

HOW WOULD MILLENIAL INVESTORS IMPACT ECONOMIC GROWTH IN INDONESIA?

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ABSTRACT

Economic growth is closely related to increasing the production of goods and services in community economic activities. Realizing economic growth requires substantial costs, so the way to achieve economic growth is to increase investment. This study aimed to determine the effect of millennial investors, investment, e-money, inflation, and interest rates in the short, medium, and long term on economic growth in Indonesia. This study uses the VAR technique using the Eviews 10.0 application. Methods and analysis techniques are carried out with the following stages: VAR Model, Impulse Response Function (IRF) model, and Forecast Error Variance Decomposition (FEVD) Model with Assumption Test. The results show that the investment itself recommends short-term investment. In contrast, the other variables, namely Millennial investors, E-money, GDP, Inflation, and Total Investment, do not respond at all, where the response of these variables only appears in the second period. In the medium term, recommended investment itself. Other variables that have the most considerable influence on investment as a policy variable other than the investment itself are Total Investment, then Inflation, Millennial Investors, GDP, and E-money. In contrast, the minor influencing investment is GDP. In the long run, they were recommended by the investment itself.

Keywords: Millennial Investors, Investment, Economic Growth

INTRODUCTION

Economic development is an essential part of national development. One of the critical benchmarks in determining the success of economic development is economic growth which describes the real impact of the development policies implemented. Economic growth is closely related to increasing the production of goods and services in the community's economic activities. Realizing economic growth requires substantial costs, so achieving economic growth increases investment (bappeda.bulelengkab.go.id, 2017).

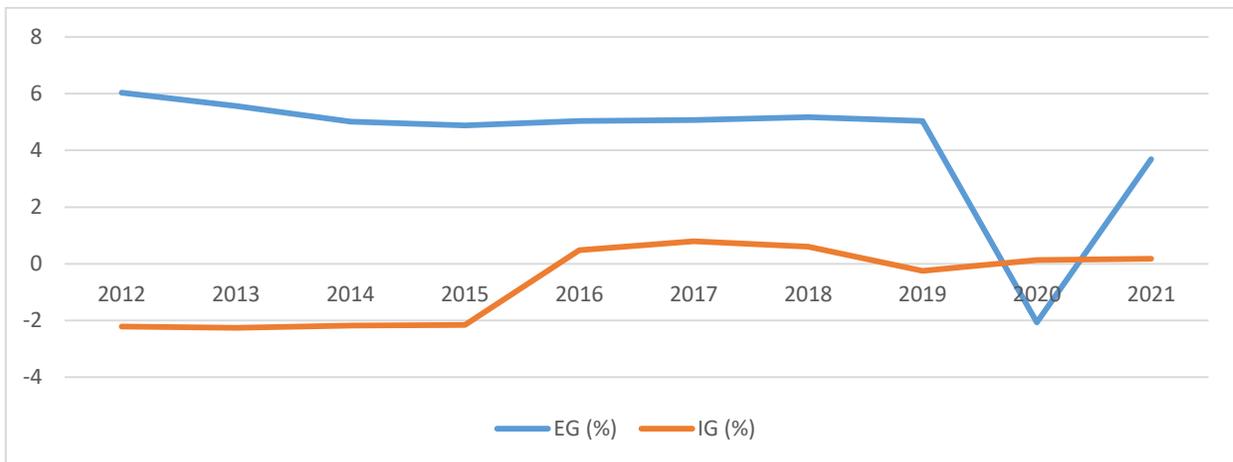
Economic growth, according to Neo-Classical Economic Growth Theory, cannot be separated from three main factors or components, namely (1) capital accumulation, (2) population and labor force growth, and (3) technological progress. Provision of capital accumulation is obtained from savings and investment (investment). Investment funds can be obtained from the government, the public (private), foreign loans, and foreign private investment (Sukirno, 2011).

Investment is closely related to economic growth. Increased investment can increase production capacity, which is expected to produce output and added value to increase economic growth. The increase in production capacity can be obtained through private investment (Private Investment), which is commonly referred to as domestic investment (PMDN) or foreign investment called Foreign Investment (PMA) (Sulistiawati, 2012). As for the discussion of this research, the researcher will only focus on the overall investment, namely the total of Indonesian PMDN and PMA.

The region's success in increasing the attractiveness of investment depends on the ability of the region to formulate policies related to investment and the business world. It is also important to note that in the effort to attract investors, besides conducive macroeconomic conditions, human resources and infrastructure development in a broad sense are also important. In addition, the ability of the region to find factors that can be used as a measure of the competitiveness of the regional economy against other regions is also crucial to increasing its attractiveness and winning a competition. One of the factors in increasing regional development is the availability of capital in the form of investment. The absence of capital in development is an inhibiting factor for economic growth (setneg.go.id, 2019).

Indonesia is a country that has considerable economic potential when compared to other countries. Indonesia is also inseparable from economic problems in general, such as inflation, high unemployment and income distribution problems, and the growing number of poor people.

Economic indicators of a country can be described through GDP (Gross Domestic Product) at constant prices, so it can be said that the economic growth rate in Indonesia can be reflected in Indonesia's Gross Domestic Product. The following graph shows Economic Growth and Investment in Indonesia from 2012 to 2021.



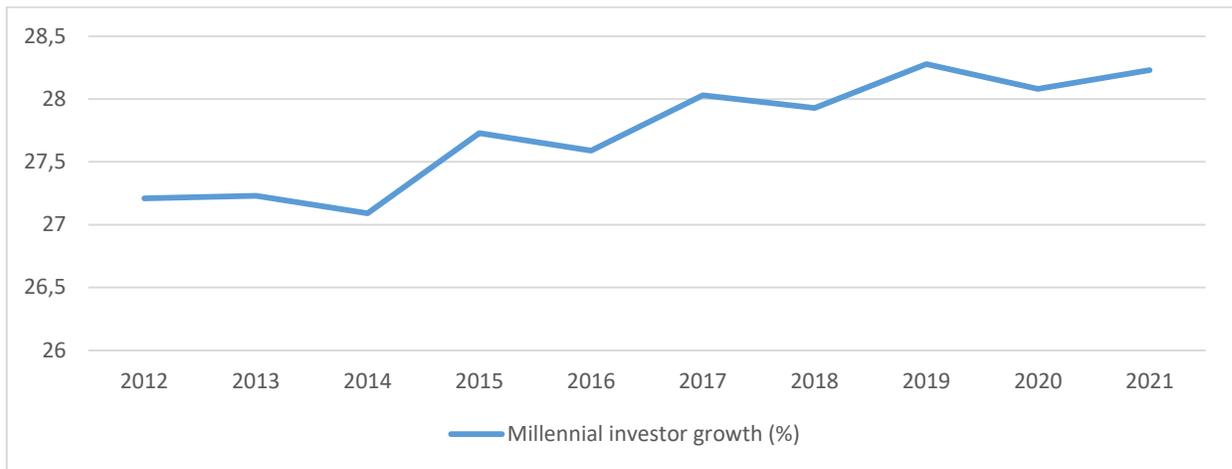
Source: BPS (bps.go.id, 2021)

Figure 1. Economic Growth and Investment Growth in Indonesia, 2012-2021

From the figure above, it can be seen that the value of economic growth from 2012-2021 continues to increase. In 2020, the value of economic growth decreased to -2.07; this shows that economic growth in Indonesia decreased due to the COVID-19 pandemic. So that the economy in the market is disrupted, many employees are laid off, and people's purchasing power decreases.

To grow the economy because investment activities are one of the strategic activities to spur increased production that has implications for improving the economy. Investment is the expenditure of companies and the government to buy authentic capital goods to establish new companies and expand existing businesses to obtain profits more significant than the capital costs incurred to invest.

The following is the development of millennial investors from 2012-2021 obtained from the Indonesia Central Securities Depository (KSEI):



Source: KSEI (ksei.co.id, 2021)

Figure 2. Millennial Investor Growth in Indonesia, 2012-2021

One of the factors that cause millennial investors to invest is the ease of digital transactions. Currently, there are various types of digitalization of financial transactions, one of which is e-money. E-money is an electronic payment instrument where the value of money used in transactions is stored in electronic media. The e-money application uses smart card technology.

LITERATURE REVIEW

Millennials and Investment

According to the generation grouping in The Millennial Generation Research Review conducted by the National Chamber Foundation, millennials were born between 1980 and 1999 (Statistik, 2018). Millennial generation is a generation that evolved and grew from the development of computers and the internet. This makes it easier for millennials to access and learn from funding or finance and make better investment decisions (Putri & Tasman, 2019).

Innovations in the capital market sector support the millennial generation's technological sensitivity. Securities companies then compete to offer convenience in accessing and transacting in the Indonesian capital market. In the past, stock account creation was done directly face-to-face, so now many securities companies make it easy to open stock accounts online (djkn.kemenkeu.go.id, 2021).

The 2020 Population Census recorded the millennial generation in the second position with the most dominant population, reaching 25.87 percent of the population. The characteristics of the millennial generation, who are technology literate, and the ease of investing in the capital market make the position of the millennial generation relatively dominant in the Indonesian capital market. It is stated in a publication by the Indonesian Central Securities Depository (KSEI). Regarding investor demographics, as of September 2021, KSEI recorded the dominance of millennial investors, which amounted to 59.23 percent of the total investors in Indonesia.

Figures in the demographics show that millennials tend to have good financial literacy. However, compared to the total number of millennials in Indonesia, only about 3 percent of millennials have done investment activities. Thus, in general, the millennial generation in

Indonesia still needs good education about investment so that the number of millennial investors can grow in the future (Helvira, 2022).

The 3 percent number of millennials who invest is relatively low (djkn.kemenkeu.go.id, 2021). Millennials need to realize the importance of improving welfare in the present, especially future welfare. Millennials need awareness to protect their current assets from the decline in wealth caused by inflation.

In addition to inflation factors and increasing asset values, millennials can make investments to accelerate financial goals. Millennials need to set clear personal financial goals, such as financial freedom in retirement. In retirement, millennials no longer have a source of income in the future. However, through investments made during youth, the necessities of life in retirement can be appropriately met with the returns on investments made so far. Even so, millennials are usually more likely to invest in companies with a clear mission, such as hedge fund products and services. Therefore, millennials are more likely to participate in the stock market (Mulyantini, 2018)

METHODS

Data

This study uses secondary data with a period starting from 2012 to 2021. The data are sourced from the Central Bureau Statistics (BPS), Bank Indonesia, and the Indonesian Central Securities Depository (KSEI). The variables used are the number of millennial investors, investment growth, inflation rate, interest rate, e-money transaction volume, and economic growth.

Estimation Technique

The estimation technique of this research uses Vector Autoregression (VAR) analysis, the Impulse Response Function (IRF) model, and the Forecast Error Variance Decomposition (FEVD) model. The assumption tests are stationarity, cointegration, structural, and optimal lag.

RESULTS AND DISCUSSION

Stationary Test

The result of the Augmented Dickey-Fuller test is as follows:

Table 1. ADF Test at Level

Variables	ADF	t-statistic	Prob.	Conclusion
INV	-3.5155	-1.432	0.0000	Stationer
INVMIL	-3.5155	-5.924	0.0000	Stationer
E-MONEY	-3.5155	-1.752	0.0005	Stationer
INF	-3.5155	-4.690	0.0002	Stationer
SB	-3.5155	-4.411	0.0006	Stationer
GDP	-3.5155	-1.869	0.0000	Stationer

Source: Output Eviews 10.0

Cointegration Test

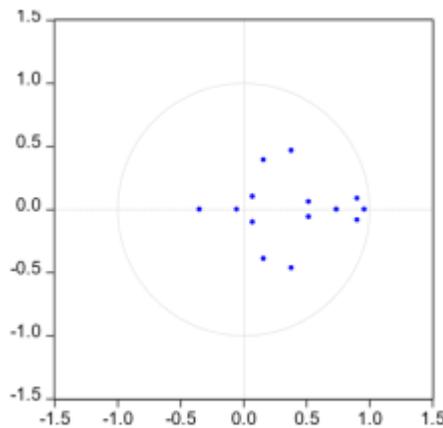
The results of the Johansen cointegration test are as follows:

Table 2. Cointegration Test

No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.
None *	0.506275	165.7731	125.6154	0.0000
At most 1 *	0.403242	111.4283	95.75366	0.0027
At most 2 *	0.308952	71.67758	69.81889	0.0353
At most 3	0.232992	43.22251	47.85613	0.1272
At most 4	0.159167	22.79760	29.79707	0.2562
At most 5	0.113174	9.448713	15.49471	0.3255
At most 6	0.002601	0.200519	3.841466	0.6543

Source: Output Eviews 10.0

Structural Lag Stability Test VAR



Source: Output Eviews 10.0

Figure 3. Structure Lag Stabilization

The image above shows the roots point in a circle line. The results of the model specifications formed using Roots of Characteristic Polynomial, and Inverse Roots of AR Characteristic Polynomial are stable. Lag stability is met.

VAR analysis results

Table 3. VAR Results

Variable	Greatest Contribution 1	Greatest Contribution 2
INV	INV _{t-1}	GDP _{t-1}
INVMIL	GDP _{t-1}	INF _{t-1}
E-MONEY	GDP _{t-1}	SB _{t-1}
INF	INF _{t-1}	INV _{t-1}
SB	INV _{t-1}	GDP _{t-1}
GDP	GDP _{t-1}	INV _{t-1}

Source: Output Eviews 10.0

Impulse Response Function (IRF) Test

The results of the IRF test for INV variables are as follows:

Table 4. IRF test for INV

Variables	Short-term	Mid-term	Long-term
INV	+	+	+
INVMIL	+	-	-
E-MONEY	+	-	-
INF	+	+	+
SB	+	+	+
GDP	+	-	-

Source: Output Eviews 10.0

Based on the table above, it is known that the increase in investment was responded positively in the short term, medium term, and long term by the investment itself. Moreover, positive responses are only in the short term by millennial investors, E-money, Inflation, JUB, GDP, and per capita income only. In contrast, negative responses in the medium and long term are Millennial Investors, E-money, and GDP, and negative responses in the long term by GDP.

The results of the IRF test for INVMIL variables are as follows:

Table 5. IRF test for INVMIL

Variables	Short-term	Mid-term	Long-term
INV	+	-	+
INVMIL	+	+	+
E-MONEY	+	+	-
INF	+	+	+
SB	+	-	-
GDP	+	-	+

Source: Output Eviews 10.0

Based on the table above, it is known that the increased investors' millennials responded positively in the short, medium, and long term millennial investors themselves—furthermore, the negative response only in the medium term by Investment and Total Investment. In the long term, E-money and interest rates responded negatively. Meanwhile, inflation and GDP responded positively in the medium and long term.

The results of the IRF test for E-MONEY variables are as follows:

Table 6. IRF test for E-MONEY

Variables	Short-term	Mid-term	Long-term
INV	+	-	-
INVMIL	+	+	+
E-MONEY	+	+	+
INF	+	+	+
SB	+	-	-
GDP	+	-	+

Source: Output Eviews 10.0

Based on the table above, it is known that the increase in E-money was responded to positively in the short term, in the medium term, and in the long term by E-money itself. Then the medium-term positive response by GDP. In the long and medium term, investment and interest

rates responded negatively. Meanwhile, millennial investors responded positively to inflation and GDP in the medium and long term.

The results of the IRF test for GDP variables are as follows:

Table 7. IRF test for GDP

Variables	Short-term	Mid-term	Long-term
INV	-	+	+
INVMIL	-	-	-
E-MONEY	-	-	-
INF	+	+	+
SB	+	-	+
GDP	+	-	+

Source: Output Eviews 10.0

Based on the table above, it is known that the GDP increase was responded to positively in the short, medium, and long term by the GDP itself. Positive response in the medium to long term by Investment and Inflation. Furthermore, it was responded negatively in the medium and long term by millennial investors, E-money, and GDP. Furthermore, it was responded negatively in the medium term by the amount of investment and in the long term by the amount of investment itself.

The results of the IRF test for INF variables are as follows:

Table 8. IRF test for INF

Variables	Short-term	Mid-term	Long-term
INV	-	-	+
INVMIL	-	-	-
E-MONEY	+	-	-
INF	+	-	-
SB	+	-	+
GDP	+	-	+

Source: Output Eviews 10.0

Based on the table above, it is known that the increase in inflation was responded to positively in the short term and negatively responded in the medium and long term by inflation itself. In the medium and long term, millennial investors responded negatively to e-money, inflation, and GDP. In the medium term, GDP responded positively, and in the medium term, investment responded negatively. Then responded positively in the long term by the Investment variable.

CONCLUSION

Based on the results above, it can be concluded that the most considerable contribution to investment is the investment amount for the previous year and GDP for the previous year. The variable that contributes the most to millennial investors is GDP in the previous period and the second most significant contribution is inflation in the previous year. The most significant contribution to E-money is the GDP of the previous year. Then the following year's contribution is the interest rate of the previous year. The variable that contributes the most to inflation is the inflation itself for the previous year and then the investment amount for the previous year. The

most considerable contribution to Total Investment comes from the variable investment amount for the previous year, followed by Per capita Income for the previous year. The most significant contribution to GDP is GDP itself in the previous year and then Total Investment in the previous year.

Furthermore, the Impulse Response Function analysis results show that in the short term (period 1), the investment is positive, namely above the average, and all other variables are not responded to. In the medium term (period 5), one standard deviation of positive investment is responded positively by inflation and the amount of investment. Then it was responded negatively by millennial investors, E-money, and GDP. In the long term (period 10), one standard deviation from positive investment is responded positively by Inflation, Total Investment. Then it was responded negatively by millennial investors, E-money, and GDP.

REFERENCES

- bappeda.bulelengkab.go.id. (2017). <https://bappeda.bulelengkab.go.id/informasi/detail/artikel/artikel-pembangunan-pertumbuhan-ekonomi-53>.
- bps.go.id. (2021). <https://www.bps.go.id/>.
- djkn.kemenkeu.go.id. (2021). <https://www.djkn.kemenkeu.go.id/kpkn-lhokseumawe/baca-artikel/14399/Milenial-dan-Investasi-Part-1.html>.
- Helvira, R. (2022). PENGARUH FINANCIAL LITERACY TERHADAP KEPUTUSAN INVESTASI GENERASI MILENIAL DI KOTA PONTIANAK. *Jurnal Ekonomi dan Bisnis*, 9(2), 402-410.
- ksei.co.id. (2021). <https://www.ksei.co.id/>.
- Mulyantini, S. (2018). *Feb.upnvj.ac.id*.
- Putri, I., & Tasman, A. (2019). Pengaruh Financial Literacy dan Income terhadap Personal Financial Management Behavior pada Generasi Millennial Kota Padang. *Jurnal Kajian Manajemen dan Wirausaha*, 1(1).
- setneg.go.id. (2019). setneg.go.id/baca/index/investasi_dan_indonesia_maju.
- Statistik, B. P. (2018). *Statistik Gender Tematik: Profil Generasi Milenial Indonesia*. Kementerian Pemberdayaan Perempuan dan Perlindungan Anak.
- Sukirno, S. (2011). *Makroekonomi: Teori Pengantar* (3rd ed.). Jakarta: PT. Raja Grafindo Persada.
- Sulistiawati, R. (2012). Pengaruh Investasi terhadap Pertumbuhan Ekonomi dan Penyerapan Tenaga Kerja Serta Kesejahteraan Masyarakat di Provinsi di Indonesia. *Jurnal Ekonomi Bisnis dan Kewirausahaan*, 3(1), 29-50.