

# Determinant factors of investors' behavior in investment decision in Indonesian capital markets

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## ABSTRACT

This study examines the effect of financial information, macro environment, and subjective norms on investors' behavior when making investment decisions in Indonesian capital market. It was conducted by a survey design and involved 190 individual investors in three big cities in Indonesia (Jakarta, Surabaya, and Bandung). By using Structural Equation Modeling with Warp-PLS 3.0, the results showed that macro factors had a significantly positive effect on the technical information, the financial information and the macro factors had a significantly positive effect on the investor intentions, and the intentions of investors and the financial information had a significantly positive impact on investment decisions. It was also found that the financial information held a great contribution to build investor intentions and investment decisions. Thus, Indonesian individual investors were rational and sophisticated investors. They were not influenced by the actions of other investors, analyst opinions, and media. The implication of this research was how to provide information comprehensively to investors, which was very important to influence their decisions.

## ABSTRAK

ASEAN-China Free Trade Area (AC-FTA) berdampak pada kinerja ekonomi secara sektoral di Indonesia. Salah satu sektor yang terkena dampak dari perdagangan bebas tersebut adalah sektor penyumbang terbesar pendapatan nasional di Indonesia. Penelitian ini adalah penelitian deskriptif kualitatif yang bertujuan untuk menganalisis secara kualitatif dan memaparkan dampak dari perdagangan bebas ASEAN-China terhadap sektor industri di Indonesia. Hasilnya menunjukkan bahwa kinerja sektor industri di Indonesia mengalami penurunan selama pemberlakuan perdagangan bebas ASEAN-China, yang terindikasi pada (1) kontribusi sektor industri terhadap PDB cenderung menurun, sementara kontribusinya dalam penyerapan tenaga kerja tidak ada perubahan yang signifikan, (2) sektor industri mengalami pertumbuhan rata-rata per tahun lebih rendah daripada pertumbuhan rata-rata PDB, (3) kontribusi sektor industri dalam total ekspor Indonesia cenderung mengalami penurunan. Ekspor hasil industri mengalami pertumbuhan rata-rata per tahun lebih rendah daripada pertumbuhan total ekspor, (4) kontribusi impor hasil industri terhadap total impor non migas Indonesia mengalami kenaikan. Impor hasil industri mengalami pertumbuhan rata-rata per tahun lebih tinggi daripada pertumbuhan total impor non migas, (5) prosentase realisasi investasi (baik PMDN maupun PMA) di sektor industri terhadap total investasi di Indonesia cenderung menurun, dan (6) persentase kredit perbankan yang disalurkan ke sektor industri cenderung mengalami penurunan.

## 1. INTRODUCTION

The efficient market hypothesis has assumed that capital markets and securities respond rapidly and rationally to price sensitive information and more

independently of past trends (Reilly and Brown 2003). A key assumption behind the efficient market hypothesis is that investors are rational and risk averse, and possess a limitless capacity to process

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freely available information accurately (Dimitrios et al. 2007). In addition, the hypothesis always considers the financial information as the main factor for the proper functioning of markets. In this case, financial markets can only be effective if there is no significant failure of information and if the investors has the ability to interpret the financial information using fundamental or rational techniques (Abrue and Mendes 2005).

To make an effective investment decision, the investor needs to select the right stock among different alternatives at the right time. In order to choose superior stock, the investor has to evaluate alternative investments and specify criteria to minimize those alternatives and rank the lifted ones (Albadvi et al. 2006). The criteria or factors that affect investment decision could be categorized as the rational or analytical factors category and the irrational factors category. The analytical factors are fundamental indicators to evaluate country, industry, and company as well as technical indicators to evaluate company prices' pattern (Albadvi et al. 2006). Irrational factors depended on investor attitude, behavior, and characteristics.

Decision making is a cognitive process of conducting alternative selection, from a wide range of existing alternative based on the information and resources we have. The development of business and investment environment is full of competition and global change, making it necessary for an investor to be able to examine and develop their abilities and intuition in making an investment decision. Investors should be able to filter and analyze a wide variety of information and change various aspects of the case, as well as to predict the future. Information received and analyzed by the investor must have certain qualities, so he will be able to act rationally in the process all the information it has received, to deliver the best outcome.

This study is based on the intention of investment decisions made by investors in the capital market. Intention is owned by investors based on their beliefs of the information available, including financial information, information macro aspects, technical factors as well as the information subjective norms. The assumption used is that humans behaved consciously because of the consideration of information and always considered the implications of their actions (Fishbein and Ajzen 1975). Some thoughts underlying this study are the number of empirical studies of intentions to invest in Indonesia Stock Exchange shares was still small. This study used subjective norm as the characteristics of the internal pressure and external influences.

Also, this research is important to determine the study and creation of models for investment conceptual.

There are two problems to be examined such as whether there is an influence of financial information factors, macro factors, technical information and subjective norm towards the intention of the investor in making an investment decision on the Indonesia Stock Exchange shares, and whether macro factors affected the technical information.

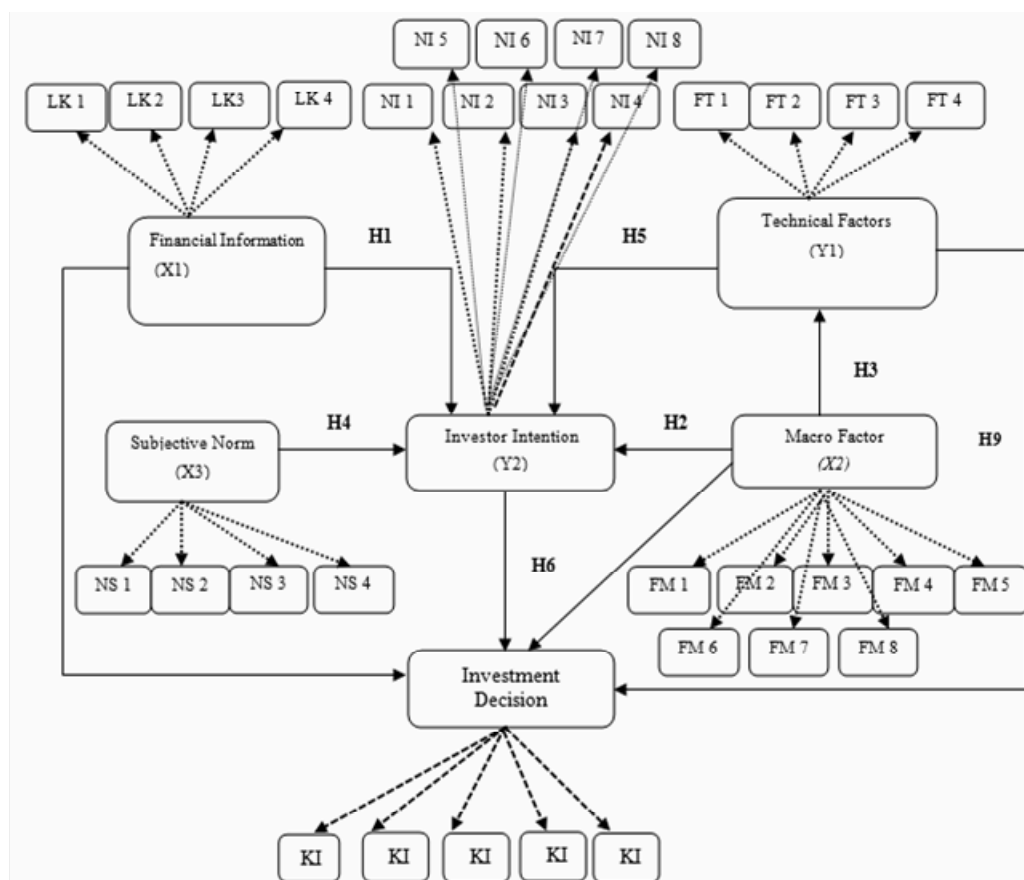
## 2. THEORETICAL FRAMEWORK AND HYPOTHESIS

This study is based on the theory of Reasoned Action proposed by Fishbein and Ajzen in 1975. The theory is developed by assumption that humans behaved in a way that was conscious and considered the information that was available. Ajzen (1975) argues that a person's intention to perform a particular behavior was influenced by two basic determinants, namely, attitudes and social influence. The attitude came from behavioral beliefs, while the influence of social or subjective norms came from normative beliefs. Alleyne and Broome (2010), in their research, stated that attitude, the reference group, the confidence, and the opportunity had a significant effect on the willingness to invest. While Baghdadabad, Tanha and Halid (2011), in their research, stated that the financial statements, risk, government policy, the conditions were the factors that significantly affected the behavior of investors in making the investment decision in the Capital Market of Kuala Lumpur.

Tversky and Kahneman (1981), found the experimental evidence on financial decision making under uncertainty that shows the people do not behave as in traditional models because the investors do not always behave as decrypted in traditional models. A problem such as the prospect theory is behavioral economic theory describes decisions between various alternatives that involve risk. Overconfidence is a second behavioral phenomenon. In the model of Daniel, Hishleifer and Subrahmanyam (2001), investor who are overconfident overrate signal precision and overreact to private signals about payoffs of economics factors. Mispricing occurs from investor's misinterpretation of information about fundamental factors.

Modern theory of investor's decision making suggests that investors do not always act rationally while making an investment decision. They deal with several cognitive and psychological errors.

Figure 1  
Research framework



Investors must have a clear survey of the cognitive and emotional error they are vulnerable to. Tversky (1990), found that 1) investors act not always risk averse but often risk seeking while they make an investment decision, 2) investors interpret outcomes of various decisions differently, 3) the expectations of investors are often biased in predictable direction, rather than rational.

The relationship between the dependent and independent variables can be explained as in Figure 1:

1. Financial information affects investor intentions (Epstein and Pava 1994), (Pamela and Stuerke 2005). Investor decision in capital market is based on the intention to make an investment. The investors realize the investment intention, take a variety of ways, and collect the information necessary to support the investment decision. The investment means buying shares of a company's prospects. The company prospects can be seen from the company's financial statements issued by the company. Financial information affects investors' intention, in the form of confidence for investors before they make investment decisions.
2. Macro factors affect the intentions of investors (Miliken 1987) and (Gordon and Narayanan 1984). A country's political conditions, interest rates, inflation, unemployment are factors that affect the investor's intention to invest. When a country's political conditions are conducive, then investors feel calm and comfortable, which will encourage their intention to invest. The accuracy of predictions made by the investors about the macro factors will increase the confidence of their intention before they make an investment. Intention to make investment decision will be able to change, along with changes in the macro information received by investors. So investors can make revisions or change their intention, while investors who are already confident in the accuracy of predictions of the macro-economic changes will immediately make investment decisions.
3. Macro factors affect the technical factors (Ling Feng Li 2002) and (Fatma 2007). Investors believe in their ability to predict the economic changes that happen, so they are sure that any changes to the macro factors influence the movement of stock prices in the capital market.

The movement of stock prices formed in the capital market is a combination of demand and supply as well as the psychological condition of investors. Investor expectations for interest rates or inflation affect the trend of stock price movements. Technical analysis is based on past information in the form of stock price movements and trading volume, as reflected in the graph or charts.

4. Subjective norms affect the investors' intentions (Gopi and Ramayah 2007) and (Alleyne and Broome 2010). These subjective norms can be described as nearest recommendations, expert analyses, or other investors. The more influential outsiders or recommendations from others, the more influence the investment decisions made by investors.
5. Technical information affects investor intentions (Dimitrios 2007) and (Inaishi 2010). The investors believe the accuracy and the benefit from technical information will enhance their beliefs and intentions in making investments. They can make revision on their intentions and beliefs, along with their belief in the benefits of technical information. An investor believes that the accuracy of the technical information he has received will immediately make stock investment decisions.
6. Investor intentions affect the investment decisions (Aduda 2012) and (Iramani 2011). Investors who like risk tend to invest in stocks compared to investing in bonds. Individual investors who have rational behavior will invest in shares of companies with good financial performance. The investors with irrational behavior tend to be influenced by other investors' action.
7. Macro factors affect the investment decision (Kadariya 2012) and (Moshi and Kilindo 1999). This case is usually for the short term investment decisions. Changes in interest rates, inflation and government policy are factors that influence the investment decisions made by investors.
8. Financial information affects the investment decision (Norman 2012) and (Akhtar 2011). This situation occurs when investors are faced with an urgent situation and limited, so that they immediately take investment decisions when they are informed about the company's finances. For example, when there are rumors that the company will pay dividends, then investors will soon take the decision of purchasing the company's shares.

9. Technical information affects the investment decisions made by investors (Kadariya 2012) and (Venkatesh and Tyagi 2011). Movement or volatility of stock price is one of the indicators used by investors in making decisions. A trader will take investment decisions by looking at the stock price movement.

Based on the theory and research framework above, the research hypotheses were formulated as follows:

H<sub>1</sub> = Financial information affects the investors intention.

H<sub>2</sub> = Macro factors affect the investors intention.

H<sub>3</sub> = Macro factors affect the technical information.

H<sub>4</sub> = Subjective Norms affect the investors intention.

H<sub>5</sub> = Technical information affects the investors intention.

H<sub>6</sub> = Investor intention affects the investment decisions.

H<sub>7</sub> = Macro factors affect the investment decisions.

H<sub>8</sub> = Financial information affects the investment decisions.

H<sub>9</sub> = Technical information affects the investment decisions.

### 3. RESEARCH METHOD

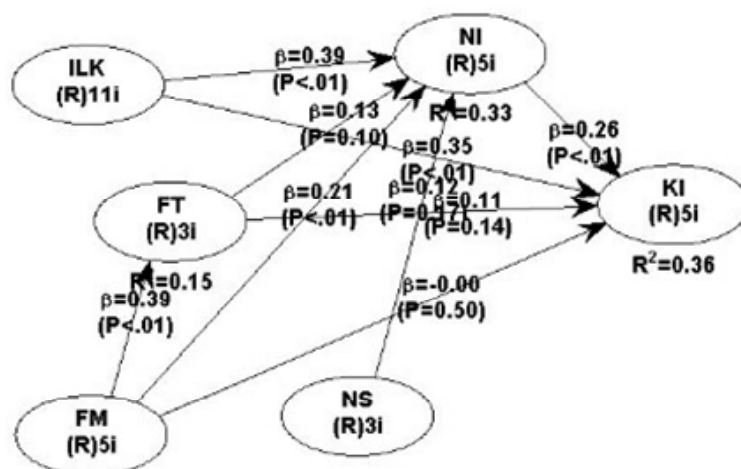
This is an explanatory research to explain the causal relationship between variables through hypothesis testing. The data were collected by means of a survey and taking a sample by non-random sampling (Snowball Sampling) using questionnaires as a quantitative method. The population was the individual investors in three major cities in Indonesia: Jakarta, Bandung and Surabaya, considered to have been doing stock investment decisions in Indonesian Capital Market. According to Hair *et al.* (1998), a sample size is 5-10 x number of indicators or 100 - 200.

Data test validity was done by using PLS 3.0 WARP software and looking at the value of loading factor, where the factor loading value for each indicator was  $\geq 0.5$ . To measure the degree of reliability of the instrument, we used the interim consistency reliability. Measurement was done by observing the coefficient of alpha or what is well known as Cronbach's Alpha. Measuring is reliable if the alpha value is  $> 0.6$  (Malhotra, 2004). Meanwhile, Ferdinand (2002) suggested for the exploratory research that the reliability of 0.5-0.6 was sufficient to justify the study.

The variables consist of the following.

1. Financial Information (X<sub>1</sub>) is the degree of positive or negative effects determined directly by

Figure 2  
Structural Equation Model



individual investors' confidence on the quality of financial information that is useful in decision making. Financial information variables were identified through four latent variables, namely reliable, relevance, secondary data and benefit-cost and 15 indicators. Measurement of these variables made use of Likert scale with a score of 1 to 5. Respondents were asked to express their perceptions by selecting a value on a scale of 1 (not very useful) up to a scale of 5 (very useful).

2. Macro factors ( $X_2$ ) is a situation in which the perception of a person will get a barrier to estimate and predict accurately the situation around. This variable is identified by the 3 indicators. Measurements of this variable use Likert scale with a score of 1 to 5. Respondents were asked to express their perceptions by selecting a value on a scale of 1 (very unpredictable) up to a scale of 5 (very predictable).
3. Technical Information ( $Y_1$ ) is the degree of positive or negative effects determined directly by individual investors' confidence on the quality of the stock price information that is useful in decision making. Technical information variable is identified through 4 measured indicators. Measurement of this variable uses Likert scale with a score of 1 to 5. Respondents were asked to express their perceptions by selecting a value on a scale of 1 (not very useful) up to a scale of 5 (very useful).
4. Subjective norm ( $X_3$ ) is the individual investor perceptions about the strength of the influence of expert opinions in financial investments (e.g., friends, economists, and regulators) that motivate individual investors in stock selection. Subjective norm variables use 4 indicators with a Likert scale. This scale is used to meas-

ure the strength of normative beliefs to adhere in the stock selection decisions. The provided answers have values on a scale of 1 (not very encouraging) up to a scale of 5 (strongly encouraging).

5. Intention investors ( $Y_2$ ) is the desire of investors to invest. This variable was measured using a Likert scale of 1 to 5 that have 8 indicators. Respondents were asked to respond with provided alternative answers, strongly disagree (1) to strongly agree (5).
6. Investment decision ( $Y_3$ ) is the realization of the investor to get profit in the stock selection decisions. The variable has 5 indicators. Investment decisions instrument was developed using a Likert scale of 1 to 5. Respondents were asked to respond with alternative answers with a range from 1 (do not agree) to 5 (strongly agree).

#### 4. DATA ANALYSIS AND DISCUSSION

Data were analyzed using the Structural Equation Model (SEM) with PLS WarpPLS 3.0 program to create the model, to make predictions or estimations and hypothesis testing. The number of questionnaires being distributed was 190 out of 200 questionnaires, so that the response rate obtained from the respondents would be 95%.

The questionnaires were returned by respondents with the demographic characteristics of the respondents as follows: most of respondents from Jakarta, male gender, age  $\leq 25$  years, education background was a bachelor's degree, investment experience were 1-2 years, not married, and the categories of investors used fundamental analysis.

To test the quality of data, measurement model (outer model) and the structural model testing (Inner Model) were used as the following.

**Table 1**  
**Results of Hypothesis**

Variables	S.E.	Path Coef	P value	Ha	Decision
Financial Information → Investor Intention	0.075	0.386	<0.001	H1	Significant
Macro Factors → Investor Intention	0.076	0.212	0.003	H2	Significant
Macro Factors → Technical Information	0.059	0.389	<0.001	H3	Significant
Subjective Norms → Investor Intention	0.120	0.116	0.168	H4	Not Significant
Technical Information → Investor Intention	0.098	0.125	0.102	H5	Not Significant
Investor Intention → Investment Decision	0.094	0.259	0.003	H6	Significant
Macro Factors → Investment Decision	0.074	0.000	0.499	H7	Not Significant
Financial Information → Investment Decision	0.097	0.350	<0.001	H8	Significant
Technical Information → Investment Decision	0.103	0.113	0.136	H9	Not Significant

### Evaluation of Measurement Model (Outer Model)

The validity and reliability of each latent variable, namely the variable Information Financial Report, Macro Factors, Subjective Norms, Technical Factors, Intention Investors and Investment Decisions used WarpPLS 3.0 software. The size of individual reflexive was valid if value of loading ( $\lambda$ ) with latent variables of  $\geq 0.5$ . If one indicator had  $\lambda < 0.5$ , then the indicator should be dropped because it indicated that the indicator was not sufficient to measure latent variables appropriately. From the data processing there were 12 indicators that were eliminated because  $\lambda < 0.5$ , namely: ILK6, ILK8, ILK9, ILK13, FM6, FM7, FM8, FT1, NS2, NI1, NI4, NI7. The structural equation model diagram can be seen in Figure 2.

When the invalid indicators drops, it means the indicators used in the study have fulfilled convergent validity. In addition, reflective indicators must also be tested for discriminant validity by using cross loading. In fact, it was obtained that the loading factor for the indicator ILK (ILK1, ILK2, ILK3, ILK4, ILK5, ILK7, ILK10, ILK11, ILK12, ILK14, ILK15) had a loading factor with ILK higher than others. Loading factor ILK1 was 0.706 out of ILK, which was higher than the loading factor to another (FM = -0.063, FT = 0.129, NI = -0.013, NS = -0.044, KI = 0.084). This also applied to the loading factor for the indicator FM, FT, NI, NS, KI and NI.

Test reliability was done by looking at the value of the composite reliability of the indicators that measure the construct. The results of composite reliability indicated a satisfactory score if it was above 0.7.

Based on the output from data processing, the values of composite reliability for all constructs were above 0.7, which indicated that all the constructs in the model fulfilled the discriminant validity criteria. The highest composite reliability values was 0.886, which could be found in the latent variable ILK and the lowest was 0.743 on NI variable. It

could be concluded that the indicators used had good reliability to measure the constructs. Test reliability also was confirmed with a Cronbach's Alpha. According to Ferdinand (2002) for exploratory research, the reliability between 0.5-0.6 was sufficient to justify the study.

Fit model can be indicated using the following steps, namely: the average path coefficient (APC), the average R squared (ARS), and the variance inflation factor average (AVIF). It is suggested that the APC value and ARS must be significant, at least at the 0.05 level, while AVIF should be lower than 5 ( $<5$ ) (Hair et al. 2010). Based on the data processing, the results showed that APC values of 0.217, 0.279 of ARS, and AVIF 1.348. It means that the data was fit with the proposed model. Value of AVIF (Average Variance Inflation Factor) produced  $1.348 < 5$ , meaning that there was no multicollinearity between exogenous variables. In addition, The Q square of  $> 0$  was also obtained, which corresponded to the criteria of model fit. Q square for each endogenous variable was as follows: technical factor was 0.153, investor intention was 0.334, and investment decision was 0.358.

From the results above, it can be explained as follows:

1. R square value for the technical factor was 0.151, indicating that variation of technical factors could be explained by the variable of macro factor of 15.1%, while 84.9% was influenced by other variables not included in this research. It was known that the technical factors containing technical information in the capital market were driven by supply and demand. Psychological factors of investors, rumors and actions could affect the supply and demand reflected in the stock price movement.
2. R square value for the investors intentions was 0.332, indicating that the variation investors intention could be explained by the financial information, macro factors, only 33.2%, while the

remaining 66.8% was influenced by other variables excluded from this research. This was due to the many variables that influenced the investors' intention, i.e., psychological factors.

3. R square for the investment decision was 0.355, indicating that the variation of investment decision could be explained by the financial information and investor intention with 35.5%, while the remaining 64.5% was influenced by other variables not included in the research.
4. Value of composite reliability for all variables was  $> 0.70$ , so this model was appropriate to the recommended requirements.

### Results of Hypotheses

In relation to the hypotheses, this section provides the results as shown in Table 1. The analysis of PLS 3.0 WARP program shows the correlation between variables of  $H_1$  to  $H_9$ . The hypothesis is accepted if it has significance value under 0.05.

### Discussion of Results

*Financial Information had a significant effect on the investor intention.* From the coefficient value (0.39) with a significance level (0.001), financial information had a positive and significant effect on intention investors. Thus, the first hypothesis which stated that the financial information had an effect on investor intentions was acceptable. This suggests that investors had fundamental knowledge in the financial information, so it would form the intentions and beliefs of investors. Financial information signals obtained by investors were able to make changes in investor intentions. When the company issued the financial information report, investors would study, analyze, and make interpretation on those reports, whether the signal had good or bad news.

Investors used the financial information to enhance its intention to invest in the capital market. The use of financial information as a basis of their intention to invest in the capital market showed that investors chose to use their common sense or rational thinking to make decision. The results were consistent with Akintoye (2008), which stated that the financial information was useful to improve the confidence of investor when they wanted to invest in the capital market.

*A macro factor had a significant effect on the investor intention.* From the coefficient values (0.21) with a significance level  $< 0.001$ , macro factor had a positive and significant effect on intention investors. It means, if investors are more knowing and more understanding of the changes of macro factors, they

will be more confident. Investors had the ability to predict the uncertainty of their external environment. They understood that the situation changes in the external or macro environment were caused by external aspects beyond their control, which ultimately could affect the entire mechanism in the capital market. This result was consistent with Kim, Linsu and Lim Y (1988).

*Macro factors had a positive and significant effect on the technical information.* From the coefficient (0.39) with a significance level  $< 0.001$ , macro factors had a positive and significant effect on the technical information. The positive direction explained that the more investors knew and understood the changes of information in the macro factors, the more they would be able to perceive the technical information in the stock price movement. Investors realized that the economic turbulence, changes in technology, government policy and market situation would influence volatility of capital markets. So the major changes that occurred in the macro factors would affect the stability of the capital markets. Thus, a good investor should be able to make predictions and careful in addressing changes in the macro conditions.

*A subjective norm had no significant effect on the investors' intention.* From the coefficient (0.12) with significance level 0.17, subjective norms had no significant effect on the investor's intention. This explains that the investors did not use outside parties in determining the decision when they invested in the capital market. They believed in their ability to process and to analyze all the information they had to make right investment decisions.

This result was different from Aduda (2012) in that the Subjective Norm had a significant and positive impact on the mental investment. The researcher explained that investors recognized the strength of the influence of the people around them, from a friend of investors, observers, and mass media. Our study explained that at that time investors were better at absorbing and filtering information available. They were not affected by the rumors or actions taken by other investors.

*Technical information had no significant effect on investors' intention.* From the coefficient value (0.13) with significance value of 0.102 we can describe that technical information had no significant effect on investors' intention. Investors were not glued to the technical information, which involved the movement of the stock. The results of this study were not in line with by Dimitrios (2007) and Inaishi (2010) that the movement of stock price could influence the confidence of investors, which ulti-

mately affected the investor's intention to invest in the capital market.

Capital market conditions were speculative, so it could make an investor act cautiously and not follow market timing. A wise investor would act realistically and back again to look at the company's fundamentals. This could be explained that when our research was conducted, the conditions of Indonesian capital market were bearish, so they would affect the investors' intention. They would act carefully when Indonesian economic was unstable.

*Investors' intention had a significant effect on the investment decision.* From the coefficient value (0.26) and significance value (0.003), we can describe that investors' intention had a significant effect on the investment decision. The investor intention would encourage them to make investment decisions. The stronger intention of the investors made, the greater chance the investor will make investment decisions.

The positive response from investors to their self-intention to invest in the stock was due to accuracy information that they obtained. One of methods used by investors was through fundamental analysis to establish the performance and prospects of the company and they made stock selection based on rationality. This process required consideration and thought, and the investors would be realized in action which was investment decision. This was consistent with the theory of reasoned action proposed by Fishbein and Ajzen.

*Macro factors had no significant effect on the investment decision.* From the coefficient value (0.00) and significance value (0.50), it could be said that macro factors had no significant effect on the investment decision. This indicated that investors did not use their perceptions and predictions on macro factors to make investment decisions. The investors paid more attention to the data stated in the financial statement information. It could be seen from characteristic respondents, who mostly used fundamental analysis in analyzing stocks to invest. Changes in interest rates would not be directly addressed quickly by investors, or immediately make them sell their shares.

Investors would do a self-control to avoid the wrong decision by means of delaying the decision or not making a decision at all. This process made the investors to be prudent, self-control, risk-neutral, repositioning planning and investment control in the long term investment. A true investor was when they always acted rationally and avoid speculation. Therefore, from these results, it could be seen that

there was a tendency of the respondents who were pure types of investors, not speculators or traders.

*Financial information had a positive and significant effect on investment decisions made by investors.* Based on the results of data processing, the coefficient values were 0.35 with a significance value  $< 0.001$ . The capable and successful investors to analyze the financial statement information will enhance their confidence to make investment decisions in the capital market. The results of this study were consistent with Tavakoli (2011) and Norman, (2012) which stated that the financial information was the factors that affected the behavior of investors when they made investment decisions in the stock capital market. Investors had confidence that the financial information was beneficial to them to predict and realize the expectations, able to provide comparison of benefits and costs of ownership of securities, and able to provide the prospect of the company.

*Technical information had no significant effects on the investment decision.* Based on the results obtained data processing the coefficient value was 0.11 with a significance value 0.499, no significant effects on the investment decision were found. It can be explained that decision-making did not lie on the market information or the movement of stock prices. Investors who invested in the capital market would observe the strength of a company's fundamentals. This study was different from Aduda (2012) because the respondents in this study were the investors, not traders or securities analysts. Investors in this research were pure investors so they would be more careful in their decision-making, not only based on stock price movements. They used their own funds to make investments, not just to get capital gains like speculators and traders, so they usually invested in the long term. In addition, the economic conditions of a country at that time were unstable, which would make the capital market in bearish condition slow down, mark decline in the value of individual stock price. The policy issued by government had been responded negatively by the market. In conditions of economic turbulence or uncertainty, investors should get back to the company's fundamentals. A wise investor would act realistically, to quote Boehme (2012).

## 5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

It can be generalized that the attitude of investors is rational. The financial information affects significantly the investor's intentions and their invest-



ment decisions. Subjective norms that usually had a significant effect on the investor intention turned out to have no significant effect. Thus, the investors' behavior moved toward sophisticated investors. It implies that the fundamental analysis was still considered to be the key success by the investors before they made a decision to invest in the capital market.

Besides that, sophisticated investors were the desire of the Indonesian capital market to reach an efficient capital market. For that reason, companies must be transparent in financial reporting and updating information in accordance with the change and development of the corporate finance.

However, this research had some limitations and needs to be improved, as follows.

1. The respondents were only from the 3 major cities in Indonesia, namely Jakarta, Surabaya and Bandung. The number of respondents was relatively small compared with the number of investors in the Indonesian capital market as a whole.
2. The research method only used questionnaires and short interviews, therefore, further research should use in-depth interviews to better understand the psychology of respondents.
3. The model needs to be developed for example by incorporating investor behavior related to psychological aspects and risks.

## REFERENCES

- Abreu, M and Mendes, V 2005, 'Financial Literacy and Portfolio Diversification', JEL: G11, I20, G32, J24.
- Aduda, J, Odera, EO, Mactosh, O 2012, 'The Behavior and Financial Performance of Individual Investors in the Trading Shares of Companies Listed at the Nairobi Stock Exchange, Kenya', *Journal of Finance and Investment Analysis*, vol 1, no 3, pp. 33-60.
- Ajzen, Icek, 1975, 'The Theory of Planned Behavior', *Journal of Organizational Behavior and Human Decision Processes* 50, pp. 179-211.
- Akhtar, ME 2011, 'Determinants of Short Term Investment Decision Making', *Journal of Actual Problem in Economics*, no 11.
- Akintoye, IR 2008, 'Optimising Investment Decision through Informative Accounting Reporting', *European Journal of Social Sciences*, volume 7, number 3.
- Albadvi, A, Chaharsoghi, SK, Esfahanipour, A 2006, 'Decision Making in Stock Trading: An Application of Prometiiee', *European Journal of Operational Research* 177 (2007), pp. 637-683.
- Baghdadabad, M.R. Tavakolli, Tanha. F. Habibi and Halid, N 2011, 'A Study on Small Investor's Behavior In Choosing Stock, Case study: Kuala Lumpur Stock Market', *African Journal of Business Management*, vol.5 (27), pp. 11082-11092.
- Boehme R 2012, 'Corporate Financing Decisions and Efficient Capital Market', pp. 06.
- Daniel, KD, Hirshleifer, DA, Subrahmanyam, A 2001, 'Overconfidence, Arbitrage, and Equilibrium Assets pricing', *Journal of Finance*, vol 56, pp. 921-965.
- Dimitrios I. Maditinos, Zeljko Sevic, Nikolaos G. Theriou 2007, 'Investors' Behavior in the Athens Stock Exchange (ASE)', *Studies in Economics and Finance*, vol. 24 no 1, pp. 32-50.
- Eipstein, MJ and Pava, M 1994, 'Individual Investor's Perceptions on the Summary Annual Report: A Survey Approach', *Journal of Applied Business Research*, vol. 10, number 3, pp. 60-67.
- Fatma, Sonmez, Saryal, 2007, 'Does Inflation have an Impact on Conditional Stock Market Volatility? Evidence from Turkey and Canada', *International Research Journal of Finance and Economics*, ISSN 1450-2887, issue 11.
- Ferdinand Augusty, 2002, *Structural Equation Modeling dalam penelitian Manajemen*, Semarang, BPFE Universitas Diponegoro.
- Gopi, M and Ramayah, T 2007, 'Aplicability of Theory of Planned Behavior in Predicting Intention to Trade Online: Some Evidence From a Developing Country', *International Journal of Emerging Markets*, vol. 2 Iss:4, pp. 348-360.
- Gordon, LA and Narayanan, VK 1984, 'Management Accounting System, Perceived Environmental Uncertainty and Organizational Structure: An empirical Investigation', *Accounting, Organizations, and Society*, vol 9, no 1, pp. 33-47.
- Inaishi, R, Kaoru, T, Fei Zhai and Eisuke, K. 2010, 'Effect of Overconfident Investor Behavior to Stock Market', *Journal of Advanced Computational Intelligence and Intelligent Informatics*, vol. 14. No. 6, pp. 661-668.
- Lingfeng Li, 2002, 'Macroeconomic Factors and The Correlation of Stock and Bond Return', *Journal of Financial Economics* 44, pp. 123-165.
- Kadariya, S 2012, 'Factors Affecting Investor Decision Making: A Case of Nepalese Capital Market', *Journal of Research in Economics and International Finance (JREIF)*, vol. 1 (1), pp. 16-30.
- Kim, Linsu and Lim, Y 1988, 'Environment, Generic Strategies, and Performance in a Rapidly Developing Country', *Academy of Management Journal*, vol. 31, pp. 802-827.
- Latan, Henky, Ghozali, Imam, 2012, 'Partial Least

*Squares, Konsep, Metode dan Aplikasi Menggunakan Program Warp PLS 2.0'*, Edisi 1. ISBN: 978.602.097.229.9, Badan Penerbit Universitas Diponegoro.

- Mlikien, FJ 1987, 'Three Types of Perceived Uncertainty about the Environment: State, Effect, and Response Uncertainty', *Academy of Management Review*, vol 12, no 1, pp. 133-143.
- Moshi, HPB and Kilindo, AAL 1999, 'The Impact of Government Policy on Macroeconomic Variables: A Case Study of Private Investment in Tanzania', *AERC Research Paper 89, African Economic Resarch Consortium Nairobi*.
- Naresh K Malhotra, 2004, *Review of marketing research*, Emerald Group Publishing Ltd.
- Norman, ASK 2012, 'The Use of Financial Information in Stock Exchange Investment Decision Making in Capital Markets in Tanzania: A Case of Zanzibar', *International Journal of Marketing and Technology*, volume 2, Issue 3. ISSN: 2249-1058, pp. 14-25.
- Pamela and Stuerke, 2005, 'Financial analysis as user accounting information evidence about to restriction activites after earning Announce-

ment', *International Journal of Managerial Finance*, Vol. 1, Iss. 1, pp. 8-24.

- Reilly, Frank K, and Keith C. Brown 2003, *Investment Analysis and Portfolio Management*, Thomson, South-Western, Seventh Edition, 2003.
- Tversky, A and Kahneman, D 1981, 'The Framing of Decisions and the Psychology of Choice', *Science*, new series, vol 211, no. 4481, pp. 453-458.
- Tversky, A and Thaler, RH 1990, 'Anomalies: Preference Reversal', *The Journal of Economic Perspectives*, vol 4, no 2, pp. 201-211.
- Venkatesh, CK and Madhu, T 2011, 'Technical Analysis and Its Usage in Indian Capital Markets: A Survey', *Bangladesh Research Publications Journal*, vol 5, issue 4, pp. 282-294.

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