





#### Conference Paper

# The Investment Decision Based on Student Finance-Education and Promotion, Mediated By Perception of Risk

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#### Abstract

This research is aimed to analyze the effect of student finance-education and promotion on investment decision, mediated by the perception of risk. The population of this research is students who are registered as investors on the University Investment Gallery in Medan and Aceh. The sampling technique was purposive sampling and retrieved 350 samples. Data analysis is Structural Equation Modeling (SEM) using AMOS software. Results of the study showed that students' investment decisions are influenced significantly by promotion and perception of investment products, while finance-education is not able to significantly affect students' investment decisions.

**Keywords:** finance-education, promotion, risk perception, investment decision, investment gallery

## 1. Introduction

The capital market is crucial in the Indonesian economy. The positive development of technology and globalization in Indonesia leads Indonesia into becoming an icon in Southeast Asian capital markets. Governments and communities supports are required in enabling the Indonesian capital market to cope with the highly increasing demand on it. One of the supports is creating the stability on political, law as well as the stability of the investment climate in Indonesia to convince the community into participating in the Indonesian capital market. (Applied accounting.com/Indonesia capital market, 2016).

However, the current state of Indonesian capital market growth is not equal with the population in which the total population growth outnumbers the capital market investors. A number of local investors in Indonesia still stand at 174 thousand which

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considerably small compare to the population of 240 million people. This figure illustrates that only 1% of the total population becomes investors. Compare to other countries, the number of investors in Malaysia is 18% and Singapore is 30% of their total population. This figure shows that the capital market has not become the primary choice or not popular to be considered as an investment instrument for the Indonesia people (Indonesia Stock Exchange (BEI)-Medan, 2016).

The pre-survey result shows that there is little and even limited time, information or knowledge as well as social media or promotion provided to the people regarding the capital market investment instrument. Furthermore, there is intransparancy and unclear information to the people regarding the capital market investment, not to mention the high risk perception or negative paradigm of the community about capital market investment instrument. Therefore the Indonesian people feel much secure to choose other form of investment which is traditional and considered real instead of capital market investment that assumed to be dangerous which benefit considered not promising.

Indonesian Stock Exchange (BEI) has been working on various activities and programs to increase the number of investors in Indonesia. Some of them are to encourage issuers to go public and have finance-education programs such as class on capital market to the community through schools, colleges, and other educational institutions both formal and non-formal. The results do not show a very significant growth as the population growth in Indonesia, but still, it help to increase the number of investors in Indonesia. The following data can be shown in Figure 1.



**Figure** 1: Graph number of capital market investors in Indonesia from 2013 to 2015. Source: stockandexchange.com (2018).

Indonesian Stock Exchange (BEI) opened vast opportunities for all people of Indonesia to become an investor in the stock market. One of the main targets is youngadolescents since this age- group is regarded as a potential consumer to be provided with education and knowledge of investment products and how to invest properly and correctly. Indonesia Stock Exchange (IDX) as the stock organizer holds marketing **KnE Social Sciences** 



activities of investment products such as socialization, education, and promotion conducted in cooperation with the FSA, KSEI (Indonesian Central Securities Depository), and KPEI (Clearing and Guarantee Securities Indonesia) as well as securities firms to have Capital Market School, Seminar on mutual funds, and so on taking place in the offices of the Stock Exchange as well as in several universities in Indonesia. The result is quite helpful to attract new investors as much as 88 397 investors in 2014. Then finally BEI aims to introduce the theory and practice in the capital market to academics who considered as potential investors. (BEI Medan, 2016)

Therefore, researchers wants to see the extent to which investment decisions of students becoming investor in selecting stock investment as an investment instrument for the future by involving the role of finance-education and promotion held by Indonesian Stock Exchange along with several parties, especially the university through the gallery of investments mediated by students' perceptions on the risk of equity investments which is considered as having the highest risk.

### 2. Theory

#### 2.1. Finance-Education

Finance-education is manifested by the Organization for Economic Co-operation and Development (OECD), (2005) is the process of improving consumer knowledge of Finance (investors) about a variety of financial products, the concept of risk and return, applied through the giving of information, instructions, suggestions for the investors to have the skills and higher confidence higher when making wiser financial decisions.

#### 2.2. Promotion

According to Lupiyoadi (2006), promotion is one of the variables in the marketing mix that is very important to be implemented by the company in the market of services. A promotional activities are not only serves as a communication tool between companies and consumers but also as a tool to influence consumers in purchasing or using the service in accordance with the wishes and needs.



### 2.3. Risk perception

Risk Perception is thoughts, beliefs, and valid constructs of a person against negative incidents that may occur on an event (Oltedal, et al., 2004). Risk perception can also be defined as things that can induce protective behavior (behavioral protection or prevention behavior) on someone (Brewer, 2004).

### 2.4. Investment decision

The investment is the placement of the current amount with the hope of making a profit in the future (Halim, 2005). Thus, in investment decisions, investors require some information which is important factors as the basis in deciding an investment.

### **Hypothesis**

The research hypotheses are:

- 1. Finance-education has a significant effect on the student's risk perception as stock investors in the capital market on investment gallery universities in Medan and Aceh.
- 2. Promotion has a significant effect on the student's risk perception as an equity investor in the investment gallery universities in Medan and Aceh.
- 3. Finance-education has a significant effect on the investment decisions of students as stock investors on investment gallery universities in Medan and Aceh.
- 4. Risk perception significantly influences the investment decisions of students as stock investors on investment gallery universities in Medan and Aceh.

# 3. Method

The study population was all students enrolled as investors in the investment gallery of the universities in Medan and Aceh with uncertain number, therefore, the number of sample taken is similar to those in the SEM analysis which are 100-350 samples (Ghozali, 2016). Samples were 350 and by way of purposive sampling technique. The criteria proposed are (1) registered as investors at least 3 months (2) have an additional source of income beside the income from their elderly (3) have been getting subjects of financial management, portfolio, and capital markets. A source of data in this research



is through questionnaires and documentation. Data analysis techniques in this study using descriptive statistical analysis using SPSS and analysis using structural equation models (SEM) with AMOS software.

## 4. Result

#### 4.1. Descriptive statistics

The survey results showed that the majority of students who become investors are women with the percentage of as much as 65% while only 35% of them are men investors. Survey data shows that 78% of the investors are students of the Faculty of Economics, while 22% are investors are students of other faculties such as Faculty of Law, Faculty of Social and Political Sciences, Faculty of Islamic Studies, Faculty of Engineering and the Faculty of Medicine. The fewest number of investors comes from the Faculty of Islamic Studies in Aceh because there is still the perception that investments contain the elements of gambling and riba and therefore considered as incompatible with the Islamic Shari'a. Other criteria known from the survey results is: only 45% who think that investing in stocks is a form of long-term investment is the right plan for the future, while the majority of them are known to have a good knowledge and skills on financial management. The remaining 55% are students who make an investment decision on the capital markets due to following the decision of his/her friends or influenced by the information obtained from friends and professors who teach finance courses who suggested them to join the investment in the capital market. These data show that only 45% of investors are students with the level of knowledge and good skills in financial management as their basis for their decision to be an investor,

The criteria are based on the perception of the risk of stock investing is known that 60% of investors are students with the perception that stock investment is one of the most high-risk investments, however, it also gives higher profit which worth the risk compare to other kinds of investments. While the other 40% investors are students with the bad perception on the risk of stock investments who assume that the stock is an investment with high risk, unsecured, considered the same as other forms of investment, it would not return, there is the threat of losing the entire larger investment funds, and certainly requires substantial capital to become investors in the capital market. However, there are other data showing that only 40% are active investors while the remaining 60% are not active in capital market transactions. This



number an indicates that below 50% are students who do not have a good understanding on managing finances in the form of capital market investment. While the rest are students who become investors due to following their fellow friends or being influenced without having adequate knowledge and skills regarding investment.

### 4.2. Results of data processing

The results of the full test model used in this research using structural equation modeling using AMOS software are as follows:



Figure 2: Full model SEM. (Source: Processed Data, 2018).

Based on the test results of a full model structural equation models, there are criteria of goodness of fit of this research model, based on Tabel 1:

| No.         | Goodness of Fit Index | Cut-off Value  | Results<br>Analysis     | Evaluation<br>Model        |
|-------------|-----------------------|--|-------------------------|----------------------------|
| 1           | $\chi^2$ -Chi-square  | expected to be small   | 166.475                 | Good fit                   |
| 2           | probability           | $\geq$ 0.05 (Ferdinand, 2014)  | 0.287                   | Good fit                   |
| 3           | CMIN/DF               | < 2.00   | 1.060                   | Good Fit                   |
| 4           | RMSEA                 | ≤ 0.08   | 0.013                   | Good Fit                   |
| 5           | GFI                   | ≥ 0.90 (Ghozali, 2016)   | 0.963                   | Good Fit                   |
| 6           | AGFI                  | ≥ 0.90 (Ghozali, 2016)   | 0.945                   | Good Fit                   |
| 7           | TLI                   | ≥ 0.90 (Ghozali, 2016)   | 0.995                   | Good Fit                   |
| 8           | CFI                   | ≥ 0.90 (Ghozali, 2016)   | 0.996                   | Good Fit                   |
| 5<br>6<br>7 | GFI<br>AGFI<br>TLI    | ≥ 0.90 (Ghozali, 2016)<br>≥ 0.90 (Ghozali, 2016)<br>≥ 0.90 (Ghozali, 2016) | 0.963<br>0.945<br>0.995 | Good F<br>Good F<br>Good F |

TABLE 1: The goodness of Fit Index Model.

Source: Processed Data (2018).

The data in Table 1 shows that our model is a fit model or model with good fit criteria so it is applicable to be used to test hypotheses of this study.





Next is the test results used to answer this hypothesis using a regression weight output:

|   | Estimate | Р     | Hypothesis |
|---|----------|-------|------------|
| Finance_education $\rightarrow$ Risk_perception     | 0.058    | 0.558 | Rejected   |
| promotion $\rightarrow$ Risk_perception             | 0.602    | 0.000 | Accepted   |
| Finance_education $\rightarrow$ Investment_decision | 0.154    | 0.097 | Rejected   |
| promotion $\rightarrow$ Investment_decision         | 0.331    | 0.010 | Accepted   |
| Risk_perception $\rightarrow$ Investment_decision   | 0.479    | 0.000 | Accepted   |
| Source: Processed Data (2018).                      |          |       |            |

TABLE 2: Hypothesis research.

The data in Table 2 as a basis for answering the research hypothesis is:

1. The influence of the finance-education of the positive perceptions of risk is not significant; with a *p*-value (0.558) and the value estimate (0.058).

Ho is accepted and Ha is rejected finance-education has no significant effect on the risk perception of students as stock investors in the capital market on investment gallery universities in Medan and Aceh.

- 2. The Influence of promotion on investor risk perception of students on the university investment shares in the gallery is a significant positive with a value of p(0.000) and the value estimate (0.602). Ho is rejected and Ha accepted Promotion is significantly gives positive effect on the risk perception of students as an equity investor in the investment gallery universities in Medan and Aceh.
- 3. The influence of finance-education on student's investment decisions as an equity investor in the gallery investments universities in Medan and Kota Aceh is positive, not significant with a p-value (0.097) and the value estimate (0.154). Ho is accepted and Ha is rejected Finance-education is not significantly giving positive effect on the investment decisions of students as stock investors on investment gallery universities in Medan and Aceh.
- 4. The Effect of promotion on investment decisions taken by students as an equity investor in the investment gallery universities in Medan and Aceh is a significant positive p-value (0.010) and the value estimate (0.331). Ho is rejected and Ha accepted Promotion gives significant positive effect on the investment decisions of students as stock investors on investment gallery universities in Medan and Aceh.



- 5. The influence of risk perception of students as an investor in the investment gallery of universities in Medan and Aceh on their investment decisions is significantly positive with a *p*-value (0.000) and the value estimate (0.479). Ho is rejected and Ha accepted risk perception significantly influences the investment decisions of students as stock investors on investment gallery universities in Medan and Aceh.
- 6. Perception of risk on investment shares as student's intervening variable that mediates the relationship of the campaigns carried by the Indonesian stock exchanges together with the university.
- 7. Promotion is the most influential factor and contributes bigger impact on investment decisions than finance-education.

# 5. Discussion

Finance-education obtained by students on campus does not have a significant influence on the risk perception of students on stock investments. Education or financial knowledge received in college is not able to change students' perceptions of the risks of equity investment. Students still believe that investing in stocks is a form of high-risk investment, capital-intensive, provide large returns form but maybe it is likely to lose the entire capital and profits, so that will provide a long-term inconvenience to students. Therefore the information and knowledge of various financial instruments, how to manage financial risk, risk diversification cannot change the mindset or preparation of their opinion about the future of the investment and is not change their behavior in managing finances get better.

Finance-education obtained by students at the college also gives no significant effect on investment decisions. This means that education and financial knowledge given, cannot assist students in making investment decisions as an investor in the investment gallery of universities in Medan and Aceh. The results of this study are supported by Lusardi and Mitchell (2007) that is stated in his research that the finance-education given to the public does not significantly impact on public finances behavior as getting better at managing finances and it impacted on investment decision for retirement planning.

The results of this study not according to the research conducted by Gumus, Fatih B, and Dayioglu, (2015)which states that the decision of the investors is influenced

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by demographic factors, social and economic factors such as age, gender, educational background, economic status and level of job/position. Everything is significantly affected except to marital status which does not have an impact on the perception of risk and investment decisions taken by investors. In addition, other research studies do not support this research is known that finance-education can improve attitudes, values, and beliefs that are able to influence investment decisions that are appropriate long-term needs for comfort for the family (Cohen and Nelson, 2011).

In contrast to the opinion Weber, Blais, and Betz, (2002)which could be considered to support this research is mentioned that the perception of risk is the mindset of unrealistic thoughts and minds to the risks involved in the decision-making process, and ultimately the decision is referred to as risk behaviors. Another opinion states that the perception of risk from a cultural standpoint has no relationship between perceptions of risk to information and knowledge possessed by someone.

The results showed that the campaign carried out by the Indonesian stock exchange and the university through the galleries investments have a significant positive effect on students' perceptions of the risks of equity investment selected. Promotion is capable of significantly provides an enormous impact on the changing of student perceptions over the risk of stock investments becomes better. The results are consistent with research conducted by Jariwala (2013), which states that developing and promoting financial literacy through education becomes an important policy against financial protection, financial inclusion, and regulations that support. Exciting promotions accompanied with complete information will help people feel more secure because it has protection against the risk of stock investment.

Promotion and perception of risk-significant positive effect on the investment decisions made by students as an equity investor in the investment gallery universities in Medan and Aceh. Promotion in the form of interesting information about the delivery of investment instruments and procedures for selecting a good investment, financial management to diversify risks through the medium of interest in accordance with the needs and mindset or the style of today's youth can help students take the right investment decisions. Their interesting diction and enjoyable atmosphere in accordance with the style of a youngsters in introducing stock investments or capital market to students will help students deciding to become a capital market investors. This promotion will also help changing students' perceptions of the risks of equity investment which previously considered negative becomes positive, stock investments which are considered high risk, will then worth the profit gained which is considerably high as well for the better financial condition in the future. However, there must be clear information and



direct assistance for students in viewing and assessing market conditions for them to be able to choose a safe stock investment that benefit them for long-term preparation for a secure future.

These results are in accordance with the opinion Lusardi, (2008), states that one's investment decision is very much influenced by one's perception over his/her chosen investment risk. Meyer and Bernier (2010), In her study also mentions that the marketing mix conducted by a company helps increasing sales. Including the marketing of financial products and services so that the promotional mix will help students into having decision to save more and more shares and became an active investor in the gallery of the university investment. Schubert, Brown, and Gysler, (1994), also mentioned in his research that there is no relationship between the genders investor risk perception on the chosen investment. Although women are considered of having higher risk at losing over the investment of their choice.

# 6. Conclusion

Finance-education is a positive but not significantly effect students' perceptions of the risk of stock investments chosen and finance-education is also positive although not significantly affect the investment decisions taken by investor. However, promotion has a positive and significant effect on the student investment decisions as investors. Promotions conducted also positively impact significantly to the perceptions of students as investors over his chosen investment risk.

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