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DETERMINANTS OF INVESTMENT OPPORTUNITIES IN PHARMACEUTICAL COMPANIES REGISTERED ON THE IDX DURING THE COVID-19 PANDEMIC

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Abstract

The reason of this exposition is to form a judgment, whether it is concurrent or fractional. Deals Development, Gaining Development, Resource Development, and Return On Speculation (ROI) to Speculation Opportunity Set (IOS) in Pharmaceutical sub-sector companies recorded on the Indonesia Stock Exchange (IDX) in 2019Q1–2021. With the assistance of a method called 'linear induction analysis' which takes under consideration 'normality', 'multicollinearity', 'autocorrelation' and 'heteroscedasticity'. The comes about of the F test examination appear that the Fcount esteem is 2.910282 higher than the Ftable esteem of 2.58, and a critical esteem is 0.0320370.05 which suggests that the ROI is essentially higher than the Ftable esteem with regard to Venture Opportunity Set (IOS) . Given that the R Square is around 0.1373, this shows a 13.73% speculation opportunity set, concurring to the coefficient of assurance.

Keywords: Sales Growth, Earning Growth, Asset Growth, Return On Investment in Investment Opportunity Set (IOS).



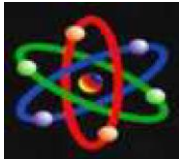
INTRODUCTION

The entire world is confronting a genuine emergency in 2020. This was caused by the spread of the viral flare-up known as Covid-19. Through a articulation by the WHO (World Organization or World Wellbeing Organization) that the status of the crown infection episode was at the widespread level. This epidemic spread exceptionally altogether rapidly and proceeds to extend all through the world, counting Indonesia. The quick spread has had an affect on numerous perspectives, one of which is the industry in Indonesia. The COVID-19 widespread has come about in noteworthy changes in different mechanical segments, counting the pharmaceutical industry. Be that as it may the pharmaceutical industry is appearing appealing potential for venture openings in the midst of this challenging circumstance. Amid the widespread, the request for pharmaceutical items such as drugs, immunizations and therapeutic gear expanded definitely. Pharmaceutical companies play an vital part in creating and giving the restorative arrangements required to overcome wellbeing emergencies amid a widespread. This tall request makes alluring speculation openings for pharmaceutical companies to extend generation and create developments that are important to advertise needs. Venture Opportunity Set (IOS) is an elective that can be chosen by speculators and companies to see venture opportunities/opportunities to contribute within the frame of a collection of existing assets (assets in put) within the future to reinforce advertise capitalization. Speculation Opportunity Set (IOS) can be affected by a few factors, one of which is the

development proportion. The development proportion plays a part in calculating the rate of victory that will be realized. The higher the development proportion, the more prominent the company's execution. The execution of the company will give an diagram to speculators in surveying and considering speculation choices.

The company's advance is the specified perspective both from the inside and outside scope of the company. Development incorporates a positive affect on the company's perspectives coming about in expanded venture openings within the company's commerce. For investors, company development is an opportunity that gives benefits since the speculation made guarantees tall returns within the future. The showcase responds to company development and development is reflected in venture openings, to be specific venture opportunity sets (Kusumawati & Safiq, 2019). This consider employments the proportion of deals development, benefit development, and resource development. Development proportions can be utilized to help in deciding the determination of venture opportunity sets. The more noteworthy the level of deals and company benefits, the more noteworthy the inclination for outside utilize compared to lower levels of deals. In expansion to utilizing development proportions, analysts too utilize productivity proportions with a intermediary for Return on Speculation (ROI) which is anticipated to influence IOS. In the midst of the spread of COVID-19, the pharmaceutical industry is confronting gigantic challenges as a result of the affect emerging from this circumstance. Pharmaceutical companies experience





changes in deals, resources and profits. These are a few variables that overwhelm the impact of speculation opportunity set (IOS) variances. Companies that look for to realize an ideal IOS esteem got to consider its relationship with the components that influence the IOS.

Issue r Code	Ye ar	Sale	Asset	Net profit	HP S
	2019	744,634,530,000	901,060,986,000	78,256,797,000	2,850
BRA ND	2020	655,847,125,000	929,901,046,000	71,902,263,000	3,280
	2021	1,064,394,815,000	1,026,266,866,000	131,660,834,000	3,690
	2019	9,400,535,476,000	18,352,877,132,000	15,890,439,000	1,250
KAE F	2020	10,006,173,023,000	17,562,816,674,000	20,425,756,000	4,250
	2021	12,857,626,593,000	17,760,195,040,000	289,888,789,000	2,430
	2019	1,359,175,249,655	1,383,935,194,386	7,961,966,026	2,850
INA F	2020	1,715,587,654,399	1,713,334,658,849	30,020,709	3,280
	2021	2,901,986,532,879	2,011,879,396,142	37,571,241,226	3,690

Table 1. Research Phenomena

From the table recorded over, it can be seen that PT MERK Tbk's deals in 2019-2020 diminished by 88,787,405,000, but this was not counterbalanced by an increment in closing share cost of 430. From the table recorded over it can be seen that the resources of PT Kimia Farma Tbk in 2020-2021 have expanded by 197,378,366,000, be that as it may this circumstance was not balanced by a diminish within the closing share cost of 550. From the table recorded over it can be seen that PT Indo Farma Tbk's benefits within the 2019-2020 quarter diminished by 7,931,945,317, but this was not balanced by an increment within the

closing share cost of 430. With reference to the past depiction, this think about was inspected to reply the address: do deals development, profit development, resource development, and return on speculation (ROI) have an impact on the Venture Opportunity Set earlier to and amid the Covid-19 widespread.

RESEARCH METHODOLOGY

Types and Sources of Data

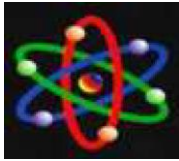
The information connected in this ponder are auxiliary, meaning that the information has existed some time recently and was collected by other parties. The auxiliary information utilized in this investigate comes from the Indonesian Securities Trade site which gives stock cost data issued by different Indonesian companies.

Population and sample

The scope of the question that will be the subject of inquire about will be the populace. Within the setting of this think about, pharmaceutical companies recorded on the Indonesia Stock Trade (IDX) are the populace utilized as inquire about subjects. In this ponder a agent test of the population was chosen employing a purposive testing procedure. The criteria used in examining utilizing the purposive examining strategy within the 2019Q1-2021Q4 period incorporate:

Criteria	Elimination	Amount
1. Companies that are the research samples for the 2019-2021 period	(1)(2)	10 978449
2. Companies that are not in a state of delisting	(35)	
3. Companies that have profit 2019Q1-2021Q4		





4.	Unit of Analysis Q1-Q4 in 2019-2021 (12)	
5.	Company Data in Unit of Analysis which reveals sales Growth, profit growth and asset growth	
Number of Data Samples		49

Table 1. Sample Criteria

In this ponder , two untrustworthy factors and one dependable variable were utilized. The factors specified over are utilized to decide the relative esteem of the free and subordinate factors. The free factors are Deals Development, Winning Development, Resource Development, Return On Venture (ROI), and the subordinate variable is Venture Opportunity Set. Agreeing to Ruchjana & Hasbullah (2020), there are common procedures in board information investigation, specifically Irregular Impact Demonstrate (REM), Settled Impact Show (FEM), and Common Impact Show (CEM) are three sorts of impact models. To choose the foremost suitable demonstrate, the sChow, sHausman, and Lagrange Multiplier (LM) strategies can be utilized. Chow test was utilized to compare the board noteworthiness of the CEM and FEM models. The Hausman test was utilized totally to compare the gauges given by FEM and REM. In differentiate, the LM test is utilized to distinguish person impacts that are not captured by the REM demonstrate.

RESULT

	SG	EG	AG	ROI	iOS
Means	14.170 15	79.402 92	12.978 82	8.0091 89	4.2613 69
Median	8.5806 25	10.851 83	8.0899 52	6.4584 03	3.2166 03
Maximum	128.56 36	1319.2 32	177.56 67	30.988 14	14.437 31

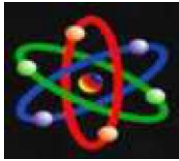
Minimum	0.9769 44	0.2353 06	1.1238 42	0.0862 14	0.7115 53
std. Dev.	20.440 45	210.55 82	25.042 90	6.3559 73	3.5435 13
Skewness	4.0367 05	4.6186 44	6.0153 70	1.5087 34	1.3077 61
kurtosis	21.750 00	26.275 92	39.765 21	5.6772 30	3.6549 19
Jarque-Bera	850.84 89	128032 1	305518 9	33.223 38	14.842 66
probabilit y	0.0000 00	0.0000 00	0.0000 00	0.0000 00	0.0005 98
sum	694.33 75	389074 3	635.96 21	392.45 02	208.80 71
Sum Sq. Dev.	20054. 97	212806 8.	30103. 05	1939,1 23	602.71 13
Observati ons	49	49	49	49	49

Table 2. Descriptive Statistics

Variable Deals Development with a least esteem of 0.976944, a greatest esteem of 128.5636 and an normal esteem of 14.17015 with a standard deviation esteem of 20.44045. Gaining Development Variable, the least esteem is 0.235306, the most extreme esteem is 1319.232 and the normal esteem is 79.40292 with a standard deviation esteem of 210.5582. Resource Development Variable, the least esteem is 1.123842, the most extreme esteem is 177.5667 and the normal esteem is 12.97882 with a standard deviation esteem of 25.04290. Variable Return On Speculation (ROI), least esteem 0.086214, greatest esteem 30.98814 and normal esteem 8.009189 with standard esteem.

The Chow test was utilized to analyze and compare the Common Impact Demonstrate (CEM) and Settled Impact Demonstrate (FEM). On the off chance that ($P > 0.05$), the CEM demonstrate will be decided. On the





off chance that ($P < 0.05$), the FEM demonstrate will be calculated. Based on the comes about of Chow's explore in Table 3.2, the likelihood of cross area sF is around 0.0000, lower than the centrality level (0.05). Since of this, the demonstrate utilized in this inquire about is the Settled Impacts Demonstrate (FEM). The Housman test employments the Settled Impact Demonstrate (FEM) and the Irregular Impact iModel (REM) to choose the finest show. In the event that is more prominent than 0.05 the result is REM, and in the event that is less than 0.05 the result is FEM. The point of this investigate is to discover out whether there's a noteworthy contrast between the two demonstrate estimation parameters.

Correlated Random Effects - Hausman Test
 Equation: Untitled
 Test period random effects

Test Summary	Chi-Sq. Statistics	Chi-Sq. df	Prob.
Random cross-sections	0.000000	4	1.0000

Table 4. Housman's Experiment

The results of Housman's experiment, with a random cross-section probability of 1.0000 greater than 0.05. The Random Effects Model (REM) was then selected as the model for this test. Lagrange Multiplier test is used to ensure that the best imodel is chosen between the Comment Effect Model (CEM) and the Random Effect Model (REM). The selected model is CEM if $P > 0.05$, and the selected model is REM if $P < 0.05$.

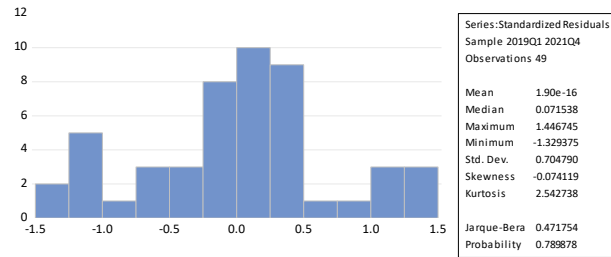


Figure 4. Jarque-Bera probability

The graph above shows the Jarque-Bera probability weight of 0, exceeding the commonly used significance level, which is 0.05. On the graph, the normality test results show that the data meets the normality criteria. The results of the multicollinearity test above show that all independent variable values in the multicollinearity test above are below 0.90, so it is concluded that in the research data there is no multicollinearity.

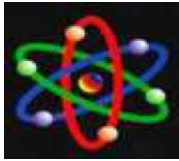
Autocorrelation Test

Variables	coefficient	std. Error	t-Statistics	Prob.
C	0.873688	0.329515	2.651435	0.0111
LOG_SG	0.092254	0.127468	0.723741	0.4731
LOG_EG	-0.116715	0.059911	-1.948162	0.0578
LOG_AG	-0.022550	0.092876	-0.242800	0.8093
LOG_ROI	0.264280	0.064523	4.095888	0.0002

Table 5. T-Test

The findings of the autocorrelation analysis on the Durbin-Waston test (DW-Test) obtained a DW value of 1.746946 and a dU value in the DW table of 1.7210, then $1.7210 < 1.746946 < 4 - 1.746946$, namely $1.7210 < 1.746946 < 2.253$. This means that the research achieved did not occur autocorrelation. Sales Growth tcount (0.723741) < ttable (1.679) with a significance value (0.4731) > (0.05). It





means that individually (partially) there is no significant impact or influence between sales growth and IOS. Earning Growth tcount (-1.948162) < ttable (1.679) with a significant value (0.0578) > (0.05). It means that individually/partially there is no significant impact or influence on earning growth with IOS. Asset Growth tcount (-0.242800) < ttable (1.679) with a significance value of (0.8093) > (0.05). It means that individually/(partially) there is no significant impact or influence between asset growth and IOS. ROI (Return On Investment) tcount (4.095888) > ttable (1.679) with a significance value (0.0002) <(0.05). Means that individually/partially there is a significant influence or impact between asset growth and IOS.

R-squared	0.209218
Adjusted R-squared	0.137329
SE of regression	0.736129
F-statistics	2.910282
Prob(F-statistic)	0.032037

Table 6. F-Test

In table above it can be seen that the fcount value is 2.910282 and the ftable value is 2.58. This means that the weight of fcount > ftable is executed with a significant value (0.032037 <0.05). This shows Sales Growth, Earning Growth, Asset Growth, and Roi simultaneously significantly affect IOS.

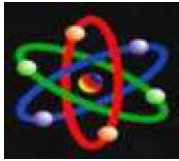
Discussion of Research Results

The comes about of the T test from the halfway test, the Deals Development comes about gotten essentially did not have an impact or impact on the 'Investment Opportunity Set'. These discoveries bolster

the comes about of inquire about by sKusumawati and sSafiq (2019) who say that deals development does not have a critical impact on IOS. From the comes about over, changes within the value of deals development don't always have an affect on changes within the esteem of IOS. Deals development is as it were one calculate that can influence an venture opportunity. The COVID-19 widespread has made advertise vulnerability and changes in shopper behavior towards the buy and utilization of drugs towards deals and intrigued in contributing. This brought about in moo IOS/investment openings in spite of positive deals development. The comes about of the T test from the halfway test, the Gaining Development comes about don't have an impact or impact on the Speculation Opportunity Set.

The comes about of these discoveries back the discoveries of Kurniawan (2020), who expressed that sSales Growth/profit development does not have a critical affect on Venture Opportunities/IOS. The more positive the benefit development esteem does not continuously ensure an increment within the IOS esteem. Companies with tall development rates in benefits show that they can increment their operations, but they ought to too consider the presence of IOS, due to tall benefit development pharmaceutical companies may moreover involvement higher fetched burdens due to expanded request for wellbeing items and utilize of common assets. existing control. The comes about of the T test from the halfway test, the Resource Development comes about appear that it has no noteworthy impact or impact on Speculation





Opportunity Set'. These discoveries coincide with the hypothetical comes about of Kurniawan's inquire about (2020), which states that Resource Development has no critical impact on Speculation Opportunities/IOS.

Resources that have expanded development don't continuously ensure a great or beneficial IOS. Resource development appears that companies have more resources that can be utilized for speculation but cannot continuously be utilized viably to create superior IOS. Resources can be utilized to extend the company's generation capacity to meet the expanding request for pandemic-relevant pharmaceutical items. Whereas expanded generation can give short-term benefits, it does not essentially make beneficial IOS within the long term.

Effect of ROI on Investment Opportunity Set

The comes about of the T test from the fractional test, gotten the comes about of Retrun On Speculation (ROI) which altogether have an impact or impact on the 'Investment Opportunity Set'. The comes about of these discoveries back the hypothesis that Benefit by intermediary for ROI encompasses a noteworthy impact on IOS (Suduby and Rita, 2021). ROI is the proportion of the benefit produced by an speculation compared to the fetched of the speculation. In this case, a high ROI appears that the company has overseen to create great utilize of the venture and produce critical benefits. Amid the Covid-19 widespread, tall ROI appeared that pharmaceutical companies had overseen their investments well and took advantage of

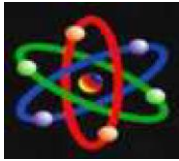
market openings that risen amid the widespread. That's , When a company incorporates a higher return on investment/ROI, there are more openings to contribute. The comes about of the F test from the concurrent test show that all factors essentially increment IOS (Speculation Opportunity Set). Comparably, it can be concluded that a critical alter within the free parameter features a noteworthy affect on the Speculation Opportunity Set ('IOS').

CONCLUSIONS

Regarding this research, the researcher concludes as follows:

1. Sales growth shows no significant effect on IOS. This means that even though there was an increase in sales, it did not bring a significant change to the pharmaceutical company's IOS performance.
2. Earning Growth does not have a significant impact on IOS. So even though profit increased, IOS did not increase significantly.
3. Asset Growth does not significantly affect IOS. This means that even though there is an increase in assets it does not bring a significant change to the IOS performance of pharmaceutical companies
4. Return On Investment (ROI) has a significant influence on IOS. So the increasing ROI value will have a positive impact on IOS.
5. Overall Sales Growth, Earning Growth, Asset Growth and ROI in pharmaceutical companies simultaneously had a positive impact





on iOS during the Covid 19 pandemic. Related to this, the factor that has the most impact on company IOS performance is ROI, but Sales Growth, Earning Growth and Asset Growth also play an important role in determining iOS performance in IOS performance.

Suggestions

From the research that has been carried out, the researcher suggests the following:

1. For companies to maintain high ROI through an effective strategy in investment management. Companies must also increase Sales Growth, Earning Growth, and Asset Growth to maximize the positive impact on IOS. Companies must also stay abreast of the latest developments in the pharmaceutical industry to maintain their competitive advantage and improve IOS.
2. Suggestions for the next researcher to review additional factors that might affect IOS, for example looking at the impact of using technology or government policies on IOS. In addition, researchers can also compare these results with pharmaceutical companies in other countries to see whether the factors that influence IOS are similar or different.

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