

## MIMETIC ACTION PERFORMED BY INDIVIDUAL INVESTORS AT INDONESIA STOCK EXCHANGE (IDX)

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**Abstract:** *The aims of this research are to perform a thorough analysis and obtain empirical evidence on the impacts of financial information, risk perception, and subjective norms that may alter the level of investors confidence whenever they have to deal with investment decision making process in certain way so they can maximize the amount of expected return utility. This study applies causal explanatory method and hypothesis testing. Primary data and survey method are used in this study. The population and samples for this research are individual investors of IDX who are joining level 3 capital market school. Researcher uses purposive sampling technique to collect samples and assumes individual as analytical unit for this research. This is a one shot study which applies structural equation modeling (SEM) technique for data analysis. The finding of this study reveals that financial information has positive impact towards unsystematic risk; financial information has positive impact towards preference of return; unsystematic risk has positive impact towards mental investment; subjective norm has positive impact towards mental investment; systematic risk has negative impact towards mental investment; systematic risk has negative impact towards preference of return; and mental investment has positive impact towards preference of return. The research finding demonstrates that investor action is heavily affected by subjective norm and such action will have very dominant role for investment decision making process. Thus, investors take mimetic and disjunction actions whenever they have to deal with investment decision making process.*

**Keywords:** *Financial information, unsystematic risk, systematic risk, subjective norm, mental investment, preference of return*

### INTRODUCTION

Indonesia Stock Exchange (IDX) has long been indicated as an emerging market. Market makers, in this case, merely give naive and unsophisticated response, and only have limited competence in performing analysis and interpretation towards any information they receive. In such situation, therefore, investors tend to rely on rumours, speculation, and *mass behaviour* (Arrozi, 2012a; Arrozi, 2012b) and

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lose their collective rationalism. Price making in stock trading is basically the manifestation of investors' psychological and emotional factors. Such inappropriate price making procedure may lead investors to take wrong decision, and buy inappropriate stock in misleading market, they are also fooled by some misinterpreted information. (Scott, 2015).

Investors may find a lot of difficulties in analyzing such financial information. Financial statement only plays minor function whenever it deals with investment decision making process in IDX (Arrozi, 2012b; Prabowo, 2000a; 2000b). This situation takes place because investors tend to play their roles as profit takers after performing certain technical analysis to earn certain amount of capital gain; those investors will speculate whenever they have to make any decision related to short-term investment.

They actively apply a series of strategies to react to available issues, *rumours*, political development, *insider trading*, *market anomaly*, e.t.c. Financial statement has not been used properly and the investors always perceive events from the perspective of *corporate action*." (Arrozi, 2012c).

The above-mentioned fact reflects that investment process depends heavily on mass psychology and investors only rely on *rumours* before taking any speculative decision. Shortly, investors tend to act *unsophisticatedly, and naively* (Prabowo, 2000a; 2000b), *and do not have adequate understanding* on the fundamental signal of financial information due to the fact that their *cognitive skill in interpreting such financial information is somehow limited*. As an implication, some problems may appear (Scott, 2015; Arrozi, 2012c), among others: false *belief in expected values, impatience action, loss-control, and impulsive action* when making investment decision. Such problems appear due to investors' irrational decision resulting from wrong stock calculation.

*Theory of Planned Behaviour* (TPB) explains that the intention of an individual to take an investment action shall rely on those three factors, namely: attitude, subjective norm, and behavior control. TPB Model can provide further explanation about investors' expected or unexpected behavior, by finding the correlation between their attitude, subjective norm, behavior control and the performance of the expected attitude (Ajzen, 1988). TPB model has been selected as the focus of our discussion since information may develop a motif for individuals to take certain action. Such motif may be developed normatively if the investors' level of knowledge is still very low and such motif may vary over time (Hartwick and Barki, 1994).

The major issue of this research is to figure out what kind of motif that may trigger investor's decision making. Investors motif is reflected on information, perception, preference *return*, and the revision made to investors' performance due to the availability of new information. Thus we may develop an assumption

that men take certain action in accordance with the information they have and the implications of their action (Ajzen and Fishbein, 1980). Stock price change is the reflection of bulk information – it can be both financial and non-financial information - received by the investors. Information is an important element in stock trading because it will bring certain advantage once it is received, analyzed, and interpreted; increase our level of understanding, change our stance towards certain issue, alter any decision and action regarding the investment we make. Investment intention shall be built from some motivating factors which may further affect investment decision. Those factors are among others: the amount of planned undertaking, individual characteristics, social pressure, and environment. Those factors may develop over time due to the availability of information and may trigger the shift of motivation, an indication which strongly affects investors' intention (Ajzen, 1988).

The aims of this research are to perform a thorough analysis and obtain empirical evidence on the impacts of financial information, risk perception, and subjective norms that may alter the level of investors confidence whenever they have to deal with investment decision making process in certain way so they can maximize the amount of expected return utility in accordance with their preference.

## **THEORETICAL REVIEW AND HYPOTHESIS DEVELOPMENT**

### **Theory of Planned Behaviour (TPB)**

*Theory of Planned Behavior* explains individual attitudes appearing due to the intention to perform such attitude, those attitudes has been affected by some determining factors (Ajzen, 2002), among others:

- (a) Attitudinal belief, shall be defined as a confidence that there will be a possibility to perform certain individual attitude. Such belief may induce certain individual attitude – it can be either positive or negative.
- (b) Normative belief, shall be defined as a confidence that there will be a normative belief contributed by other parties as well as motivation to accept such belief. Normative belief may induce certain perception of social pressure.
- (c) Control belief, shall be defined as individual belief about the availability of certain opportunity which may either support or constrain a behavior, and a perspective about certain opportunity which may either support or constrain such behavior. Control belief may induce perceived behavioral control.

Perceived behavioral control affects intention and directly affects actual behavior. TPB Model shall be interpreted as a condition where every individual adopts positive behavior and gets positive support from from others, but does not

have opportunity and adequate resources to do certain action, thus a possibility that the said individual does not have the intention to perform certain action may be developed.

### **Financial Information**

Financial information will be beneficial if they meet the following major requirements: relevant, reliable, and help the estimation of *expected value* and *risk* (Scott, 2015). Such information will be considered relevant in the event that it has certain level of predictive value, feed back, and meet certain amount of time frame; whereas reliable information is any information which has *representational faithfulness, verifiable, neutral, free from bias and error, and display what shall be displayed*. Other relevance of such information is to assist the estimation of the estimated value and risks of the securities; assist to alter users' confidence and action; increase the confidence of the users, regarding the profitability/ realization of intention during uncertain condition; change users' decision or behavior; and have certain value. To be considered as valuable, information shall improve decision makers' level of knowledge regarding their past, recent, and future decisions (Suwarjono, 2008). Valuable information may be affected by the following factors: what kind of decision shall be made, what kind of method shall be applied, any information furnished by other sources, and the capacity of the decision maker regarding such information processing. The output of such information processing shall be understandable and beneficial for the decision makers.

### **Risk Perception**

Risk perception reveals that *user attitudes are affected by financial statement* which provides financial foundations by way of determining the size of risk, i.e.: *dividend payout, current ratio, asset size, asset growth, leverage, variability in earnings, and co-variability in earnings which have substantial explanatory power* (Beaver *et al.*, 1970). Selva (1995) defines risk perception as users perception on any financial fundamental risk that may affect stock price. Koonce *et al.* (2004) combines risk perception model which applies behavioral risk characteristics approach and *standard deviation theory which discusses on losses and gains*. The premise formulated by the research center shall be Financial statement users perception shall be digested and defined by combining some characteristics of behavioral risk like *worry* and *control*. Risk indicators for the characteristics of behavioral risk: *worry, catastrophic potential, known by management, voluntary and control, whereas the significances of financial risk indicator are among others loss outcome, loss probability, and gain outcome*.

### **Return Preference**

Preference, related to investment, shall be defined as individuals' intention and wish to receive optimum amount of *return* which may be gained from *capital gain*,

dividend, or both sources (Nofsinger, 2005). Such intention is normally driven by investors' decision or the result of financial statement's *advisory* (Snelbecker *et al.*, 1990) made in accordance with investors' *expected return* and *risk*, by adopting this approach we assume that every investor has the same utility function (Markowitz, 1952). *Risk averse* investors will chose in accordance with Markowitz. *Risk seeker* investors will select high risk investment in hopes of obtaining high *return*. Investors' preference towards portfolio will be varied because different investor may have different utility function. Investors' utility function may vary because such function has been made in accordance with *expected utility model* of investor's behavior towards risk in hope of maximizing the amount of expected utility index towards *income* (Arrozi, 2013). Investor select the type of investment by weighing on the amount of *expected return received in its maximum level*. Investor A may have different utility function with investor B, each investor may select similar or different investment opportunity too.

### ***Mental Investment***

*Mental investment is a cognitive process which can be applied to estimate risk and return. Mental investment as a reflection of mental attitude is supported by three factors, namely: (1) Determination: the presence of strong motivation, intention, and clear objectives. (2) Self dicipline: know what to do and when to take action (3) Fighting: hard work, smart work, and time management. Mental investment process requires high level of users' capability and is closely retaliated with individual cognitive, affective, and conative aspects, like: financial and non-financial information processing, fundamental and technical implementation of investment information, shift of investment preference, risk and return perceptions, and investment learning experience. (Nofsinger, 2005).*

*Mental investment is an important aspect of investment and it requires individual knowledge on preferred securities, investment timing, risk, market, prospect, and expected value. (Nofsinger, 2005; Nyhus, 1995; Altman, 2006). It will also be linked to the correlation between the goal of the investment strategy preferred by market makers and its expected return. Thus, the cognitive process used by each market maker may be varied since each market maker may have different preference, with regard to return or risk (Arrozi, 2011).*

### ***Empirical Study***

*Return preference expected by the investors are normally in form of dividend and capital gain (Arrozi, 2011). The determining factor of the investment is long-term profit because stocks are high risk instruments traded in risky market. Another determining factor is short-term profit, following friends' suggestion, and having ownership authority. Chen and Hsu (2005) prove that company news and advice gives more notable contribution in altering investors' confidence and action than financial information.*

Financial information does not correlate with *return preference*, it has been evidenced by Stainbank and Peebles (2006), Chen and Hsu (2005). Users are failed to receive information with economical value and the expected *return will not be achievable*. The findings of Lambert and Verrechia (2005), also Ferris *et al.* (1990) reveal that users reduce their dependency to company performance because they assume that size of risk is not a crucial issue and they prefer to do speculative trade. The studies performed by Koonce *et al.* (2004) and Capstaff (1992) show that users tend to control the impact of *unsystematic risk by performing stock diversification* – varying the types of companies, industries, and their compositions. Users posture towards risk based on the following preferences: *risk averter*, *risk seeker*, or *risk neutral*.

Users perception towards accountancy and financial information will motivate them to alter their investment confidence and intention. Performance prediction, prospect, and dividend give positive impact towards the intention to make certain decision (Scott, 2009). Studies performed by Bhattacharjee (2000), Hailu *et al.* (2005), and Shin *et al.* (1995) proves that users, when making their decision, accept support and motivation from the experts and behave like what they suggest. The level of motivation may increase along with the increasing number of social pressure from the experts – regarding those experts' approval towards certain action performed by the investor.

A study performed by Chen and Steiner (1990) shows that poor risk perception may result from company's poor performance and prospect. Whenever stocks are not prospective, users will evaluate the performance of those stocks. Poorly performed stocks will be released to the market and revised by other stocks with better prospect and performance. As a consequence, the intention to perform decision making will be elevated. The result of the studies performed by Luo (1999), and Kim and Lim (1988) show whenever stock price is affected by market risk, external information must be controlled so *stock loss can be avoided*. *Control and planning* are performed to assure stock reposition and revision. As a consequence of those actions, the intention to make investment decision will grow.

Arrozi (2011)'s finding proves that investment decision making model may explain *risk investor's* behavior. Negative *framing model* specifically indicates that IDX investors tend to apply *risk neutral to maximize* their utility and prepare an evidence that there is a tendency that the investors prefer to be *indifference towards* fair investment.

## **Hypothesis**

In accordance with the above-mentioned theories and empirical studies, the researcher would like to propose the following hypotheses:

- H<sub>1</sub>: Financial information positively affects *unsystematic risk*.
- H<sub>2</sub>: Financial information positively affects *return of preference*.
- H<sub>3</sub>: *Unsystematic risk* positively affects *mental investment*.
- H<sub>4</sub>: Subjective norm positively affects *mental investment*.
- H<sub>5</sub>: *Systematic risk* negatively affects *mental investment*.
- H<sub>6</sub>: *Systematic risk* negatively affects *return of preference*.
- H<sub>7</sub>: *Mental investment* positively affects *return of preference*.

## RESEARCH METHODS

### Research Design

This research applies causal explanatory approach which explains the causal and simultaneous relationship between financial information, subjective norm, and risk perception variables towards *mental investment* and *return of preference*. Data of this research are collected through a survey. The research uses primary source data. Research data consists of subjects who express their opinion, attitude, and experience, or individual characteristics. The research applies *one shot study time frame*. Respondents of the research are investors. The research uses individuals as analytical units. The data is analyzed by using *Structural Equation Modeling (SEM)*.

The population and samples of the research are individual investors joining Level 3 IDX School of Financial Market. The size of the sample, with regards to *maximum likelihood estimation (MLE)* shall cover approximately 100 – 200 samples (Ferdinand, 2002). 178 samples are used for this research. Purposive random sampling technique is applied to this research.

### Definition of Operational Variables

Each operational variable will be defined as follows:

#### Financial Information

Financial information shall be defined as positive or negative factor that may affect investor's confidence towards the quality of financial information that will be beneficial for decision making process. The researcher develops this instrument from SAK (IAI, 2015), Ho and Wong (2005), also Arrozi (2012b). Financial information may be identified through 4 latent variables: *relevance*, *reliability*, *secondary quality*, and *performance*. This instrument can be measured by using Likert scale ranging from not at all usefull (1) until very useful financial information (5).

### **Subjective Norm**

Subjective norm shall be defined as investors' perception towards the influence from people around them which motivate them to do investment. This instrument has been developed from Chow *and* Chan (2008) also East R. (1993) through 4 indicators: observer, friends, mass media, and regulator. This instrument will be measured by using Likert scale. This scale measures the strength of investors' normative evidence – to follow investment decision, which ranges from 1 for not encouraging at all to 5 for very encouraging.

### **Systematic Risk**

*Systematic Risk shall define* investor perception regarding the unpredictable aspects of investors' external environment. This instrument is developed from the instrument formulated by Gordon *and* Narayanan (1984), also Miles *and* Snow (2013) which may be observed through 5 indicators: Economic condition, government policy, politics, financial market, and interest level. This instrument is measured by using Likert scale, ranging from scale 1 (very unpredictable) to scale 5 (very predictable).

### **Mental Investment**

*Mental Investment shall be defined as the intention to do investment* which is directly determined by investor's confidence towards the estimation of stock *return*. The instrument to measure *mental investment* has been developed from Arrozi (2012c) which consists of 7 dimensions: time preference, investment interest, knowledge about investment, attitude towards risk taking, self-control, investment control and planning, and investor's economic situation. This instrument can be measured by using Likert scale with varied alternatives of response, ranging from strongly disagree (1) to strongly agree (5).

### **Unsystematic Risk**

*Unsystematic risk shall be defined as* investor perception towards any financial report which has negative or *loss position*. The instrument used to measure *risk perception* consists of 7 indicators which are developed from Koonce *et al.* (2004): Financial report reflects financial problem, the concern towards company's financial condition, uncontrollable financial condition, the correlation between financial risk and its time of occurrence, Probability of economic loss recorded in the financial statement, the amount of estimated loss that may be incurred to the company, and financial risk that may be incurred to the company. This instrument applies Likert scale with varied responses ranging from very high risk (1) to very low risk (5).



### Return Preference

Return preference reflects investors' confidence and intention to gain profit from their investment decision. The instrument to measure this variable is developed by Arrozi (2011; 2012c) and such variable can be measured by using 5 indicators, namely: the expectation of gaining high amount of return from stock investment, the expectation to gain stock return which exceeds the amount of market return, the expectation to gain stock return in the amount exceeding deposit interest the expectation to gain optimal amount of stock return after performing stock performance revision, and the expectation to gain optimal return as expected by the investors. The instrument for this variable will be measured by using Likert scale with varied responses ranging from not expected to be reached (1) to must be reached (5).

### Research Model

The most rational model designed for this research will be shown like the following:

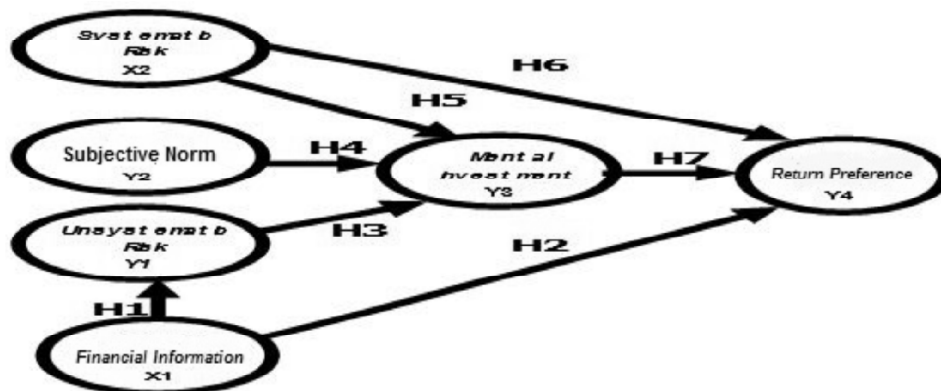


Figure 1: The Development of Research Model

### Criteria for Model

In order to test the proposed research model, researcher uses SEM equation model in certain way that fit model indicator meets the criteria for good research model. The summary of indices used in fit research model will be shown in Table 1.

## RESULT

### Data Collection

Research data are collected through a survey. 200 copies of questionnaires are distributed to the investors, and 22 of which are not completed. Thus, there are

**Table 1**  
**Criteria for Fit Structural Equation Model**

No	Goodness of Fit Index	Cut off Value
1	<i>Degree of freedom</i>	
2	Probability of significance	$\geq 0.05$
Absolute Fit Measures		
3	<i>Chi-Square</i>	Expected to be low
4	RMSEA	$\leq 0.08$
5	GFI	$\geq 0.90$
Incremental Fit Measures		
6	TLI	$\geq 0.95$
7	CFI	$\geq 0.95$
Parsimonious Fit Measures		
8	AGFI	$\geq 0.90$
9	CMIN/DF	$\leq 2.00$

Source: Ferdinand, 2002: 61

only 178 copies of questionnaires that can be processed for further analysis. Data of questionnaire distribution and submission will be displayed in Table 2.

**Table 2**  
**Illustration of Questionnaire Distribution and Submission**

Description	Number
Distributed Questionnaire	200 copies
Returned Questionnaire	200 copies
Percentage of Returned Questionnaire	100%
Usable Questionnaire	178 copies
Percentage of Usable Questionnaire	89%

Source: Data processed by the researcher

### Characteristics of Respondents

The objects of the research are the investors of Indonesia Stock Exchange (IDX). Based on their demographic characteristic, most respondents are 36-40 year old, male, have earned S1/undergraduate program, have invested their money in stock market for about 1-5 years, and can be classified as individual investors.

### Reliability and Validity Tests

Table 3 shows reliability test procedure using *cronbach alpha method with the value ranging between 0.844-0.925*, the value exceeding 0.60 will be deemed reliable (Nunnally, 1978). In addition to that, validity of the research will be measured by using analytical factor with MSA value ranging between 0.708-0.918, the value exceeding 0.50 will be deemed valid (Kaiser and Rice, 1974).

**Table 3**  
**The Result of Reliability and Validity Variables Test**

<i>Variable</i>	<i>Reliability</i>	<i>Validity</i>
Financial Information	0.8676	0.708
Subjective Norm	0.8713	0.815
<i>Systematic Risk</i>	0.9259	0.918
<i>Unsystematic Risk</i>	0.8879	0.794
<i>Mental Investment</i>	0.8818	0.778
<i>Return Preference</i>	0.8440	0.822

Source: Data processed by the researcher

### **Model Fit Test (*Goodness of fit Test*)**

Model is tested by using SEM to observe its fitness. The result of *Goodness-of-fit Test* will be displayed in Table 4 and the result shows that all criteria are met and *fit*.

**Table 4**  
**Fit Indices of Structural Equation Model (SEM)**

<i>Criteria</i>	<i>Cut off Value</i>	<i>Result of Calculation</i>	<i>Description</i>
<i>Chi-Square (x<sup>2</sup>)</i>	Expected to be low	534.451	x <sup>2</sup> = 573 (Good Model)
<i>Significance of Probability</i>	≥ 0.05	0.874	Good Model
RMSEA	≤ 0.08	0.000	Good Model
GFI	≥ 0.90	0.903	Good Model
CMIN/DF	≤ 2.00	0.891	Good Model
TLI	≥ 0.95	1.057	Good Model
CFI	≥ 0.95	1.000	Good Model

Source: Data Processed by the Researcher

### **Hypothesis Testing**

The result of data analysis processed by using AMOS program, made in order to test hypothesis H1 until H7 will be shown in Table 5. The result of test for hypothesis 1 to Hypothesis 7 shows that all hypotheses are accepted. The result of such hypotheses test will be displayed in Table 5.

## **DISCUSSION**

### **H1: Financial Information Affects *Unsystematic Risk***

Such research finding reveals that financial information positively affects *unsystematic risk*. Financial statement provides information on emitents' financial risk by 'emitting' *good or bad news signal* so investors may have high risk perception. The fact that emitent shows poor risk probability and high chance to bear a loss may trigger investors' negative confidence and potential threat to the respective stock. Loss probability and prediction might happen to the emitent because

**Table 5**  
**Estimation of Structural Model Parameter**

<i>Variable</i>	<i>Estimate</i>	<i>S.E.</i>	<i>C.R.</i>	<i>Prob.</i>	<i>H<sub>a</sub></i>	<i>Note</i>
Financial Information → <i>Unsystematic Risk</i>	1.758	0.255	5.889	0.000	H1	Accepted (Sign.)
Financial Information → Return Preference	0.686	0.227	3.016	0.003	H2	Accepted (Sign.)
Unsystematic Risk → Mental Investment	0.358	0.057	2.754	0.006	H3	Accepted (Sign.)
Subjective Norm → Mental Investment	0.467	0.095	3.843	0.000	H4	Accepted (Sign.)
Systematic Risk → Mental Investment	-0.269	0.087	-3.079	0.002	H5	Accepted (Sign.)
Systematic Risk → Return Preference	-0.914	0.114	-4.495	0.002	H6	Accepted (Sign.)
Mental Investment → Return Preference	0.158	0.057	2.754	0.006	H7	Accepted (Sign.)

*Source:* Data Processed by the Researcher

emitter's stock belong to certain industry or sector of a country, and is very sensitive to the conjuncture and turbulence of dynamic change. Thus, some factors will inevitably affect the stocks. Financial statement has *information usefulness in reporting (company)'s financial performance*, risk potentials in business and industrial operations as well as their prospects. A financial report must be *relevant, reliable, and full disclosure* so market makers will be able to take their decision in accordance with the available facts. The finding of this research supports the previous research performed by Healy and Palepu (2001), Barth *et al.* (2001), and consistent with Koonce *et al.* (2004). Nevertheless, the finding of this research is not in accordance with the one conducted by Lambert and Verrechia (2005).

### H2: Financial Information affects Return Preference

The findings of this research reveals that financial information positively affects *return preference*. It shows that investors develop positive attitude towards financial information so they will be able to set a prediction to gain *return*. As a consequence, investors expect and act on their expectation by gaining *return*. It has been triggered by the fact that investments are affected by investors' strategy and the amount of return gained may vary between one investor and another due to investor's varied preference, resulting from the subjectivity of *rate of return*. Some market makers prefer dividend only, *capital gain only*, or both dividend and *capital gain*. Investors' preference may change in accordance with their confidence, perception, individual attitude, and decision. One of the instruments used for decision making is financial information which reports on short term performance of dividend - it gives information about promised *return* and the future prospect of the investment. Market makers who have return preference on dividend expect that they will be able to accept the output of emitter performance during one period. Financial statement comprises of a set of information which may help investors to gain certain amount of profit based on their preferences. The findings of this research are in accordance with the findings reported by Barth *et al.* (2001), and inconsistent with Stainbank and Peebles (2006), also Chen and Hsu (2005).

### H3: Unsystematic Risk affects Mental Investment

The output of the test performed reveals that *unsystematic risk positively affects mental investment*. This fact supports the hypothesis that investors have positive *unsystematic risk* perception, and such perception may change their intention to perform investment (*mental investment*). The risk potentials are reflected in the condition of stock price which tends to be *volatile*. Based on market efficiency, such risk information will be reflected in the volatility of price stock. The implication of such volatility may affect investors' *cognitive* in making investment decision. Positive correlation between attitude and *unsystematic risk* perception, along with internalization process happening to the investors may change *risk seeker preference into neutral* in facing investment risk and such investor will not have any confidence on doing

stock investment. It shows that investors tend to take *disjunctive action* or waiting for the exact time to do investment. The finding of this research is in accordance with the findings formulated by Chen *and* Steiner (1999) and inconsistent with Hsu *and* Siu (2004).

#### H4: Subjective Norm Affects *Mental Investment*

The findings of this research reveal that subjective norm positively affects *mental investment*. In other words, positive attitude towards social influence or the people living around the investors are high and this may increase investors motivation to do investment. Three confidences assessed in this research to measure investors' attitude towards the influence of people surrounds them are among others the influence from observer, friends, and mass media, all kinds of influence get positive response from the investors. Friends' influence heavily affect investors' confidence and commitment to do investment. Due to the fact that different investor adopts different *cognitive* preference, there will be a tendency that investors' friends furnish the investors with a set of guidelines and analysis on the performance of the stocks based on their experience, knowledge, and comprehensive insight about the performance of certain industry or sector which related to the stocks. The result of such analysis will heavily affect investors' decision since such analysis may provide a prediction about the performance of investors' preferred stocks. In other words, investors get social pressure from their friends because the action they take is encouraged by the suggestion from their friends. This process reveals the existence of *hallo effect* since *investors' friends suggestion gives very significant contribution towards investors decision on the type of stock they prefer* and such suggestion may alter the direction of investors' investment. The finding of this reseach is in accordance with the finding of the previous research conducted by Bhattacharjee (2000), and Hailu *et al.* (2005). Nevertheless, the result is not in accordance with the finding formulated by Tan *and* Teo (2000) also Hsu *and* Chiu (2004) during their researches.

#### H5: *Systematic Risk* Affects *Mental Investment*

The result of the test reveals that *systematic risk negatively affects mental investment*. It shows that investors who display high level of *systematic risk* or *predict it inaccurately may lower the level of mental investment – or the intention to do investment*, and vice versa. Broadly speaking, most IDX investors tend to show neutral attitude towards *systematic risk perception*. Investors fully understand that the above-mentioned condition has been triggered by an external aspect beyond their control which may affect all stock mechanisms at Indonesia Stock Exchange. This condition triggers neutral expectation and various complicated views are developed by the market makers. The nature of *risk assets securities along with inevitable uncertainty of the market* may trigger unclear or misinterpreted information received by the investors – after performing a series of technical assessment. Investors shows adequate proportion of cognitive understanding because environment is in

*uncertain condition and investors need to know about this condition immediately.* Investors perform self-restrain because they are afraid of making wrong decision when doing long-term investment, they tend to hold their decision until certain appropriate timing or do not make any decision at all. As a consequence, *mental investment lies within those investors become positive.* This process triggers investors to be more prudent, have more self-control, risk neutral, and have more interest in finding out about new types of investment. The finding of this research is in accordance with the finding of the research performed by Luo (1999), also Kim and Lim (1988).

#### H6: Systematic Risk Affects Return Preference

The result of the assessment shows that *systematic risk negatively affects return preference.* It reveals that investors tend to negatively react towards *systematic risk so they can predict the price of stock circulating in the market and gain optimum return preference as well as increase the value of the company.* As a consequence, investors may expect and do a realization of such expectation in form of *return, or capital gain.* The application of *valid technical analysis* may benefit the investors and help them in finding and choosing well-performed stocks and produce expected amount of profit. The preferred stocks must be able to maintain their price during *volatile condition and situation, they must be able to show good performance,* in accordance with the amount of investors' *return preference.* The preference may change due to various causes (Scott, 2015). One of those causes is the information of stock price which shows *return capital gain's short term performance.*

#### H8: Mental Investment Affects Return Preference

The result of the assessment reveals that *mental investment positively affects return preference.* In other words, *positive mental investment which takes form as the confidence to do high volume investment may increase return preference, and vice versa.* Investors take investment decision in order to maximize stock utility by way of implementing the capability to perform information processing, apply the information, pay *attention to matters regarding investmen,* select preferred stock from available alternatives, make any decision regarding *return preference,* and take a decision on the type of stock they prefer. Investors perceive this process as their positive attitude to maximize the amount of their wealth. The implication of such expected action will be the optimization of the utility of *return preference in form of dividend, capital gain, or both of them.* This fact reveals that the utility expected by the investors are individual in nature so each investor may have his/her own specific utility. This research is in accordance with the finding formulated by Wahlund and Gunnarsson (1996), Nagy and Obenberger (1994), also Antonides and Van Der Sar (1989).

Table 6 displaying indirect effects of *mental investment towards the correlation between financial information and return preference* reveals that *indirect effect in the amount of 1,9801* is higher than direct effect which is only amounted 1,7630; the

correlation between *systematic risk* and *return preference* shows that those two variables *indirectly correlate* in the amount of 1,3650 higher than their direct amount which is amounted to -0,7864. It can be inferred that *mental investment improve the influence of financial information and systematic return towards return preference*. The result of analysis reveals that *mental investment may increase the level of expected return as future profit through halo effect and mymetic*. Thw result of this research is in accordance with the result of a study performed by Bhattacharjee (2000), Hailu *et al.* (2005), and Arrozi (2012c).

**Table 6**  
**Indirect Correlation**

<i>Variable Correlation</i>	<i>Total Correlation</i>	<i>Direct Correlation</i>	<i>Indirect Correlation</i>
Financial Information → Return Preference	3,7431	1,7630	1,9801
Systematic Risk → Return Preference	0,5786	-0,7864	1,3650

*Source:* Result of Data Processing

## CONCLUSIONS

### Conclusion

The result of this research reveals the supports to hypotheses 1, 2, 3, 4, 5, 6, and 7. Subjective norm is a factor which has greater effect than other variables: *financial information, risk systematic, risk unsystematic, and mental investment*. Some external factors have been evidenced support and affect the confidence of the investors to do investment. The decision whether an investor will invest on stocks or not is made in accordance with the knowledge and experience of the investors or their friends. This process shows that *hallo effect is at work because friend suggestion may give significant contribution to investors' performance to do investment*. This result displays that friends are performing *hallo effect in order to affect the investors in a way that they will do whatever they suggest*.

The finding of the research reveals that investors perform *hallo effect* and *mimetic action or copying what others do previously because of the suggestion or motivation from other market makers*. This "mimicking" will not bother investors to think whether the action they do will result in positive output or not.

### Suggestion

For the following research an induction can be added in its research model - by adding more variables like *environment uncertainty, technical information, and momentum strategy in bearish and bullish condition* - as either *intervening or moderating variables in mental investment model*. In addition to that, regulators may give announcement to market makers on the importance of information while



doing investment. Due to the fact that stock investment is closely related with company's prospect, fundamental information/knowledge will be inevitably important to be furnished during the selection of stocks.

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