# **Equate Goals and Risks in the Convenience of Investing**

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## **Abstract**

During this uncertain pandemic situation, the number of investors is increasing all over the world. Nevertheless, this trend does not indicate the right investment decision, especially for young investors who have specific characteristics. Risk-based portfolio preference is expected to be a bridge or mediation that can contribute to investment decisions caused by goal-based investing. The objective of this study is to analyze the interrelation of goal-based investing, risk-based portfolio preference, and investment decision among young investors in Rumah Saham Indonesia/RSI (Indonesian Stock House). The population of this research was 935 young individual investors registered with RSI. Using a proportionate random sampling, 280 young investors participated as the respondents. The data were collected through questionnaire surveys, and the Structural Equation Model was employed to analyze the interrelationship among the construct variables. The results reveal that Goal-Based Investing has a positive influence on Risk-Based portfolio Preference and Investment Decision, Risk-based portfolio preference has a positive influence on Investment Decision. In the model, Risk-Based Portfolio Preference functions as a mediating variable.

# **Keywords**

Goal-based Investing, Investment Decision, Risk-based Portfolio Preference, Young Investors.

## Introduction

The company's goal is to maximize profits, while the investors' goals are capital preservation, capital appreciation, current income, and total return. Capital reservation in investment is that investors want to minimize the risk of loss. In real terms, investors try to maintain the purchasing power of investments, that the return must be no less than the inflation rate. Capital appreciation has the right purpose when investors want the portfolio to grow in real terms from time to time to meet future needs. Growth mainly occurred through increased capital. Current income is a return objective when investors want a portfolio to concentrate on generating income rather than capital gains. The purpose of the total return strategy is the same as the capital appreciation that investors want the portfolio to grow over time to meet future needs (Keith & Frank, 2009).

During this uncertain pandemic situation, the number of investors is increasing all over the world. Nevertheless, this trend does not indicate the right investment decision, especially for young investors who have specific characteristics. The trend may fill the research gap regarding the topic of investment decisions. The millennial generation has grown up in a unique atmosphere that may long-term influence their financial investing decisions (Larson et al., 2016). Under uncertainty, behavioral attributes of investment decisions can be different among individual investors (Nagy & Obenberger, 2018), including the cohort of young millennial investors. As the young generations, millennials and Generation Z have very different characteristics from the previous ones (Generation X and B) (Poluakan et al., 2019). These differences in characteristics are related to the digital technology revolution that has changed human habits and lifestyles, social relationships, ways of working, and ways of thinking and processing information (Vogel, 2015) also the financial behavior on investment decisions.

Financial behavior on investment decisions is the interaction between the market and investors. Behavioral finance is a model that emphasizes the potential implications of psychological factors influencing investor behavior (Lovric et al., 2010). Its emergence is driven by the notion that conventional financial theory pays less attention to how investors make investment decisions. Various theories and financial models assume that investors always behave rationally in the investment decision-making process. Investors are assumed to be willing and able to receive and analyze all available information based on rational thinking. However, in the behavioral finance review, investors behave more normally and often exhibit irrational behavior (tends to be judgmental), so that this situation deviates from the assumption of rationality and tends to be biased. Behavioral finance aims to investigate the emotional characteristics of investors to explain subjective

factors and irrational anomalies in the capital market (Baker & Nofsinger, 2010; Godoi et al., 2005; Taffler, 2018).

The phenomenon in Indonesia in the capital market shows investor confidence in making investment decisions. This can be seen from the number of stock portfolios traded during the period 2012-2021, which tends to increase. Although in 2020 the stock index price decreased, it also began to increase at the beginning of 2021. Sustainable investment performance is heterogeneous around the world, but there are promising opportunities for investors to earn superior risk-adjusted returns in certain regions while adopting sustainable investment practices that are driven by investment decisions and but there are promising opportunities for investors to earn high returns tailored to regionally superior risks while implementing sustainable investment practices (Cunha et al., 2020).

Traditional financial theories have assumed that decision-makers are rational human beings whose primary goal is to maximize expected utility. However, with the advent of behavioral finance advocates claim that it is irrationality in the behavior of decision-makers that guides most decisions. Studies on investor behavior have taken a different perspective in terms of investment decision bias, that bias is systemic errors in judgment (Kahneman, 2003). Bias may be irrational behavior from a traditional financial perspective, but evidence from evolutionary psychology suggests that bias is a design of the human mind and aids in decision making. Bias can be positive in terms of achieving satisfaction with investment decisions (Sahi et al., 2013), but can also be negative so that it can jeopardize their investment objectives (Copur, 2015).

The development of behavioral finance theory, including investment and behavioral investors, has become one of the important aspects of investment decisions. Investment behavior is considered a determining factor in decision-making because it includes the style and characteristics of investors in the investment process (Pompian, 2012). According to traditional finance, investors compose a portfolio to maximize wealth, while in Behavioral Finance, investors will arrange portfolios based on the goals to achieve, both according to the objectives of the period and to the selection of the portfolio type for the achieved goals. Simultaneously, each investment objective defines a unique decision problem, and a specific portfolio of objectives is defined (Giorgi, 2009).

Goal-based investing is expected to be an important step towards narrowing the gap between practitioner investment principles and individual investor perspectives. Goal-Based Investing defines portfolio efficiency in terms of client goals, rather than relying on traditional returns and standard deviation measures. Risk management is also based on the client's goals, using measures to capture the risk of failing to achieve those goals. Based on specific measures in portfolio efficiency and risk, investment solutions related to investment decisions can be taken by matching each objective with a suitable strategy rather than creating a single overall portfolio so that optimizing portfolio preference will have an impact on investment decisions (Nevins, 2004; Parker, 2016).

Many factors influence investment decisions in behavioral financial reviews. Although many factors are seen as driving investment decisions, the study found that the Investment Experience factor does not support investment decisions (Metawa et al., 2018). Critical questions arise about what must be in place so that the investment experience can move investors and investment managers to make investment decisions on all risk attributes presented in an investment. Investment decision based on Behavior Finance in Pompian (2012) is described as objective and subjective decision making that is influenced by cognitive biases, emotions (Shefrin & Statman, 1994), and social interactions (Ricciardi, 2008) such as Loss Aversion, Framing, Herding Behavior, Self-attribution, Emotional Gap, Anchoring Bias, and Mental Accounting.

Goal-based investing is a relatively new approach to wealth management that emphasizes investing to achieve certain life goals. Goal-based investing measures an investor's progress toward a specific life goal (savings for education, retirement funds) rather than focusing on generating portfolio returns. The focus of this investment approach is on funding personal financial goals (Janssen et al., 2013). Goal-based investing is an attempt to protect themselves from poverty and the prospect of wealth (Shefrin & Statman, 1994). In this study, Goal-based investing refers to Wealth Prospect Goals, Poverty Protection, Additional Income.

An investor has the main task to provide investment returns that are following the expected objectives along with the risks and returns offered on each investment or portfolio. Therefore, the process of how investment selection is realized is very important in the process of optimizing risk-based portfolio investment on investor behavior (Sachse et al., 2012). Thus, Risk-based portfolio preference in this study refers to Maximum Diversification Investment Risk, Risk-based Characteristic Portfolio, Risk Cost Investment Portfolio, and Risk of Portfolio Policy. These indices have been modified according to Risk Preference and risk tolerance.

Regarding the research gap, this study adopts prospect theory and expected utility as well as goal-based setting and modern portfolio theory and portfolio behavior, in formulating processes to improve investment decisions, namely asking how to view risk and portfolio

allocation on investments that investors need to make investment decisions can make investment decisions by increasing the Risk-based portfolio preference. Thus, the objective of this study is to analyze the interrelation of goal-based investing realization, risk-based portfolio preference, and investment decisions among young investors.

# Method

Using a quantitative approach, this study attempted to describe the variables and verify their interrelation of variables. The population of this research was 935 young individual investors registered with RSI. Using a proportionate random sampling, 280 young investors participated as the respondents. The data were collected through questionnaire surveys, and the Structural Equation Model was employed to analyze the interrelationship among the construct variables.

The instrument of this study was a questionnaire administered to 280 young investors as respondents. The data were collected through surveys (7 rating scale) distributed via Google form to the respondents. The instrument was based on the operationalization of these constructs as follows.

- 1. Goal-based investing as an exogenous latent construct consists of three observed variables: Wealth Prospect Goals (GBI1), Poverty Protection (GBI2), and Additional Income (GBI3).
- 2. Risk-based portfolio preference (RBPP) as an endogenous latent construct also as mediating variable consists of four observed variables: Maximum Diversification Investment Risk (RBPP1), Risk-based Characteristic Portfolio (RBPP2), Risk Cost Investment Portfolio (RBPP3), and Risk of Portfolio Policy (RBPP4).
- 3. Investment Decision (IND) as an endogenous latent construct consists of seven observed variables: Loss Aversion (IND1), Framing (IND2), Herding Behavior (IND3), Self-attribution (IND4), Emotional Gap (IND5), Anchoring Bias (IND6), and Mental Accounting (IND7). The interval scale is used to measure investment decision indicators. The greater the value the greater the investor can overcome the bias

In performing SEM, the model specification of the hypothesized relationships among the variables in SEM-based on relevant theories was first defined. The model in question is specified in Figure 1, showing three main hypotheses.

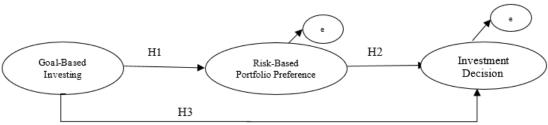


Figure 1 Model Specification of Goal-Based Investing, Risk-Based Portfolio Preference, and Investment Decision

Then, model identification was made to ascertain whether the model was over-identified, just-identified, or under-identified so that the measurement and structural model could be estimated. The next step was to evaluate whether the model performance fits several quantitative indices for the overall goodness of fits (GoF), such as  $\chi^2$ , RMSEA, CFI, GFI, NFI, and other indices. The last step was the modification of the model to improve its suitability if needed. The Analysis of Moments Structures (AMOS) software from IBM SPSS was employed to support the SEM calculation.

## **Results and Discussion**

#### **Results**

The study results based on the reference to the mean value, standard deviation, and category are presented in Table 1.

Table 1 Mean Value, Standard Deviation, and Category of Constructs

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Construct	Manifest Variables	Mean	SD	Category
	Wealth Prospect Goals	4.714	1.127	Fairly High
	Poverty Protection	4.600	1.105	Fairly High
	Additional Income	4.661	1.146	Fairly High
GOAL-BASED INVESTING (GBI)		4.658	1.126	Fairly High
Construct	Manifest Variables	Mean	SD	Category
	Risk Perception to Maximum Diversification Portfolio	4.575	0.974	Fairly High
	Risk Tolerance to Risk and Portfolio Policy	4.454	1.080	Fairly High
	Cost Investment Portfolio	4.321	1.109	Fairly High
	Risk-based Characteristic	4.414	1.068	Fairly High
RISK BASED INVESTMENT PORTFOLIO (RBPP)		4.441	1.061	Fairly High
Construct	Manifest Variables De-biasing	Mean	SD	Category
	Loss Aversion	4.454	1.138	Fairly High
	Framing	4.475	1.110	Fairly High
	Herding	4.364	1.128	Fairly High
	Self-attribution	4.086	1.114	Fairly High
	Emotional Gap	4.143	1.152	Fairly High
	Anchoring	4.661	1.052	Fairly High
	Mental Accounting	4.325	1.194	Fairly High
INVESTMENT DECISION (IND)		4.358	1.141	Fairly High

Based on Table 1, the construct of Goal-Based Investing, Risk-Based Portfolio Preference, and Investment Decision can be categorized as fairly high (from ideal 7.0). To deepen the analysis, the interrelation of Goal-Based Investing, Risk-Based Portfolio Preference, and Investment Decision can be evaluate using SEM. To evaluate the interrelationship among the variables, the calculation of the overall model using SEM was estimated.

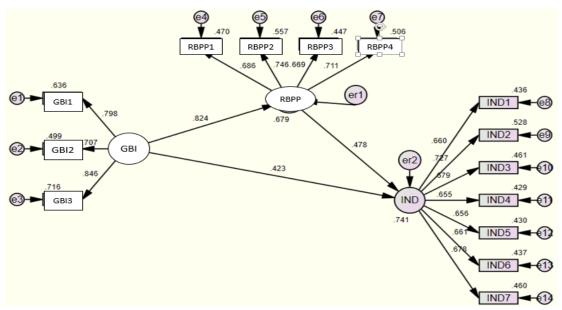


Figure 2 Overall Model of Interrelation of Goal-Based Investing, Risk-Based Portfolio Preference, and Investment Decision

Table 3 Model Estimation of Goal-Based Investing, Risk-Based Portfolio Preference, and Investment Decision

			Estimate	Beta	S.E.	C.R.	P	Sig.	R-Squared
RBPP	+	GBI	0.709	0.824	0.072	9.869	0.000	Sig.	0.679
IND	+	RBPP	0.460	0.478	0.119	3.860	0.000	Sig.	0.741
IND	+	GBI	0.350	0.423	0.098	3.574	0.000	Sig.	
GBI1	+	GBI	1.000	0.798					
GBI2	+	GBI	0.886	0.707	0.073	12.065	0.000		
GBI3	+	GBI	1.061	0.846	0.072	14.696	0.000		
RBPP1	+	RBPP	1.000	0.686					
RBPP2	+	RBPP	1.088	0.746	0.101	10.777	0.000		
RBPP3	+	RBPP	0.975	0.669	0.099	9.814	0.000		
RBPP4	+	RBPP	1.037	0.711	0.100	10.353	0.000		
IND1	+	IND	1.000	0.660					
IND2	+	IND	1.100	0.727	0.105	10.451	0.000		
IND3	+	IND	1.029	0.679	0.104	9.878	0.000		
IND4	+	IND	0.992	0.655	0.104	9.576	0.000		
IND5	+	IND	0.994	0.656	0.104	9.591	0.000		
IND6	<b>←</b>	IND	1.001	0.661	0.104	9.650	0.000		
IND7	<b>←</b>	IND	1.027	0.678	0.104	9.865	0.000		
Indirect Ef	fect	•	0.326	0.384					

The model estimation of the overall model indicates that all loading factors of the measurement model are above .6 in which the values can reflect each construct. In the structural model, it was found that Goal-Based Investing had a positive direct effect on Risk-Based Portfolio Preference and positively affected Investment Decision. The indirect effect of Goal-Based Investing on Investment Decision through the Risk-Based Portfolio Preference was also significant. It means that Risk-Based Portfolio Preference can function as a variable that connects to improve Investment decisions. Similarly, Risk-Based Portfolio Preference evinced a positive direct effect on investment decisions. The R-Squared values indicate a better fit for the model. In short, the higher Goal-Based Investing may enhance Investment Decisions supported by Risk-Based Portfolio Preference. The investor's capacity to understand Goal-Based Investing will determine the Risk-Based Portfolio Preference that directly and indirectly enhances the capability to handle the investment decision.

To confirm the goodness of fit of the model, all indices met the target. The estimates led to the model goodness-of-fit (see Table 4). In general, the goodness-of-fit of the model indicates that the model could reproduce the data and that the model was consistent with the data; it does not necessarily require adjustment or modification to improve the model fit.

Table 4 SEM Goodness of Fit (GoF)

	Target	Estimates	Fitness
Chi-Square P	Small value P = 0 (saturated) or P > .05	$\chi^2 = 171.35$ P = .000	good fit
NCP	Small value Narrow interval	97.35 (63.02; 129.40)	good fit
RMSEA	$0.055 \le RMSEA \le 0.082$ P < .05	.069 P = .012	good fit
ECVI	Small value and close to saturated ECVI	D* = .836 S* = .713 I* = 6.750	good fit
AIC	Small value and close to saturated AIC	$D^* = 233.35$ $S^* = 210.00$ $I^* = 1883.24$	good fit
CAIC	Small value and close to saturated CAIC	D* = 377.03 S* = 696.65 I* = 1948.12	good fit
NFI	NFI ≥ .90	.908	good fit
CFI	CFI ≥ .90	.945	good fit
IFI	IFI ≥ .90	.945	good fit
RFI	RFI ≥ .90	.886	close fit
RMR	$RMR \le .08$	.045	good fit
GFI	GFI ≥ .90	.920	good fit
AGFI	AGFI ≥ .90	.887	close fit

Notes: D = Default Model; S = Saturated; I = Independence

## **Discussion**

Based on the findings of this study, goal-based investing has a positive effect on risk-based portfolio preference. In goal-based investing, young investors will increase the optimization of portfolio preferences in maximum diversification, especially when investors expect additional income and realize it. The young investors diversify and rely on risk-based portfolios that meet the expectation. This supports previous research that goal-based investing is an important factor in managing portfolios so that investors can anticipate the risk of underachieving goals (Parker, 2016). Although the focus of investors on the Indonesian Stock House is additional income, it is possible to think about how to realize additional assets or wealth, which can protect themselves from poverty. Investors to increase their income do not consider the cost of portfolio investment. The costs incurred can be anticipated and not a difficult thing to do. Existing portfolio policies can be optimized to meet investor satisfaction and needs.

The financial portfolio is less than optimal because it does not match the expectations of investors. Investment objectives such as liquidity and capital maintenance tend to lead to losses (Curtis, 2004). The determination of the most basic goal-based investing is the realization of achieving additional income goals other than the main income. The realization of this goal-based investing can make young investors happier because investors are more focused on increasing portfolio diversification (Rohner & Uhl, 2018). For some investors, the added value of the wealth is not the money earned, but the impact. For these individual investors, wealth is the sum of their passions and goals. A holistic view of wealth can empower investors to follow their aspirations. Meanwhile, the findings of this study reveal that additional income is the main goal to realize before focusing on the goal of wealth prospects.

Portfolio construction and risk management must align with client investor goals, and goal-based investing can improve risk measurement, risk profiling, and manage behavioral bias. Thus, investment strategies need to create better solutions to achieve the investment goals desired by investors (Nevins, 2004). This study revealed that goal-based investing can be a significant factor in optimizing risk-based portfolio preferences.

In the realization of portfolio selection, the realization of short-term investment goals is the main concern (Giorgi, 2009), especially when investors are ambitious in investing in the long term to achieve their short-term goals. This can trigger the global financial crisis because investors are ambitious to achieve high investment returns. Young investors, however, generally rely more on short-term goals to just add income, while senior

investors prefer a portfolio to realize the purpose of poverty protection reserves. This finding supports previous research that goal-based investing in the future of wealth management in optimizing investment (Mladina, 2016).

The overall findings of this study revealed that millennial investors at the Indonesian Stock House were able to realize their investment goals to obtain additional income by focusing on long-term and short-term investments that support long-term goals. In developed countries such as Germany and America, the realization of investment objectives is more optimal in managing wealth, with the preparation of the program as its investment strategy (Rohner & Uhl, 2018). Comfort in the portfolio preference is also a consideration in optimizing the investment (Melissa & Rayer, 2016).

In emerging markets, such as China, prudence is important in portfolio investment (Li et al., 2010). As the investor's goal is satisfaction in balancing the portfolio, the appropriate investment target is not too high compared to the investment horizon (long-term or short-term investment). Here, risk allocation is not an option, so the investors implement the passive portfolio strategy. The investors in India, however, prioritize long-term wealth accumulation (Singh & Thimmaiah, 2017). The next research must consider a more in-depth and focused investment strategy which has not been covered in this study.

Most young investors have a mediocre income, thus triggering investors to invest as additional income rather than to increase the prospect of wealth. If their income is already higher, these young investors start thinking about increasing their wealth/assets. This study found that goal-based investing is not solely to get all the benefits in portfolio investment but connects wealth with investment goals, even with life goals and comfort to their investment strategies. In essence, this finding is in line with previous research that profit is not solely an investment objective (Melissa & Rayer, 2016). IPOs are a preference for portfolio types that increase along with the income they earn. The next preference is the other portfolio diversification such as mutual funds and common stocks.

In times of a pandemic like this, with all the limitations, the income of investors is reduced, even the extreme situation is the absence of income or the termination of income sources. It is only natural that investors do not go overboard in setting their investment goals, namely realizing additional income. Investors invest in the hope of additional income, which was the tendency to invest for the prospect of increasing wealth or assets.

Referring to the results, goal-based investing has a positive effect on investment decisions. This is in line with previous research (Mladina, 2016) that the preparation of

investment programs can change behavioral biases in investment decision-making. This investment decision can be made without losing rationality with goal-based investing and the support of quality information to control behavioral bias. This finding also supports the proposition of previous research that the clarity of goal-based investing can encourage investors to not be biased in their decision-making (Melisa & Rayer 2016). Investors tend to choose long-term goals rather than short-term in making investment decisions (Giorgi, 2009). Investors can consider goal-based investing in a decision-making environment (Alkaraan & Northcott, 2013).

In this study, goal-based investing directly influences investment decisions, due to the important contribution of realizing additional income. We also find that investors can force the biases of mental accounting, framing, and anchoring. These indices have the highest contribution to investment decisions. This study proves that the tendency of investors can sort out accounts on the mental accounting bias which is driven by the choice of portfolio diversification. Likewise, investors tend to perceive under uncertain situations based on the first information received or one's initial judgment, and these investors do not change it after new information is available. Also known as the anchoring effect, investors who join Indonesian stock houses are also triggered by optimizing the selection of risks that have been determined from the start. This also can reduce a framing bias in investment decisions. The pattern of framing effects is that individuals tend to avoid risk when decisions are packaged as choices between gains (positive frames) but tend to take risks when presented as choices between losses (negative frames). This study proves that when presented with positive framing, investors choose the risk that makes them comfortable.

The findings of this study support previous research that objective investment analysis, risk-based investment optimization on risk perception affects investment decisions, especially on psychological and emotional influences, so investors will optimize risk selection in allocating their portfolios as was done in this study (Virlics, 2013). This shows tolerance for risk in making investment decisions. Nevertheless, the other research asserts that the perception of risk has a significant and negative effect on decision-making (Aeknarajindawat, 2020), while we find that risk tolerance is very necessary to optimize portfolio investment.

Loss aversion can be avoided by controlling the perception of risk in portfolio choices, and myopic bias in investment decisions can act strategically in making portfolio policies (Koonce et al., 2005). The risk-return on risk-choice characteristics encourages investors to reconsider their investment decisions and encourages higher risk-seeking behavior

(Bradbury et al., 2015). In line with this research, it is stated that loss aversion can affect investment decisions (Aeknarajindawat, 2020).

In a bearish market in developed markets such as America, the influence of risk perception affects investment objectives and will affect investment decisions (Roszkowski & Davey, 2010), but in Indonesia, portfolio preferences are still more of a focus than risk, although risk characteristics also affect it. Any risk-based portfolio can be obtained intuitively. Optimization can be obtained by maximizing portfolio diversification that follows the policy of portfolio selection and portfolio rebalancing that satisfies the wishes of investors (Jurczenko et al., 2013). The concept of optimization here is to fulfill the desires and satisfaction of investors in carrying out investment activities such as in the Behavioral Pricing Theory (Shefrin & Statman, 2000). Portfolio diversification is seen as the most important measure to optimize the balance of risk and return on assets because it is considered a good investment behavior, which meets the mental accounting bias (Sachse et al., 2012).

In this study, maximizing investment based on the character of risk is the most important thing. Although it has a significant effect on investment decision-making, the relationship is not too strong. This is because the Herding bias and self-attribution are still inherent so that it can lead to overconfidence tendencies in the future.

In times of a pandemic, comfort is the main thing for investors to make investment transactions and their decision-making can take advantage of the emotional gap. The investor will be happy to determine and adjust investment choices based on the risk because investors know very well that risk is important to be tolerated. It is not too grandiose to achieve high returns but more to the comfort that is obtained. When a sense of comfort is obtained, investment decisions will be made. Risk-based portfolio preference can function as a partial mediation, which is indeed important in mediating the effect of goal-based investing on investment decisions.

The results of this study are slightly different from previous studies concerning the finding that the risk will increase loss aversion (Aeknarajindawat, 2020). It could be due to the profile of investors in developing countries such as India and its surroundings, while people in Indonesia are less prepared to face losses. For this reason, rather than suffering greater losses, determining the portfolio taken can be a way to optimize investment preferences based on risk. When the risk is tolerable, a small loss or profit is fine. This can be material for further study for investor behavior on loss aversion bias. If conditions and situations are different, maybe after this pandemic. Young investors will

be able to determine their investment preferences without fear of loss without considering risk and convenience.

#### Conclusion

Goal-Based Investing exhibited a positive direct effect on Risk-Based Portfolio Preference and Investment Decision, directly and indirectly. Risk-Based Portfolio Preference had also a direct effect on Investment decisions in the context of the present research, young investors seemed to have specific characteristics. The additional income is the main goal for a young investor before they focus on the goal of wealth prospects. Goal-based investing can be a significant factor in optimizing risk-based portfolio preferences. Goal-based investing in the future of wealth management in optimizing investment. Risk tolerance is very necessary for young investors to optimize portfolio investment. Risk-based portfolio preference can function as a partial mediation, which is indeed important in mediating the effect of goal-based investing on investment decisions.

Young investors in the pandemic era tend to equate investment goals with convenience in investing through risk preferences.

Future implications of research in the field of Investment Risk from the perspective of Investor Behavior are the focus of attention.

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