

Contribution of Real Estate Activities and Financial/Insurance Industry Activities to the Formation of Gross Domestic Product

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Abstract

This research examines and proves the contribution of real estate activities and financial and insurance industry activities to the formation of Indonesia's Gross Domestic Product in 2000-2017. The issue that will be discussed is about the variables that influenced the formation of Indonesia's Gross Domestic Product in 2000-2017. The purpose of this study is to prove the influence of the contribution of real estate activities and financial and insurance industry activities to the formation of Gross Domestic Products in Indonesia. To analyze and prove the hypothesis an empirical test was carried out in the form of Q Square prediction with Smart PLS 3.1 on the magnitude of the influence of the activity sub-sector. The method used in data collection is a combination of secondary data derived from Asia Development Bank data. The method used to analyze data is the time series data method. The results showed that Real Estate Activities is an independent variable that does not have a positive and significant effect on the formation of a total Gross Domestic Product. It can be seen from the statistical t value of 1,800 > from the t table value of 1,964 and this can be proven by the original sample value of 0.073 and the significance of 0.073 > 0.05 which means that Real Estate Activities has no positive effect and significant to the formation of total Gross Domestic Product. Variable Financial and Insurance Activities are independent variables also do not have a positive and significant effect on the formation of total Gross Domestic Product. This can be seen from the statistical t value of 0.401 > from the t table value of 1.964 and this can be proven by the original sample value of 0.689 and no significance of 0.005 = 0.05 which means that Financial and Insurance Activities have no effect positive and significant towards the formation of total Gross Domestic Product.

Keywords: real estate activities, financial and insurance industry, the formation of Indonesia's gross domestic product

1. Introduction

Prospects and developments Property investment in Indonesia is predicted to experience a rapid increase. The Indonesian Real Estate Association (REI) revealed that the property business growth in Indonesia could still experience an increase of 20% -30%. In Indonesia, still need millions of decent houses. Therefore, there are many investors who seize the opportunity to take a lot of profit, namely by investing in property in strategic locations.

One of the growth factors of property investment in Indonesia is the completion of the election celebration. The realization of investment or direct investment will slow down due to the holding of the 2019 legislative and presidential elections. This is because many entrepreneurs are waiting and delaying their investments. The investment growth cycle always slows down in the political year. Entrepreneurs tend to delay investing while waiting for the results of the election. The election results will influence government policy in the next 5 years, including in terms of business and other economic activities. Because usually after the implementation of the agenda popping up infrastructure development projects. This includes housing construction projects. Its development is seen from other factors that also affect the property business in Indonesia is the number of consumers who are interested in cheap Down Payment (DP). Indirectly, this DP determination also affects property demand. So it is not surprising that developers who offer low-cost DP with all the conveniences. In carrying out investment property, the risk of experiencing bankruptcy or loss is very small. When compared with other types of investments, such as investment stocks or deposits. Besides having a small risk, to conduct property investment prospects in Indonesia also does not require sophisticated knowledge. Only special knowledge is needed to understand it as in other investment

instruments. This can be seen from the history of property development in Indonesia. So far there has never been a developer or developer who offers a decrease in the price of property, especially homes.

In addition, the Financial Services Industry Sector showed stable conditions with intermediation performance at a positive level. Despite the increased pressure on global markets, the risk profile of the financial services sector is generally well managed. The adequacy of capital and liquidity levels of the domestic Financial Services Institution (OJK) contributed to the resilience of the Indonesian economy amid increasing pressure on the financial markets. In the future, the financial services industry will develop with the adoption of Financial Technology (Fintech) and the granting of licenses to operate in 35 financial industry service companies other than banks. This is a fundamental question whether the permit is appropriate. Does the operation of Fintech contribute to the Indonesian economy. The hope can play a major role in improving the Indonesian economy. Besides the development of the insurance industry also played a role in the development of the economy in Indonesia. Researchers test it in the long run so it is interesting to review the existing phenomena. Liu (2019) in his research entitled *FinTech and Its Disruption to Financial Institutions* concluded that FinTech's activities had an impact on Financial Institutions and also had an impact on economic development. In addition, Idris's research in Malaysia (2019) also showed that there was something positive about the Malaysian economy over the Financial Industry revolution which entered the category of the industrial revolution 4.0. This industrial revolution is the latest technological trend in such a sophisticated manner, which has a major influence on the production process in the manufacturing sector, trade and financial sectors, such as the use of artificial intelligence (AI), e-commerce, big data, finTech, and shared economies. If you pay attention to the presence of the 4.0 industrial revolution in the financial industry, it can be seen in the form of financial technology (FinTech), which has become increasingly popular lately.

Research by Liao et al (2019) concluded that in the Chinese region there was an efficiency in the financial system due to the implementation of Internet Finance. It is also a question whether there are positive impacts or negative impacts, especially on a small scale, also a background that strengthens this research. Besides this research is also to strengthen the research conducted by Bernard (2019) states that a movement that seeks to open access to banking services to the broadest possible extent to the public, especially those who have not yet utilized banking services. Elsheshtawy's research (2019) states that the case in Dubai caused urbanization where, due to the 2008 financial crisis, the city was abandoned and expatriates fled. After the crisis the infrastructure grew well. Fang et al (2019) tested factors that could affect the performance of the Real Estate Investment Trust (REIT) with observations in Pakistan, Malaysia, Thailand, Singapore and Hong Kong from 2008-2018 with 350 observations concluded that the Net Asset Value (NAV) as a proxy for REITs performance while internal factors are dividend yields, net income and size, external factors used are stock indexes, inflation and interest rates. The results of this research help investors and portfolio managers to broaden their market understanding of the influential factors that affect REIT performance. In addition this research was inspired by Holroyd's research (2019) stating that the financial industry and economic growth are driven from the production of digital content, words, images, videos, animations or other information of commercial value for distribution through digital means and impact on national industrial policies or strategies national innovation as a driver of economic development. Research conducted by Li et al (2019) states that the information and communication technology industry can affect the financial industry and also the economic sector through technology diffusion and information transformation. His research uses an input-output table (IO) to examine China's industrial impact and competitive advantage in 2002-2012. In addition, other similar research is Rethel and Thurbon (2019), Gholipour (2019), Nolan (2019), Janoschka et al (2019), Bouw & Thoma (2019), Zhao et al (2019), Salvati et al (2019) and Moussa et al (2019).

2. Literature Review

2.1 Financial Technology (Fintech)

Fintech is an abbreviation for the words 'financial' and 'technology', which means that it is an innovation in the field of financial services (Bernards, 2019). The innovations offered by Fintech are very broad and in various segments, from B2B (Business to Business) to B2C (Business to Consumer). Some examples of businesses incorporated in Fintech are:

1. The process of buying and selling shares,
2. Payment,
3. Lending in a peer to peer manner,
4. Funds transfer,
5. Retail investment,

6. Financial planning (personal finance),
7. Internet.
8. Communication networking.

The existence of Fintech greatly influenced the lifestyle of the economic community. The combination of effectiveness and technology has a positive impact on society at large. There are several benefits of having Fintech in the community, the first benefit being that Fintech can foster new developments in the field of technological startup that is mushrooming. This can help expand employment and increase economic growth.

2.2 Real Estate Activities

Real Estate is related to a plot of land and its environment along with existing buildings and projects on land (Cepni et al., 2020). Pavesi et al (2020) state that the real estate activities are activities that are part of the gross domestic product in a country and part of the gross regional domestic product in an area. Real estate includes all the resources on it, such as plants, minerals, water, and other immovable objects in the area (Fonseka et al., 2020). Scherthanner et al (2020) state that the real estate can be grouped into two broad categories based on their use, namely Residential real estate, which is real estate used for residences, such as flats, housing, and condominiums. Usually in residential areas there are places for small businesses such as minimarkets and home industries. Commercial real estate is this real estate that is used for commercial purposes to make a profit. For example office buildings, shops, warehouses, bonded zones, hotels, tourism areas where there are buildings.

2.3 Financial/Insurance Industry Activities

Industry is a business activity that is part of the economic growth of a country where its activities include the processing of raw materials or semi-finished goods into finished goods that provide added value for profit (Riasanow et al., 2020). Packing, assembling, assembling and repairing businesses are part of the industry. Industrial products are not only in the form of goods, but also in the form of services. Ohinata and Picchio (2020) state that the Financial Services is a term used to refer to services provided by the financial industry. Financial services are also used to refer to organizations that handle management: Investment Banks, Bank Funds, Credit Card Companies, Consumer Finance Companies and Securities and Insurance Companies. The financial and insurance industry is a service that provides various services related to money and investment. Based on a survey of financial services is the largest service with a share of 25% of the market capitalization value based on the S&P 500 survey.

2.4 The Formation of Gross Domestic Product

Scholl Schermuly (2020) explain that Gross Domestic Product is everything that is produced by society and business, including workers' salaries. GDP data is also a way to find out which economic sectors are experiencing growth or decline. Davidson et al (2020) state that in the United States, this GDP figure is calculated and announced quarterly by the Bureau of Economic Analysis (BEA), which revises the estimated up or down development of data received throughout the quarter. The amount of GDP compared to the quarter or the previous year. If GDP in the fourth quarter rose by two percent, this means that the country's economy has experienced growth of two percent throughout the fourth quarter. The GDP calculation method that uses income parameters is obtained by adding up the income of all employees, employees, company profits, copyright income, rental income and net interest income. This is called the GDP income method calculation. While other methods can be measured by the expenditure approach calculated by adding up total consumption, investment, state expenditure and net exports.

3. Method

This study uses a data analysis method using SmartPLS software version 3.0. which is run on computer media. Secondary data on the contribution of real estate activities and financial and insurance industry activities, data on the formation of Gross Domestic Product Indonesia in 2000-2017 sourced from the Asia Development Bank. The measurement model is used to test the validity and reliability, while the structural model is used to test causality (hypothesis testing with predictive models).

4. Result and Discussion

4.1 Result

4.1.1 Data Descriptive

The descriptive statistics in this study are as follows in Table 1.

Table 1. Descriptive statistics

Years	Real Estate Activities (X ₁)	Financial and insurance activities (X ₂)	GDP by industrial (Y)
2000	31.9	64.3	1389.7699
2001	38.2	75.7	1440.4057
2002	47.9	81.9	1505.21636
2003	56.6	89.8	1577.1713
2004	66.1	96.5	1656.5168
2005	81.5	110.7	1750.8152
2006	97.4	124.5	1847.1267
2007	110.2	140.6	1964.3273
2008	132.0	170.1	2082.4561
2009	145.3	184.4	2178.851
2010	198.2	239.7	6864.1331
2011	218.8	270.6	7287.6353
2012	237.9	320.5	7727.0834
2013	264.3	370.1	8156.4978
2014	294.6	408.4	8564.8666
2015	327.6	465.0	8982.5113
2016	348.3	520.9	9434.6323
2017	379.8	571.1	9912.7493
Average	170.9	239.2	4,684.6
Max	379.8	571.1	9,912.7
Min	31.9	64.3	1,389.8

Source: Results of processing with SmartPLS (2019).

Based on the Table 1, can be seen that the average value of the Real Estate Activities sector transaction is USD 170.9 billion with the minimum value of USD 31.9 billion and the highest value of USD 379.8 billion. Financial and insurance activities with an average transaction value of USD billion USD 239.2 billion with the highest value of USD 571.1 billion with the lowest value of USD 64.3 billion. The GDP by industrial (Y) with an average production value of USD 4,684.6 billion and the lowest value of USD 1,389.8 billion with the highest value of USD 9,912.7 billion.

The result of t-statistics value in the table path coefficients is presented in the following Figure 1 as a follows:

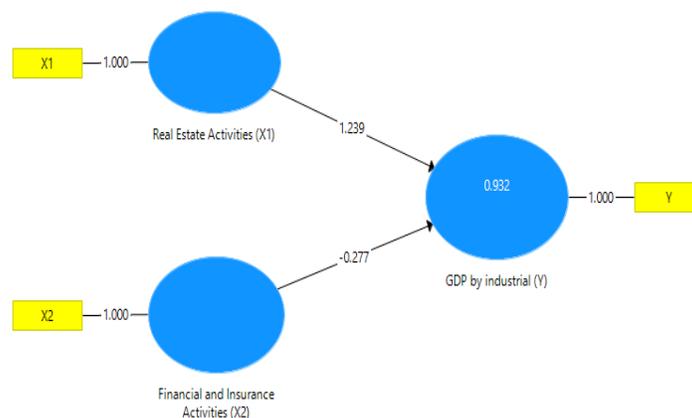


Figure 1. The overall model with coefficient

Based on the model in the Figure 1, it can be seen that both Real Estate Activities and Financial and Insurance Activities do not play a major role in the total Gross Domestic Product. The Hypothesis test results are in the following table: The statistic result of this research in the following Table 3:

Table 2. Path coefficients

	Original Sample	Sample Mean	Standard Deviation	t Statistics	p Values
Financial and Insurance Activities (X2) -> GDP by industrial (Y)	-0.277	-0.162	0.690	0.401	0.689
Real Estate Activities (X1) -> GDP by industrial (Y)	1.239	1.125	0.688	1.800	0.073

Source: PLS Output (2019).

Based on the results of the hypothesis test, it can be seen that the Real Estate Activities (X1) is an independent variable that does not have a positive and significant effect on the formation of a total Gross Domestic Product. It can be seen from the statistical t value of 1,800> from the t table value of 1,964 and this can be proven by the original sample value of 0.073 and the significance of 0.073> 0.05 which means that Real Estate Activities (X1) has no positive effect and significant to the formation of total Gross Domestic Product. The Financial and Insurance Activities (X2) variable is an independent variable and does not have a positive and significant effect on the formation of total Gross Domestic Product. This can be seen from the statistical t value of 0.401> from the t table value of 1.964 and this can be proven by the original sample value of 0.689 and no significance or less than 0.005 = 0.05 which means that Financial and Insurance Activities (X1) have no effect positive and significant towards the formation of total Gross Domestic Product.

4.1.2 Predictive Relevance

The result of Predictive Value show in Table 3 as a follows:

Table 3. The predictive relevance

	Financial and Insurance Activities (X ₂)	GDP by industrial (Y)	Real Estate Activities (X ₁)
Financial and Insurance Activities (X₂)		0.018	
GDP by industrial (Y)			
Real Estate Activities (X₁)		0.369	

Source: PLS Output (2019).

Based on the Table 3 it can be show that there is a direct relationship between each independent variable on the dependent variable.

4.1.3 Determination Coefficient Test Results

The result of Adjusted R2 as a follows:

Table 4. The determination coefficient

	R Square	R Square Adjusted
GDP by industrial (Y)	0.538	0.508

Source: PLS Output (2019).

Based on the test results of the coefficient of determination at Table 4 the value of R Square is 0.538 and the Adjusted R Square value is 0.508. Thus, the value of R Square illustrates that all independent consisting of Real Estate Activities (X_1) and Financial and Insurance Activities (X_2) variables in this study are able to represent the GDP by industrial (Y) as a dependent variable.

4.2 Discussion

The construction industry and the financial industry as one of the producers that have forward relations and links with other sectors. The dependency relationship that occurs with other economic sectors is not only static but can also be dynamic. In the sense that if there is a lot of demand for the construction sector for a construction and financial development, it will automatically move the building material/material industry, consulting services and various small/home industries, while the construction products in the form of buildings can move the sectors ahead such as manufacturing, agriculture, and other sectors which is funded by banking and finance (Indrayani *et al.*, 2019). The connection between the construction industry and other sectors is in the form of a link between the use of output from other sectors (backward linkages) and the linkage of providing inputs to other sectors (forward linkages). Inputs in the form of materials, machinery, labor, professional staff, technology, management systems and capital, are produced by sectors including: manufacturing, trade, banking education and insurance. So that the relevant government institutions such as the ministry of industry and trade, the department of education, banking, insurance. While construction output is used by other sectors, namely agriculture, transportation, energy (electricity) and services. Wibowo (2004) states that linkage relationship will build a strong correlation for the mining industry construction with other sectors.

The availability of labor in Indonesia is triggered by the high rate of population growth so that the abundant workforce is characterized by the main characteristics of not having enough expertise and cheap wages. In general, labor-intensive labor intensive policies have become very popular because they are used in government programs/donor agencies with the creation of large workers in the short term and at the same time as equal distribution of income distribution (Wibisono *et al.*, 2019). The construction sector policy also has an impact on the choice of construction work methods that do not place too much emphasis on cost effectiveness and minimal product quality. Indonesia as a developing country/agricultural country has a labor availability in the agricultural sector and at the same time will contribute to the construction sector for workers informal as unskilled laborers. Informal workers in the construction sector are mostly contributed by farmers as laborers/laborers who work on the sidelines of the planting season or when the harvest season fails and act as seasonal laborers. Although the contribution of the construction workforce itself can be lower/higher than the estimate, because The Statistical Board only counts related to construction work while many other sectors are carrying out similar construction work (buildings in the agriculture or mining sector), they are not counted.

The contribution of the real estate sector to economic growth tends to stagnate from year to year. The last three years, the portion of the property sector, which consists of construction and real estate, to gross domestic product is around 13%. The property cycle experienced by Indonesia today is still fairly reasonable. In 2013-2014 the real estate sector in Indonesia experienced a boom and if it could not be pushed it would bubble and threaten the economy. Recommendations made so that the Government and Bank Indonesia (BI) provide a variety of relaxation to the property business in the form of reduced interest rates, tax cuts, additional subsidies, and others to help him get excited again. In April 2020, property sector activities experienced challenges and decreased again due to the Corona Virus (Covid-19).

Based on the Meeting of the Board of Commissioners (RDK) of the Indonesian Financial Services Authority in December 2019 assessing the stability of the financial services sector in a safe condition with intermediation of the financial services sector posted a positive performance and risk profile of the manageable financial services industry. The indicators in the form of bank loans recorded positive growth, financing companies financing receivables increased, investment loans grew double digit, fund raising, bank third party funds (DPK) grew, this showed the positive role of financial service institutions in supporting financing the national economy where funds were collected from the financial services sector utilized by the government for development funding.

5. Conclusions

Real Estate Activities does not have a positive and significant effect on the formation of a total Gross Domestic Product. The Financial and Insurance Activities variable do not have a positive and significant effect on the formation of total Gross Domestic Product. Considering the importance of the construction sector, it is necessary to identify the main issues affecting the efficiency of the construction sector and take corrective actions to enhance economic growth and development. The contribution of the real estate sector to economic growth tends to stagnate

from year to year. Recommendations to the fiscal and monetary policy provide a variety of relaxation to the property business in the form of reduced interest rates, tax cuts, additional subsidies to help him get excited again. For the Indonesian Financial Services Authority the stability of the financial services sector in a safe condition with intermediation of the financial services sector posted a positive performance and risk profile of the manageable financial services industry.

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