"Macroeconomic policy and profit rate of a company: A dynamic panel estimation and comparative analysis from Indonesia"

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MACROECONOMIC POLICY AND PROFIT RATE OF A COMPANY: A DYNAMIC PANEL ESTIMATION AND COMPARATIVE ANALYSIS FROM INDONESIA

Abstract

Macroeconomic policy (fiscal and monetary) dynamics are interesting to analyze, especially considering corporate performance. This paper aims to determine the effect of macroeconomic policy on the company's profit rate. Effectiveness of tax revenue (ETAX), realization of tax revenue (RTAX), Bank of Indonesian rate (BIRT), investment growth (INVG), realization of investments (RINV), infrastructure fund allocation rate (INFR), and realization of infrastructure funds (RINF) are macroeconomic policy variables. This study uses a sample of 256 companies listed on the Indonesia Stock Exchange (IDX) in 2005–2019. This paper employs such methods as GMM, using Wald-test and Sargan's test. GMM estimator result shows that the instrument of infrastructure fund realization policy (RINF), investment growth (INVG), and investment realization (RINV) affect the company's profit rate (PROF). Therefore, companies need to pay attention to the government development plans, investment growth, and investment realization, which can improve company performance. The result, government's development for the 2005–2009 and 2015–2019 periods shows a significant difference in companies' ability to generate profits.

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INTRODUCTION

A company's profit rate is a widely researched topic. Empirical study indicate that internal or external factors can determine company profitability (Eljelly, 2013; Jadah et al., 2020). Profitability is usually measured using financial ratios such as net profit margin, gross profit margin, return on asset, return on investment, and others (Brigham & Houston, 2016). Several empirical studies examine factors that affect a company's profit rate internally, such as financial ratios, solvency, activity, liquidity (Ermy & Bambang, 2019), non-financial factors, firm size (Margaretha & Supartika, 2016), and corporate governance (Ararat et al., 2017). Jadah et al. (2020) proved that macroeconomic factors that affect the profit rate include economic growth, government effectiveness, inflation, interest rate, unemployment, and political instability. However, it is crucial to test the impact of infrastructure development on a company's profit rate.

Infrastructure development is one of the critical foundations of economic growth (Familoni, 2006; Owusu-Manu et al., 2019; Patra & Acharya, 2011). However, infrastructure is often analyzed for macroeconomic activities, while its influence on company performance has not been studied in Indonesia. For example, McCawley (2015) de-

scribes the development and managerial barriers of infrastructure in Indonesia over the past five decades. In contrast, Makmuri (2017) identifies the influence of infrastructure instruments in the distribution of revenues. Recently, Maryati et al. (2020) analyzed infrastructure development benefits for the agricultural sector.

Infrastructure is a basic need in improving the investment climate. Infrastructure improvements lead to an increase in the state financial budget. Thus, tax revenue policy has an impact on company expenses. A company became the object of the country that felt the most impact from every policy set by the government because the largest tax contributions came from the processing industry sector (31.8%), trade (19.3%), and financial services (14%) (Ministry of Finance RI, 2018). Increasing state revenues improve the investment climate in the business world and can optimize economic potential and improve tax reform measures. Dollar et al. (2005) analyzed an important investment climate for productivity levels, wages, profit rates, production growth rate, employment, and capital stock of companies. The role of government is critical for companies in providing an excellent regulatory framework for infrastructure, international market access, and financial services. The key to the progressive socio-economic development of society is an investment by regulating a favorable investment climate (Sibirskaya et al., 2015). A better investment climate leads to higher returns on equity. Higher returns on equity will lead to faster company capital accumulation and growth. However, a low return on equity reduces company profitability and shows a slow growth rate.

1. LITERATURE REVIEW

The economic state of a country significantly affects the trade cycle, either domestically or internationally. Trade in the economic cycle does not escape the productivity level of a company. The productivity of goods and services produced at all times will determine the standard of living by looking at the total revenue and total costs obtained from the company's economic activities (Mankiw, 2020). Planning the management of the company's funds for production or investment (both short-term and long-term investments) must be realized by economic conditions to survive in all economic situations. Tax policy from the government will affect the ups and downs of a company's profit. The company's profit is affected by the tax imposed. If a company incurs the greater tax, it will lead to a decrease or smaller prediction of net profit (Beigi et al., 2013).

Deferred tax expense has a positive and significant effect on profit management. The higher the deferred tax burden, the greater the company's profit management to avoid losses (Kasipillai & Mahenthiran, 2013). On the other hand, when taxes are included as deductions in the company's financial statements, it reduces its net profit. Therefore, the government's tax rate policy significantly affects the profit rates generated by companies. The profit rate is a measure of the company's profitability that describes the

condition of a company, whether growing, stagnant, or falling. These variables are negatively related to the profitability of banks in China (Tan, 2016) and go-public companies on the Bucharest Stock Exchange (Vătavu, 2014). The more taxes companies pay, the higher the tax burden, thus lowering profitability. Schoenmaker et al. (2014) also pointed out that local taxes have a negative impact on the profitability of the Flemish hospitality industry.

Literature and empirical studies provide some theories that demonstrate the relationship between monetary policy and projected business performance with various macroeconomic variables. To test the influence of monetary policy on the performance of manufacturing sector companies, Imoughele and Ismaila (2014) found that the performance of manufacturing companies in Nigeria is very responsive to monetary instruments established by authority. The significant relationship is reflected in variable inflation, exchange rates, and external reserves. In contrast, the amount of money in circulation and interest rates are inactive in concluding monetary policy to the manufacturing sector. Different results were shown by Osakwe et al. (2019). Interest rates were found to be an effective monetary policy tool to the performance of manufacturing companies in Nigeria. Monetary policy effects are also seen in capital market performance. Isola and Mesagan (2018) observed the influence of monetary policy

on the performance of SMEs in three countries in West Africa. It was concluded that monetary instruments of interest rates and loans to the private sector significantly affected Nigeria but had no effect on Ghana. On the other hand, the exchange rate affected the performance of SMEs in all three countries. Therefore, monetary policy determines the company's decision to maintain liquidity and avoid higher financial stability risks.

Infrastructure allocation funds are increasing along with the development of a country's economy. Infrastructure development is important for human resource development and economic growth (Tsaurai & Ndou, 2019), both the construction of electricity distribution infrastructure (Palei 2015), mobile (Toader et al., 2018), transportation (Mohmand et al., 2017), to road construction and repair (Ivanova & Masarova, 2013). Indonesia's infrastructure budget comes from the general allocation fund. General allocation funds are funds used to finance the needs of provinces and districts/cities in the framework of decentralization implementation. This fund continues to increase every year along with Indonesia's increasingly advanced economic cycle.

McCawley (2015) described infrastructure development in Indonesia from 1965 to 2015. As a result, he mentioned that infrastructure experienced significant development, but the quality is often complained about due to poor maintenance and management. On the other hand, demand for infrastructure is very high, and infrastructure issues limit market and economic activities due to access that can be difficult. As a result, infrastructure problems often lead to income inequality (Makmuri, 2017). By analyzing 32 provinces during 2007–2013, Makmuri (2017) found infrastructure facilities in the form of electricity quantity, quantity, and airport quality, encouraging income distribution and reducing income inequality.

The investment climate in various countries is created from domestic direct investment (DDI) and foreign direct investment (FDI) activities. Concerning the economic sector, FDI and DDI are proven to affect economic growth in various countries (Bayar, 2014; Lean & Tan, 2011; Mohamed et al., 2013). On the other hand, foreign direct investment and direct domestic investment complement each other in cre-

ating an investment climate that can encourage investment and maintain economic growth (Ullah et al., 2014). In addition, Kubny and Voss (2014) mentioned that FDI can provide investment opportunities to local companies through the provision of technology that cannot be produced domestically.

The combination of FDI and DDI plays a vital role in increasing entrepreneurship (Munemo, 2014). Shawa et al. (2014) ensured that FDI is important for predicting foreign investment inflows in the economy, and the increase in FDI positively impacts export growth. It is known that domestic investment positively impacts export growth (Tien, 2016). A study was conducted in the United States to evaluate the causal relationship between the origin of the investment and company performance. Chen (2011) indicated that the company received FDI showing better performance than companies that received acquisitions from domestic. Companies receiving foreign investments experienced increased profits, higher sales and labor productivity. Thus, investment creates a financial atmosphere that can affect company profitability.

From the factors described previously, this study aims to explore the influence of several government policies (fiscal and monetary) on the profitability of companies in Indonesia. The policy instruments include tax revenues, interest rates, allocation of infrastructure funds, and investment. There are two interesting things to analyze in this study. First, the impact of economic policy on issuers' performance is analyzed, where economic policy will affect their performance. Second, it is vital to determine the effect of each policy on the three main sectors of public companies in Indonesia listed on the stock exchange in three main sectors. They include the primary sector, industrial and manufacturing sector, and the tertiary sector (services). Moreover, the paper aims to indicate the differences between these three sectors because each sector has its own character.

2. METHODOLOGY AND DATA

The empirical specification of this study is based on the type of research data used. Panel specifications allow for a degree of cross-company het-

erogeneity, as the influence of fiscal policy and monetary policy on a company's profit rates can vary between companies. The paper tries to record the dynamic process between fiscal policy, monetary policy, and corporate profit rates in Indonesia. The study used the dynamics of the data panel; in more detail, the econometric model estimated in this study can be written in Equation 1 (Teixeira & Queirós, 2016):

$$PROF_{i,t} = \alpha_1 + \beta_1 ETAX_{i,t} +$$
$$+ \beta_2 RTAX_{i,t} + \beta_3 BIRT_{i,t} + \beta_4 INFR_{i,t} + \quad (1)$$
$$\beta_5 RINF_{i,t} + \beta_6 INVG_{i,t} +$$
$$+ \beta_7 RINV_{i,t} + \mu_i + \varepsilon_{i,t},$$

where $PROF_{i,t}$ is lag of dependent variable, denotes the profit rate, $ETAX_{i,t}$ is lag of effectiveness of tax variable, $RTAX_{i,t}$ is lag of tax revenue variable, $BIRT_{i,t}$ is lag of interest rate proxied with BI-rate, $INFR_{i,t}$ is lag of infrastructure fund allocation rate, $RINF_{i,t}$ lag of realization of infrastructure funds, $INVG_{i,t}$ is lag of investment growth, and $RINV_{i,t}$ is lag of realization of investments.

The Wald-test is used to test the explanatory power of independent variables on dependent variables. While validity is analyzed using the Sargan's test with a significance of 0.05, whose null hypothesis is that over-identifying restrictions are valid.

2.1. Variable instrument and data sources

The study used four different panel data sets to estimate dynamic models. The data set is based on the industrial sector of go-public companies listed on the Indonesia Stock Exchange (IDX). The sector consists of the primary sector, manufacturing sector, and tertiary (service) sector. The number of samples is determined using the purposive sampling method: a company is registered with the IDX from 2005 to 2019 and is not delisting. First, the panel data set for primary sector companies in 2005–2019 with a total of 16 companies. This sector includes companies in the field of agriculture and mining. The second panel data set for manufacturing sector companies in 2005–2019 with a total of 99 companies. These sectors include basic industry and chemical subsectors, miscellaneous industries, and consumer

goods. The third data set for service sector companies from 2005 to 2019 with a total of 141 companies. These sectors include property, real estate, building and construction, infrastructure, utilities, transportation, finance, trade, services, and investment. The final set is a combined data set of 256 companies from 2005 to 2019. At the end of the study, the paper also conducted a one-way ANOVA test using Bonferroni tabulation with a probability of 0.05 to estimate the difference in profit rates from the three sectors. To compare profit rates in two cabinets, the study used a t-test (mean-comparison test).

Measurement of research variables is projected based on the adoption of the literature and previous research (Table 1). For measuring a dependent variable of profit rates, the study used one formula from Brigham and Houston (2016): net profit margin. The measurement of the effectiveness of tax revenues adopts the formula used by Ruliana (2015), which is the comparison of receipt realization to the revenue target. BI rate is the interest rate set by the Bank Indonesia. The infrastructure fund allocation rate formula adopts the common size ratio of Ehrhardt and Brigham (2013). Data on the amount of state tax revenue and infrastructure allocation funds are obtained from the Government Financial Report from the Ministry of Finance of the Republic of Indonesia. As for investment growth, it is measured by modifying the growth ratio of Zheng et al. (2015). Economic sector investment realization data is obtained from the Indonesian Central Statistics Agency database.

Table 1. Variable description and measurement

Variable	Description	Proxy
PROF	Profit rate	Net profit/total sales
ETAX	Effectiveness of tax revenue	Realization of tax revenue/ target of tax revenue
RTAX	Realization of tax revenue	Amount of tax revenue
BIRT	BI-rate	Bank of Indonesian Interest rate (*Reference rate*)
INFR	Infrastructure fund allocation rate	General allocation funds/total state expenditure
RINF	Realization of infrastructure funds	Amount of general allocation funds
INVG	Investment growth	(Current investment – prior investment)/prior investment
RINV	Realization of investments	Amount of DDI and FDI

Table 2. Descriptive statistics of each industry

Variable	Obs.	Mean	Std. dev.	Min	Max
All data sets					
PROF	3,840	.0329119	13.99046	427.5663	322.2222
ETAX	3,840	.9435853	.0631288	.8329121	1.081207
RTAX	3,840	9.507712	3.83362	3.470311	15.46142
BIRT	3,840	7.239957	2.017965	4.5625	12.75
INFR	3,840	.1925923	.0133969	.1741574	.2183449
RINF	3,840	2.719765	1.047153	.8876543	4.209102
INVG	3,840	.0876239	.2271445	−.5466939	.4136918
RINV	3,840	3.886804	2.443902	.757768	7.786291
Primary sector data set					
PROF	240	−.1619439	3.685775	−53.95377	13.97771
ETAX	240	.9435853	.0632525	.8329121	1.081207
RTAX	240	9.507712	3.841132	3.470311	15.46142
BIRT	240	7.239957	2.021919	4.5625	12.75
INFR	240	.1925923	.0134231	.1741574	.2183449
RINF	240	2.719765	1.049205	.8876543	4.209102
INVG	240	.0876239	.2275895	−.5466939	.4136918
RINV	240	3.886804	2.448691	.757768	7.786291
Manufacturing sector data set					
PROF	1,485	−.403341	11.816	−332.0643	7.285714
ETAX	1,485	.9435853	.0631419	.8329121	1.081207
RTAX	1,485	9.507712	3.834412	3.470311	15.46142
BIRT	1,485	7.239957	2.018382	4.5625	12.75
INFR	1,485	.1925923	.0133996	.1741574	.2183449
RINF	1,485	2.719765	1.047369	.8876543	4.209102
INVG	1,485	.0876239	.2271914	−.5466939	.4136918
RINV	1,485	3.886804	2.444407	.757768	7.786291
Service sector data set					
PROF	2,115	.3612828	15.98928	−427.5663	322.2222
ETAX	2,115	.9435853	.0631355	.8329121	1.081207
RTAX	2,115	9.507712	3.834027	3.470311	15.46142
BIRT	2,115	7.239957	2.01818	4.5625	12.75
INFR	2,115	.1925923	.0133983	.1741574	.2183449
RINF	2,115	2.719765	1.047264	.8876543	4.209102
INVG	2,115	.0876239	.2271686	−.5466939	.4136918
RINV	2,115	3.886804	2.444162	.757768	7.786291

A summary of descriptive statistics related to the instruments used in this research model is presented in Table 2. Table 2 provides information on statistical descriptions of 4 data sets, including all sectors, primary sector, manufacturing sector, and service sector. The number of observations from all sector data sets is as much as 3,840; 240 observations – for the primary sector; 1,485 observations – for the manufacturing sector; and 2,115 observations – for the service sector.

To identify correlations between research variables and see the magnitude of co-movement, the correlation matrix is displayed in Table 3. In the end, the correlation matrix value of each variable indicates that there is no correlation of each research variable.

Table 3. Correlation matrix between the variables of each industry

Variable	PROF	ETAX	RTAX	BIRT	INFR	RINF	INVG	RINV
All data sets								
PROF	1.0000	–	–	–	–	–	–	–
ETAX	0.0099	1.0000	–	–	–	–	–	–
RTAX	−0.0243	−0.6854	1.0000	–	–	–	–	–
BIRT	0.0176	0.4307	−0.7795	1.0000	–	–	–	–
INFR	−0.0054	−0.1979	−0.2342	−0.0050	1.0000	–	–	–
RINF	−0.0244	−0.7367	0.9878	−0.7872	−0.0985	1.0000	–	–
INVG	−0.0012	0.1484	0.2262	−0.3968	−0.2309	0.1978	1.0000	–
RINV	−0.0317	−0.7272	0.9796	−0.6898	−0.1895	0.9767	0.1661	1.0000
Primary sector data set								
PROF	1.0000	–	–	–	–	–	–	–
ETAX	0.1008	1.0000	–	–	–	–	–	–
RTAX	−0.0397	−0.6854	1.0000	–	–	–	–	–
BIRT	−0.0137	0.4307	−0.7795	1.0000	–	–	–	–
INFR	−0.0112	−0.1979	−0.2342	−0.0050	1.0000	–	–	–
RINF	−0.0379	−0.7367	0.9878	−0.7872	−0.0985	1.0000	–	–
INVG	−0.0109	0.1484	0.2262	−0.3968	−0.2309	0.1978	1.0000	–
RINV	−0.0369	−0.7272	0.9796	−0.6898	−0.1895	0.9767	0.1661	1.0000
Manufacturing sector data set								
PROF	1.0000	–	–	–	–	–	–	–
ETAX	0.0129	1.0000	–	–	–	–	–	–
RTAX	−0.0474	−0.6854	1.0000	–	–	–	–	–
BIRT	0.0446	0.4307	−0.7795	1.0000	–	–	–	–
INFR	0.0066	−0.1979	−0.2342	−0.0050	1.0000	–	–	–
RINF	−0.0465	−0.7367	0.9878	−0.7872	−0.0985	1.0000	–	–
INVG	−0.0018	0.1484	0.2262	−0.3968	−0.2309	0.1978	1.0000	–
RINV	−0.0526	−0.7272	0.9796	−0.6898	−0.1895	0.9767	0.1661	1.0000
Service sector data set								
PROF	1.0000	–	–	–	–	–	–	–
ETAX	0.0065	1.0000	–	–	–	–	–	–
RTAX	−0.0130	−0.6854	1.0000	–	–	–	–	–
BIRT	0.0051	0.4307	−0.7795	1.0000	–	–	–	–
INFR	−0.0117	−0.1979	−0.2342	−0.0050	1.0000	–	–	–
RINF	−0.0136	−0.7367	0.9878	−0.7872	−0.0985	1.0000	–	–
INVG	−0.0006	0.1484	0.2262	−0.3968	−0.2309	0.1978	1.0000	–
RINV	−0.0221	−0.7272	0.9796	−0.6898	−0.1895	0.9767	0.1661	1.0000

3. EMPIRICAL RESULTS

The GMM estimator assumes the data is stationary. However, sometimes in one data set the panel is found not stationary. Thus, the root testing unit is considered. The study used four root unit testing methods: Levin-Lin-Chu test, Im-Pesaran-Shin test, Phillips-Perron (PP) Fisher test, and Augmented Dickey-Fuller (ADF) Fisher test. After passing the root unit test, it was concluded that the variable profit rate in each sector was stationary (probability < 0.05) with the results in Table 4.

Once it is determined that the stationary assumption in the regression analysis is not violated, then the GMM estimator regression results are accepted. The study presents four dynamic regression results of the GMM estimator panel for each dataset, along with the results of the Wald test and the Sargan's test.

Table 4. Result of panel unit root test

PROF	Levin-Lin-Chu		Im-Pesaran-Shin		PP-Fisher Chi-Square		ADF-Fisher Chi-Square	
	Stat.	Prob.	Stat.	Prob.	Stat.	Prob.	Stat.	Prob.
Set 1	−120.0000	0.0000	−13.1045	0.0000	45.2617	0.0000	17.1269	0.0000
Set 2	−57.4509	0.0000	−6.6674	0.0000	13.1308	0.0000	13.1562	0.0000
Set 3	−15.3725	0.0000	−7.3927	0.0000	32.0812	0.0000	13.5137	0.0000
Set 4	−120.0000	0.0000	−12.1718	0.0000	29.9407	0.0000	11.3061	0.0000

Note: Set 1 – is all data sets; Set 2 is primary sector dataset; Set 3 is manufacturing sector dataset; and Set 4 is service sector dataset.

3.1. Factors affecting the profit rate of Indonesian firms

Dynamic panel regression result of all sectors (Table 5) shows that the variables of RINF, INVG, and RINV are significant to PROF. This means that the company's profit rate in Indonesia (from all industrial sectors) is determined by fiscal factors through infrastructure fund realization, investment growth, and investment realization policies. Meanwhile, the BI rate as a proxy of monetary policy does not show its impact. Based on the Wald test, the independent variables in the model have explanatory power for the variable dependent ($p < 0.05$). The probability value of Sargan's test

is greater than the critical value, so over-identifying restrictions of instrumental variables are valid.

3.2. Factors affecting the profit rate of the primary sector

Table 6 presents the dynamic panel regression results of the primary sector as well as Wald test and Sargan's test. Independent variables in the primary sector dataset have explanatory powers on dependent variables, and over-identifying restrictions are valid. GMM estimator results show that the company's profit rate in the primary sector is only affected by infrastructure fund realization (RINF), while other variables are insignif-

Table 5. Dynamic panel regression results of all sectors

Variable	Coef.	Std. err.	z	P > |z|
ETAX	−13.00194	215.0845	−0.06	0.952
RTAX	11.47397	22.24887	0.52	0.606
BIRT	−4.168487	9.921872	−0.42	0.674
INFR	−2009.088	1584.709	−1.27	0.205
RINF	178.4833	69.23435	2.58	0.010
INVG	295.9797	101.9144	2.90	0.004
RINV	−82.71354	28.97844	−2.85	0.004
PROF$_{t-1}$	130.4485	596.5552	0.22	0.827
Wald-statistic			chi2(7) = 15.71	Prob = 0.0279
Sargan's test			chi2(60) = 37.15	Prob = 0.9910

Table 6. Dynamic panel regression results of the primary sector

Variable	Coef.	Std. Err.	z	P > |z|
ETAX	105.9664	69.53034	1.52	0.128
RTAX	−9.356421	7.799642	−1.20	0.230
BIRT	−4.592051	3.298735	−1.39	0.164
INFR	−612.9607	478.7567	−1.28	0.200
RINF	62.4368	22.45953	2.78	0.005
INVG	−27.11551	15.3562	−1.77	0.077
RINV	−12.69463	10.34816	−1.23	0.220
PROF$_{t-1}$	22.00977	183.2139	0.12	0.904
Wald-statistic			chi2(7) = 15.17	Prob. = 0.0339
Sargan's test			chi2(29) = 30.74	Prob. = 0.3774

Table 7. Dynamic panel regression results of the manufacturing sector

Variable	Coef.	Std. Err.	z	P > |z|
ETAX	−513.5859	640.7699	−0.80	0.423
RTAX	50.79689	66.96786	0.76	0.448
BIRT	74.64133	22.17463	3.37	0.001
INFR	−1058.073	4129.5	−0.26	0.798
RINF	187.3144	199.6252	0.94	0.348
INVG	209.3718	98.28453	2.13	0.033
RINV	−161.7741	76.96265	−2.10	0.036
$PROF_{t-1}$	−234.3892	1532.909	−0.15	0.878
Wald-statistic			chi2(7) = 45.89	Prob = 0.0000
Sargan's test			chi2(11) = 14.98	Prob = 0.1831

Table 8. Dynamic panel regression results of the service sector

Variable	Coef.	Std. Err.	z	P>|z|
ETAX	79.70643	545.3688	0.15	0.884
RTAX	−8.347725	46.74818	−0.18	0.858
BIRT	−24.81112	24.365	−1.02	0.309
INFR	−5,642.347	3,060.874	−1.84	0.065
RINF	369.4652	193.1378	1.91	0.056
INVG	−305.1487	130.1243	−2.35	0.019
RINV	−164.0954	60.31712	−2.72	0.007
$PROF_{t-1}$	930.51	1,165.382	0.80	0.425
Wald-statistic			chi2(7) = 20.27	Prob = 0.0050
Sargan's test			chi2(11) = 49.03	Prob = 0.2781

icant. The realization of infrastructure fund allocation affects the profit rate of the primary sector company.

3.3. Factors affecting the profit rate of the manufacturing sector

Dynamic panel analysis should be performed when the lag of dependent variables is used to estimate unbiased estimators. The study found that BIRT, INVG, and RINV were significant to profit rates in manufacturing sector companies. The Wald test reinforces this result and the straightforward Sargan's test that independent variables can explain dependent variables well, and over-identifying restrictions are valid.

3.4. Factors affecting the profit rate of the service sector

A company's profit rate in the service sector is influenced by the INVG and RINV variables which are one instrument of fiscal policy. This statistical result (Table 8) found no significance of the variables in the model even though the Wald and Sargan's tests were clear.

3.5. Comparison of the firm's profit rate in both cabinets

Countries around the world inevitably experience shifts in heads of state with certain leadership styles and controversial policies. The difference between two or more leaderships in a country can bring good news or create a dilemma for entrepreneurship (large or small companies). Differences in economic policy between governments impact the company's profit rate; the study analyzed the difference in corporate profitability between the two Indonesian governments. The two governments are called Cabinet 1 and Cabinet 2. Cabinet 1 was the government in 2005–2009, while Cabinet 2 was the government of the period 2015–2019. Based on the two samples, the t-test in Table 9 indicates a significant difference in the corporate profit rates in Indonesia between the two cabinets ($p < 0.05$). However, the difference is very thin because the probability value is close to 0.05.

Bonferroni tabulation is required to know whether or not there is a difference in profit rates in three industrial sectors in each cabinet. The statistics

Table 9. Comparison of profit rates between both cabinets

Group	Obs.	Mean	Std. Err.	Std. dev.	df	t	Prob.
1	1,280	.1768716	.2648178	9.47441	–	–	–
2	1,280	−.9533402	.5050732	18.07005	–	–	–
combined	2,560	−.3882343	.2853066	14.4355	–	–	–
Diff	–	1.130212	.5702871	–	2,558	1.9818	0.0476

Table 10. Comparison of profit rates between both cabinets in the industrial sector

Row Mean – Col Mean	Cabinet 1		Cabinet 2	
	1	2	1	2
2	.02103 1.000	–	−.790941 1.000	–
3	.29403 1.000	.272999 1.000	−.22329 1.000	.56765 1.000
Bartlett's test	chi2(2) = 4,100	Prob. = 0.000	chi2(2) = 115.794	Prob. = 0.000

are presented in Table 10. The study found no difference in profit rates between the industrial sectors of companies in Indonesia in both reigns ($p > 0.05$). Bartlett's test also conveys a probability value of 0.000 less than the critical value. All three sectors in both cabinets had the same variant.

4. DISCUSSION

The analysis of dynamic panel estimators on this study obtained surprising results. The profit rate of companies listed on the Indonesia Stock Exchange is generally determined by fiscal policy instruments. The policy instrument is the realization of infrastructure funds, investment growth, and investment realization. All three play different roles. The study looked at that the realization of infrastructure funds and investment growth lead positively to an increase in the company's profit rate, while investment realization has a negative influence. The realization effect of infrastructure funds is also seen in the primary sector. These findings support Makmuri (2017): improving infrastructure facilities can drive income distribution and reduce inequality. Although, the realization of infrastructure is not felt significantly by the manufacturing and service sectors individually, but it is overall significant. Equitable infrastructure provides mobility for people and businesses in particular to support operational activities and distribution of products/services. Agriculture and mining companies need infrastructure and mobility support

for the production and delivery of goods. As Obayelu et al. (2014) and Maryati et al. (2020) found, infrastructure encourages farmers to save time and costs, resulting in higher profit-generating capabilities.

The influence of investment growth and investment realization is also found in the manufacturing sector and service sector. Investment growth has a positive impact on the profit rate of manufacturing sector companies, while in the service sector shows a negative direction. The findings support Ullah et al. (2014), who found that DDI and FDI create an investment climate that can encourage investment. Investment growth shows a climate that encourages manufacturing companies to invest through the provision of technology to support productivity and increased revenue. Most manufacturing companies in Indonesia export goods to several countries. This shows that good investment growth can increase the growth of the company's exports so that their performance increases.

On the other hand, the service sector feels the opposite influence. The realization of investment negatively influences the company's profit rate, both in the manufacturing and the service sectors. There is a favorable investment climate when domestic investment and foreign direct investment complement each other. The study saw that the proportion of FDI realization is much higher than DDI. DDI is half that of FDI; even in 2008 DDI was only 14%. When higher FDI cre-

ates a more competitive business environment and disrupts domestic products/services, domestic products/services will compete with foreigners, impacting their performance (Chen, 2011).

The study found that the interest rate projected with BI rate is insignificant to the company's profit rate both in the primary sector, service sector, and overall. The effect is only shown in the manufacturing sector. BI rate is the monetary policy instrument used in this study. This instrument was found to have a positive influence on the profit rate of manufacturing companies in Indonesia. That is, the interest rate set by Bank Indonesia affects the profit rate of manufacturing sector companies. Interest rates are often related to capital markets and money circulation (borrowing and saving). Companies tend to save funds to suppress cash outflows, increase their output, and avoid greater interest charges due to increased interest rates (Isola & Mesagan, 2018).

CONCLUSION

Government policy at the time of the pandemic influenced the economic condition of a company. This study aims to analyze the effect of macroeconomic policy on company's profit rate in Indonesia. The research findings explain that the policy instruments for infrastructure fund realization, investment growth, and investment realization affect the company's profit rates. The impact of investment policy on profit rate is also seen in the manufacturing and service sectors, although it shows a different direction in the investment growth variable. Meanwhile, the realization of infrastructure funds only affects the profit rates of primary sector companies. On the other hand, monetary policy only affects the profit rates of manufacturing sector companies. The different tests show a significant difference in the mean of profit rates in the two government cabinets, the period 2005–2009 and the period 2015–2019.

The dynamic results of the relationship between fiscal policy and monetary policy on the corporate profits rates in Indonesia can open the horizons of readers, state officials, and company management in making decisions. The Indonesian government can pay close attention to economic policy instruments (fiscal and monetary) because of the impact on business performance in Indonesia. Future research can further examine the involvement of macroeconomic policies on company performance, such as distinguishing between the roles of FDI and DDI, inflation, currency exchange rates, and other macroeconomic instruments.

AUTHOR CONTRIBUTIONS

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