

# TESTING FINANCIAL INFORMATION IN FORMING INVESTOR CONFIDENCE

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**Abstract**—This study aims to see how markets react in their investments of information content of corporate financial performance in the capital market. This research has a decomposition attitude for investors to react in response to information of the financial performance of corporations. It begins with evaluating financial fundamental factors in expectation of common market reactions. Object research used is data from the financial reports of manufacturing companies for the years 2008-2017 listed on the Indonesian Stock Exchange. Analysis of data uses logistic regression with probit model and multivariate GLM. To achieve the aim, it will construct a model of market reaction in investment in regard to information of the financial performance of corporation. The research results show that first there are differences in net operating assets, causal growth, and financing assets to companies which have experienced profit both positive and negative. Second, company information had a significant effect on the beliefs of investors. Investors tend to give a reaction when they receive company information containing bad news.

**Keywords**— *market reaction, investor confidence, information, financial performance.*

## I. INTRODUCTION

Financial behaviour plays an important role in someone's decision to invest. Before making a decision, an investor should study corporate financial reports, the performance of the company, their portfolio track record, the state of the economy, risk of business, etc. This is what is presented in the fundamental approach. However, the fundamental approach requires the assumption that must be fulfilled which is generally difficult to obtain. First, the availability of that really relates to a company's fundamental value of financial assets that have been analysed. Second, investors are rational. In fact, the assumptions above are difficult to obtain. Kahneman and Tversky (1973) stated that information that can be obtained is limited. Although information can be obtained, interpretation of the information can be different. Thus, the psychological factors in decision making are grounded in the discovery of Miller (1977), who said that in one time unit, the human brain has to receive information, manage it and shape it into a decision which has limits so that people do not, regardless of bias and decision

making, rely on the power of psychology. A group of researchers stated that the limited attention of investors and the ability to process information causes systematic mistakes which can affect stock market prices. Besides that, investors also simplify considerations and decisions with focus on information of the bloated earnings performance.

Utility theory, developed by Von Neumann and Morgenstern (1947), states that (1) the investors are very rational, (2) they agree by complex choice, (3) they dislike risks and, (4) they maximize wealth. Not all investors are rational people and also they are not emotional. The bad news is that market players will be emotional immediately when shares are assessed as too low. To avoid loss, the investor behaves irrationally and seeks to sell shares quickly after a bad performance.

Information is a signal to the market against good news or bad news and also acts as a stimulus (Bruns, 1968). Sophisticated investors will analyse information to determine whether the signal is valid, trustworthy, and able to produce valuable information. If signal is beyond this and is trusted, the signal serves as a stimulus affecting investors' confidence. This factor changed according to time because information causes motivational changes as an indication that affects intentions (Ajzen, 1988).

Indonesian capital markets are the emerging market where decision-making is speculative, and affects opinions and psychology. Decision making for accounting and finance focuses on fundamental analysis. The determination of the value of shares with the performance of fundamentals can be used to assess the prospects of a firm (Scott, 2009).

## II. LITERATURE REVIEW AND HYPOTHESIS

### A. Investor Confidence

Confidence is an essential component in the process of decision making (Beaver, 1989). Changes in decisions can occur when new information received changes confidence. Scott (2009) and Beaver (1989) said financial information content helps in the formation of investors' confidence in the buying or selling of stock. Scott (2009) give predictions that investors begun to withdraw their behaviour in response to information in financial reports: (1) Investors are very confident about returns and risks of stocks It is grounded in the information available on the market, which includes the

market price until just before current net income published by the company. But, the confidence is not the same because there is a difference in information and the ability to interpret the information. (2) After publishing net income for some years running, investors will become more knowledgeable by analysing the income. If net income is higher than expected then this is good news. Other investors have high hopes of net income, the interpretation of the net income which is the same as bad news.

Belief Adjustment Theory (Hogarth & Einhorn, 1992) supposes that man will process information consecutively and have a limited memory. Therefore, this will change the order which is supposed to act through the process of anchoring and adjustment. Confidence is now beneficial as a conviction to be adjusted to be renewed and continually occurring respectively. This theory also considers the force of the confidence of an anchor and predicts that the person who has more anchor may be cut by negative information more than the person who has a small anchor.

#### *B. Financial information as former investor confidence*

The theory believes that adjustment explains the phenomena order effect that arises from an interaction between strategic information processing and which is characteristic of a duty that is one part of the heuristic bias (Bazerman, 1994). Specifically, model adjustment confidence predicts no influence on the order of (no order effects) evidence as consistent (a whole negative or whole positive) but the influence of his review happens when individuals obtain diverse evidence (some negative and some positive). Strategic reference point theory is a theory of psychology which explains that in the environment complex decision makers tend to consider the three main factors for decision making: the internal factor, external and dimension (past time, now, and the future).

#### *C. Preview Research*

Ferris et al (1990) showed that users who have no knowledge of the benefits of financial information are at risk. Studies by Beaver et al. (1970), Lee (1999), dan Koonce et. al (2004), state that users who are very confident companies which experience financial hardship, illiquidity, and worrying financial conditions are seen as risky. Users control unsystematic risk to diversify the shares of various companies, industry, and composition.

Risk perception reflects the view about potential loss on items of the company's financial reports and risk (Koonce et al., 2004). Risk perception shows the worrying conditions from the performance and prospects of a bad company. So, the user performs performance evaluation of stock. When the

performance of shares is bad it will be sold and revised with a stake performance which is still good. As a result intention in election stock is high (Chen dan Steiner, 1990; Gibson et al, 1997). The results of a different study by Hsu and Chiu (2004) indicate that the user does not want to be attentive to consequences in their intention to act.

Chen and Hsu (2005) proved that information company news advice contributed higher than information financial statements in changing belief and action investors. Users acted naively towards financial reports because they were not able to analyse financial information to be useful in the decision-making. Eipstein (1975), Easton and Zmijewski (1989), Beaver (1989), Barberis and Thaler (2003), Stuerke (2005), serta Scott (2009) shows that investors are very confident about shares of the company who wrote it.

Baker Wurgler (2007) used investor sentiment to see how psychological factors investors can be biased so as to affect the decision taken. This is reflected through returns of individuals and returns of the stock market that are formed. Sentiment investors can result from low capitalization of shares, a company that is less profitable, fluctuates with higher prices, the absence of payment dividend, and companies that experienced financial distress.

Chan & Chen (1991) and Fama & French (1992) shows that the anomaly markets, namely the return of higher to share small value and company shares relatively experienced distress. This test was backed by Aggarwal (2008) indicating that risk premium relates to assets held company and the company capitalization. Investors will be underreacting against a risk going out of business so that stock of a corporation will experience negative premium risk.

#### *D. Hypothesis*

Chen and Hsu (2005) showed that information from company news and advice makes a contribution which is higher than its financial statement in changing beliefs and investor action, as well as stating that the ministry of religious affairs relevance is more important than reliability. Based on the theoretical and empirical results, the arranged hypothesis is as follows:

##### *H1 : Company information influences investors belief*

Scott (2009) and Beaver (1989) showed that financial information has the wrong information in helping in the formation of investors in the buying or selling of stocks, which it is supposed to do. Scott (2009) give predictions that investors began to withdraw their behaviour in response to things in the financial reporting of information: (1) Investors are very confident about return and risk stock issuers expected. It is grounded in the information available on the market, which includes the market price until just before current net income company published. But, the confidence is not the same because there is a difference

in putting information and the ability of the interpretation of information. (2) After publishing net income for years running, investors will become more knowledgeable by analysing the income. If net income is higher than expected, this is good news. Other investors have high hopes of how achieving net income now, the interpretation of the net income which is the same as bad news. Baker Wurgler (2007) used investor sentiment in see how the psychological factors of investors can be biased so as to affect the decision taken. This is reflected through the returns of individuals and the return of stock markets that are formed. Based on the theoretical and empirical results, the arranged hypothesis is as follows:

*H2 : Investors tend to react favourably to company information when they received information that a finance company indicated good news.*

**III. METHOD**

Population in this research is financial data from all employers included in the manufacturing industries which are classified in the Indonesian Capital Markets Directory. Research was undertaken by using a purposive sampling method to obtain a representative sample in accordance with the set criteria. The criteria used for an election sample is: 1) the sample is companies included in manufacturing years 2008-2017 and publish a financial report which has been audited. Sampling derived from one industry aims to avoid any influence from a different industry. 2) the sample is companies that meet the criteria as the representative of a group of the company which reported a positive operating profit positive and a group of the company which reported a negative operating profit.

*A. Data Analysis*

The first step is to discriminate detection of financial information in a company that experienced positive and negative profit. An instrument of analysis used is binary logistic regression. Next it is based on an indicator obtained to prove that forms of financial information which investors are supposed to do. An instrument used in the analysis is GLM multivariate and interaction effect.

**IV. RESULTS AND FINDINGS**

Processed data indicates that financial information can distinguish profitable companies that obtained positive or negative net operating assets, earnings per share growth, fixed assets turnover and decisions funding for assets.

**TABLE 1. PARAMETER ESTIMATES IN PROBIT MODEL**

Parameter	Estimate	Std. Error	Z	Sig	95% Confidence Interval	
					Lower Bound	Upper Bound
DNOA	.484	.229	2.111	.035*	.035	.934
CAP	.047	.072	.654	.513	-.095	.189
PBV	.014	.019	.736	.462	-.023	.051
GEPS	.036	.014	2.513	.012*	.008	.063
FATO	.162	.050	3.221	.001*	.063	.261
DAR	-1.419	.270	-5.261	.000*	-1.948	-.890
GEBIT	.000	.009	-.016	.987	-.018	.018
DPR	.714	.679	1.051	.293	-.617	2.046
BETA	-.004	.041	-.099	.921	-.085	.077
INTERCEPT	.692	1.055	.656	.512	-.363	1.746

\* : Significant at 5 percent level.

Pearson goodness of fit shows that model fit with the data. The results of statistics show value sig = 0,984 namely was sitting on 0.05.

**TABLE 2. CHI-SQUARE TEST**

		Chi-Square	df <sup>a</sup>	Sig
Probit	Pearson Goodnes-of-Fit Test	321.694	378	.984

a. Statistics based on individual cases differ from statistics based on aggregated case

Processing the data shows that there is a real difference between groups. The results of the research suggest that there are differences in those with real operating assets, caused growth, and financing assets between the company which had positive and negative profit, and this difference is also reacted to by different investors. In other words net operating assets, growth of eps, and financing of assets gives different investors' confidence. However, fixed assets turnover applies to only the results of those tried with pillai's trace of the course who gives evidence that there was a gap in belief of investors, whereas the one at the height of the remaining portfolios were not tested.

**TABLE 3. MULTIVARIATE TEST<sup>A</sup>**

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.449	364.243 <sup>b</sup>	2.000	894.000	.000
	Wilks' Lambda	.551	364.243 <sup>b</sup>	2.000	894.000	.000
	Hotelling's Trace	.815	364.243 <sup>b</sup>	2.000	894.000	.000
Dnoa	Roy's Largest Root	.815	364.243 <sup>b</sup>	2.000	894.000	.000
	Pillai's Trace	.091	44.481 <sup>b</sup>	2.000	894.000	.000
	Wilks' Lambda	.909	44.481 <sup>b</sup>	2.000	894.000	.000
Geps	Hotelling's Trace	.100	44.481 <sup>b</sup>	2.000	894.000	.000
	Roy's Largest Root	.100	44.481 <sup>b</sup>	2.000	894.000	.000
	Pillai's Trace	.006	2.830 <sup>b</sup>	2.000	894.000	.060

Effect		Value	F	Hypothesis df	Error df	Sig.
	Wilks' Lambda	.994	2.830 <sup>b</sup>	2.000	894.000	.060
	Hotelling's Trace	.006	2.830 <sup>b</sup>	2.000	894.000	.060
	Roy's Largest Root	.006	2.830 <sup>b</sup>	2.000	894.000	.060
Fato	Pillai's Trace	.002	.774 <sup>b</sup>	2.000	894.000	.461
	Wilks' Lambda	.998	.774 <sup>b</sup>	2.000	894.000	.461
	Hotelling's Trace	.002	.774 <sup>b</sup>	2.000	894.000	.461
	Roy's Largest Root	.002	.774 <sup>b</sup>	2.000	894.000	.461
Dar	Pillai's Trace	.013	5.737 <sup>b</sup>	2.000	894.000	.003
	Wilks' Lambda	.987	5.737 <sup>b</sup>	2.000	894.000	.003
	Hotelling's Trace	.013	5.737 <sup>b</sup>	2.000	894.000	.003
	Roy's Largest Root	.013	5.737 <sup>b</sup>	2.000	894.000	.003

a. Design: Intercept + dnoa + geps + fato + dar

b. Exact statistic

The testing for each variable proves that there are differences in net operating assets, eps growth, and financing assets to companies that have a positive and negative. It also distinguish investors' beliefs. While the two fixed assets are unable to distinguish a company that had a positive and negative, it does not distinguish between investors' beliefs.

**TABLE 4. TEST OF BETWEEN-SUBJECTS EFFECTS**

Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	Dpat	14.721 <sup>a</sup>	4	3.680	28.348	.000
	Dcaar	2.420 <sup>b</sup>	4	.605	2.480	.043
Intercept	Dpat	85.999	1	85.999	662.449	.000
	Dcaar	23.606	1	23.606	96.778	.000
Dnoa	Dpat	10.822	1	10.822	83.359	.000
	Dcaar	2.164	1	2.164	8.871	.003
Geps	Dpat	.733	1	.733	5.650	.018
	Dcaar	.000	1	.000	.001	.978
Fato	Dpat	.122	1	.122	.939	.333
	Dcaar	.125	1	.125	.514	.474
Dar	Dpat	1.480	1	1.480	11.398	.001
	Dcaar	.001	1	.001	.006	.939
Error	Dpat	116.189	895	.130		
	Dcaar	218.309	895	.244		
Total	Dpat	741.000	900			
	Dcaar	388.000	900			
Corrected Total	Dpat	130.910	899			
	Dcaar	220.729	899			

r square = .112 (Adjusted r square = .108)

r square = .011 (Adjusted r square = .007)

The result of this research supports the theory of signalling that financial information can be a signal that

the possibility of profit in the company in the future does not affect investors beliefs .The result of this research does not support a theory of the structure capital with the approach of Modigliani-miller. This approach said that the total value of companies was not affected by the capital structure company, but was influenced by the investment company and the ability of the company to generate profit (Sudana, 2015). The result of this research also supports the theory of prospect. Based on the theory, people have an irrational tendency to be more reluctant to risk an advantage rather than a disadvantage. When a person in a position winners, the person tending to avoid the risk, and if a person in a position losers, the person tending to would dare tackle risk. In reality, in the stock market there were many who were influenced by the psychology of the market or animal spirit that follows illogical rules (Samsul, 2006).

A component of a company's product in the manufacturing sector is 30-40 percent of imports from East Asia are strengthened due to the weakening spread between the rupiah and because of the weakening of the rupiah exchange rate and a half thousand dollars which affects the cost of the promotion of production and the operations of the firm. Over the period the dollar downturn is in the research which may depreciate who could be classified as mild. The stability of the rupiah exchange rate against the dollar makes the firm manufacturing sector capable of producing a growth of sales impact in improving company performance. Improving the performance of the company in generating sales will attract investors to invest. This shows that the information which discribe the signal of good news, it would marked abnormal return increased.

## V. CONCLUSIONS AND ADVICE

### A. Conclusion

The results of research suggests that financial information (companies that obtain profit, positive or negative) is a net operating asset, growth earning per share, fixed assets turnover and decisions funding for assets. The results of the study also prove that there are differences in net operating assets, causes growth, and financing assets to companies that experienced profit positive and negative. It is also distinguished by investors' beliefs. While fixed asset turnover is unable to distinguish a company that experienced profit positive and negative it does not distinguish between investors' beliefs. This is a reflection of company information which has had a significant effect on the beliefs of investors. Investors tend to give a negative reaction when it receives company information containing bad news.

### B. Advice

Companies need to continue to improve the reputation of business so that public trust can be formed through investment interest in the capital market. The achievement of profit is insufficient, but a concrete

manifestation of the sustainability of business through an integrated network is necessary so that the community can be sure to buy company shares, and of course increase interest in community investment through the money market. It also requires government regulation in protecting the assets of society who are expected to invest through the money market.

#### REFERENCES

- [1] Ajzen, Icek, 1988. The Theory of Planned Behavior, *Organizational Behavior and Human Decision Processes*. 50 (2).
- [2] Barberis, Nicholas, and Thaler, Richard, 2003. *Handbook of the Economics of Finance*, Elsevier Science.
- [3] Beaver, W.H., 1989. *Financial Reporting: An Accounting Revolution*, Second Edition, Englewood Cliffs, New Jersey: Prentice Hall.
- [4] Beaver, W.H., Kettler, P., and Scholes, M., 1970. The Association Between Market Determined and Accounting Determined Risk Measures. *The Accounting Review*, Vol. 6, pp. 654 - 682.
- [5] Bruns, William J., 1968. Accounting Information and Decision Making: Some Behavioral Hypotheses. *The Accounting Review*, July, pp. 469-480.
- [6] Chen, Carl R and Steiner, Thomas L. 1990. Managerial Ownership and Agency Conflict : A Nonlinier Simultaneous Equation Analysis of Managerial Ownership, Risk Taking, Debt Policy, and Dividend Policy. *The Financial Review*. Vol 34, pp. 119-136
- [7] Easton, P.D., and M.E. Zmijewski, 1989. Cross Sectional Variation In The Stock-Market Response to Accounting Earnings Announcement. *Journal of Accounting and Economics*, July, pp 117-141.
- [8] Fama, E., French, K., 1995. Size and Book-to-Market Factors in Earnings and Returns. *Journal of Financial Economics* 33, 3-56.
- [9] Fama, E., MacBeth, J., 1973. Risk, Return and Equilibrium: Empirical Tests. *Journal of Political Economy* 81, 607-636.
- [10] Ferris, K. R., Hiramatsu, K., and Kimoto, K., 1990. Accounting Information and Investment Risk Perception in Japan. *Journal of International Financial Management and Accounting*, 1 (3), pp. 232 - 243.
- [11] Hogart, R., and H., Einhorn, 1992. DAR Effect in Belief Updating: The Belief-adjustment model, *Cognitive Psychology*. 24(1), pp 1-55.
- [12] Hsu, Meng-Hsiang, and Chao-Min Chiu, 2004. Predicting Electronic Service Continuance With a Decomposed Theory of Planned Behaviour, *Behaviour & Information Technology*. 23(5): 359-373.
- [13] Koonce, Lisa, and Mercer, Molly, 2004. Using Psychology Theories in Archival Financial Accounting Research. *Journal of Accounting Literature*, pp 175-190.
- [14] Neumann, J. Von, and O. Morgenstern, 1947, "Theory of Games and Economic Behavior", Princeton: Princeton University Press.
- [15] Scott, William R., 2009. *Financial Accounting Theory*, 5th ed, Toronto: Pearson Education Canada Inc.
- [16] Stuerke, Pamela S., 2005, Financial Analysts As Users of Accounting Information: Evidence about Forecast Revision Activity After Earnings Announcements. *International Journal of Managerial Finance*, Vol. 1 (1), pp. 8-24.