THE EFFECT OF GOVERNMENT POLICY ON INFRASTRUCTURE PRIORITIES ON THE PROFITABILITY OF CONSTRUCTION COMPANIES IN INDONESIA 2011-2019

Ahmad Rifai^{1*}, Tony Irawan², and Dikky Indrawan³

- ¹ Financial Education and Training Agency, Ministry of Finance, Indonesia, and School of Business, IPB University, Bogor, Indonesia
- ² Faculty of Economics and Management, IPB University, Bogor, Indonesia
- ³ School of Business, IPB University, Bogor, Indonesia

ABSTRACT

Introduction/Main Objective: The Indonesian government's policy of prioritizing the acceleration in infrastructure development will certainly have an impact on construction companies. Background of the Problem: This research aims to determine the influence of internal and external company factors on the profitability of companies in the building construction subsector. Novelty: This research analyzes the impact of increasing the government's infrastructure budget on the profitability of building construction subsector companies. Research Method: This research uses panel data regression analysis with annual financial report data from building construction subsector companies listed on the Indonesia Stock Exchange for the period from 2011 to 2019, which is divided into the period before the infrastructure sector became the focus of development (2011 to 2014) and after (2015 to 2019). Profitability is measured using the return on assets. The external factors are measured using the infrastructure budget and inflation, while the internal factors are measured using company size, liquidity, leverage, cash turnover, working capital turnover and receivables turnover. Findings/Results: This research concludes that the infrastructure budget, company size, and liquidity do not have a significant positive effect on company profitability, while inflation does not have a significant negative effect on profitability. Furthermore, cash turnover, working capital turnover, and account receivable turnover have a significant positive effect on profitability, while leverage has a significant negative effect on profitability. Conclusion: This research shows that companies should periodically review the impact of loans and always maintain the composition of their funding, according to their needs. Meanwhile, the government needs to evaluate the auction process, and sharpen its alternative infrastructure project funding strategies.

ARTICLE INFO

Article information:

Received 8 April 2022. Received in revised form 23 November 2023. Received in revised form 20 February 2024.Accepted 15 March 2024

Keywords:

building construction; government policy; infrastructure; profitability; ROA

JEL Code:

D13, I31, J22, K31

ISSN:

ISSN 2085-8272 (print) ISSN 2338-5847 (online)

https://doi.org/10.22146/jieb.v39i3.4369

https://journal.ugm.ac.id/v3/jieb

Copyright[©] 2024 THE AUTHOR (S). This article is distributed under a Creative Commons Attribution-Share Alike 4.0 International license. Journal of Indonesian Economy and Business is published by the Faculty of Economics and Business, Universitas Gadjah Mada.

^{*} Corresponding Author at Financial Education and Training Agency, Ministry of Finance, Indonesia, and School of Business, IPB University, Bogor, Indonesia. Email: rifai.ap@gmail.com

INTRODUCTION

In 2014, there were two general elections, the legislative election on April 9, 2014, and the presidential election on July 9, 2014 (Mansur and Jumaili 2014). The presidential election was won by Joko Widodo (Jokowi), who was elected president, with Jusuf Kalla as vice president for the 2014 to 2019 term. The Jokowi/Jusuf Kalla government created policies for, and paid a lot of attention to, national infrastructure development. This was stated in the nine national development priority programs (Nawacita), which prioritized the acceleration of infrastructure development to connect the periphery with growth centers and promoted connectivity between the islands in the archipelago (BPIW, 2016). Concrete evidence of the importance of infrastructure development is that infrastructure services influence the residents' satisfaction of using local ports in Ternate, North Maluku (Fahri, 2022). Apart from that, Irawan et al. (2012) analyzed the impact of infrastructure on the Indonesian economy by introducing several types of infrastructure and discussing its impact on poverty levels. The results show that improvements to all types of infrastructure are expected to increase economic growth, increase the government's income, increase factor income, and reduce poverty levels. Increasing public works for agriculture, land transportation and telecommunications are still better options than the other options.

According to a Long-Term Development Plan (Bappenas, 2014), to support the construction sector, the government has a program to build 5,000 km of railway lines, 2,600 km of roads, 1,000 km of toll roads,49 reservoirs, 24 ports, and power plants with a combined 35,000-megawatt capacity. All of this is outlined in the national five-year plan (RPJMN 2015-2019). In one year of their leadership (2015), Jokowi and Jusuf Kalla succeeded in completing eight pending projects, including the Cikopo-Palimanan (West Java) toll road, and the Dr. Ir. Soekarno Bridge (North Sulawesi), Red and White Bridge (Maluku), Jatigede Dam (West Java), Nipah Dam (East Java), Bajulmati Dam (East Java), Sidoarjo mud handling (East Java), and construction of the Tayan Bridge (West Kalimantan) (Bappenas 2015). From 2016 to August 2019 there were 81 national strategic projects (PSN) completed. In 2020 alone, the government, through the Priority Infrastructure Acceleration Committee (KPPIP), has completed 11 PSNs during the period from January to December 4, 2020 (KPPIP, 2020).

Based on data from the Ministry of Finance (2019), the infrastructure budget from 2011 to 2019 increased every year. The increase in the realization of the infrastructure budget is since infrastructure development has become a top priority for national development (Setjen DPR RI, 2015). Fulfilling infrastructure development plans certainly involves the construction services sector in Indonesia (BPS, 2018). The construction services sector comprises construction consultancy services and construction work. Construction consultancy is a service for all or part of the activities that include the assessment, planning, design, supervision, and management of the construction of a building. Meanwhile, construction work is all or part of the activities that include the construction, operation, maintenance, demolition, and rebuilding of a building (Republic of Indonesia, 2017). Bearing in mind that physical infrastructure and facilities are the basis for the growth of sectors in national development, and the fact that construction services also provide employment, so construction services have an important role in national development (Jonudin et al., 2011). The construction services sector has a strategic position in the national economic system. Its strategic value is the link between the construction sector and the supply chain, facilities, and infrastructure for other sectors (Suraji et al., 2007).

The important role of the construction sector in national economic growth means it is necessary to pay attention to the decline in performance experienced by construction companies (Trianto, 2011). This is in line with Jokowi's policy of supporting state-owned enterprises (BUMN) through various policies that direct BUMN to invest and work on major infrastructure projects. Because the government has a strong influence on BUMN, it allows Indonesian BUMN to focus on implementing development projects (Kim, 2019, 2021). Through the involvement of BUMN, it has strengthened the capacity to absorb the state infrastructure budget, even though there are negative concerns about this strategy, such as increasing debt, and crowding out (Curristine et al., 2018). However, the performance of infrastructure development resulted in Jokowi being re-elected as president in the 2019 Election (McCawley, 2019).

How well a company performs financially can be seen through its profitability. Profitability is defined as the ability of a company to earn profits (Faoziyyah & Laila, 2020). One profitability ratio that can show a company's ability to generate profits is the return on assets (ROA). The ROA shows the profit a company generates from its assets. The greater the ROA ratio, the better the company (Putri, 2018). In Indonesia. construction services subsector companies (building construction) consist of companies/state-owned government-owned enterprises (BUM) and private companies. In Figure 1, the profits of building construction subsector companies, listed on the Indonesia

Stock Exchange (IDX) for the period 2011 to 2019, are explained.

Figure 1 shows that private building construction subsector companies experienced an increase in their net profits from 2011 to 2014. Then, in 2015, the net income of PT Acset Indonusa Tbk (ACST), PT Nusa Konstruksi Enjiniring Tbk (DGIK), and PT Nusa Raya Cipta Tbk (NRCA) experienced a drastic decline. Meanwhile, PT Total Bangun Persada (TOTL) experienced an increase in its net profit from 2015 to 2017, but this fell again in 2018 and 2019. On the other hand, BUMN companies also experienced a drastic decline in 2019. It shows that the increase in budget and infrastructure development was not matched by the profits of construction companies, especially private companies. According to the Indonesian National Construction Implementing Association (Gapensi) records, as many as 37,000 private contractor companies went bankrupt between 2015 and 2018 (Baderi, 2019).

To determine the importance of the construction sector's role in national economic growth, it is necessary to pay attention to the decline in performance experienced by construction companies (Trianto, 2011). How well a company performs financially can be seen through its profitability. Profitability is defined as the ability of a company to earn a profit (Faoziyyah & Laila, 2020). Husna and Desiyanti (2016) stated that profitability ratios include the gross profit margin (GPM), net profit margin (NPM), return on assets (ROA) and return on equity (ROE). One of the profitability ratios that can show a company's ability to generate profits is the return on assets (ROA). The ROA shows the company's profit generated by the use of its assets. The greater the ROA ratio, the better the company (Putri, 2018).





The profitability of a company can be influenced by external and internal factors (Halian, 2020). The external factors (macroeconomics) describe the economic changes affecting many households, companies, and markets (Agustina & Ardiansari, 2015). The external macroeconomic factors that are the focus of this research are the infrastructure budget and the inflation rate. An increase in the infrastructure budget, as a macroeconomic variable, can be important information for companies to take policy steps relating to their profitability. The construction services sector can be influenced by infrastructure plans and risks (Sukandar, 2019). The inflation rate is considered vital because it can affect the price of construction materials, impacting production costs in the construction sector. According to Putri (2019), inflation can cause an increase in the price of goods, causing an increase in a company's production costs.

The internal factors, often referred to as the fundamental micro factors of the company, are controllable. According to Karim et al. (2018), these factors can be grouped into company policy and performance. The company's performance factors, relating to the company's condition, can be shown in the company's financial statements. Several previous studies



o-WSKT → WIKA → PTPP → ADHI

related to the influence of internal factors on company profitability produced inconclusive results. The results of research conducted by Alfian (2016) into the effect of firm size, leverage, and liquidity on profitability showed that firm size and leverage did not affect profitability, and liquidity had a negative effect on profitability. That study's results differ from the results of Putra and Badjra's (2015) research, which found that leverage had a significant negative effect on profitability, while firm size had a negative and insignificant effect on profitability. The research results on the effects of receivables turnover and cash turnover on profitability, conducted by Eksandy and Dewi (2018) and Diana and Santoso (2016), showed that receivables turnover did not affect profitability, while cash turnover had a positive effect on profitability. This is in line with the results of research by Santoso (2013), which showed that receivables turnover had no significant impact on profitability. However, this is not in line with the results of research by Syukriadi et al. (2017), which showed that receivables turnover had a negative and insignificant effect on profitability. The research on working capital turnover on profitability, conducted by Dini et al. (2020), showed that

working capital turnover had a significant positive effect on profitability.

Based on the description above, it is crucial to examine the external and internal factors that affect the profitability of building construction subsector companies. The internal factors observed in this study are the company size, liquidity, leverage, cash turnover, working capital turnover, and receivables turnover. At the same time, the external factors used in this study are the size of the infrastructure budget and the inflation rate. The facts above are the background to this study, which aims to see the effect of infrastructure priorities on the profitability of building construction subsector companies listed on the Indonesia Stock Exchange (IDX) for the period between 2011 and 2019.

LITERATURE REVIEW

The trade-off theory, proposed by Myers (1977), states that companies will take on debt to a certain level when the tax savings from additional debt are equal to the cost of the financial difficulties. The costs of financial distress are the costs of bankruptcy and agency costs, which increase as the result of a decline in a company's credibility. In determining the optimal capital structure, the trade-off theory includes several factors, namely taxes, agency costs, and financial distress costs, while maintaining the assumptions of market efficiency and symmetric information as a balance and benefit from using debt. The trade-off theory implies that in determining the capital structure, companies with high levels of profits will try to increase their debt ratios because additional debt can reduce their taxes. On the other hand, an uncontrolled increase in debt can cause financial difficulties, due to increasingly large debt interest burdens. Meanwhile, the pecking order theory, developed by Myers and Majluf (1984), explains that the use of funding sources from

within the company is preferred over the use of other funding sources, such as debt and issuing new equity. This theory assumes that companies prefer internal sources of financing to fund their projects.

Financial performance is one measure of a company's success in a certain period, which can be used to measure itsperformance. Financial performance measurements aim to evaluate the company's efficiency and effectiveness in obtaining profits, and certain cash positions carried out by a formal business (Hery, 2015). The company's financial performance is reflected in its financial reports, in the form of a balance sheet, profit and loss, and capital transfer position reports (Sawir, 2000). Meanwhile, financial ratio analysis connects the elements in the financial reports, including the liquidity ratios, solvency (leverage), profitability, and activity, as well as other aspects of the company in the form of its financial ratios. Profitability is the net final result of various management policies and decisions, where the profitability ratio is able to show the effectiveness of the company's management. This ratio is measured using the return on assets (ROA) and return on equity (ROE) (Sawir, 2005).

The profitability of a company can be influenced by external and internal factors (Halian, 2020). The external factors (macroeconomics) are economic changes that affect society, companies and markets (Ady, 2020). These originate from outside (are external to) the company and are uncontrollable but can influence the ups and downs in company performance (Hendramiko et al. 2020). The infrastructure budget and inflation rate are factors that influence external company profitability. At the end of 2014, the government reformed its spending budget by cutting the fuel oil (BBM) subsidy budget and increasing the infrastructure development budget (Anas et al. 2016) by Rp. 49.8 trillion (Haryanto 2015). To accelerate infrastructure development, the government is trying to find creative funding schemes, including the Government and Business Entity Cooperation (KPBU)/Public Private Partnership (PPP) scheme. This scheme is an infrastructure provision and financing scheme based on cooperation between the government and private business entities (Kemenkeu, 2019). The most important success factors in implementing the PPP schemeinclude good governance, the technical feasibility of the project, the commitment of the government and private partners, appropriate risk allocation, and the sharing of experience (Chioma et al. 2023).

Government expenditure contained in the State budget (APBN) is one of the fiscal policy tools carried out by the government. The government can use it to manage the country's economy. Government spending on education, health and infrastructure is basically an investment in economic growth. The infrastructure budget is related to the signaling theory, where the government must provide signals to external parties. The presence of these signals can provide the external parties with a good understanding of what the government is doing and help to achieve their organizational goals. How can construction companies respond to policies implemented by the government, so that the companies are able to make decisions to improve their financial performance? With an increase in the infrastructure budget, the number of construction projects can increase. An increase in the number of construction projects can open up more opportunities for construction companies, so that they can increase theirprofitability. By considering the government's infrastructure priorities, it is suspected that the infrastructure budget will have a positive impact on the

profitability of companies in the building construction subsector.

Dimi and Firmansyah (2022) explained that the program to accelerate the development of the Trans-Sumatra Toll Road infrastructure had an impact on the financial performance of PT Hutama Karya (Persero). In 2015 to 2019, Persero received state capital participation (PMN), which reduced the company's solvency level. This decrease in the level of solvency indicated that there was a decrease in the proportion of debt compared to the total assets and equity. In terms of profitability, the government assignment was able to increase Hutama Karya's level of profitability. In the period before the assignment, the company's level of profitability decreased, while the period after the assignment showed an increasing level of profitability. Thus, the following hypothesis can be formulated:

H1: The infrastructure budget has a significant positive effect on profitability

Economic factors are variables borne by economic conditions, national including monetary and fiscal policies, the state of the global economy, and inflation (Buhamizo et al. 2023). The inflation rate is a macro indicator that is often used to view economic conditions, because it can provide information about the economic stability of a region (Hendramiko et al. 2020). A high level of inflation can cause an increase in the price of raw materials and various other operational costs, so that the net profit obtained becomes smaller (Darminto, 2010). Based on the results of research conducted by Istyawati and Purwohandoko (2019), Imaama (2019), and Muhaemin (2016), they all state that inflation has a significant negative effect on profitability. This can happen when there is an increase in inflation, as production costs also increase. This is in line with Rukman (2019), who explains that inflation is a condition characterized by an increase in the price of goods, or a decrease in the value of the currency in circulation. For construction companies, rising inflation can cause material prices and production costs to increase, which can lead to a decrease in their profitability. Thus, the following hypothesis can be formulated:

H2: Inflation has a significant negative effect on profitability.

Meanwhile, the internal factors that influence profitability are company size, liquidity, leverage, cash turnover, working capital turnover, and receivables turnover. This is in accordance with research conducted by Eksandy & Dewi (2018), Syukriadi et al. (2017), Santoso (2013), Diana and Santoso (2016), and Alfian (2016), which studied the variables that influence profitability.

Dewi and Abundanti (2019), and Ambarwati et al. (2015) showed that company size has a significant positive effect on company profitability. The more the company's assets are maximized, the higher the profit that will be obtained, because the company's assets are used by the company for its operational activities, which are aimed at generating profits. The influence of company size on profitability is related to the pecking order theory, which has a preference for using internal funding sources to fund projects. In this research, company size is calculated from the natural logarithm of company assets. With this theory, larger companies (with larger assets) have a greater ability to fund their projects using the assets they own. This shows that the larger the company is, the more opportunities the company has to generate profitability. Furthermore, increasing company size provides opportunities for greater profitability (Alduais et al., 2022a). Likewise, Lim and Rokhim (2021) explored that the ROA is

influenced significantly and positively by both firm size and market power. Thus, the following hypothesis can be formulated:

H3: Company size has a significant positive effect on profitability

Liquidity is one of the factors that can influence the level of profitability (Eksandy and Dewi 2018). Liquidity is the company's ability to fulfill its financial obligations, which must be met as soon as possible (Oktavianti and Kurnia 2018). Istyawati and Purwohandoko (2019) explaint hat liquidity had a positive effect on the profitability of property, real estate and building construction sector companies listed on the IDX for the 2014 to 2017 period. Santini and Baskara (2018), and Aldboush et al. (2023), also explain that liquidity has a positive effect on profitability. The liquidity ratio describes acompany's ability to meet its short-term obligations (Padangaran, 2016). In this research, liquidity is proxied by the current ratio (CR). The current ratio is a value that shows the availability of current assets to meet current obligations. Hence, the higher the CR value, the higher the profitability. Thus, the following hypothesis can be formulated:

H4: Liquidity has a significant positive effect on profitability

The choice of the financial structure is a problem that concerns the composition of funding, which determines how much debt or financial leverage a company will use to fund its assets. Leverage is a company's ability to fulfill all its obligations, both long-term and short-term (Alfian, 2016). The level of leverage shows acompany's ability to settle all its obligations to other parties (Santioso and Chandra, 2012). In this research, leverage is proxied by the debt to equity ratio (DER), which describes the comparison between the total debt and total equity in company funding, and shows the company's independent capital ability to fulfill all its obligations. Leverage is related to the pecking order theory, which predicts a negative relationship between profits and debt ratios. This theory suggests that companies prefer to use internal funding rather than external funding sources to pay dividends and finance new investments. The higher the debt ratio, the lower the profit. Leverage affects profitability and the relationship between that profitability and other sources of risk, depending on the country in which the company operates (Grau and Reig, 2021). This is also supported by Putra and Badjra (2015), Dewi & Abundanti (2019), and Angelita & Sihombing (2019), who explain that leverage has a negative effect on profitability. Thus, the following hypothesis can be formulated:

H5: Leverage has a significant negative effect on profitability

In managing daily activities and in making long-term strategic decisions, cash flow is the focus of attention for managers (Eksandy and Dewi 2018). Cash turnover is the number of times cash rotates in a certain period through sales (Diana and Santoso 2016). The lower the cash turnover, the more unproductive cash there is. This can cause the company's profitability to not be maximized. Based on the results of research conducted by Syukriadi et al. (2017) intoconstruction companies on the IDX in 2017, it was explained that cash turnover had a positive and significant effect on profitability. Dwiyanthi & Sudiartha (2017), Diana & Santoso (2016), and Eksandy & Dewi (2018) also explain that cash turnover has a positive and significant effect on profitability. The cash turnover theory shows the ability of cash to generate income, so that it can be seen how many times cash rotates in one period. The

higher the cash turnover, the more efficiently cash is used to earn profits. It can be assumed that cash turnover will have a positive impact on the profitability of companies in the building construction subsector. Thus, the following hypothesis can be formulated:

H6: Cash turnover has a significant positive effect on profitability.

Working capital is all the current or shortterm assets used in daily operational activities (Santoso 2013). The more working capital a company has, the better the company's condition (Diana and Santoso 2016). Working capital turnover is a ratio to measure how effective a company is in managing its working capital (Santoso 2013). Riyanto (2015) stated that the working capital turnover rate shows the effectiveness of working capital's use in the company, where the higher the working capital turnover rate, the more effective the use of working capital is. The faster the working capital is turned over, the greater the profits a company will gain. This theory is supported by the results of research conducted by Santini & Baskara (2018), which explains that working capital turnover has a positive and significant effect on profitability. Research by Early et al. (2020) intomanufacturing companies in the consumer goods industry sector, listed on the IDX for the 2015 to 2017 period, shows that working capital turnover has a significant positive effect on profitability. Thus, the following hypothesis can be formulated:

H7: Working capital turnover has a significant positive effect on profitability.

Receivables are company assets formed due to credit sales transactions for goods and services produced by the company (Eksandy and Dewi 2018). Trade receivables can be claims arising from sales of merchandise, services, or sales of other assets carried out usingcredit, which can create claims onother parties (Munandar et al. 2018). Receivables turnover is used to measure how long it takes to collect receivables in one period, or how many times the invested funds are able to rotate in one period (Kasmir 2015). Receivables turnover shows the company's efficiency in managing its receivables. Alow receivables turnover indicates poor collection efficiency during that period (Astuti and Aprianti 2020). Riyanto (2015) stated that the higher the company's receivables, the higher the level of risk for the company, but it is still in line with the increasing level of profits that the company will obtain. Receivables play a role in efforts to increase profitability, where the greater a company's receivables turnover is. the better its receivables' management is, and this indicates good company profit management. A high receivables turnover shows that the company is becoming more effective in efficient and managing its receivables. This means that the company's profitability can be maintained. This theory is supported by the results of research conducted by Napitupulu et al. (2020), and Pratiwi & Ardini (2019), which shows that receivables turnover has a significant positive effect on profitability. Thus, the following hypothesis can be formulated:

H8: Receivables turnover has a significant positive effect on profitability.

The framework for the thinking behind this research is presented in Figure 2.

Figure 2 explains that this research focuses on private and state-owned building construction subsector companies listed on the Indonesia Stock Exchange for the 2011 to 2019 period.

METHOD, DATA, AND ANALYSIS

This research is quantitative research using secondary data in the form of the annual financial reports of building construction subsector companies listed on the Indonesia Stock Exchange for the 2011 to 2019 period. The annual report data used has been split into the period before the infrastructure sector became the focus of development, namely 2011 to 2014, and after it became the focus of development, namely 2015 to 2019. Panel data regression was carried out based on both the nominal values and real values. The panel data regression analysis used the dependent variable: profitability (ROA), and the independent variables: infrastructure budget, inflation, company size, liquidity, leverage, cash turnover, working capital turnover, and receivables turnover. The ROA was chosen because it would provide a more accurate picture of capital efficiency, including liability elements, when looking at the level of company profitability, and it was able to compare industry ratios, which are important for strategic planning and can measure the overall efficiency of capital use (Sudana, 2011).



Figure 2. Research framework

The sample for this research was the building construction subsector companies listed on the Indonesia Stock Exchange for the 2011 to 2019 period, which were selected using purposive sampling. Based on the selection criteria above, a research sample was obtained, which is presented in Table 1.

The dependent variable used in this study was profitability, measured using the return on assets (ROA) ratio. One of the profitability measurement tools is the ROA, which is also an important indicator for assessing a company's financial performance (Eksandy & Dewi, 2018). The independent variables used consisted of the company's external and internal variables. The company's external variables were the infrastructure budget (IB) and inflation (INF). In contrast, the company's internal variables were the company size (SIZE), liquidity (LQ), leverage (LV), cash turnover (CT), working capital turnover (WCT), and receivables turnover (ART).

Data on the infrastructure budget (IB) were obtained from the data issued by the Ministry of Finance from 2011 to 2019. Inflation data (INF) used inflation data (general index) issued by the Central Statistics Agency (BPS) from 2011 to 2019. Company size (SIZE) was generated from the natural log of the company's assets (Santioso

& Chandra, 2012). Liquidity (LQ) showed the ability to pay the company's short-term obligations (Alfian, 2016). In this study, liquidity was proxied by the current ratio. Leverage (LV) was calculated by dividing the total liabilities by total equity. The cash turnover ratio (CT) showed how effectively the company manages its cash to generate revenue. The cash turnover ratio was between sales and average cash (Eksandy & Dewi, 2018). According to (Kasmir, 2011), the capital turnover ratio should be calculated from net income divided by working capital. Accounts receivable turnover (ART) was computed from the annual sales divided by the average receivables (Kasmir, 2011).

This research used panel data regression analysis. Panel data regression is a combination of time series and cross-section data (Gujarati & Porter, 2009). Panel data regression model analysis is carried out based on real values, where all the data are corrected for the annual inflation rate. Time series data is data collected over time on an individual, while cross-section data is data collected at one time on many individuals. The following were the formulations for the panel data regression models:

NoIssuer CodeCompany nameIPO dateBUMN1WSKTWaskita Karya (Persero) TbkDec 19,20122WIKAWijaya Karya (Persero) TbkOct 29, 20073PTPPPP (Persero) TbkOct 29, 20074ADHIAdhi Karya (Persero) TbkMar 18, 2004Private Companies1ACSTAcset Indonusa TbkJun 24, 20132NRCANusa Raya Cipta TbkJun 27, 20133TOTLTotal Bangun Persada TbkJul 25, 20064IDPRIndonesia Pondasi Raya TbkDec 10,20155MTRAMitra Pemuda TbkFeb 10, 20166DGIKNusa Konstruksi Enjiniring TbkDec 19, 2007				
No	Issuer Code	Company name	IPO date	
BUI	MN			
1	WSKT	Waskita Karya (Persero) Tbk	Dec 19,2012	
2	WIKA	Wijaya Karya (Persero) Tbk	Oct 29, 2007	
3	PTPP	PP (Persero) Tbk	Feb 9, 2010	
4	ADHI	Adhi Karya (Persero) Tbk	Mar 18, 2004	
Priv	vate Companies			
1	ACST	Acset Indonusa Tbk	Jun 24, 2013	
2	NRCA	Nusa Raya Cipta Tbk	Jun 27, 2013	
3	TOTL	Total Bangun Persada Tbk	Jul 25, 2006	
4	IDPR	Indonesia Pondasi Raya Tbk	Dec 10,2015	
5	MTRA	Mitra Pemuda Tbk	Feb 10, 2016	
6	DGIK	Nusa Konstruksi Enjiniring Tbk	Dec 19, 2007	
7	SSIA	Surya Semesta Internusa Tbk	Mar 27, 1997	
Mod	el 1: ROAit = $\alpha 0 + \alpha 1$	$IBt + \alpha 2INFt + \epsilon it$ as there was no	heterogeneity in the cross-	

 Table 1. Research sample

Model 2: ROAit =	$\alpha 0 + \alpha 1 SIZEit + \alpha 2LQit + \alpha 2LQit$
	α 3LVit + α 4CTit +
	$\alpha 6 WCTit + \alpha 6 ARTit + \epsilon it$
Model 3: ROAit =	$\alpha 0 + \alpha 1 IBt + \alpha 2 INFt +$
	α 3SIZEit + α 4LQit +
	α 5LVit + α 6CTit +

ROA = return on assets (profitability),

 α 7WCTit + α 8ARTit + ϵ it

- Ron Tetain on assets (promaon
- IB = infrastructure budget,
- INF = inflation,
- SIZE = company size,
- LQ = liquidity,
- LV = leverage,
- CT = cash turnover,

WCT = working capital turnover,

ART = accounts receivable turnover,

I = the order of the companies observed, and t= time series, and ε = error.

In determining the best model, the Chow test, the Hausman test and classical assumption tests (normality, multicollinearity, autocorrelation, heteroscedasticity) were carried out. The Chow test was carried out to determine the best regression model between the pooled least square (PLS) model and the fixed effect model (FEM), which was based on the null hypothesis, as there was no heterogeneity in the crosssection. Based on the test results, should the selected model be FEM, it would be necessary to carry out the Hausman test.

RESULT AND DISCUSSION

1. Results

Descriptive statistics refer to the minimum value, maximum value, mean and standard deviation (std.dev) of all the variables in this research, namely the infrastructure budget (IB), inflation (INF), company size (SIZE), liquidity (LQ), leverage (LV), cash turnover (CT), working capital turnover (WCT), and receivables turnover (ART). Table 2 presents the descriptive statistics of this study.

Based on Table 2, the average ROA value was 5.7457%, which showed that during the 2011 to 2019 period, the company's ability to generate net income by using its assets was not optimal. From 2011 to 2019, the average value of the infrastructure budget was IDR 246.45 trillion. The average weight of inflation was 4.52%. It was assumed that inflation in that period was categorized as mild inflation (<10% per year). The average weight of liquidity was 29.02. The average weight of liquidity was

153.63%, which indicated that in these periods, most of the companies were able to pay off their current debts using their existing assets. The average leverage value was 238.55%, indicating that the building construction subsector company had a relatively large amount of liabilities, 2.39 times its total equity. It could be interpreted that the company's ability to fulfill its obligations through equity was classified as poor.

Variable	Mean	SD	Min	Max
ROA	5.7457	7.5101	-24.8800	32.1400
Infrastructure Budget (IB)	246.4501	114.1298	109.8718	403.7120
Inflation (INF)	4.5178	2.1148	2.7200	8.3800
Company Size (SIZE)	29.0208	1.6459	25.5740	32.4227
Liquidity (LQ)	153.6344	41.2491	94.6200	313.9500
Leverage (LV)	238.5506	365.3049	39.1800	3,546.5600
Cash Turnover (CT)	9.2728	8.3041	2.2433	31.3394
Working Capital Turnover (WCT)	8.6692	38.3927	-7.3356	383.7471
Accounts Receivables Turnover (ART)	7,1994	2,7771	2.3153	17.3033

Table 2. Descriptive statistics

After going through the Chow test and the Hausman test, it was concluded that the best model was the fixed effect model (FEM). The coefficient of determination (R2) measures the proportion of the ROA's variability (dependent variable) that the independent variables in the model can explain. Based on the results of the FEM, the model had an R-squared value of 83.64%, meaning that the independent variable could explain 83.64% of the dependent variable (ROA). At the same time, the remaining 16.36% could be explained by other variables outside the model. This model also fulfilled the classical assumption test, which showed that the selected model met the normality, multicollinearity, autocorrelation, and heteroscedasticity tests.

Based on the results of the multicollinearity test (Table 3), there was no strong correlation between the variables, because the correlation value between the independent variables was < 0.80.

Based on Table 4, it is known that the three models were significant in the F test, with an error rate close to 0%, or a probability value (F-statistic) of 0.0000, which is less than = 0.01. This meant that the independent variables used were good enough to explain the ROA. Based on the results obtained in Table 4, the variables IB, INF, SIZE, LQ, LV, CT, WCT, and ART had a significant effect on the ROA, where each of these variables had a significance value between 1% to 10%.

	IB	INF	SIZE	LQ	LV	СТ	WCT	ART
IB	1.000000							
INF	-0.603474	1.000000						
SIZE	0.341210	-0.170113	1.000000					
LQ	0.053423	0.000529	-0.302844	1.000000				
LV	0.052467	-0.043013	0.253627	-0.353065	1.000000			
CT	-0.218248	0.117053	-0.613196	-0.144243	0.134515	1.000000		
WCT	-0.167140	0.064482	0.004093	-0.264026	-0.439895	0.120066	1.000000	
ART	-0.205946	0.150055	0.021307	0.120173	0.106150	0.135293	0.123550	1.000000

 Table 3. Multicollinearity

Variable	Model 1		Model 2		Model 3					
variable -	Coef	Prob	Coef	Prob	Coef	Prob				
Infrastructure Budget (IB)	-2.535***	0.001	-	-	-4.3652**	0.0103				
Inflation (INF)	0.308^{***}	0.006	-	-	0.1414^{**}	0.0473				
Company Size (SIZE)	-	-	-1.639***	0.000	-0.5953**	0.0493				
Liquidity (LQ)	-	-	-0.009	0.452	-0.0251***	0.0100				
Leverage (LV)	-	-	-0.004***	0.000	-0.0034***	0.0000				
Cash Turnover (CT)	-	-	-1.769***	0.009	-3.8568**	0.0120				
Working Capital Turnover (WCT)	-	-	0.310^{*}	0.051	0.5181^{*}	0.0058				
Accounts Receivables Turnover (ART)	-	-	2.713***	0.000	2.5711**	0.0489				
R-squared	0.533	36	0.64	0.6495 0.83		364				
Adjusted R-squared	0.468	36	0.5812		0.7996					
<i>F-statistic</i>	8.2002		9.4989		22.718					
Prob (F-statistic)	0.0000		0.0000		0.0000					

 Table 4. Panel Data Regression Results

Notes: ***) significantat 1% level of significance, **) significantat 5% level, and *) significantat 10% level.

2. Discussion

The infrastructure budget is used as an external factor that represents the government's focus on infrastructure. It is assumed that the large budget allocation for infrastructure will increase the number of construction projects in Indonesia, so that the construction companies' incomes will increase, and their profitability will also increase. However, the test results showed that the infrastructure budget had a significant negative effect on profitability (ROA). This shows that the hypothesis: The infrastructure budget has a significant positive effect on profitability (H1), is rejected. By increasing the number of infrastructure projects, debt has become a source of funding for construction companies. This is supported by Dinarjito (2018), who stated that infrastructure projects encourage construction companies to get involved because they require a large amount of capital, so that debt is one of the sources of financing carried out by such companies. This can cause financial burdens, such as loan interest and the principal that must be paid to the bank. This became natural when linked to the government's commitment to infrastructure investment for the period 2014 to 2019, where funding for infrastructure projects was not fully

borne by the government (Dinarjito, 2018). An increase in debt shows an increase in the obligations that the company must fulfill, which can reduce the company's profitability. The high level of company funding through debt results in greater interest expenses and other costs that must be borne by the company (Boston 2016).

One aspect that cannot be explained in the model is the reality regarding implementing infrastructure projects that do not go as expected. Various obstacles are often experienced, which hinder the implementation of infrastructure projects and their financing. The barriers include land acquisition, funding, as well as bureaucracy and regulations that delay the project. Delayed land acquisition can undoubtedly hamper the work of infrastructure projects, causing them to be protracted. Of course, this can result in high operational costs and delayed funding, ultimately reducing profitability. Infrastructure funding is also not fully funded by the government. Based on the 2015 to 2019 National Medium-Term Development Plan (RPJMN), a total of IDR 4.796 trillion was needed to meet the infrastructure development targets set by the government in 2019. However, the central and regional governments only contributed 41% for financing, while

BUMN companies only contributed 22%. It meant that 37% of the required funds (approximately IDR 1.752 trillion) had to come from the private sector.

In fact, in the four years from 2014 to 2018, the number of private contractors decreased. This was because infrastructure projects were dominated by state-owned companies (Baderi, 2019). However, it was also due to the reduced ability of private companies, in terms of their funding, human resource competencies, and This meant that private limited tooling. contractor companies found it difficult to participate in infrastructure projects (Prabowo, 2019). It was also related to the existence of government policies regarding auctions for the projects being carried out. Along with infrastructure priorities, the government has carried out many multi-year projects, whose values ranged from hundreds of billions to trillions of rupiah. Only state-owned companies can work on such projects, due to their capital, experience, and complete equipment.

An increase in inflation can increase the price of goods, increasing the operating costs and causing a reduction in profitability. However, the test results in this study indicated that the inflation rate had a significant positive effect on profitability. It meant that if inflation increased, there would be an increase in profitability (ROA), and vice versa. This result is in line with research by Diewantra and Oetomo (2019), who showed that inflation has a significant positive effect on profitability. It can happen when the purchasing power of the company can offset the increase in inflation. In addition, the rise in inflation could also increase the price of the construction work itself, so that the increase in inflation will continue to be accompanied by an increase in company profitability. Sahara (2013) also shows that inflation has a positive effect on profitability. He

argues that this can happen if the rise in prices that the company can enjoy is higher than the production costs incurred, so the company's profitability will increase. Therefore, the hypothesis: Inflation has a significant negative effect on profitability (H2), is rejected.

In this study, the company's size was calculated from the natural log of the company's total assets. The test results, based on the nominal value, indicated that the company's size had no significant effect on profitability. However, based on real value, firm size had a significant negative impact on profitability. If viewed based on the test results from several different models, the firm size variable has properties that tend to show a significant negative effect on profitability. It means that if the company's assets increase, then profitability decreases. These results are supported by research conducted by Sukmayanti & Triaryanti (2019) on property and real estate companies between2014 and 2016, which showed that company size has a significant negative effect on profitability. It can occur when the addition of assets is not matched by the company's ability to increase its profitability by using its owned assets. This shows that the hypothesis: Company size has a significant positive effect on profitability (H3), is rejected.

The test results showed that liquidity had a significant negative effect on profitability. This meant that if CR increased, there would be a decrease in profitability (ROA), and vice versa. These results are in line with research conducted by Dwiyanthi and Sudiartha (2017) and Alfian (2016), who found that liquidity has a negative and significant effect on profitability (ROA). Based on an analysis of each company's financial statements, the high CR value in the building construction subsector is due to the large receivables in current assets. It indicates a problem in collecting receivables, so unpaid

receivables will reduce the companies' revenues and profitability for that year. This shows that the hypothesis: Liquidity has a significant positive effect on profitability (H4), is rejected.

The test results showed that leverage had a significant negative effect on profitability. The higher the DER value, the lower the profitability (ROA) value, and vice versa. These results are supported by research conducted by Putra & Badjra (2015), Dewi & Abundanti (2019), Angelita & Sihombing (2019), and Alduais et al. (2022b), who found that leverage has a negative and significant effect on profitability. Based on the financial statements of the building construction subsector, a high DER indicates that the companies' source of capital is highly dependent on loans from outside parties, causing debt burdens such as bank interest expenses, and other expenses, to be borne by the companies, which could reduce their profitability. According to Gunde et al. (2017), this could be due to the payment of costs incurred due to more significant debts or loans. The decline in company profits causes the ROA value to drop. This shows that the hypothesis: Leverage has a significant negative effect on profitability (H5), is accepted.

Cash turnover shows a company's ability to manage its assets to generate income. However, the results of this study indicated a significant negative effect of cash turnover on profitability. A higher cash turnover can lead to a decrease in profitability. This means that the cash in the building construction subsector has not been managed effectively to generate revenue, leading to the decline in profitability. This result is in line with Jumingan (2014), who suggested that companies with high liquidity levels, due to large amounts of cash, show a low cash turnover rate and indicate an over-investment in cash, meaning that they are less effective in managing their cash. This result is not in line with the research conducted by Syukriadi et al. (2017) on

construction companies listed on the IDX in 2017, which shows that cash turnover has a positive and significant effect on profitability. Research by Dwiyanthi and Sudiartha (2017), Diana & Santoso (2016), and Eksandy & Dewi (2018) also found that cash turnover has a positive and significant effect on profitability. This shows that the hypothesis: Cash turnover has a significant positive effect on profitability (H6), is accepted.

Working capital turnover had a significant positive effect on profitability. The faster the working capital turnover, the higher the profitability (ROA), and vice versa. These results indicated that the more rapidly the working capital rotates, the higher the profit. Hence, the company's profitability increased. A high working capital turnover rate indicates effectiveness in the use of the working capital. The positive relationship between the turnover of working capital and profitability shows that the faster the working capital rotates, the greater the company's profit. These results align with research conducted by Santini & Baskara (2018), Dini et al. (2020), and Alarussi and Gao (2023), which show that working capital turnover has a significant positive effect on profitability. This shows that the hypothesis: Working capital turnover has a significant positive effect on profitability (H7), is accepted.

Based on several models' separate test results, the receivables turn over variable had a nature that tended to show a significant positive effect on profitability. This meant that a greater receivables turnover would have increased the profitability of the building construction subsector companies during the period from 2011 to 2019. It showed that the number of receivables must be reduced, to increase profitability by collecting them on time. This result is in line with the studies conducted by Napitupulu et al. (2020), and Pratiwi & Ardini (2019), which show that the receivables turnover has a significant positive effect on profitability. This shows that the hypothesis: Receivables turnover has a significant positive effect on profitability (H8), is accepted.

CONCLUSION AND SUGGESTION

This research concludes that increasing the infrastructure budget did not necessarily increase the profitability of companies in the building construction subsector during the 2011 to 2019 period; their profitability actually decreased. Likewise, an increase in inflation caused company profitability to increase. In terms of company size, the larger the company size caused the company's profitability to decrease. Likewise with company liquidity, which showed that the higher the liquidity, the company's profitability decreased. Meanwhile, the higher the amount of debt a company used to finance its business activities, the lower its profitability. This also applied to companies that had good capital turnover and receivables turnover, so their profitability increased.

This research has important implications for companies to maintain the composition of their funding, including debt from third parties, so as not to incur too large a loan burden that can reduce profitability. Apart from government infrastructure projects, it is best for building construction subsector companies to also take on projects whose funding is well managed. Additionally, to increase their income, companies can carry out other operational activities besides construction services, such as engineering, procurement, and construction (EPC), which can generate recurring income. Building construction subsector companies need to anticipate and manage their payment risks through their client selection, ensure safe contract content, monitor their cash flow, and ensuring down payments. If there is a delay in revenue, the

company can negotiate a "slowdown" in the construction's implementation, or a temporary suspension of the project. Additionally, companies need to mitigate cost overruns through planning and estimating cost factors. This can be done through implementing project management software applications, to reduce over-reliance on the practitioners' judgment and previous project experiences.

On the other hand, the government needs to increase the activity of both state-owned and private building construction subsector companies, by evaluating the project bidding process so that private companies can also participate in infrastructure projects. They should not let government projects of small value be taken up by BUMN subsidiaries. Apart from that, the government can also sharpen its infrastructure funding strategy, so that it does not only come from the APBN, for example, through the public-private partnership (KPS) scheme.

The limitation of this research is that it has not been able to measure, in detail, the practices of bidding for and accepting government and private construction projects. It is recommended that further research be carried out, and further analysis, by considering the mapping of companies that receive infrastructure projects.

REFERENCE

- Ady, R. A. (2020). Pengaruh makroekonomi terhadap profitabilitas perbankan di Indonesia. *Research Fair Unisri*, 4(2), 115– 126. https://doi.org/10.33061/rsfu.v4i1.3393
- Agustina, C., & Ardiansari, A. (2015). Pengaruh faktor ekonomi makro dan kinerja keuangan terhadap nilai perusahaan. *Management Analysis Journal*, 4(1), 10–21.
- Aldboush Hassan Hamad, Nashat Ali Almasria, Marah Ferdous. (2023). Determinants of firm profitability: Empirical evidence from Jordan's service sector. *Business: Theory* and Practice, 24(2), 438–446.

https://doi.org/10.3846/btp.2023.18623.

- Alarussi, A.S. and Gao, X. (2023), Determinants of profitability in Chinese companies", International Journal of Emerging Markets, 18(10), 4232-4251. https://doi.org/10.1108/IJOEM-04-2021-0539
- Alduais, F., Almasria, N. A., Samara, A., & Masadeh, A. (2022a). Conciseness, financial disclosure, and market reaction: A textual analysis of annual reports in listed Chinese companies. International Journal of Financial Studies, 10(4), 104.

https://doi.org/10.3390/ijfs10040104

- Alduais, F., Almasria, N. A., & Airout, R. (2022b). The moderating effect of corporate governance on corporate social responsibility and information asymmetry: An empirical study of Chinese listed companies. Economies, 10(11), 280. https://doi.org/10.3390/economies10110280
- Alfian, M. A. (2016). Analisis pengaruh faktor menentukan profitabilitas yang sektor properti, estate, real dan konstruksi bangunan yang terdaftar di Bursa Efek Indonesia Periode 2010-2014. Jurnal Ilmu Manajemen, 4(1), 1–14.
- Ambarwati, N. S., Yuniarta, G. A., & Sinarwati, N. K. (2015). Pengaruh modal kerja, likuiditas, aktivitas dan ukuran perusahaan terhadap profitabilitas pada perusahaan manufaktur yang terdaftar di Bursa Efek Indonesia. Jurnal Ilmiah Akuntansi Undiksha, 3(1), 1–11. https://doi.org/10.23887/jimat.v3i1.4727
- Angelita, A., & Sihombing, H. (2019). Pengaruh leverage dan perputaran modal kerja terhadap profitabilitas perusahaan sub sektor otomotif dan komponen yang terdaftar di Bursa Efek Indonesia Tahun 2011-2015. Jurnal PLANS : Penelitian Ilmu Manajemen Dan Bisnis, 14(1), 38-42.

https://doi.org/10.24114/plans.v14i1.13327

Baderi, F. (2019). Ribuan Kontraktor Swasta Bangkrut Akibat Dominasi BUMN Karya. Retrieved from: https://www.neraca.co.id/article/123028/rib

uan-kontraktor-swasta-bangkrut-akibatdominasi-bumn-karya

- BAPPENAS. (2014). Rencana Pembangunan Jangka Menengah (RPJMN) 2015-2019: *Vol. II* (pp. 1-1-10–81).
- BPIW. (2016). Infrastruktur PUPR terpadu untuk negeri. Sinergi Kementerian PUPR, 5(Mei), 1–62. Retrieved from: http://bpiw.pu.go.id/uploads/publication/atta chment/Buletin_042017_Edisi16.pdf
- BPS. Statistik Konstruksi (2018). 2018. Retrieved from: https://www.bps.go.id/website/pdf_publikas i/Statistik-Konstruksi-2014.pdf
- Chioma Okoro, Chukwuma Nnaji, Nicholas Chileshe and Jonathan Tembo (2023). Perceptions of public-private partnerships transportation project success factors in countries: developing An explanatory sequential investigation. Journal of Construction in Developing Countries, 28(2): 295-327. https://doi.org/10.21315/jcdc-07-22-0123
- Curristine T, Nozaki M and Shin J (2018) Developing infrastructure. In: Breuer L, Guajardo J and Kinda T (eds) Realizing Indonesia's Economic Potential. Washington, DC: International Monetary Fund Publication Services, pp.67-84.
- Dewi, N. P. I. K., & Abundanti, N. (2019). Pengaruh leverage dan ukuran perusahaan sebagai variabel mediasi. E-Jurnal Manajemen, 8(5), 3028-3056. https://doi.org/10.24843/EJMUNUD.2019.v 08.i05.p16
- Diana, P. A., & Santoso, B. H. (2016). Pengaruh perputaran kas, piutang, persediaan terhadap profitabilitas pada perusahaan semen di BEI. Jurnal Ilmu Dan Riset Manajemen, 5(3), 1–18.
- Diewantra, Y. D., & Oetomo, H. W. (2019). Pengaruh perputaran persediaan, ukuran perusahaan dan inflasi terhadap profitabilitas dan nilai perusahaan. Jurnal Ilmu Dan Riset Manajemen, 8(8), 1–19.
- Dimi, F.N.M., & Firmansyah, A. (2022). Kinerja keuangan PT Hutama Karya (Persero):

Dampak kebijakan program percepatan pembangunan infrastruktur Jalan Tol Trans Sumatra. *STATERA: Jurnal Akuntansi Dan Keuangan*, 4(1), 17-36.

https://doi.org/10.33510/statera.2022.4.1.17-36

- Dinarjito, A. (2018). Menilai kesehatan BUMN konstruksi yang terdaftar di Bursa Efek Indonesia sebagai akibat meningkatnya proyek infrastruktur pemerintah. *Substansi*, 2(1), 1–18.
- Dini, S., Silalahi, Si., Marpaung, E., Sihombing, D., & Rajagukguk, L. (2020). Pengaruh Perputaran kas, persediaan, piutang, modal kerja terhadap profitabilitas perusahaan. *Jurnal Ekonomi*, 25(2), 270–286. https://doi.org/10.24912/je.v25i2.670
- Dwiyanthi, N., & Sudiartha, G. M. (2017). Pengaruh likuiditas dan perputaran modal kerja terhadap profitabilitas pada perusahaan manufaktur sektor industri barang konsumsi. *E-Jurnal Manajemen Unud*, 6(9), 4829–4856.
- Eksandy, A., & Dewi, V. M. (2018). Pengaruh perputaran modal kerja, perputaran piutang dan perputaran kas terhadap profitabilitas perusahaan (Studi Pada perusahaan konstruksi sektor infrastruktur di Bursa Efek Indonesia Periode 2012 2015). Jurnal Dinamika UMT, 2(2), 1–14. https://doi.org/10.31000/dinamika.v2i2.143 3
- Fahri, J. (2022). Exploring citizen's satisfaction with the infrastructure of services at a Local Seaport in Ternate, North Maluku. *Journal of Indonesian Economy and Business*, *37*(2), 103-135.

https://doi.org/10.22146/jieb.v37i2.3449.

- Faoziyyah, A. A., & Laila, N. (2020). Faktor internal dan faktor makroekonomi yang mempengaruhi profitabilitas asuransi syariah di Indonesia periode 2016-2018. *Jurnal Ekonomi Syariah Teori Dan Terapan*, 7(6), 1146–1163. https://doi.org/10.20473/vol7iss20206pp114 6-1163
- Grau, A., Reig, A. (2021). Operating leverage

and profitability of SMEs: agri-food industry in Europe. *Small Bus Economics*, **57**, 221–242.

https://doi.org/10.1007/s11187-019-00294-y

- Gujarati, D., & Porter, D. (2009). Basic Econometrics. USA: McGraw-Hill.
- Gunde, Y. M., Murni, S., & Rogi, M. H. (2017). Analisis pengaruh leverage terhadap profitabilitas pada perusahaan manufaktur sub industri food and beverages yang terdaftar di BEI (Periode 2012-2015). *Jurnal EMBA*, 5(3), 4185–4194. https://doi.org/10.35794/emba.v5i3.18382

Halian, W. (2020). Dampak Kondisi Makroekonomi dan Kebijakan Perusahaan terhadap Profitabilitas Sub Sektor Konstruksi Bangunan di Bursa Efek Indonesia tahun 2012-2016. Bogor: Institut Pertanian Bogor.

- Hendramiko, Achsani, N. A., & Sasongko, H. (2020). Pengaruh faktor makroekonomi dan faktor mikroekonomi terhadap gross operating profit. Jurnal Riset Manajemen Sains Indonesia (JRMSI), 11(1), 86–105. https://doi.org/10.21009/JRMSI.011.1.05
- Husna, N. and Desiyanti, R. (2016). The analysis of financial performance on net profit margin at the coal company. *International Journal of Management and Applied Science*, 2(4): 105–108.
- Imaama, R. N. (2019). Pengaruh nilai kecukupan modal, inflasi, likuiditas, dan risiko kredit terhadap profitabilitas perbankan. *Jurnal Ilmu Dan Riset Akuntansi*, 8(2), 1–18.
- Irawan Tony, Djoni Hartono, Ferry Irawan, & Arief Anshory Yusuf. (2012). Infrastructure improvement and its impacts on The Indonesian economic performance. *Journal* of Indonesian Economy and Business, 27(3), 293 – 302.
- Isaac Buhamizo, Lawrence Muhwezi and Ruth Sengonzi (2023). A regression model to enhance the profitability of local construction contractors in Uganda. *Journal of Construction in Developing Countries*, 28(1): 221–241.

https://doi.org/10.21315/jcdc-08-21-0137.

Istyawati, N., & Purwohandoko. (2019). Penga-

ruh leverage, likuiditas, ukuran perusahaan, inflasi, dan profitabilitas (Studi pada perusahaan sektor properti, real estate and building construction di Bursa Efek Indonesia). *Jurnal Ilmu Manajemen*, 7(3), 668–676.

- Jonudin, Nurazi, R., & Kananlua, P. S. (2011). Analisa kinerja keuangan perusahaan jasa konstruksi di Bursa Efek Jakarta. *Jurnal Ilmiah Manajemen*, 9(1), 13–30.
- Jumingan. (2014). *Analisis Laporan Keuangan*. Bogor: Bumi Aksara.
- Karim, A. F., Hermanto, H., & Ardana, N. (2018). Pengaruh faktor fundamental makro dan mikro terhadap nilai perusahaan (Studi pada saham perusahaan sektor infrastruktur dan sektor konstruksi yang terdaftar di BEI Periode 2015 – 2017. JMM Unram - Master of Management Journal, 7(2), 86–102. https://doi.org/10.29303/jmm.v7i2.384
- Kasmir. (2011). Analisis Laporan Keuangan. Jakarta: Rajawali Pers.
- Kemenkeu. (2019). Anggaran Infrastruktur APBN 2019. Retrieved from: http://visual.kemenkeu.go.id/anggaraninfrastruktur-apbn-2019/
- Kim K (2019) Using partially state-owned enterprises for development in Indonesia. *Asia Pacific Business Review*, 25(3): 317– 337.
- Kim K (2021) Indonesia's restrained state capitalism: Development and policy changes. *Journal of Contemporary Asia*, 51(3): 419–446.
- KPPIP. (2020). Pemerintah Berhasil Selesaikan 11 Proyek Strategis Nasionaldi Tengah Pandemi. Retrieved from: https://kppip.go.id/berita/pemerintahberhasil-selesaikan-11-proyek-strategisnasional-di-tengah-pandemi/
- Lim, H., & Rokhim, R. (2021). Factors affecting profitability of pharmaceutical company: An Indonesian evidence. *Journal of Economic Studies*, 48(5), 981–995.

https://doi.org/10.1108/JES-01-2020-0021.

McCawley P (2019) Jokowi bets on an

infrastructure boom. East Asia Forum, 10 April.

- Muhaemin, A. (2016). Analisis Faktor-faktor yang Memengaruhi Profitabilitas Bank Pembiayaan Rakyat Syariah di Indonesia. Bogor: Institut Pertanian Bogor.
- Myers Stewart C. (1977). Determinants of corporate borrowing. *Journal of Financial Economics*, 5(2), 147-175. https://doi.org/10.1016/0304-405X(77)90015-0.
- Myers, Stewart C.; Majluf, Nicholas S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*. 13 (2): 187–221. doi:10.1016/0304-405X(84)90023-0.
- Napitupulu, E. F., Ginting, R. A., Sinurat, R. M., Nadeak, Y., & Sitorus, F. D. (2020). Pengaruh perputaran kas, perputaran piutang dan leverage (DER) terhadap profitabilitas (ROA) pada perusahaan pertambangan yang terdaftar di BEI 2016-2018. Ekonomi, Keuangan, Investasi Dan Svariah (EKUITAS), 2(1),132 - 138.https://doi.org/10.47065/ekuitas.v2i1.409
- Padangaran, N. (2016). Faktor-faktor Penentu Kinerja Keuangan Usaha Ayam Pedaging di Kota Kendari. Bogor: Institut Pertanian Bogor.
- Prabowo, D. (2019). Proyek Infrastruktur dikuasai BUMN, Kontraktor Swasta Gulung Tikar. Retrieved from: https://properti.kompas.com/read/2019/09/1 1/170000421/proyek-infrastruktur-dikuasaibumn-kontraktor-swasta-gulung-tikar.
- Pratiwi, A. E., & Ardini, L. (2019). Pengaruh perputaran modal kerja, ukuran perusahaan, leverage dan perputaran piutang terhadap profitabilitas. *Jurnal Ilmu Dan Riset Akuntansi*, 8(3), 1–17.
- Putra, A., & Badjra, I. (2015). Pengaruh leverage, pertumbuhan penjualan dan ukuran perusahaan terhadap profitabilitas. *E-Jurnal Manajemen Universitas Udayana*, 4(7), 2052–2067.
- Putri, L. P. (2018). Pengaruh Aktivitas terhadap

profitabilitas perusahaan konstruksi dan bangunan di Indonesia. *Jurnal Seminar Nasional Royal (SENAR)*, September, 465– 468.

- Putri, P. (2019). Pengaruh Variabel Makroekonomi dan Kinerja Keuangan Perusahaan terhadap Harga Saham Emiten Kelapa Sawit. Bogor: Institut Pertanian Bogor.
- Republik Indonesia. (2017). Undang-Undang Nomor 2 Tahun 2017 tentang Jasa Konstruksi Lembaran Negara Republik Indonesia Tahun 2017 Nomor 11. Kementerian Hukum dan Hak Asasi Manusia Republik Indonesia. Jakarta.
- Riyanto, B. (2015). *Dasar-dasar Pembelanjaan Perusahaan*. Yogyakarta: BPFE Universitas Gadjah Mada.
- Rukman, A. (2019). Pengaruh Variabel Makroekonomi terhadap Harga Saham Perusahaan Agribisnis Indeks lLQ-45. Bogor: Institut Pertanian Bogor.
- Sahara, A. Y. (2013). Analisis pengaruh inflasi, suku bunga BI, dan Produk Domestik Bruto terhadap Return on Asset (ROA) bank syariah di Indonesia. *Jurnal Ilmu Manajemen (JIM)*, 1(1), 149–167.
- Santini, N. L. K. A., & Baskara, I. G. K. (2018). Pengaruh perputaran modal kerja, ukuran perusahaan, dan likuiditas terhadap profitabilitas perusahaan tekstil dan garmen. *E-Jurnal Manajemen Unud*, 7(12), 6502– 6531.
- Santioso, L., & Chandra, E. (2012). Pengaruh Profitabilitas, ukuran perusahaan, leverage, umur perusahaan, dan dewan komisaris independen dalam pengungkapan corporate social responsibility. *Jurnal Bisnis dan Akuntansi*, 14(1), 17–30. https://jamal.ub.ac.id/index.php/jamal/articl

https://jamai.ub.ac.id/index.php/jamai/articl e/view/1131

Santoso, C. (2013). Perputaran modal kerja dan

perputaran piutang pengaruhnya terhadap profitabilitas pada PT. Pegadaian (Persero). Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi, 1(4), 1581–1590.

- Setjen DPR RI. (2015). Anggaran Pembangunan Infrastruktur Kebutuhan dan Tantangan Tahun 2015. Retrieved from: http://www.dpr.go.id/doksetjen/dokumen/ap bn_Anggaran_Infrastruktur 20150129103211.pdf
- Sudana, I. M. (2011). *Manajemen Keuangan Perusahaan*. Jakarta: Erlangga.
- Sukandar, B. (2019). *Perilaku Dinamis Perusahaan Konstruksi di Asia Tenggara*. Bogor: Institut Pertanian Bogor.
- Sukmayanti, N. W. P., & Triaryanti, N. (2019). Pengaruh struktur modal, likuiditas, dan ukuran perusahaan terhadap profitabilitas pada perusahaan property dan real estate. *E-Jurnal Manajemen*, 8(1), 7132–7162. https://doi.org/10.24843/EJMUNUD.2019.v 8.i1.p7
- Suraji, A., Tamin, R., Wibowo, M., Soeparto, H., Trigunarsyah, B., & Soemardi, B. (2007). Konstruksi Indonesia 2030 untuk Kenyamanan Lingkungan Terbangun. Jakarta: Lembaga Pengembangan Jasa Kontruksi Nasional.
- Syukriadi, A. Z., Chalid, L., & Mursalim. (2017). Pengaruh Perputaran kas, piutang, dan persediaan terhadap profitabilitas pada perusahaan konstruksi yang listing di Bursa Efek Indonesia. Jurnal Bisnis dan Kewirausahaan, 6(4), 463–477.
- Trianto. (2011). Dalam Masalah Penilaian Kesehatan Keuangan Perusahaan Konstruksi. Universitas Sumatera Utara. Retrieved from: http://repository.usu.ac.id/bitstream/ 123456789/31171/5/Chapter% 20II.pdf.