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# Impact of investment behaviour on financial markets during COVID-19: a case of UK

Fanyi Wang<sup>a</sup>, Ruobing Zhang<sup>b</sup>, Faraz Ahmed<sup>c</sup> and Syed Mir Muhammed Shah<sup>d</sup>

<sup>a</sup>School of Finance, Jilin Business and Technology College, Changchun, Jilin, China; <sup>b</sup>School of Finance, Changchun Guanghua University, Changchun, Jilin, China; <sup>c</sup>School of Business, Iqra University, Karachi, Sindh, Pakistan; <sup>d</sup>School of Business, Sukkur IBA University, Sukkur, Sindh, Pakistan

## ABSTRACT

This study aims to determine the impact of investment behavior on financial markets during COVID-19 with respect to the UK. This study is quantitative, where the data has been gathered from the primary sources of information, i.e., through a survey questionnaire. The researcher adopted the non-probability convenience sampling through which 337 responses were gathered. The questionnaire was self-administered, which was based on 7 points Likert scale. Concerning the analysis, the SEM technique has been adopted in which CFA and path analysis were carried out to determine the impact of variables. The study's analysis determined significant moderation of COVID-19 uncertainty over the relationship of risk perception and general risk to tolerance. Similarly, the moderation of COVID-19 uncertainty over the relationship of risk perception and financial risk to tolerance was also determined. Additionally, the profitability rate's effect was determined by the financial risk tolerance and general risk tolerance. Moreover, the effect of risk perception was also determined over the financial risk to tolerance. Lastly, the effect of satisfaction was determined to be significant over the general risk to tolerance.

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## KEYWORDS

COVID-19; general risk; financial risk; investment behaviour; rate of profitability; risk perception

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I15; F36; F65; G24

## 1. Introduction

Novel coronavirus leads to unprecedented repercussions on the economy of every country. In the UK, the spread of the virus has made the investors, public, and policymakers aware that economic damage can occur due to external uncertainties, and the consequences are on an unknown scale (Dertli & Eryüzü, 2020). Whereas there is an aggregate impact of pandemic over the stock market of the UK, and the spending behavior of households has changed as they are more defensive and resist to invest. However, it is imperative to investigate the behavior in unprecedented conditions at a micro level to understand better aggregating the market outcomes (Gao

**CONTACT** Ruobing Zhang  [ruobingzhang2021@126.com](mailto:ruobingzhang2021@126.com)

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et al., 2021; Su et al., 2021a; Zhang et al., 2021). Meanwhile, Covid-19 outbreaks the overall life of citizens in the UK because of Lockdown, shutting down of institutes and offices, which restricted most of the individuals and investors' earning. This issue created a huge impact on the investment behaviour in the financial market of the UK.

Individual investors are such people who purchase securities on their behalf. These investors trade in very small amounts and are mainly involved in the activities of the stock market (Umar et al., 2021a; 2021b). It is considered acceptable for the investors to face issues while making rational and accurate decisions for funding the managers (Ahmad, 2020; Umar et al., 2021c). They did not contain the relevant data and the access for official information of the UK stock market, which results in rapid rational and logical decision making for the investment process as it results in rushed decisions. It is assumed that the market and organizational factors are changing investor behavior in the UK while at the time of COVID-19 (Espinosa-Méndez & Arias, 2021). Moreover, the organization's qualities like accounting information and net assets are major factors for the investment decision. Additionally, the rate of growth over earnings per share, gross domestic product, and foreign direct investment is considered as the main link and it has a significant impact on the share price of the companies listed in the UK's stock market. Making decisions related to investment in uncertain conditions, specifically, the decisions related to stock, are very tough (Grable, 2017). It mainly represents the decision for different alternative stocks in the light of information that has been gathered. Neoclassical finance and behavioral finance are considered two different things as it should be assumed that financial agents are rational and there is a perfect capital market (Harvey, 2021).

It has been added that COVID-19 would mainly cause several financial services categories in 2020 as they are considered the opportunity for the development of sales that are restricted severely and lack the confidence of consumers (Sharif et al., 2019). However, several categories are very important and recover well in the long go. Also, the implications of COVID-19 results in a recession, due to which the insurers are coming under an increase in pressure from the issue of sensitivity of price. This would compound several difficulties that have been faced by the travel insurers and businesses that have experienced the cost of record claims (Su et al., 2021c; Yarovaya et al., 2020). Travel insurance was expected to reach another level by 2024, and it is mainly affected due to the virus. The world's economy is affected by the COVID-19, whereas the financial markets are also affected due to the spread of this virus (Zhang et al., 2020). A majority of investors are facing their portfolios are drowning even though several opportunities help gain from the current situation of a pandemic. During the economic boom, the traditional investment strategies were studied and documented (Ashraf, 2020). However, the study's main aim is to analyze the impact of investment behavior on financial markets during covid-19 by focusing on the UK as the case.

## 2. Literature review

The role of investment behaviour holds critical importance in determining the performance of financial markets. Three factors were considered in investment

behaviour: risk perception, satisfaction, and rate of profitability (Nguyen et al., 2020). The moderating variable that was taken in this research is the uncertainty of Covid-19 and how it impacts the financial market. Global perception recorded regarding the investment behaviour and the risk perception made by the various investors in the financial market was done based on current situations and circumstances (Ainia & Lutfi, 2019). Risk perception arises in the decisions that were taken to increase the financial health and condition of investors. Moreover, the general risk of tolerance changes over the period. The tendency to take measures for the reduction of risk can be determined by general risk to tolerance. For the sake of simplicity, the risk perception changes from individual to individual, and every investor perceive risk based on their tolerance of risk (Nguyen et al., 2020). Meanwhile, behavioral finance also reflects the attitude that is directly embedded in the investment system. Different theorists make arguments that investors sometimes behave irrationally along with the production of inefficient markets and securities mispriced for not mentioning the opportunities regarding making money (Asamoah et al., 2021; Su et al., 2020a; 2020b). This may be true to some extent, but every time to cover these inefficiencies would have increased a challenge. Moreover, most of the time, investors make decisions based on some irrelevant figures and stats like example, investors should invest in stock, which would have witnessed some considerable fall after some continuation growth in their recent past (Harari, 2020). These make investors believe that price has decreased, which is by the short-term market movements, creating an opportunity to buy the cheap. In reality, stocks are meant to do quite often decline in some values because of change in underlying fundamentals (Chang & Andreoni, 2020). The first hypothesis of the study in terms of determining the impact of risk perception over general risk tolerance provided below:

*H1: There is a significant impact of Risk perception on the general risk to tolerance.*

The risk perception impacts the financial risk tolerance was observed as one of the main aspects for the financial analyst operating in the financial market (Aboagye & Jung, 2018). The assessment of financial risk tolerance is considered as an attitudinal input to make financial decisions. Investors in the financial market make decisions regarding their financial wealth and financial risk tolerance level, which can significantly bring a high return on investment (Grable, 2017). Various external factors must be considered while making financial decisions. Simultaneously, regulators are now taking steps to hold financial services to make financial decisions as per the standards in the financial market build and set out by the policymakers. It can be observed that investment behavior of risk perception can be used to enhance financial risk tolerance (Nguyen et al., 2020). Moreover, risk perception strongly influences the investment decision, and the perception of risk of any individual directly stops that individual from allocating funds to high-risk assets and always trying to prefer low-risk assets (Sekścińska & Markiewicz, 2020; Su et al., 2020c). However, the investors with the perception of lower risk always choose to put all investments in high-risk stocks compared to deposits with low risk (Menon, 2020).

*H2: There is a significant impact of Risk perception on the financial risk to tolerance.*

The satisfaction of investors regarding their investment deviates their decisions regarding general risk. Moreover, numerous investors are operating in the financial market that generally utilizes risk assessment techniques while making decisions regarding their investments. There are various general risks, which must be perceived while paying a lot of attention among scholars and policymakers that change financial investors' perception (Aeknarajindawat, 2020). The discrepancy among financial investor's satisfaction levels changes the risk assessment techniques and methods to gauge general risk in the market. In addition, there are various general risks, which financial investors in the market ignored. General risk tolerance is high for some investors operating in the financial market, and financial advisers seek to rate general risk to obtain high returns by reducing or ignoring the risk in the financial market (Aboagye & Jung, 2018). There is no doubt that consumers related to financial services have limited knowledge and an understanding of investment products (Nguyen et al., 2020). Furthermore, this has been argued that such services intangibility directly increases the consumer's uncertainty while considering the purchase, and the performances of the services become a bit difficult and impossible for evaluating after purchase and even on all credence goods. This is meant to be highly apparent for some of the financial services where it this found to be impossible to judge the quality of financial service before making purchases (Chikweti, 2020; Su et al., 2021b).

*H3: There is a positive impact of satisfaction on the general risk to tolerance.*

Satisfaction as investment behaviour brings more positive elements and perceptions regarding financial risk tolerance. It suggests having a maximum amount of volatility that any investor is willing to accept. The context of professional practice reveals that risk assessment is a mandatory part of the practice. An investor's ability to handle risk and satisfaction can be related to demographic factors (Shusha, 2017; Umar et al., 2021d). In general, financial investors and their risk assessment tactics vary with the market conditions. As several external factors are implying in the financial market that change the extent of satisfaction among investors. It is a prevalent belief in cultures that men tend to take more risks than women when considering the financial aspects (Aboagye & Jung, 2018). It is widely assumed that women are less risk-tolerant. Hugh risk-tolerant believes that risk-return and preferences depend on investors' behaviour and the level of satisfaction possessed by an individual. Furthermore, financial satisfaction is not tied to having some specific amount of money and therefore, two people might feel different degrees of satisfaction while experiencing the same amount of financial situation or using the same financial resources (Çera et al., 2020; Umar et al., 2020). Meanwhile, this found that over-spending of the increased likelihood of financial distress at the time recession where being in good health has income certainty and the average risk tolerance that is lower to the odds of financial distress (Vettese, 2020).

*H4: There is a significant impact of satisfaction on the financial risk to tolerance.*

The rate of profitability can be determined through the development of general risk tolerance. Overall, financial profitability and the tendency of high return for investors stimulate an individual's interest to invest more in the financial markets (Payne et al., 2019). The main objective of several investors is to bring more returns

on investment in the financial market. As various external factors influence their financial profitability. There are various ways to develop a high return rate that predicts the risk regarding the financial aspect. High profitability is the main aspect that enhances tolerating the general risk present in the UK's financial market. Meanwhile, age has a negative and curvilinear relationship with tolerance (Song & Kim, 2021). This found that the risk of tolerance decreases with age, while another research found that risk tolerance directly increased with age at around the age of 55 and later after this began to decrease. Another evidence found that risks related to finances are too consistent with the risk preferences related to other aspects of an individual's life (Heo et al., 2020).

*H5: There is a significant impact of the rate of profitability on the general risk to tolerance.*

The rate of profitability is highly dependent on the financial risk assessment and how the changes in the rate of profitability can change financial risk tolerance. The ability to take risk tolerance while making investments in stock or any financial commodity can be determined through developing a high return on financial investment (Kumar et al., 2015). Various financial tools and methods were opted by the investors that strive to influence their investment plans for risk tolerance and constantly to try to gauge the investor's preferences. Individual investors are not consistent, and now the financial market is affected by the investor's decisions regarding the development of high financial literacy (Crickette et al., 2012). There are various sources of financial consultation brought to the mass investors to provide essential knowledge regarding the retention of high profit over their investment.

*H6: There is a significant impact on the rate of profitability on the financial risk to tolerance.*

Past researchers have observed the impact of the COVID-19 pandemic. In the past years, the global financial market has been adversely affected by an outbreak that damages various business decisions. The impact of COVID-19 among risk perception and general risk to tolerance can be determined through the investors' investment decisions. As global uncertainty has adversely affected the business sectors, that brings instability for the investors. The increased uncertainty has increased the risk over various financial investments predicted by financial investors (Zhang et al., 2021). Due to high uncertainty in general, risk perception in the financial market brings volatility in their decision-making process. Due to the uncertain elements that drive through COVID-19 disrupts the functioning of financial markets. Various systematic risks that were present in the market can be seen in 2019. Therefore, financial investors have backed up their investments to protect their money or mitigate the risk of financial return failure.

*H7: Uncertainty of Covid-19 moderates between risk perception and general risk to tolerance.*

Uncertainty due to Covid-19 has an adverse impact on financial markets. The regulators and another financial market used the post crises regulatory framework to increase capital to support financial-economic activities substantially. The focus has

been shifted towards the development of economic influence that supports the state's banking and financial industry. Moreover, after the outbreak, industries have taken contingency actions and plan to minimize COVID-19 impacts (Zhang et al., 2020). The volatility in the microeconomic indicators concerning the macroeconomic indicators disrupts the operations in the financial market. Therefore, the government and other financial institutions have taken actions to mitigate the financial risk such as lack of wealth, decreased investors, etc. Meanwhile, the massive amount of contagion of this Covid-19 had disrupted so many businesses around the European Union and in the UK, which has resulted in the immense drag on the revenues along with the cash flows, which might directly lead to some significant increase in the bankruptcies of corporate (Mirza et al., 2020).

*H8: Uncertainty of COVID-19 moderates between risk perception and financial risk to tolerance.*

The uncertainty is increased due to COVID-19, which has disrupted the satisfaction level of investors and changed their investment behaviour toward the general risk in the market. The main objective is to develop potential financial forecasting to allocate their investment to the best options. Many factors arise due to the COVID-19 pandemic and have increased volatility of decisions among investors, and each investment planner is taking contingency actions to bring stability in the financial market and emphasize to mitigate the risk of financial volatility. Currently, governments of the world are raising high financial resources to support emerging economies and stimulates satisfaction levels for investors that could evaluate the socio-economic impacts on the growth of economic stability. Uncertainty due to the outbreak has impacted the financial market risk assessment domain and other supporting sectors that can be used to evaluate another financial commodity market. This issue is even more critical over the context of Covid-19, which outbreaks the global economic system in the rout and some portfolio of manager and faces extreme performance pressures, which is why it is relevant to observe. Due to the rise in the market volatility because of the policy intervention, stock market contagion, and some spill over the cryptocurrencies (Mirza et al., 2020).

*H9: Uncertainty of COVID-19 moderates between satisfaction and general risk to tolerance.*

The satisfaction of investors determines the perception of investment that could stimulate the decisions for the investors. The short-term impact of the COVID-19 outbreak has affected the stock market indices. The major impacts and abnormal returns over investment were observed in the financial market over the past years. Rising pandemic impacts have changed the dynamics of the financial market. To support the statement, it can be stated that market participants are now making decisions contrary to rational market participants (Liu et al., 2020). The economist and scholars distinguished the rapid changes in the financial decisions in the previous year. As rapid changes due to the COVID-19 pandemic have changed investors' satisfaction levels regarding assessing financial risk.

*H10: Uncertainty of COVID-19 moderates between satisfaction and financial risk to tolerance.*

The rising uncertainty by COVID-19 has also compressed the rate of profitability, and general risk assessment tactics were changed in the past year. Currently,

numerous investors have changed their perception of the rate of profitability and government role in supporting the financial market and other SMEs to promote stability in a state. Moreover, it was stated in one of the research that 83 percent were neither prepared nor have any plan to cater to the uncertainty or to handle the situation (Shafi et al., 2020). The policy changes were done after the crises, and many sectors or organizations have taken actions after the effects of Covid-19.

*H11: Uncertainty of COVID-19 moderates between the rate of profitability and general risk to tolerance.*

The uncertainty has brought down the rate of profitability or expectations for various investors, and many have changed their perception for return on investment (ROI) for the investment or allocating their investment on the financial market (Oehler & Wedlich, 2018). Investors and other financial planners have taken various planning actions that can be used to carry out effective and high profits in the current times of the Covid-19 pandemic.

*H12: Uncertainty of COVID-19 moderates between the rate of profitability and financial risk to tolerance.*

The Covid-19 pandemic has directly affected some digitization trends and interrupted and reversed so many other like long integrated chains (Chowdhury et al., 2021). Covid-19 pushed some real interest rates into negative form and territory and directly moved the economy from equilibrium to forecast. Meanwhile, this pandemic has added a high level of uncertainty while the European Central Bank (ECB) has included the policy intervention. That needs to be present and bit, and this would guide by changing along with the imprecise information (Dabrowski, 2021).

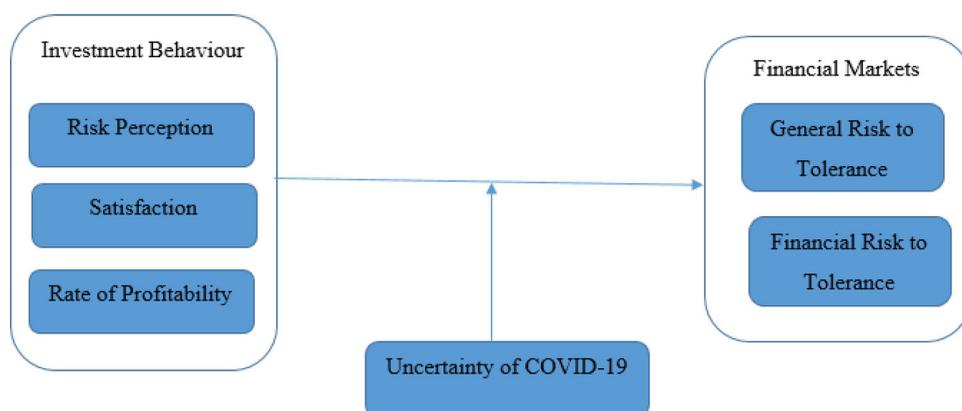
### **3. Conceptual and theoretical framework**

#### **3.1. Conceptual framework**

Conceptual framework help to illustrate the expectation through the finding of the research. It defines all the variables for the study and helps to map out the relationship between those variables. Meanwhile, the conceptual framework should be constructed before collecting data and representing in the visual form. The above figure shows that there are two variables in the study, including investment behaviour and financial markets. There is an impact of investment behaviour on financial markets, whereas there is a moderating role of the uncertainty of COVID-19 over this impact. Investment behaviour is considered the dependent variable, further divided into several factors: satisfaction, risk perception, and rate of profitability. Whereas financial markets are considered an independent variable of the study is affected by the general risk to tolerance and financial risk to tolerance (Figure 1).

#### **3.2. Theoretical framework**

The theory that can be applied to the study is prospect theory which assumed that gains and losses should be valued differently, and thus the individuals should take the



**Figure 1.** Conceptual framework.

Source: Author Estimation.

decisions based on perceived gains instead of losses that are perceived (Nguyen et al., 2020). This theory is also known as a loss-aversion theory which is considered as the general concept that in case if two choices are put before some individual, both equal would be presented in an aspect of potential gains as well as others that are in terms of possible losses so that former option can be selected. In addition to this, the prospect theory is considered the behavioural model that illustrated the way people decide among the alternatives in which risk and uncertainty are included (Sherif, 2020). However, it also demonstrated that people would think in terms of utility expected and relative to the reference point instead of absolute results.

Another theory that can be applied to the study is a neoclassical theory that explains the amount of capital stock desired by the firm at a specific time. In addition to this, the rate of investment is mainly determined by how the organizations adjust their capital sticks for the desired stock level. It is also analysed that in neo-classical economics, this approach is mainly used by economists as they focus on determining the outputs, goods, and distributors of incomes in the market by the demand and supply (Yarovaya et al., 2020). This theory of organization is considered the microeconomic concept that states that the existence of the organization and its decisions for maximizing profits.

## 4. Methodology

### 4.1. Data collection and population

The data has been gathered from the primary sources of information through a survey questionnaire to carry out this study. Since the study has focused on determining the impact of investment behaviour on financial markets during the COVID-19 pandemic within the UK, it is challenging to gather data from all the investors in the UK. In this manner, the researcher must restrict the sample size to an adequate number of respondents. The study of (Fugard & Potts, 2015) provided the formula through which the adequate number of respondents could be determined. With this equation, the adequate sample size is determined to identify the target population, which is provided below:

$$n = \frac{z^2 \times p \times q}{e^2}$$

Based on the equation provided above, 'z' refers to the z-score computed at 1.96 while the CI is computed at 95%. Additionally, 'e' in the above equation denotes an error estimated at 5%, while 'p' denotes the variability proportion computed at 50%. Moreover, 'q' in the equation refers to the population which has not been considered in the study.

$$n = \frac{(1.96)^2 \times 0.5 \times 0.5}{(0.05)^2} = 384$$

Based on the prior equation, it can be determined that the adequate sample size for this study is 384. Therefore, it depicts that the sample size of 384 respondents would be adequate in terms of conducting the study. Conversely, the consideration of response rate is also essential while targeting the desired respondents. Considering this, the researcher provided 384 questionnaires to the investors out of which 337 were gathered, which estimates the study's response rate as 87.76%.

#### **4.2. Sampling technique**

Considering the above discussion regarding the adequate sample size, it is evident that including the entire population is not a feasible option. Therefore, it is imperative to target the desired population or ensure that the actual number of respondents is included in the sampling process. In this manner, the researcher has provided the calculation of sample size to target the respondents through a particular sampling technique. The sampling technique adopted by the researcher is non-probability purposive sampling. As per the study of (Farrokhi & Mahmoudi-Hamidabad, 2012), purposive sampling allows the researchers to gather the data based on the purpose of the study as the study is based on investment behavior. Therefore, this technique helped to gathered data from various investors.

Moreover, this purposive sampling also helps the researcher squeeze information from the broader audience based on the specific measure and purpose (Campbell et al., 2020). However, in the context of this study, to analyze the overall impact of investment behavior on financial marketing, the purposive technique would be best for sampling. In this particular study, to find the specific effects on the UK's financial market due to Covid-19, purposive sampling would be best to collect data and target the population that has been affected due to Covid-19 in terms of finance (Kaur & Bharucha, 2021).

#### **4.3. Research instrument**

To conduct this study, the survey questionnaire has been used by the researcher in terms of gathering the responses from the investors in the UK. It is due to the purpose that the researcher had to gather the data from an adequate number of

respondents, which could only be possible with the help of a survey questionnaire. In this manner, the questionnaire was provided to the target population, a self-administered questionnaire based on 7 points Likert scale. However, the expected time to complete the questionnaire was 10 to 15 minutes.

#### **4.4. Data analysis method**

For this analysis of data gathered through a survey questionnaire, the researcher has used the Structural Equation Modelling (SEM) technique. As per the study of (Martínez-López et al., 2013), SEM is an essential technique for data analysis and is being widely adopted in survey studies. Additionally, the study of (Marsh et al., 2014) stated that the SEM technique involves confirmatory factor analysis (CFA) to measure the model (Afshan et al., 2018; Afshan & Sharif, 2016; Sharif et al., 2019). Conversely, the path analysis is another aspect of the SEM technique which has also been included in the study. In addition to this, the researcher has also conducted the CFA technique to comprehend and ensure the reliability and validity of the constructs. The analysis has been carried out to test the hypothesis through SmartPLS.

### **5. Results and discussions**

#### **5.1. Confirmatory factor analysis**

Considering the discussion carried out in the prior section, CFA is considered to an essential aspect of the SEM technique, which helps to comprehend the structure of latent constructs along with the attentive examination of constructs and latent variables. The study of (Brown & Moore, 2012) argued that assessing the factors with the assistance of CFA assists in comprehending the relationship between latent variables and constructs. Additionally, the study of (Geldhof et al., 2014) stated that various measured provide support to CFA to identify the reliability and validity of the constructs. In this manner, the construct validation is carried out based on the outer loadings, composite reliability, convergent validity, discriminant validity, and Cronbach's Alpha. [Table 1](#) below shows the results of CFA.

Moreover, (Garson, 2012) determined that the measurement of the factor loading provides the variance extracted by the factor from the variable. According to (Shau, 2017), the threshold for factor loadings is 0.6, and the items must possess factor loading above 0.6 to ensure eligibility. Therefore, it can be determined based on the below [Table 1](#) that the minimum value for factor loading is 0.755, which is well above the threshold of 0.6. Moreover, the other aspect of the CFA is to test the reliability of the constructs tested through Cronbach's Alpha and composite reliability. According to (Ahmad et al., 2016), the threshold for composite reliability and Cronbach's Alpha is 0.6. In this regard, it can be determined based on [Table 1](#) that the minimum value for Cronbach's Alpha is 0.706, which is well above the criteria of 0.6 and confirms reliability.

In contrast to this, the minimum value for composite reliability is determined to be 0.832, which is also above the threshold of 0.6. Thus, it confirms the reliability of constructs, and these constructs are eligible for further assessment. Moreover,

**Table 1.** Convergent Validity, Composite Reliability, and Cronbach's Alpha.

Constructs	Indicators	Factor Loadings	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Uncertainty due to COVID-19	COV1	0.906	0.910	0.943	0.848
	COV2	0.923			
	COV3	0.932			
Financial Risk to Tolerance	FRT1	0.823	0.915	0.935	0.744
	FRT2	0.914			
	FRT3	0.889			
	FRT4	0.774			
	FRT5	0.904			
General Risk to Tolerance	GRT1	0.915	0.876	0.924	0.803
	GRT2	0.919			
	GRT3	0.852			
Rate of Profitability	ROP1	0.866	0.788	0.876	0.702
	ROP2	0.771			
	ROP3	0.873			
Risk Perception	RP1	0.877	0.865	0.917	0.786
	RP2	0.897			
	RP3	0.885			
Satisfaction	ST1	0.755	0.706	0.832	0.623
	ST2	0.834			
	ST3	0.777			

Source: Author Estimation.

composite reliability is based on the factor loading from the confirmatory factor analysis (CFA) (Rafati et al., 2021). Especially in an un-dimensional scale, only one factor of CFA is defined, and then use the loaded factors for the computation of internal consistency. It can also be interpreted as composite reliability scoring similarity to other covered metrics (Sánchez-Valle et al., 2020).

Another aspect of the CFA is a validation of latent construct, which is regarded as convergent validity, which is assessed through average variance extracted (AVE). The study of (Afthanorhan, 2013) argued that the measure to determine the convergent validity is AVE, for which the threshold of 0.5 is acceptable. Furthermore, average variance extracted (AVE) is also used to assess the discriminant validity based on the thumb rule (Rönkkö & Cho, 2020). The square root of AVE, which is positive for each latent variable, should higher among the higher correlation with any other latent variable. It has determined from the below Table 1 that the minimum AVE is determined to be 0.623, which is well above the threshold of 0.05. It depicts that the constructs possess convergent validity and are eligible for further analysis.

The results for discriminant validity are provided in below Table 2, based on which the validity of the constructs can be measured with the help of the Heterotrait-Monotrait (HTMT) ratio. The study of Franke and Sarstedt (2019) stated that the threshold for the HTMT ratio is 0.9, which depicts that the values must not be above the threshold. Table 2 below shows that none of the values exceeds the threshold of 0.9, which depicts that the variables possess discriminant validity.

## 5.2. Path analysis

Table 3 below shows the path coefficients concerning the model tested in the study. Therefore, based on below Table 3, it can be determined that there is significant moderation of COVID-19 uncertainty over the relationship of risk perception and

**Table 2.** Discriminant Validity.

	Financial Risk to Tolerance	General Risk to Tolerance	Rate of Profitability	Risk Perception	Satisfaction
Financial Risk to Tolerance					
General Risk to Tolerance	0.638				
Rate of Profitability	0.506	0.644			
Risk Perception	0.361	0.409	0.622		
Satisfaction	0.464	0.624	0.927	0.897	
Uncertainty due to COVID-19	0.037	0.126	0.136	0.096	0.136

Source: Author Estimation.

**Table 3.** Path Coefficients.

	Original Sample (O)	T Statistics ( O/STDEV )	P Values
COV*ROP -> General Risk to Tolerance	0.021	0.271	0.786
COV*ROP- -> Financial Risk to Tolerance	-0.045	0.528	0.598
COV*RP -> General Risk to Tolerance	0.136*	1.909	0.056
COV*RP- -> Financial Risk to Tolerance	0.123*	1.661	0.097
COV*ST -> General Risk to Tolerance	-0.086	1.061	0.289
COV*ST- -> Financial Risk to Tolerance	-0.111	1.333	0.183
Rate of Profitability -> Financial Risk to Tolerance	0.304***	4.308	0.000
Rate of Profitability -> General Risk to Tolerance	0.362***	5.638	0.000
Risk Perception -> Financial Risk to Tolerance	0.144**	2.189	0.029
Risk Perception -> General Risk to Tolerance	0.044	0.682	0.495
Satisfaction -> Financial Risk to Tolerance	0.073	0.946	0.344
Satisfaction -> General Risk to Tolerance	0.210***	2.606	0.009
Uncertainty due to COVID-19 -> Financial Risk to Tolerance	-0.045	0.908	0.364

\*Significant at 10%; \*\*Significant at 5%; \*\*\*Significant at 1%

Source: Author Estimation.

general risk to tolerance as  $B = 0.136$ ,  $p = 0.056 < 0.1$ . From the above study of (Mirza et al., 2020) this has been proved that this Covid-19 put so many businesses in the problems in the European Union and in the UK, which drag the overall revenue with the cash flows and lead to bankruptcies. Additionally, the moderation of COVID-19 uncertainty was also determined to be significant over the relationship of risk perception and financial risk to tolerance as  $B = 0.123$ ,  $p = 0.097 < 0.1$ . However, from the study of Mirza et al. (2020), Covid-19 was a critical time for the whole globe, which breaks the world's economic system and, due to market volatility, stock market contagion. Concerning the direct effect, it has been determined that there is a significant effect of profitability over the financial risk to tolerance as  $B = 0.304$ ,  $p = 0.000 < 0.01$ . Besides this, the rate of profitability is also determined to be significant over the general risk to tolerance as  $B = 0.362$ ,  $p = 0.000 < 0.01$ . Moreover, the effect of risk perception was determined to be significant over the financial risk to tolerance as  $B = 0.144$ ,  $p = 0.029 < 0.05$ . Lastly, the effect of satisfaction was determined to be significant over the general risk to tolerance as  $B = 0.210$ ,  $p = 0.009 < 0.01$ . The study of (Vettese, 2020) mentioned that overspending in the likelihood of financial distress while during the time of recession was being in good health, income certainty, and the risk tolerance that is average and lower to odds of financial distress.

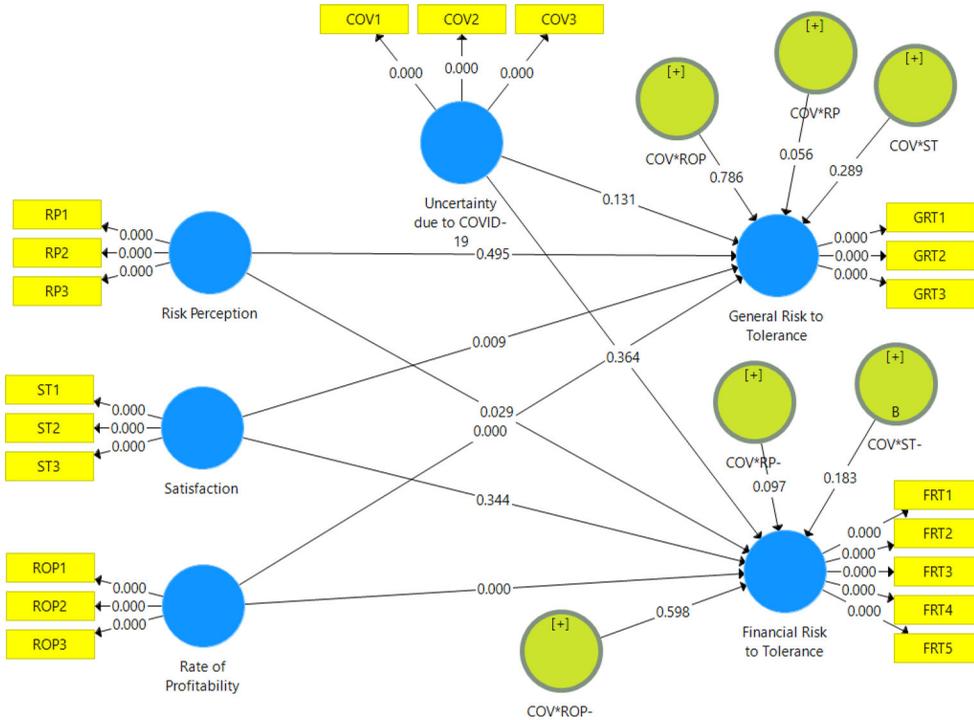
### 5.3. Quality analysis model

In addition to the CFA and path analysis, the researcher has also conducted the quality assessment model in the study. In this regard, it is evident from Table 4 that

**Table 4.** Quality of Model.

	R Square	R Square Adjusted
Financial Risk to Tolerance	0.232	0.216
General Risk to Tolerance	0.338	0.324

Source: Author Estimation.



**Figure 2.** Measurement model after bootstrapping.  
Source: Author Estimation.

R-square for financial risk to tolerance is 0.232 which depicts that the variance in risk perception, satisfaction and rate of profitability is explaining 23.2% of the variance in financial risk to tolerance obtained as 21.6% after the adjustment. In contrast to this, the R-square for general risk to tolerance is 0.338, which depicts that variance in risk perception, satisfaction, and rate of profitability is explaining 33.8% of the variance in general risk to tolerance. However, it is obtained as 32.4% after the adjustments (Figure 2).

### 6. Discussion

The analysis of the study shows that several risks should be perceived to pay attention to the makers of policymakers as it changes the perception of the investors in the financial market. The study shows that general risk tolerance is high for some investors operating in the financial market and financial advisers seek to rate general risk to obtain high return by reducing or ignoring the risk in the financial market (Aboagye & Jung, 2018). Generally, financial investors and their assessment of risk

**Table 5.** Hypothesis Assessment Summary.

S.NO	Hypothesis	Status
H1	There is a significant impact of Risk perception on the general risk to tolerance.	Rejected
H2	There is a significant impact of Risk perception on the financial risk to tolerance.	Accepted
H3	There is a significant impact of satisfaction on the general risk to tolerance.	Accepted
H4	There is a significant impact of satisfaction on the financial risk to tolerance.	Rejected
H5	There is a significant impact of the rate of profitability on the general risk to tolerance.	Accepted
H6	There is a significant impact of the rate of profitability on the financial risk to tolerance.	Accepted
H7	Uncertainty of Covid-19 moderates between risk perception and general risk to tolerance.	Accepted
H8	Uncertainty of Covid-19 moderates between risk perception and financial risk to tolerance.	Accepted
H9	Uncertainty of Covid-19 moderates between satisfaction and general risk to tolerance.	Rejected
H10	Uncertainty of Covid-19 moderates between satisfaction and financial risk to tolerance.	Rejected
H11	Uncertainty of Covid-19 moderates between the rate of profitability and general risk to tolerance.	Rejected
H12	Uncertainty of Covid-19 moderates between the rate of profitability and financial risk to tolerance.	Rejected

Source: Author Estimation.

tactics vary along with the conditions of the market. It is a common belief in the cultures that it tends to take more risk than the people while financial aspects have been discussed. It is added that high risk tolerant believes that risk-return and preferences are dependent on investors' behavior and a particular level of satisfaction possessed by an individual (Grable, 2017). The analysis of the study shows that there is a positive impact of satisfaction on the general risk to tolerance as well as a positive impact of satisfaction on the financial risk to tolerance.

Further, it has been added that there is high uncertainty in general risk perception in the financial market as it mainly brings volatility in the process of decision making. Covid-19 impacts the damaged economic indicators that disrupt the functioning of financial markets due to uncertain elements. In addition to this, it is evaluated that several microeconomic indicators are related to macroeconomic indicators (Aeknarajindawat, 2020). They mainly disrupt the operations in the financial market. So, the analysis of the study shows that there is a moderating effect of covid-19 between risk perception and financial risk to tolerance. As the financial institutions and the government take actions that reflect mitigating the financial risk like a decrease in investors and wealth (Nguyen et al., 2020). It has been added that the investors and other financial money planners have taken various planning actions that can be used to carry out effective and high profits in the current times of the Covid-19 pandemic (Grable, 2017). However, the world economy is mainly affected by COVID-19, whereas the financial markets are also affected by this.

## 7. Hypothesis assessment summary

The figure below shows the hypothesis assessment summary that shows that status for a hypothesis tested in the study's analysis (Table 5).

## 8. Conclusion and policy implications

The study is mainly focused on analyzing the impact of investment behaviour on the financial market while COVID-19. The relationship between investment behaviour and a financial market would be analyzed in the study. It has been concluded that the factors that affect the variables of the study include general risk to tolerance and

financial risk to tolerance, along with satisfaction, risk perception, and rate of profitability. There is a moderating impact of COVID-19 over the relationship among them. The study shows that financial risk tolerance is considered as an attitudinal input to make financial decisions. It is concluded that the rate of profitability mainly relies on the assessment of financial risk, and the way changes in the rate of profitability change the financial tolerance in risk. There is the ability to risk-taking tolerance when investment decisions should be taken in stock and any financial commodity that can be determined by the development of high return over financial investment. The study shows that previous years demonstrated the global financial market that has adversely affected the effects of the outbreak, which mainly damages the decisions of a business. It is concluded that the impacts of COVID-19 between risk perception and general risk to tolerance can be determined. As the global impacts have adversely affected the business sectors that bring instability for the investors.

The study results show that there is a positive impact of satisfaction on the general risk to tolerance and satisfaction on the financial risk to tolerance. In addition to this, the study shows that uncertainty of COVID-19 moderates between risk perception and general risk to tolerance and moderates between risk perception and financial risk to tolerance. However, the uncertainty of COVID-19 moderates between satisfaction and general risk to tolerance and moderates between the rate of profitability and financial risk to tolerance. Therefore, there is a moderating effect of uncertainty in COVID-19 between the rate of profitability and financial risk to tolerance.

## **9. Implications**

### **9.1. Implications for policymakers**

Following are the points of implications for policymakers.

- The study can be beneficial to update their financial policies according to the current pandemic crises.
- The study reflects all the current knowledge and how financial market operations can be managed effectively. Therefore, the study assists in making policies regarding the stabilize operations in the financial market in the UK.
- The study helps the economist and financial market regulators shape out policies used to mitigate COVID-19 uncertainties. Financial planning and forecasting can be done effectively to create a positive impact on financial planning and the market.

### **9.2. Implications for public**

Following are the points of implications for the public.

- The study can benefit the public as the study is outlined to develop effective market conditions and how COVID-19 crises can be managed for investors.

- Investors can change people's perceptions and how rising uncertainty can be managed by taking financial planning actions.

## Disclosure statement

No potential conflict of interest was reported by the authors.

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