

# Investment in Technology Development and Investment in the Business Sector in Enhancing Economic Growth, Inclusion of Domestic and Export Markets

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## Abstract

This study aims to examine investment in technology development and investment in the business sector in increasing economic growth, inclusion of domestic and export markets. This study uses secondary data from world banks and processed regression using the moving average autoregression method with the study period from 2000 to 2019. We find that Indonesia's economic growth is supported by informal businesses or micro, small and medium enterprises that market their products domestically with Indonesian residents. very many and abroad where both domestic and domestic and foreign markets both contribute to Indonesia's economic growth.

**Keywords:** Technology, Indonesia, Market

**JEL Classification:** C0, J24, J64

## Background

In today's digital and global era, competition does not only exist in the domestic market but also in the international market. Indonesia is a country with a large population. Of course, with a large population it has a large domestic market absorption. The absorption of the domestic market creates demand that stimulates investors from abroad to invest in the business sector. On the other hand, domestic entrepreneurs and investors also responded with the same response. So that there is global competition in the domestic market (Hiebert,2020).

A large domestic market that encourages the entry of foreign investors along with technology from abroad resulting in technology adaptation and technology investment, either in the form of developing existing technology or importing technology from abroad (Chang & Vo,2020).

Global competition in the domestic market encourages domestic production as well as seeking new markets abroad so that exports occur. With the global economy, exports and imports are inevitable, resulting in net exports which are the difference between exports and imports (Devereux et al,2021).

Global competition which involves domestic economic activities and domestic production has an impact on economic growth and competition itself creates inclusion in the domestic market and export markets. This study aims to examine investment in technology development and investment in the

business sector in increasing economic growth, inclusion of domestic and export markets (Silveira & Kovacic,2019).

### Literature review

In the digital era, technology development has become a necessity for companies to increase competitiveness. Technology development is intended to increase the quality and speed of production so that it can produce better and faster products. Increased production is also carried out through investment in the business sector by adding new production units and expanding the production capacity of existing business units (Karabegović,2019).

The increase in production and collective company performance on a national scale encourages an increase in gross domestic product which is an indicator of economic growth. Production results in the form of products, both goods and services, are sold in the domestic market and the international market, thus forming the inclusion of the domestic and export markets. Both the domestic and export markets have different demands and both absorb production output. Absorption of domestic and export markets creates demand which stimulates production (Kellermann,2019).

### Research Method

This research studies technology development investment and investment in the business sector in increasing economic growth, domestic and export market inclusion. This study uses secondary data from world banks and processed regression using the moving average autoregression method with the following equation:

$$GDP_t = C_t + \beta_1 TI_{t1} + \beta_2 I_{t2} + \beta_3 CO_{t3} + \beta_4 NX_{t4} + e_t$$

Where,

GDP = Gross Domestic Product

C = Constant

IT = Technology Development Investment

I = Investment in the Business Sector.

Co = Domestic Market Inclusion

Nx = Export Market Inclusion

e = Error Term

All financial data is calculated in USD,

### Results and Discussion

The estimation results are as follows:

$$GDP = -29753931988.3 + 1.6567727596*CO - 3.23719142059*I + 0.0300926426771*NX - 12.0042231211*TI$$

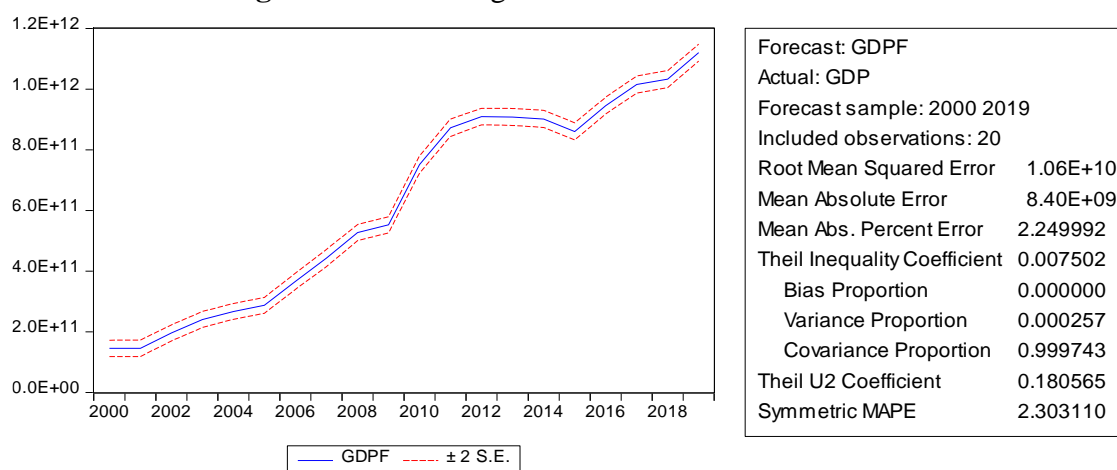
From the estimation results, domestic (Co) and export (Nx) market inclusion is positively related to Indonesia's gross domestic product (GDP) as an indicator of Indonesia's economic growth. Meanwhile, Investment in Technology Development (IT) and Investment in the Business Sector (I) are negatively related to gross domestic product (GDP). This shows that both the domestic market and the export market contribute to Indonesia's economic growth. Meanwhile, investment in technology development (IT) and investment in the business sector (I) is only controlled by conglomerate companies where the Indonesian economy is largely supported by informal businesses. Table 1 illustrates the estimation results as follows:

**Table 1.** Estimation Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2.98E+10	1.04E+10	-2.852317	0.0121
CO	1.656773	0.040281	41.13003	0
I	-3.237191	1.400726	-2.311082	0.0355
NX	0.030093	0.357551	0.084163	0.934
TI	-12.00422	6.362571	-1.886694	0.0787
R-squared	0.998973	Mean dependent var		6.24E+11
Adjusted R-squared	0.9987	S.D. dependent var		3.39E+11
S.E. of regression	1.22E+10	Akaike info criterion		49.50596
Sum squared resid	2.25E+21	Schwarz criterion		49.75489
Log likelihood	-490.0596	Hannan-Quinn criter.		49.55456
F-statistic	3648.914	Durbin-Watson stat		0.976918
Prob(F-statistic)				0

Based on the estimation results described in Table 1., it can be seen that the R-square is quite high, namely 0.998973 so that the quantitative calculation results show a 99% level of truth. Figure 1. Shows the forecasting of economic growth in Indonesia

**Figure 1.** Forecasting Economic Growth in Indonesia



Source: Author Computing

From the forecasting results, it can be seen that economic growth in Indonesia is experiencing very rapid growth by taking into account the Investment in Technology Development and Investment in the Business Sector in Increasing Economic Growth, Inclusion of Domestic and Export Markets in the process of building forecasting economic growth. Based on the results of estimation and forecasting, it

can be seen that Indonesia's economic growth is supported by informal businesses or micro, small and medium enterprises that market their products domestically with a very large population of Indonesia and abroad where both domestic and domestic and foreign markets both contribute on Indonesia's economic growth.

## **Conclusion**

Indonesia's economic growth is supported by informal businesses or micro, small and medium enterprises that market their products domestically with a very large population of Indonesia and abroad where both domestic and domestic and foreign markets both contribute to Indonesia's economic growth.

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