

# Social Media, Islamic Capital Market Literacy, Millennial Generation Investor Risk Tolerance In Indonesia

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**ABSTRACT:** The purpose of the study was to examine the direct effect of social media on Islamic capital market literacy and risk tolerance. Next, the influence of Islamic capital market literacy on risk tolerance was also tested. As many as 200 investors who are actively trading sharia shares in Malang Raya are the respondents. To test the indirect effect, the hypothesis being tested is the role of Islamic capital market literacy as a mediating variable between social media and risk tolerance. By using the structural equation model or SEM analysis tool, it was found that social media had a significant effect on Islamic capital market literacy and risk tolerance. Islamic capital market literacy has a significant effect on risk tolerance.

**KEYWORDS:** Social Media, Islamic Capital Market Literacy, Risk Tolerance, Generation Millennial

## I. INTRODUCTION

The number of Islamic capital market investors as of March 2022 was recorded at 108,345 SID and increased significantly to 367 percent in the last 5 years (Head of the Islamic Capital Market Division of BEI, 2022). However, behind the very significant growth rate of the number of investors, there are challenges faced by the Islamic capital market, namely the low literacy of the Islamic capital market, even the lowest compared to other Islamic financial sector literacy, including the literacy of Islamic investors. The low level of investor literacy is thought to affect the level of risk tolerance that investors are willing to bear if they decide to invest in the Islamic capital market (Saurabh and Nandan, 2018). While good literacy, one of which is obtained from social media in the form of websites, twitter, blogs and facebook as a medium for providing information

(Nasrullah, 2018), both financial information and market information (Wang et al., 2016), traders' opinions and the sentiments of other investors (Zhang, 2016). The tendency of investors to use social media is in line with the Financial Services Authority and the Indonesia Stock Exchange which also use websites, Instagram, Facebook, and Twitter to convey various information related to the stock market. This condition also has an impact on issuers who have started to use Facebook to communicate with investors (Wang et al., 2016). Even issuers use twitter to report directly on the general meeting of shareholders and republish information that has been published on websites. (Alexander and Gentry, 2014). In addition, information on social media can also affect risk tolerance. The essence of risk tolerance seeks to understand the risk profile of investors because each investor has a different tolerance level to accept the risks that may arise when investing. Investors' level of risk tolerance can be explained by various information on social media. Individuals with a frequency level of logging in to an online social network, namely Facebook, will have a high risk tolerance. Next is the link between literacy and risk tolerance. The relationship between the two has been investigated by Waziussaman and Edalat (2016) and Saurabh and Nandan (2018), and find investors with good financial knowledge tend to have high risk tolerance.

## II. HYPOTHESIS DEVELOPMENT

### **The influence of social media on Islamic capital market literacy**

Technological developments have brought changes in people's lifestyles, including changes in the behavior of millennial investors in the stock market. Social media is a medium that investors can use to get a variety of information. In addition to being easily and quickly accessible, this information can be accessed via smartphones so that investors can search or read information anywhere and anytime. The information presented on social media is very diverse and continuously updated and in real time, for example information on running trades, order books, stock watches, and stock quotes, recommendations for buying or selling stocks, information on macroeconomic, social, and political conditions. Information presented on social media is believed to increase knowledge or financial literacy (Mimura et al. 2015). A similar opinion was expressed by Karaa and Kuğu (2016) that individuals who often follow the opinion of famous economists, economic and financial news posted on social media can increase the knowledge of these individuals. Based on the description and findings of previous research, the research hypothesis is as follows:

H1. Social media has a positive effect on Islamic capital market literacy

### **The influence of social media on risk tolerance**

Before deciding to buy or sell shares, investors will collect information related to these shares, as well as information on economic conditions. In this digital era, investors can take advantage of social media to get all the information they need. The amount of information available on social media is used to determine the characteristics of investors. One of the characteristics of investors that attracts the attention of financial practitioners is risk tolerance (Waziussaman and Edalat, 2016). This opinion is in line with the findings of Chien and Lu (2015) that the frequency of news disclosure on social media, in this case the website will increase investor recognition. These findings indicate that the more frequently information is updated on the company's website, the more confident investors will be on the published news, which will automatically increase investor risk tolerance. Likewise with Waziussaman and Edalat, (2016) who examined the relationship between online social network behavior, in this case Facebook with risk tolerance. The results show that the more often investors log in to find information on Facebook, the higher the risk tolerance of investors. Based on the exposure of relevant

previous research findings, the following research hypotheses can be formulated: The results show that the more often investors log in to find information on Facebook, the higher the risk tolerance of investors. Based on the exposure of relevant previous research findings, the following research hypotheses can be formulated: The results show that the more often investors log in to find information on Facebook, the higher the risk tolerance of investors. Based on the exposure of relevant previous research findings, the following research hypotheses can be formulated:

H2. Social media has a positive effect on risk tolerance.

### **The influence of Islamic capital market literacy on risk tolerance**

There is a basic and generally accepted principle in investing in stocks, namely that high returns can be obtained if investors are willing to take high risks as well. This principle is known as high risk high return. Every stock investor will make various efforts to minimize the opportunity for losses. One of them, investors equip themselves with adequate knowledge about macroeconomic conditions (Khan et al. 2019), in the form of an understanding of inflation and interest rates (Van Rooij et al. 2011). Investors who have a high level of literacy will be better able to manage the risks inherent in stock instruments so that they have the courage to participate in the stock market. This assumption is in line with the findings of Wasiuzzaman and Edalat (2016) that individuals who have a good financial understanding will have a high risk tolerance. This finding is supported by Saurabh and Nandan (2018) which states that financial knowledge has a significant effect on the level of risk determined by investors. The explanation above can be used as a reference to determine the research hypothesis as follows:

H3. Islamic capital market literacy has a positive effect on risk tolerance.

### **The influence of social media on risk tolerance through Islamic capital market literacy**

Social media is one of the media to get market performance information. One of the reasons is the use of social media platforms by investors because it provides real time information. Investors in the capital market really need information that can be obtained quickly and up to date, such as information on the opening price, highest price, lowest price, and closing price in order to predict stock price movements. The information that investors have collected on social media and then analyzed is believed to be able to

increase an individual's understanding of financial instruments (Mimura et al. 2015). Furthermore, if literacy is getting better, it will increase individual risk tolerance because individuals have confidence

in the information they have. Based on this description, the proposed hypothesis is as follows: H4. Social media has a positive effect on millennial investor risk tolerance through Islamic capital market literacy.

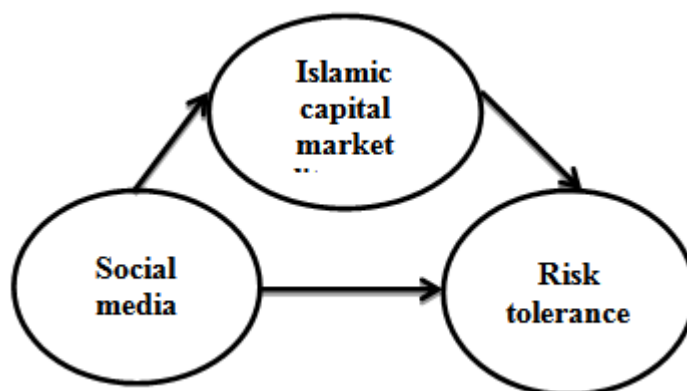


Figure 1. Conceptual Framework

### III. METHOD

The research location is in Malang Raya Indonesia with 200 respondents consisting of 120 male investors and 80 female investors who are active in trading sharia shares. The number of 200 respondents is adjusted to the opinion of Hair et al., (2010), namely the determination of the sample if using a structural equation model analysis of 100-200 respondents. In this study, social media was measured by 2 indicators, namely the quality of the system and the quality of information with 5 statement items. Islamic capital market literacy is measured by 2 indicators, namely basic and

advanced literacy with 4 statement items. Finally, risk tolerance is measured by indicators, namely investment risk, risk comfort and speculative risk with 6 statement items. All statement items have been adjusted to the respondent's condition.

### IV. RESULT AND DISCUSSION

Based on the results of the factor loading measurement model, it is known that 2 very significant indicators measure social media, 2 significant indicators measure Islamic capital market literacy and a significant indicator measures risk tolerance as shown in Table 1 below.

**Table 1. Result of Factor Loading Measurement Model**

Indicator	Variable Latent	Factor Loading
<b>Social media (X)</b>	Social media	
System quality (X1.1)		0.945
Information quality (X1.2)		0.873
<b>Islamic capital market literacy (Y1)</b>	Islamic capital market literacy	
Basic literacy (Y1.1)		0.957
Advanced literacy (Y1.2)		0.859
<b>Risk tolerance (Y2)</b>	Risk tolerance	
Investment risk (Y2.1)		0.836
Risk comfort (Y2.2)		0.728
Speculative risk (Y2.3)		0.782

The following is an explanation of the effect of exogenous variables on endogenous variables using the structural equation as shown in Table 2 below.

**Table 2. Structural Equation Model**

Endogenous Variables	Exogenous Variable	β
Islamic capital market literacy (Y1)	Social Media (X)	0.394
Risk Tolerance (Y2)	Social Media (X)	0.380
	Islamic capital market literacy (Y1)	0.458

Based on Table 2 it can be arranged structural equations as follows:

$$Y1 = 0.394X + \dots (1)$$

$$Y2 = 0.380X + 0.458Y1 + \dots (2)$$

Next Hypothesis testing is carried out based on the p value (probability), if the p value is

less than or equal to 0.05, it means that there is a significant effect. Based on Table 3 below, it appears that social media has a significant effect on Islamic capital market literacy, social media has a significant effect on risk tolerance and Islamic capital market literacy has a significant effect on risk tolerance.

**Table 3. Analysis of Regression Weights**

Relations			Standardized Regression Weight	Estimate	SE	cr	p-value	Result
Islamic capital market literacy	←	Social media	0.394	0.489	0.091	5.399	0.000	Sign
Risk tolerance	←	Social media	0.380	0.271	0.054	5.043	0.000	Sign
Risk tolerance	←	Islamic capital market literacy	0.458	0.263	0.047	5.596	0.000	Sign

Finally, testing the fourth hypothesis, namely social media has an effect on risk tolerance through Islamic capital market literacy. The following table 4 presents the test results by comparing the results of the direct effect with the total effect. The value of the total effect of 0.55 is

greater than the value of the direct influence of 0.38, so the hypothesis is accepted, meaning that Islamic capital market literacy significantly becomes a mediating variable between social media and risk tolerance.

**Table 4. Results of Indirect Effect Hypothesis Testing**

Variable	Effects Direct	Effect Indirect	Total Effect
Social media→financial literacy→financial risk tolerance	<b>0.38</b>	0.39 x 0.46 = 0.179	<b>0.559</b>

## Discussion

### The influence of social media on Islamic capital market literacy

Social media has an effect on Islamic capital market literacy, which means that information on the performance of sharia shares contained in social media can increase investor knowledge. Social media allows the distribution of information quickly and easily so that it becomes a potential medium for investors, and is often used in finding information. The ease of getting stock performance information on social media puts investors in an advantageous position because they can upgrade their knowledge anytime and anywhere. However, an important finding from this study is that the literacy position of millennial investors in the Malang Raya area is still at the basic literacy level, this indicates that the ability of investors to process material information on social media into knowledge is quite good if it is associated with market performance..

### The influence of social media on risk tolerance

Various kinds of information about capital market conditions can be easily obtained on social media, ranging from information about changes in stock prices, reviews from capital market analysts, and economic indicators. This information can be used by investors to determine the tolerance limit for accepting the risk of loss due to trading. Furthermore, what can increase investors' risk tolerance is stock performance information on up to date social media. The interesting thing about presenting information related to events or facts that can affect share prices must be submitted as soon as possible to investors no later than the end of the second working day on the company website or the Indonesian capital market website (OJK, 2020). Not even a few issuers hold the General Meeting of Shareholders broadcast live on social media. The ease of obtaining information and delivering information related to stock performance as soon as possible allows investors to increase investor acceptance of risk by being willing to bear losses due to trading. The next finding is that investors understand stocks as investment risk so that they have the opportunity to experience losses

due to trading, but this can be minimized by the ability of investors to process market performance information on social media.

### The Influence of Islamic Capital Market Literacy on Risk Tolerance

Risk tolerance is a very important issue in finance, especially investment, this is because each investor has different preferences for risk tolerance. Investors who avoid risk will certainly avoid trading stocks when capital market conditions fluctuate due to the effects of the pandemic, this is where literacy plays an important role in capital and stock market performance because the most important thing for investors is to manage risk. Investors with a good understanding of market performance will place investors in a position to have the ability to accept changes in gains due to fluctuations in stock prices. The readiness of investors to accept changes in the gain value begins with conducting a study of investment risk in the form of the actual return and the expected return to be obtained.

### The influence of social media on risk tolerance through Islamic capital market literacy

Islamic capital market iteration mediates the influence of social media on risk tolerance, this shows that good quality social media in terms of information and systems can increase investor risk tolerance, if supported by literacy. Investor knowledge cannot be separated from the media. Investors are constantly flooded with information from social media, with different natures of information. The variety of nature of information ranging from simple news to news that requires special interpretation is a challenge for investors to determine the relevant information. The ability of investors to choose the information needed based on the perception of each investor, can increase investor risk tolerance. Investors are not only required to understand the risks they face but also need to know how to manage risk and understand how to trade optimally. So risk is not just a red light sign to be avoided, but risk needs to be managed properly.

## V. CONCLUSION

Social media and Islamic capital market literacy are able to increase the risk tolerance of sharia investors. By utilizing information on the performance of sharia shares published on social media, investors can increase their knowledge of market conditions and will be able to increase the risk tolerance of investors.

### SOME OF THE ADVANAGES FROM THE ABOVE RESULTS

- a)Capital market literacy
- b)Millennial generation investor
- c)Investor risk
- d)Social media

### REFERENCES

- [1]. Chien, YT, & Lu, HM (2015). Firm Websites and the risk of firm. In *Industrial Management and Data Systems* (Vol. 115, Issue 3). <https://doi.org/10.1108/IMDS-09-2014-0276>
- [2]. Hair, JF, Black, .C., Babin, BJ, Anderson, RE, and Tatham, RI, (2010), *Multivariate Data Analysis*, Seventh Edition, New Jersey, Pearson Prentice Hall.
- [3]. Karaa, IE, & Kuğu, TD (2016). Determining advanced and basic financial literacy relations and overconfidence, and informative social media association of university students in Turkey. In *Kuram ve Uygulamada Egitim Bilimleri* (Vol. 16, Issue 6).<https://doi.org/10.12738/estp.2016.6.0415>
- [4]. Khan, MTI, Tan, SH, & Gan, GGG (2019). Advanced Financial Literacy of Malaysian Gen Y Investors and Its Consequences. In *Margin* (Vol. 13, Issue 1). <https://doi.org/10.1177/0973801018800085>
- [5]. Mimura, Y., Koonce, J., Plunkett, SW, & Pleskus, L. (2015). Financial information sources, knowledge, and practices of college students from diverse backgrounds. In *Journal of Financial Counseling and Planning* (Vol. 26, Issue 1). <https://doi.org/10.1891/1052-3073.26.1.63>
- [6]. Nasrallah. (2020). Social Media, Symbiosis
- [7]. Saurabh, K., & Nandan, T. (2018). Role of financial risk attitude and financial behavior as mediators in financial satisfaction: Empirical evidence from India. In *South Asian Journal of Business Studies* (Vol. 7, Issue 2). <https://doi.org/10.1108/SAJBS-07-2017-0088>
- [8]. Wang, T., Lin, HL, & Yen, JC (2016). How do investor relations related disclosures on
- facebook contribute to a company's information environment? In *Proceedings of the Annual Hawaii International Conference on System Sciences* (Vols. 2016-March).<https://doi.org/10.1109/HICSS.2016.138>
- [9]. Zhang, J. (2016). Social Media Content on Financial Markets. In *International Journal of New Technology and Research* (Vol. 2, Issue 3).