect model and then followed by the Hausman test, on the contrary, if the best model is the common effect model then no other tests need to be performed. The Hausman test was undertaken in choosing a fixed-effect model with a random effect model. If the value of the Chi-square cross-section is not significant then the best model is the random effect model, otherwise, the best is the fixed effect model. Thus the empirical model of this research is:  $Eco_{it} = \beta 0 + \beta 1 LnPI_{it} + \beta 2 LnPIN_{it} + \beta 3 Inflasihk_{it} + e_{it}$ 

### 4. Results and Discussion 4.1. Data description

This section explains economic growth in 33 provinces in Indonesia. Economic growth is determined based on quadrants (Table 3).

Table 3. Data Description

Quadrant	Economic growth	Financing
Ι	High	High
II	High	Low
III	Low	High
IV	Low	Low

Twenty-one other provinces are changed, where 9 of them better off and 8 others worse off, and 4 other provinces changed between variables. The relationship between financing and growth is seen by region, in general, none of the regions have entered quadrant I in 2010. For Sulawesi and Bali regions, Nusa Maluku and Papua lied in quadrant II, while Kalimantan, Java, and Sumatra in Quadrant III. There are no regions in Quadrant IV. Furthermore, 12 provinces are in BUS financing conditions for investment and economic growth remains unchanged.

# 4.2. Relationship between Financing and Economic Growth a Quadrant Approach

02	0	Q2 • Subar	α
		DIY     Sulterg	• DK
<ul> <li>Suiterg</li> <li>Suiter</li> </ul>	<ul> <li>Suisel</li> </ul>	Sumbar     Sulsel	• Kepri
• Solut	• Kepi	Banten     Malut	Sumut
Gorontalo	• Sumut • Jambi	Gorontalo     Sultra	
• Sultra			
Pabar     Malut		Maluku	
•00	• Kaltim • Banten • DM	•Riau •NTT	<ul> <li>Kalteng</li> </ul>
•NTT •Kalterg	<ul> <li>Aceh</li> </ul>		<ul> <li>Aceh</li> </ul>
Babel      Berglulu	<ul> <li>Sumbar</li> <li>Kabar</li> </ul>	Babel      Bergkulu	<ul> <li>Kalbar</li> </ul>
<ul> <li>Maluku</li> </ul>	• Rau • Kabal	• NTB	• Kalsel
	• Jøber	• Jambi	• Jabar
<ul> <li>lateng</li> </ul>	<ul> <li>Sunsel</li> </ul>		<ul> <li>Sumsel</li> </ul>
•8ai •NTB	<ul> <li>Lanpung</li> <li>Latin</li> </ul>	•Bali • Kaltim • Kepri	Lampung     Sulut
Q4 • Papua	03	Q4 • Papua • Pabar	63
20	010	20	17

Figure 1. Quadrant relationship between Financing with Economic Growth, Provinces in Indonesia, 2010 and 2017

Only the Java island shows high economic growth followed by high financing in 2017. This region is developing and located in quadrant I moving from quadrant III in 2010. In terms of economic growth and financing, the Sulawesi region stands steady in quadrant II. Meanwhile, Bali, Nusa Maluku, and Papua are worse of falling to the fourth level. Furthermore, the areas that experienced illumination were the Kalimantan and Sumatra regions from the quadrant III to the quadrant IV.

After analyzing the data description, the next step is choosing the research model. Based on this test, the recommended model is the fixed effect model. This model states that if fixed effects is significant (redundant fixed effects tests) and random effects (correlated random effects - Hausman test) are also significant, then the recommended model is the fixed effect model. It can be seen from the results of the chow and Hausman test that both have significant values at the level of 1 percent.

### Table 4. Financing and CPI regression results on economic growth

Coefficient	Std. Error	t-Statistic	Prob		
0.57410	0.0851	6.7408	0,0000		
-0.2370	0.0970	-2.4425	0.0153		
-0.0204	0.0078	-2.5906	0.0101		
-1.3926	2.4317	-0.5726	0.5674		
: 0.1865	Heteroscedasticity	:			
ared : 0.1771	Durbin-Watson stat	Durbin-Watson stat : 1.9503			
:19.7980***	Multicolinierity	:			
undant Fixed Effects T	ests : 7***				
	-0.2370 -0.0204 -1.3926 : 0.1865 ured : 0.1771 :19.7980***	-0.2370         0.0970           -0.0204         0.0078           -1.3926         2.4317           :0.1865         Heteroscedasticity           red: 0.1771         Durbin-Watson stat           :19.7980***         Multicolinierity           undant Fixed Effects Tests:         7***	-0.2370         0.0970         -2.4425           -0.0204         0.0078         -2.5906           -1.3926         2.4317         -0.5726           :0.1865         Heteroscedasticity         :           red : 0.1771         Durbin-Watson stat         :1.9503           :19.7980***         Multicolinierity         :           undant Fixed Effects Tests :         7***		

Hausman with Correlated Random Effects : 3\*\*

### Based on of the table above, the equation model is Eco= -0,3926 + 0,57410PI-0,2370PNI-0,0204INFLASIHK

BUS investment financing significantly affects economic growth. If the BUS can distribute investment financing by 1 percent, it will accelerate economic growth by around 0.57 percent (ceteris paribus). Conversely, if the BUS launches the same amount of non-investment financing, this will reduce economic growth by 0.23 percent. If the BUS delivers both financings for investment and non-investment at the same amount, then the effect on economic growth is still positive even though it has been cut by almost half. Therefore, BUS financing should be enlarged for investment financing.

The analysis above is consistent research performed by Rihab Grassa, Kaouthar Gazdar in the International Journal of Social Economics, with the theme of financial development and economic growth in GCC countries: A comparative study between Islamic and conventional finance states that this study uses generalized least squares, OLS and panel data frameworks, in analyzing the influence of Islamic financial development and conventional financial development on the economic growth of five GCC countries (Bahrain, Kuwait, Qatar Saudi Arabia and UAE) in the period of 1996-2011. They prove that conventional finance development negatively and significantly affects the economic growth of the five GCC countries. Meanwhile, the Islamic banking sector development (as measured by the Islamic deposit to GDP ratio and financing to GDP ratio) affects the economic growth of the five GCC countries.

What is found in this study is also similar to what happened in Islamic banking in several MENA countries in which has influential in increasing economic growth, although it is still hampered by the rules established by the institutions responsible for it? Similar findings in Pakistan reveal a significant long-term positive and dynamic two-way causal relationship between Islamic banking and real economic activity. The State Bank of Pakistan is advised to continue promoting Islamic banking as a banking system parallel to the conventional system as it has a substantial positive impact on real economic activity in Pakistan. More detailed research of the Islamic banking system on economic growth in Malaysia, Indonesia and Jordan. The types of Islamic finance such as mudārabah, mushārakah, murābaha, 'istisnā,' ijārah as expected turned out to have an impact on the intermediation of Islamic finance and economic growth. While private sector credit and liquid liabilities do not affect Islamic financial intermediation. In developing countries, empirical investigations reveal that the development of Islamic banking (non-usury banks) supports economic growth. In addition, cooperation between the two modes of financing increases economic growth. This new funding integration has never ignored the role of conventional financing methods.

Another research conducted in Turkey shows that Islamic banking financing does not have a significant influence on the development of the economy and industry. The main reason for this result is the small percentage of sharia banking in the overall banking system. They suggested increasing sharia banking to have a bigger contribution to the country's economy. This is similar to the findings of this study in which financing for non-investment from Islamic banking reduces economic growth.

Changes in the price level of which tends to increase, or even worst uncontrollable price, can reduce the acceleration of economic growth. This is indicated by the Consumer Price Index (CPI) variable of which illustrates inflation, where each increase of 10 CPI points will reduce economic growth by 0.02 percent. The tendency of high economic growth followed by an

increase in the price level has not been found in this study. On the contrary, inflation will hamper the economy. Price increases can reduce aggregate public consumption so companies are forced to cut down production. This result is also consistent with research conducted by Aydın et al. whom examine the role of inflation on economic growth in Azerbaijan, Kazakhstan, Kyrgyzstan, Uzbekistan and Turkmenistan in the period 1992 to 2013 using the dynamic panel threshold model. They found a non-linear relationship between inflation and economic growth in Azerbaijan, Kazakhstan, Kyrgyzstan, Uzbekistan, and Turkmenistan in the long run. Furthermore, if the inflation rate is higher than a certain critical value level, 7.97%, inflation has a negative impact on economic growth. The moderate inflation rate below the threshold, on the contrary, has a positive impact on economic growth. This finding does not indicate a causal relationship between inflation and economic growth. This finding only shows the relationship between the two variables. This research is also following research conducted by Robert J. Borro in the Inflation and Economic growth research in the journal Annals of Economics and Finance in which states that inflation has an impact on economic growth conducted in 100 countries from 1960 to 1990. Furthermore, Folsom's research A. Akinsolo and Nicholas M. Odhiambo in the Comparative Economic Research journal with the research theme Inflation and Economic Growth: A review of the international literature in which states that inflation harms economic growth in developing countries.

Another similar study but using the latest time-series techniques, ARDL and NARDL, seeks to find a long-term and causal relationship between inflation and economic growth in South Korea. Based on the results, it was found that inflation is exogenous meanwhile GDP is endogenous. The relationship between inflation and GDP is also found to be asymmetrical in the long run. The policy implication of this research is that the Korean central bank must not adopt inflation targeting policy while trying to increase GDP because it contradicts macroeconomic goals. Instead, inflation targeting policies must be implemented primarily to focus on maintaining price stability.

Mario Švigir and Josipa Miloš examine the relationship between economic growth and very complex price growth. The empirical study has shown the relationship between economic growth and inflation may be positive, negative and neutral. At present, there is no doubt that high inflation has a negative effect on economic growth. This paper investigates the relationship between economic growth and inflation in Italy and Austria, countries characterized by longterm low inflation. Statistical and econometric comparison analysis conducted for Italy and Austria for the period between 1980 - 2016 shows that low inflation is an important but inadequate factor for economic growth.

Other researchers endeavor not only to determine the impact of inflation on economic growth but also to assess the efficiency of inflation control policies, for example, inflation targeting policies. The nature of the relationship between inflation and economic growth and explains why this relationship cannot be sustained without considering the third parameter, namely the money supply.

In the long run, the interest rate and total public expenditure have a significant impact on economic growth in Nigeria, while inflation and unemployment have an inverse effect on growth in Nigeria. A possible justification for the inverse effect of inflation is that inflation may not be generated by aggregate demand pressure but because of a shortcoming supply chain of goods from both domestic and foreign supply outlets. The empirical reduction also signifies significant feedback from long-term to short-term disequilibrium. The results of this study also confirm the existence of a causal relationship between inflation, unemployment and economic growth in Nigeria.

The Schumpeterian Economy research is also in discussion among inflation, unemployment, and economic growth. The applied model predicts a positive relationship between inflation and unemployment, a negative relationship between inflation and R&D, and a negative relationship between inflation and economic growth. This theoretical prediction is

consistent with the latest empirical evidence. Therefore, when inflation is a fundamental variable affecting the economy, unemployment and economic growth show a negative relationship.

# 4.3. Indonesia's Economic Growth: an Estimation Model

The average economic growth of all 33 provinces in Indonesia is relatively higher than the results of estimated economic growth modeling. The tendency, however, decreased during the study period. it is estimated that the average economic growth will be 2.81 percent In 2018 including the trend of the related independent variables. Even in the next 5 years (2022), it will continue to slow down by 0.28 percent, if the recent condition is not improved.

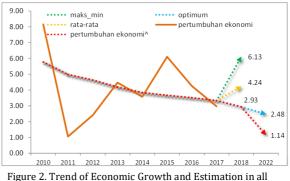


Figure 2. Trend of Economic Growth and Estimation in all Indonesia Provinces in 2010/2022

In the meantime, there are other better alternatives if there were an improvement in determining factor performance. The economy can extend by 3.74 percent if the supporting variables in the study are equivalent to the average in that period. It can even reach 6.72 percent if each of the determining factor achieves optimal value.

For more moderate conditions, if the BUS's role in financing for investments is equal to those for non-investment purposes, economic growth can reach 4.27 percent. This condition is subject to other factors such as trends during the study period, but inflation must be controlled with a maximum CPI value of 220.

The relationship between BUS financing for investment and economic growth is strengthened by the results of the economic growth model's simulation estimation influenced by BUS investment financing. By employing the value of the next 5 years (2022), in general, economic growth in all regions will be curtailed even more, even some provinces will experience a severe contraction. Interventions are needed, in consequence, to ensure better economic growth, one of which is through financing for investments made by BUS. Some provinces even require extra treatment besides the investment, for example in controlling prices.

If we use the independent variable trend value of the next 5 years, economic growth in almost all regions experiences a slowdown or worse contraction. However, if treatment is carried out, in this case, channeling a larger portion of BUS financing for both investment and non-investment, the economic growth will be more optimal. The Province of Aceh, for instance, without any treatment (just following the trend), the economic growth of this region is minus 6.91 percent. However, if we intervene by changing the proportion of BUS financing for investment and non-investment, then Aceh's economic growth will amount to 3.03 percent.

Another example, Jambi Province, if without any intervention, the economic growth of 2022 is about 2.43 percent. However, if the intervention of the same proportion of investment and non-investment is added together with an intervention in the variable consumer price index, the region's economic growth strengthens to 4.35 percent. If the government, for example, succeeded in controlling prices, so that the CPI could be reduced by 190 by 2022, then economic growth in Jambi could reach 4.35 percent.

Another thing worth noted down in the study is economic growth estimation in 2022 with the independent variable of 2010-2017 estimation trend investment and noninvestment variables with the intervention, with the treatment of other variables in certain provinces. Thus, BUS financing is very valuable in current and future economic growth, especially the proportion of investment. There are also other variables, however, of which also play a big role as well for instance CPI.

### Table 5. Proportion of BUS Investment Financing and Other Factors and Optimal Economic Growth

	Province	Proportion without Intervention		Proportion with Intervention		Other	Economic Growth ^	
No		Investme nt	Non- investme nt	Investme nt	Non- investme nt	Variable s	Without Interventi on	With Interventi on
1	Aceh	0.42	99.58	0.50	0.50	-	-6.91	3.03
2	Sumut	32.79	67.21	0.60	0.40	-	1.68	4.24
3	Sumbar	6.45	93.55	0.50	0.50	-	-5.35	5.08
4	Riau	10.42	89.58	0.75	0.25	IHK	-3.25	0.48
5	Jambi	10.63	89.37	0.50	0.50	IHK	2.43	4.35
6	Sumsel	23.95	76.05	0.50	0.50	IHK	1.83	3.78
7	Bengkulu	34.38	65.62	0.50	0.50	IHK	0.82	3.42
8	Lampung	6.81	93.19	0.50	0.50	IHK	0.89	3.25
9	Babel	2.68	97.32	0.75	0.25	IHK	-0.47	2.05
10	Kepri	30.55	69.45	0.67	0.33	IHK	-0.66	1.45
11	DKI	41.42	58.58	0.27	0.73	IHK	66.71	10.26
12	Jabar	22.87	77.13	0.30	0.70	-	-3.61	5.50
13	Jateng	13.04	86.96	0.30	0.70	-	-21.83	7.38
14	DIY	22.78	77.22	0.67	0.33	IHK	1.57	3.07
15	Jatim	16.20	83.80	0.35	0.65	-	-7.94	7.14
16	Banten	3.84	96.16	0.67	0.33	IHK	-0.42	4.04
17	Bali	48.81	51.19	0.50	0.50	-	5.46	5.66
18	NTB	8.68	91.32	0.50	0.50	IHK	1.29	3.14
19	NTT	7.91	92.09	0.50	0.50	IHK	2.04	3.49
20	KalBar	19.75	80.25	0.50	0.50	IHK	-0.18	3.15
21	Kalteng	27.74	72.26	0.50	0.50	IHK	1.68	3.32
22	Kalsel	45.74	54.26	0.50	0.50	IHK	3.92	5.79
23	Kaltim	8.35	91.65	0.50	0.50	IHK	-7.44	1.23
24	Sulut	12.04	87.96	0.50	0.50	IHK	2.67	4.51
25	Sulteng	4.04	95.96	0.50	0.50	IHK	4.28	6.06
26	Sulsel	46.69	53.31	0.50	0.50	IHK	6.58	8.67
27	Sultra	17.22	82.78	0.50	0.50	IHK	2.95	4.71
28	Gorontal 0	6.42	93.58	0.50	0.50	IHK	3.25	4.57
29	Sulbar	4.13	95.87	0.50	0.50	IHK	4.53	5.81
30	Maluku	4.43	95.57	0.50	0.50	IHK	0.50	1.06
31	Malut	14.96	85.04	0.50	0.50	IHK	2.28	4.06
32	Pabar	11.99	88.01	0.50	0.50	IHK	0.75	2.03
33	Papua	12.09	87.91	0.90	0.10	IHK	-2.16	0.04

Sources: BPS and OJK, 2010 - 2017 (data processed)

### 5. Conclusion

There is a difference in the role of financing among provinces proven by the results of the simulation estimation model, most provinces must be at least half of the total funding allocated for investment financing to encourage economic growth. Whereas some other provinces have to distribute more. All independent variables in this study including investment and non-investment financing and the Consumer Price Index influence economic growth in Indonesia. The results of the study prove that price changes have a major impact on economic growth. The uncontrolled price level will have a major impact on the development of the economy. The financing provided by Islamic banks is very beneficial in supporting economic growth, especially if the proportion of investment financing is greater than non-investment. The results of the study showed that most of Indonesia's provinces were still in quadrants II, III and IV. This shows that the allocation of investment financing in each province is still relatively low.

### References

- 1. Abduh Muhamad, Mohd Azmi Omar. Islamic banking and economic growth: the Indonesian experience. International Journal of Islamic and Middle Eastern Finance and Management, Vol.5 Issue:1, pp.35-47. 2012.
- Abdul Rafay dan Saqib Farid. Dynamic Relationship between Islamic Banking System and Real Economic Activity: Evidence from Pakistan. JKAU: Islamic Econ., Vol. 30 No. 2, pp: 97-116 (July 2017) DOI: 10.4197 / Islec. 30-2.10
- Abdul Rahim Abdul Rahman. Islamic microfinance: an ethical alternative to poverty alleviation. Humanomics, Vol. 26. 2010.
- Akinsola and Odhiambo. Inflation and Economic Growth: a Review of The International Literature. Journal of Comparative Economic Research, Vol 20 No 3 pp. 10.1515/cer-2017-0019. 2017.
- Angus C. Chu, Guido Cozzi, Yuichi Furukawa. Inflation, Unemployment and Economic Growth in a Schumpeterian Economy. October 2013 Discussion Paper no. 2013-24 School of Economics and Political Science, Department of

Economics University of St. Gallen

- Bidabad, B, and Allahyarifard, M. "Accounting Procedures for Profit and Loss Sharing (PLS) Banking". (http://www.bidabad.com/doc/PLS-accountingen.pdf Retrieved on 28 February 2016).
- Boldeanu, Florin Teodor & Constantinescu, Liliana. The main determinants affecting economic growth. Bulletin of the Transilvania University of Braşov. Series V: Economic Sciences • Vol. 8 (57) No. 2 - 2015.
- Borro J Robert. Inflation and Economic Growth. Journal of Annals of Economics and Finance, Vol 14-1, pp 85-109. 2014
- 9. Development in Turkey? IKONOMIKA: Journal of Islamic Economics and Business Volume 2, No 1 (2017) ISSN: 2527-3434 (PRINT) - ISSN: 2527-5143 (ONLINE) Page : 93 - 102
- 10. Driscoll, John C. Does Bank Lending Affect Output? Evidence From the U.S. States. Forthcoming, Journal of Monetary Economics.
- Durrani, Muhammad Kashif Khan, Abid Usman, Muhammad Imran Malik, Shafiq Ahmad. Role of Micro Finance in Reducing Poverty: A Look at Social and Economic Factors. International Journal of Business and Social Science, Vol.2, No.21 [Special Issue] pp.138–144.2011.
- Faria, J. and Carneiro, F. Does High Inflation Affect Growth in the Long and Short Run? Journal of Applied Economics, Volume 4 No.1, 89-105. 2001
- Florin Teodor Boldeanu dan Liliana Constantinescu. The main Determinant Affecting Economic Growth. Bulletin of the Transilvania University of Braşov Series V: Economic Sciences. Vol. 8 (57) No.2 – 2015.2015
- Furqani, Hafas dan Mulyany, Ratna. Islamic banking and economic growth : Empirical evidence from Malaysia. Journal of Economic Cooperation & Development. Vol 30. Issu 2. 2009.
- 15. Gokal, Hanif. Relationship Between Inflasion and Economic Growth. Working Paper of Economic Department Reserve Bank of Fiji. 2004.
- Grassa, Rihab, Kaouthar Gazdar. Financial development and economic growth in GCC countries: A comparative study between Islamic and conventional finance. International Journal of Social Economics. Vol. 41, Issue: 6, pp. 493-514. 2014.
- Gumel, Gambo Babandi, Norma MD Saad, Salina HJ Kassim Assessing. The Impact of Islamic Microfinance on Poverty Alleviation in Northern Nigeria. Journal of Islamic Economics, Banking and Finance, Vol.10, No.4, pp37-49. 2014.
- Hafnida Hafnida, Selamah Maamor, & Hussin Abdullah. An Empirical Study of the Relationship between Islamic Modes of Finance and Financial Intermediation. International Journal of Business and Management; Vol. 10, No. 7; 2015 Canadian Center of Science and Education.
- Jamel Boukhatem dan Fatma Ben Moussa. The effect of Islamic banks on GDP growth: Some evidence from selected MENA countries. Borsa Istanbul Review 18-3 (2018) 231e247 http://www.elsevier.com/journals/borsaistanbul-review/2214-8450
- 20. Mario Švigir dan Josipa Miloš. Relationship Between Inflation and Economic Growth; Comparative Experience of Italy and Austria. fip / Volume 5 / Number 2 / 2017. University College Effectus – College for Finance and Law, Trg J.F.Kennedy 2, 10000 Zagreb
- Md. Shakhaowat Hossin. The Relationship Between Inflation and Economic Growth of Bangladesh: An Empirical Analysis from 1961 to 2013. International Journal of Economics, Finance and Management Sciences. Vol. 3, No. 5, 2015, pp. 426-434.
- 22. Mohammed Yelwa, Okoroafor O.K.David, & Emmanuel Omoniyi Awe. Analysis of the Relationship between Inflation, Unemployment and Economic Growth in Nigeria: 1987-2012. Applied Economics and Finance Vol. 2, No. 3; August 2015 ISSN 2332-7294 E-ISSN 2332-7308 URL: http://aef.redfame.com
- 23. Nur Diyana Najwa Affendi dan Mansur Masih. Is infation targeting compatible with economic growth? Korean experience based on ARDL and NARDL. Munich Personal RePEc Archive MPRA Paper No. 91519, https://mpra.ub.uni-muenchen.de/91519/

- 24. OJK. 2018. Sejarah Perbankan Syariah. (https://www.ojk.go.id/id/kanal/syariah/ tentangsyariah/ Pages/Sejarah Perbankan-Syariah.aspx, diakses pada tanggal 10 Nop. 18).
- 25. OJK. Statistik Perbankan Syariah (SPS). Jakarta. 2018.
- Prastowo. (2018). Pengaruh pembiayaan perbankan syariah terhadap pertumbuhan ekonomi: Studi emperis di 13 negara. Haluya: Indonesia Journal of Multidisciplinary Islamic Studies. 2 (1), January.
- Rahman, M Mizanur. Islamic micro-finance programme and its impact on rural poverty alleviation. International Journal of Banking and Finance, Vol.7, Issue:1, No.1 pp.119-138. 2010.
- Rahman, M. Mizanur and Fariduddin Ahmad. Impact of microfinance of IBBL on the rural poor's livelihood in Bangladesh: an empirical study. International Journal of Islamic and Middle Eastern Finance and Management, Vol.3 Issue:2, pp.168-190. 2010. Raja Gradindo Persada. 2013.
- Robert J. Barro "Inflation and Economic Growth" Annals of Economics And Finance Journal Vol 14 Issue 1, 2013 page 85.
- Ruzima, Martin and Veerachamy, P. Impect of Implation on Economic Growth : A Survey of Literature review. Journal of Golden Research Thoughts, Vol 5. Issue 10. 2016
- Saida Daly dan Mohamed Frikha. Banks and economic growth in developing countries: What about Islamic banks? Cogent Economics & Finance, ISSN 2332-2039, Taylor & Francis, Abingdon, Vol. 4, Iss. 1, pp. 1-26, http://dx.doi.org/10.1080/23322039.2016.1168728
- 32. Sakai, Minako. Growing together in partnership: Women's views of the business practices of an Islamic Savings and Credit Cooperative (Baitul Maal wat Tamwil) in Central Java, Indonesia. Women's Studies International Forum, Vol.33, Issue:4, pp.412–421. 2010.
- Salhab, A. (2013). Pengaruh inflasi, jumlah tenaga kerja, dan pengeluaran pemerintah terhadap pertumbuhan ekonomi Bali. E-Journal Ekonomi Pembangunan. 2 (1), Januari.
- Sergey Blinov. Inflation and economic growth. Journal of Economics Library Volume 4 September 2017 Issue 3 www.kspjournals.org
- 35. Serhat Yüksel dan İsmail Canöz. Does Islamic Banking Contribute to Economic Growth and Industrial
- 36. Shahbaz, Muhammad, Saleheen Khan, Mohammad Iqbal Tahir. The dynamic links between energy consumption, economic growth, financial development and trade in China: Fresh evidence from multivariate framework analysis. Energy Economics. Vol 40. Pp. 8–21. 2013.
- Shirazi, Asim Shah. Targeting and Socio-Economic Impact of Microfinance: A Case Study of Pakistan. Islamic Economic Studies, Vol.20, No.2, pp 1-28. 2012.
- Sweidan, O. D. Does Inflation Harm Economic Growth in Jordan? An Econometric Analysis for the Period 1970-2000. International Journal of Applied Econometrics and Quantitative Studies, Vol. 1-2, pp. 41-66. 2004.
- Tabash, M., I. & Dhandar, R., S. (2014). Islamic banking and economic growth: An emperical evidance from Qatar. Journal of Applied Economics and Business. 2 (1), March.
- Usman, Abubakar Sadiq and Rosmaini Tasmin. The Role of Islamic Micro-finance in Enhancing Human Development in Muslim Countries. Journal of Islamic Finance, Vol.5 No.1 pp 053–062. 2016.
- Widiyanto bin Mislan Cokro Hadisumarto Abdul Ghafar B. Ismail. Improving the effectiveness of Islamic microfinancing. Humanomics, Vol.26, Issue:1 pp. 65–75. 2010.
- 42. World Bank. Social Capital, Empowerment, and Community Driven Development .http://info.worldbank.org/etools/bspan/PresentationVie w.asp?PID=936&E ID=482, 11 Mei 2005.
- 43. Yasir Ali Mubarik. Inflation and Growth: An Estimate of the Threshold Level of Inflation in Pakistan. SBP Research Bulletin, vol. 1, 35-44. 2005.