# The Effect of Financial Information on The Decision of Individual Investment Investors in North Sumatera With Intention as Mediation and Recommendation of Financial Advisors as Moderating

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**Abstract.** This study aims to examine and analyze the effect of financial information on investment decisions of individual investors in North Sumatra with the intention of mediating and recommendations of financial advisors as moderating. Data was collected through a questionnaire of 240 respondents namely individual investors in North Sumatra (Medan, Deli Serdang and Tebing Tinggi). Quantitative analysis consisting of descriptive analysis, and SEM-PLS analysis using the help of WarpPLS software. 3.0. Research results show that financial information has a positive effect on investment intentions and decisions. Investment intention has a significant positive effect on investment decisions. Investor intentions mediate the relationship between financial information and investment decisions. Financial advisory recommendations are not significant in moderating the effect of financial information on investment intentions.

Keywords: Financial; Financial Information; Financial Advisor; WarpPLS

#### 1 Introduction

Investment is an activity of placing funds on one or more assets over a certain period; an expense at the present to buy real assets in hopes of obtaining profit in the Future (Halim, 2005). In making investment decisions, investors need information as the important factors to determine the investment options. Information is strictly needed by the investor to analyze the investment decision making, generally it involves a variety of information both public and private. Information is an important component that can trigger investors to take an investment strategy that is deemed feasible. Various factors can influence investor's decision to act in the investment decision making, such as: news, information, politics, risk, security, policies, rumors, external factors (global market), as well as the consideration of market participants' belief in investing the shares (Adhikara, 2013).

Decision making is the process of thinking, managing and solving Problems (Lubis, 2010). It is a cognitive process in the selection of alternatives, from various alternatives based on the information and resources. The development of business and investment environment is full of competition and global change, making it important for investors to be able to assess and develop the ability and intuition in making investment decisions. Investors should be able to filter and analyses various information and changes in many aspects of the case, as well as to

predict the future. The information that is received and analyzed by the investor should have a certain quality, so that he will be able to act the process of all the information rationally to provide the best results (Listyarti, 2014).

This research is a significant study to determine and create the model of behavioral investment decisions of individual investors, because this research will test the influence of financial information on the behavior of individual investors in North Sumatra in making the investment decisions with the intention of investors as a premeditation and recommendation of financial advisors as a moderate.

#### 2 Methodology

This research is a causality study, which is used to know the causal relationship between variables. Generally, the causal relationship is predictable by researchers, so the researchers can declare the classification of the caused variable, the independent and the dependent variable (Sanusi, 2011). This research examines the influence of financial information on the investment decisions of individual investors on the Indonesia Stock Exchange with the intention as a premeditation and recommendation of financial advisors as a moderate. The population of this research are the individual investors in the Indonesian Stock Exchange (BEI) in North Sumatera Region.

Meanwhile, the sample are the potential investor that contains of the individual investors who have been ever in making the investment decision, reading the investment analysis, having the investment account who live in Medan, Deli Serdang, and Tebing Tinggi. The samples are taken by using nonrandom sampling by snowball sampling. The paradigm in this research is Partial Least Square (PLS) analysis which is based on the SEM application. The instruments are the questionnaires, and the Likert scale technique are used to measure the data. (Sugiyono, 2016).



Fig 1. Conceptual Framework

#### 3 Results and Discussion

The data analysis method in this research is Structural Equation Modeling-Partial Least Squares (SEM-PLS) by using WrapPLS. The validity of convergent is part of the measurement model which is in SEM-PLS usually referred as an outer model, whereas in covariance-based SEM is called confirmatory Factor Analysis (CFA) (Mahfud dan Ratmono, 2013:64). There are two criteria to assess whether the outer model (measurement model) fulfill the requirements of convergent validity for the reflective construct, i.e. (1) The loading must be above 0.7 and (2) the significant P value (< 0.05) (Hair dkk. dalam Mahfud dan Ratmono, 2013:65).

Table 1. Validity Test based on Loading Factor

|      |         | •       | •       |            |
|------|---------|---------|---------|------------|
|      | IK (X1) | KI (Y2) | NI (Y1) | RPK<br>(M) |
| IK1  | 0.885   |         |         |            |
| IK10 | 0.933   |         |         |            |
| IK11 | 0.908   |         |         |            |
| IK12 | 0.937   |         |         |            |
| IK13 | 0.910   |         |         |            |
| IK2  | 0.856   |         |         |            |
| IK3  | 0.849   |         |         |            |
| IK4  | 0.876   |         |         |            |
| IK5  | 0.903   |         |         |            |
| IK6  | 0.911   |         |         |            |
|      | IK (X1) | KI (Y2) | NI (Y1) | RPK<br>(M) |
| IK7  | 0.927   |         |         |            |
| IK8  | 0.891   |         |         |            |
| IK9  | 0.917   |         |         |            |
| KI1  |         | 0.926   |         |            |
| KI10 |         | 0.928   |         |            |
| KI11 |         | 0.944   |         |            |
| KI12 |         | 0.911   |         |            |
| KI13 |         | 0.889   |         |            |
| KI14 |         | 0.789   |         |            |
| KI15 |         | 0.812   |         |            |
| KI16 |         | 0.901   |         |            |
| KI17 |         | 0.892   |         |            |
| KI18 |         | 0.885   |         |            |
| KI2  |         | 0.919   |         |            |

| KI3   | 0.916 |       |       |
|-------|-------|-------|-------|
| KI4   | 0.878 |       |       |
| KI5   | 0.931 |       |       |
| KI6   | 0.915 |       |       |
| KI7   | 0.934 |       |       |
| KI8   | 0.926 |       |       |
| KI9   | 0.939 |       |       |
| NI1   |       | 0.927 |       |
| NI2   |       | 0.932 |       |
| NI3   |       | 0.957 |       |
| NI4   |       | 0.951 |       |
| NI5   |       | 0.959 |       |
| NI6   |       | 0.962 |       |
| NI7   |       | 0.939 |       |
| RPK1  |       |       | 0.930 |
| RPK10 |       |       | 0.957 |
| RPK11 |       |       | 0.954 |
| RPK12 |       |       | 0.950 |
| RPK2  |       |       | 0.942 |
| RPK3  |       |       | 0.946 |
| RPK4  |       |       | 0.949 |
| RPK5  |       |       | 0.966 |
| RPK6  |       |       | 0.953 |
| RPK7  |       |       | 0.952 |
| RPK8  |       |       | 0.962 |
| RPK9  |       |       | 0.958 |

Based on the validity testing of loading factor on Table 1, all value of loading > 0.7, which means it has qualified the validity based on the loading value. Then, the validity test is based on the average variance extracted (AVE) value.

Table 2. Validity Test based on Average Variance Extracted (AVE)

|         | Average Variance Extracted (AVE) |  |
|---------|----------------------------------|--|
| IK (X1) | 0.811                            |  |
| KI (Y2) | 0.815                            |  |

| NI (Y1) | 0.897 |
|---------|-------|
| RPK     | 0.905 |
| (M)     | 0.903 |

Table 3. Reliability Test Based on Composite Reliability (CR)

|         | Composite Reliability |
|---------|-----------------------|
| IK (X1) | 0.982                 |
| KI (Y2) | 0.988                 |
| NI (Y1) | 0.984                 |
| RPK (M) | 0.991                 |

Table 2 describe the recommended AVE value is above 0.5 (Mahfud dan Ratmono, 2013:67). It is known that all AVE value is > 0.5, which means it has qualified for the validity based on AVE.. From Table 3 describe It is known that the entire value of CA > 0.7, which means it has qualified reliability based on Cronbach's alpha.

Table 4. Reliability based on Cronbach's Alpha (CA)

|         | Cronbach's Alpha |
|---------|------------------|
| IK (X1) | 0.981            |
| KI (Y2) | 0.987            |
| NI (Y1) | 0.981            |
| RPK (M) | 0.991            |

 Table 5. Validity Discriminant Testing

|         | IK (X1) | KI<br>(Y2) | NI<br>(Y1) | RPK<br>(M) |
|---------|---------|------------|------------|------------|
| IK (X1) | 0.901   |            |            |            |
| KI (Y2) | 0.673   | 0.903      |            |            |
| NI (Y1) | 0.635   | 0.760      | 0.947      |            |
| RPK (M) | 0.509   | 0.654      | 0.612      | 0.952      |

The recommended CA value is above 0.7 (Mahfud dan Ratmono, 2013:67). It is known that the entire value of CA > 0.7, which means it has qualified reliability based on Cronbach's alpha. Table 5, In discriminant validity testing, the AVE squared root value of a latent variable, compared to the correlation value between the latent variables and other latent variables.

It is known that the AVE squared root value of for each latent variable is greater than the correlation value between the latent variables and other latent variables. So that it can be inferred that it has qualified the validity of discriminant.

# **Significancy of Direct Effect Testing**

Table 6. Coefficient Line and P-Value

|                       | Original<br>Sample<br>(O) | Sample<br>Mean<br>(M) | Standard<br>Deviation<br>(STDEV) | T Statistics<br>( O/STDEV ) | P<br>Values |
|-----------------------|---------------------------|-----------------------|----------------------------------|-----------------------------|-------------|
| IK (X1) -><br>KI (Y2) | 0.251                     | 0.250                 | 0.087                            | 2.869                       | 0.004       |
| IK (X1) -><br>NI (Y1) | 0.349                     | 0.349                 | 0.121                            | 2.893                       | 0.004       |
| NI (Y1) -><br>KI (Y2) | 0.430                     | 0.428                 | 0.110                            | 3.921                       | 0.000       |

Table 7. Determine Coefficient Value

|            | R<br>Square | R<br>Square<br>Adjusted |
|------------|-------------|-------------------------|
| KI<br>(Y2) | 0.667       | 0.665                   |
| NI<br>(Y1) | 0.551       | 0.545                   |

#### **Indirect Effect Significancy Test**

**Tabel 8.** Coefficient Line Value dan P-Value (Significancy Test of Direct and Indirect Effect)

|                         |         | Original<br>Sample<br>(O) | Sample<br>Mean<br>(M) | Standard<br>Deviation<br>(STDEV) | T Statistics<br>( O/STDEV ) | P Values |
|-------------------------|---------|---------------------------|-----------------------|----------------------------------|-----------------------------|----------|
| IK (X1) -> NI (Y1) -> 1 | KI (Y2) | 0.150                     | 0.153                 | 0.070                            | 2.148                       | 0.032    |

# **Moderation Testing**

**Table 9.** RPK (M) Testing in Moderating the Effect IK (X1) Toward NI (Y1)

|                    | Original<br>Sample<br>(O) | Sample<br>Mean<br>(M) | Standard<br>Deviation<br>(STDEV) | T Statistics<br>( O/STDEV ) | P<br>Values |
|--------------------|---------------------------|-----------------------|----------------------------------|-----------------------------|-------------|
| IK (X1) -> NI (Y1) | 0.342                     | 0.335                 | 0.107                            | 3.197                       | 0.001       |
| RPK (M) -> NI (Y1) | 0.363                     | 0.361                 | 0.087                            | 4.170                       | 0.000       |
| X1MY1 -> NI (Y1)   | -0.123                    | -0.128                | 0.067                            | 1.827                       | 0.068       |

### 4 Results and Discussion

#### The Effect of the Information toward the Investor's Intention

The information of the financial positively affects the investor's intentions, with a line coefficient value of 0.349 and P-values 0.004 < 0.05, so that the hypothesis that stated that

financial information affecting investor intention is acceptable. This indicates that the investor has a fundamental knowledge of financial information, so that it will form the intentions and beliefs of investors. The Interest in financial information obtained by investors will elicit the effect of financial information on the seriousness of investing. The results of this study in line with Anggraiawan (2017), Listyarti (2014), Akintoye (2008), Pamela and Stuerke (2005), Epstein and Pava (1994), stated that financial information is useful to improve the investor's confidence to invest.

#### The Effect of Financial Information toward the Investment Decision

The Financial information positively affects the investment decision with a line coefficient value of 0.430 and is significant with the value of P-Values 0.000 < 0.05. Rationally, the capable and successful investors who obtain financial information and analyze such information will increase the investor confidence to make investment decisions in the stock market, when the company announces that it will pay dividends. This information is as a signal to make an investor immediately in the decision making to purchase the company stock. These signals will be reacted differently by the investors as well as the company's financial information (Scott, 2009).

The financial information affects the investment decisions in line with those researches conducted by Listyarti (2014), Norman (2012), Tavakoli (2011) and Akhtar (2011), which happens where investors are faced with an urgent and limited situation, hence the investors immediately take investment decisions when they are informed the company's financial information.

#### The Effect of Investor's Intention toward the Investment Decision

Investor intent positively affects the investment decision by a line coefficient value of 0.430 and is significant with the value of P-Values 0.000 < 0.05, it shows that to make an investment decision that certainly runs an investor's investment should have a strong intention and commitment in self. This is a trigger how investors will make the most of their efforts to make the chosen investment decisions, committed to themselves will arise the responsibility in investing. The Recommendation of the Financial Advisor Moderate the Effect of Financial Information toward the Investor's Intention

Based on the results of the moderation test, it is known the P-Values value is 0.068 > 0.05, the recommendation of financial advisors is not significant in moderating the influence of financial information on investor's intentions, it shows that the financial advisory recommendations do not moderate the influence of financial information on investor's intentions. Investment advice derived from investment advisor is not a concern when the investor's intention to invest, in other words the credibility of the information provided by the Financial Advisor in the form of investment recommendation of market analysis results is less the concern of investors.

The individual investor in North Sumatra is an experienced investor due to the decent intention by studying the analysis of financial information generated by the company. Investors are more confident in the company's financial information than the results of the analysis of financial advisory recommendations, it can be from the media or the brokers.

# The Investor's Intention to mediate the Relationship between the Financial Information toward the Investment Decision

The indirect influence of financial information on investment decisions, through investor intent is 0.150 and significant with the value of P-Values 0.032 < 0.05. In other words, the

investor's intention significantly mediates the relationship between financial information and investment decision, financial information affects indirectly to investment decision due to investor's intention in investing by finding, analyzing, studying financial information issued by the company as the consideration by the investor in determining the investment decision.

The intention of investing as a sincere desire of a person in investing, so that from the intention it can be seen how and to what extent the investor tries hard in investing. In Planned behavior theory one's intention to behave will be increasingly higher supported by a positive attitude and the perception of ease in acting.

#### 4 Conclusion

- a. Financial information affecting investor intention. The results of this study in line with Anggraiawan (2017), Listyarti (2014), Akintoye (2008), Pamela and Stuerke (2005), Epstein and Pava (1994).
- b. The financial information affects the investment decisions in line with that research conducted by Listyarti (2014), Norman (2012), Tavakoli (2011) and Akhtar (2011)
- c. Investor intent positively affects the investment decision.
- d. The recommendation of financial advisors is not significant in moderating the influence of financial information on investor's intentions, it shows that the financial advisory recommendations do not moderate the influence of financial information on investor's intentions.
- e. The investor's intention significantly mediates the relationship between financial information and investment decision, financial information affects indirectly to investment decision due to investor's intention in investing by finding, analyzing, studying financial information issued by the company as the consideration by the investor in determining the investment decision.

## References

- Adhikara, A., Nur Diana Maslichah. (2013). Karakteristik Kualitatif Informasi Dalam Revisian Keyakinan Pengguna Untuk Penilaian Prospek Sekuritas Di Bursa Efek Indonesia. Hasil Penelitian Fundamental Dengan Dana DIKTI Tahun Anggaran 2013. Universitas Esa Unggul Jakarta.
- Akhtar. (2011). Determinants of Short Term Investment Decision Making. *Journal of Actual Problem in Economics*, 11.
- Akintoye, IR 2008, 'Optimising Investment Deci- sion through Informative Accounting Report- ing', *European Journal of Social Sciences*, volume 7, number 3.
- Anggraiawan, A., Irvan, Deannes Isynuwardhana, Dewa Putra Krishna Mahardika. (2017). Determinan Perilaku Investor Individu Dalam Pengambilan Keputusan Investasi Saham Pada Investor yang Terdaftar di GI-BEI Telkom University. e-Proceeding of Management, 4(1), 369-376.
- 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 Busi- ness Management*, vol.5 (27), pp. 11082-11092.

- 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
- Halim, A. (2005). *Analisis Investasi* (2 ed.). Jakarta: Salemba Empat.
- Listyarti, I., Tatik Suryani. (2014). Determinant factors of investors' behavior in investment decision in Indonesian capital markets. *Journal of Economics, Business, and Accountancy Ventura*, 17(1), 45-54. doi:10.14414/jebav.14.1701005
- Lubis, A. I. (2010). Akuntansi Keprilakuan (Krista Ed. 2 ed.). Jakarta: Salemba Empat.
- Mahfud Sholihin dan Dwi Ratmono. 2013. Analisis SEM-PLS Dengan WarpPLS 3.0. Edisi Satu. Yogyakarta : ANDI OFFSET
- Norman. (2012). The Usefulness Of Financial Information Capital Markets Investment Decission Making In Tanzania: A Case Of Iringa Region. *International Journal of Marketing and Technology*, 2(8), 50-65.
- Pamela and Stuerke, 2005, 'Financial analysis as user accounting information evidence about to restriction activites after earning Announce-ment', *International Journal of Managerial Fi-nance*, Vol. 1, Iss. 1, pp. 8-24.
- Sanusi, A. (2011). Metode Penelitian Bisnis. Jakarta Salemba Empat.
- Scott, W. R. (2009). Financial Accounting Theory (4 ed.). Pearson Education Canada Inc. Toronto.
- Sugiyono. (2016). Metodelogi Penelitian Bisnis. Bandung: Alfabeta.