

Impact of Covid-19 on Retail Investor Investment Preferences

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ABSTRACT

Main Objective: This research aims to calculate the impact of the Covid 19 pandemic on the investment choices of retail investors by using the stock market as a benchmark. In addition to these objectives, there are several other objectives to evaluate the impact of Covid-19 on stock investment preferences by retail investors in the stock market, to understand whether retail investors are compliant to invest money in stocks by considering the effects of the pandemic identifying retail investor stock preferences after Covid-19 and factor the causes, and analyze the change in returns provided by investment in stocks based on the effects of Covid-19. **Background problem:** The role of the covid-19 pandemic in changing retail investment preferences has been speculated on since it was first recorded in 2020. The Covid-19 pandemic has caused various consequences that affect investor preferences and subsequently change investment behavior. **Novelty:** Investor preferences were affected enough by the covid-19 pandemic to change during the global lockdown timeframe. These preferences have been linked to several intrinsic and extrinsic factors that range from personal reasons to investment characteristics and performance in the stock market.

Research Method: The research adopts cross-sectional survey research methods and mixed methods in which probability and non-probability sampling is adopted in both quantitative and qualitative approaches. The qualitative method was carried out through snowball purposive sampling while the quantitative method was carried out through Stratified Random Sampling. **Finding/Result:** The result of this research reveals that there was an important change in retail investor preferences during the pandemic, in addition to that a significant relationship between high-functioning industrial sectors and investor preferences during the pandemic was not found and finally there was a significant relationship between changes in investor portfolio and preference investors. **Conclusion:** In conclusion, the impact of COVID-19 on investment preferences is only a microcosm of the general impact in all fields and aspects of the economy. However, the extent to which such preference changes are only measured is mainly without suitable secondary data to support it. Therefore, future research needs to provide additional information about the extent to which changes in investor preferences are reflected in investors' investment portfolios and the statistical data that supports them.

Keywords: Covid 19, Retail Investor, Investment Behavior

INTRODUCTION

Economic changes at the regional and global levels are often a major influence in changing investor preferences. These preferences may vary among different types of investors in the market, therefore, such decision-making activities are subject to optimal utility theory as expected. For individual or retail investors, this preference becomes very important because of their unique position of individuality, investment scale, lower access to financial information, and personal bias (Sohail et al., 2020:13). Because such situational factors can influence the investment choices of retail investors (Seth et al., 2020). One of the factors in the recent situation that has shifted investors' goals is the Covid-19 pandemic. "The Covid-19 pandemic that started in the city of Wuhan in China in October 2019 has been observed to have disrupted human activity and existence from a general and economic perspective" (Nicks & Do 2020). Despite the human impact, the COVID-19 pandemic has globally significant monetary, financial, and commercial consequences (IMF, 2020). According to the OECD (2020a), the impact of the COVID-19 pandemic and subsequent lockdowns has been a loss of one-fifth to one-quarter of production in most economies. This, from a macroeconomic point of view, is thought to have contributed to a significant reduction in global GDP (Gross Domestic Product), putting the global economy in the throes of a recession (Abdul & Mia, 2020).

The economic downturn and uncertainty caused by the duration of the pandemic greatly affected market volatility, as well as the participation of retail investors as a segment of the financial services industry that continues to feel the ripple effects of the pandemic. "In addition, global market lockdowns imposed by local governments may inadvertently increase market access for this group of investors, facilitating a wide range of investment preferences, especially as information technology-enabled financial services support stock trading via online interfaces" (Aggarwal et al., 2021a: 101827), allows this easy access. Thus, the boom in certain sectors of the global economy during the pandemic has implications for investors, their portfolios, and their funds as preferences will inevitably change to maximize funds. It is against this background information that this study aims to provide correct information about the preferences of retail investors in the stock market.

Retail investors have always been around, as opposed to institutional investors, who trade on a larger scale and appear more visible, they trade on a smaller scale to limit their losses. The Covid19 pandemic outbreak has changed investors' perceptions of stock investment. Much of the economic literature on the impact of the pandemic on the global and regional economy indicates that there has been a significant reduction in turnover and employment, wide-scale and snatchy lockdowns, an increase in the risk of failure, and lower productivity levels (Kalemli Ozcan et al., 2020). On the other hand, the pandemic has spawned technological and medical breakthroughs that have forced an explosion in certain sectors of the economy. This boom will attract the attention of investors (retail and institutional) for further investment. With most research papers focusing on pandemic investment patterns and their effect on the world economy, it is important to note that there is a paucity of specific information about the changes in investor preferences facilitated by the pandemic. Thus, the importance of this research is in filling the knowledge gap. The pandemic has proven to be a business leveler as only those businesses that remain innovative and relevant thrive. Thus, this research purpose is to calculate

the impact of the Covid-19 pandemic on the investment choices of retail investors by using the stock market as a benchmark.

LITERATURE REVIEW

“The investment approach in various financial alternatives has become popular, not only among organizational investors but also among retail investors” (Bikas et al., 2013). “Financial markets in developing countries account for two-thirds of global investment” (Obstfeld, 2009:63). Investment requires the use of funds and assets to obtain and obtain regular income or increase in capital (Bishnoi, 2014:21). The reasons for the concept of investment are difficult to understand and are influenced by several elements (Lerner et al., 2015:45). Researchers from several countries have analyzed investor behavior and attempted to broaden our understanding of how investors can handle their investments in different states (Kaur & Kaushik, 2016:19). Thus, the role of investment behavior in influencing the functioning of financial markets is very important.

The moderating variable in this reserach is concern about Covid-19 and how it affects financial markets. The world perceptions of investment behavior and risk perceptions generated by various investors in the financial sector are documented depending on the scenario and current capital. The attention to risk arises from decisions made to improve the well-being and financial situation of investors. In addition, overall hazard strength changes across time, implying that the perception of risk for each investor is unique (Nguyen et al., 2020:119792). The current study has settled the ensuing stately case about retail investors' trading:

Contrary trading: “Contrary trading has been documented both at a cross-sectional level based on the net buying (selling) of winners (losers) stocks” (Kaniel et al., 2008:273) and “a time duration level based on negative impulse responses of net individual trading flows of market-wide individuals to market return shocks in VAR” (Ülkü and Weber, 2013: 2733). Retail investors’ contrarian trading has been considered as an implicit supply of liquidity to institutional price pressures, providing positive average returns but possibly hindering the integration of new data (Barrot et al., 2016:146). One theory for the source of this contrariness is that retail investors try to place money limit orders, which contributes to endogenous contrarian trading driven by the consumption of institutional liquidity, resulting in an adverse selection process. Such forms of trading are critical for the negative associations with contemporary returns. Also contributing to the negative relationship between historical returns are behavioral factors such as the disposition effect and belief in average returns. All of these impacts as “uninformed attempts to buy low and sell high using current prices as a heuristic reference point.”

Speculative positive feedback buying: As with contrarian trading, there is evidence of investor involvement with speculative positive feedback trading. retail investors are often blamed for the speculative buying frenzy that involves elements of positive feedback and herding trading. The example by Wang et al. (2017), underperformed following the high volume of shares dominated by retail investors in the Chinese stock market. Onishchenko and Ülkü (2020) reconcile these seemingly contradictory arguments about whether retail investors are positive or negative feedback traders by showing that retail investors are contrarians in the habitat

of institutional investors and demonstrating speculative positive feedback-driven buying, by attention (as specified). According to Mutereko's research, (2021: 267) price fluctuations, investor confidence, driving government policies, broker guidelines, good governance, and financial returns are important considerations, but social position, religious beliefs, and family opinions play the least role in the selection individual investor shares.

1. Retail Investor Investment Behavior

“Retail investors are different from organizational or company investors in investment size, resources, access to research, and professional assistance” (Bhattacharya et al., 2012:975). Furthermore, when deciding where and when to invest, retail investors are impacted by different balanced and unbalanced variables. In addition, these investors have different strategies for dealing with their finances. “In this sense, financial attitude is an individual's basic understanding of money and the capacity to make financial decisions” (Shim et al., 2009:708). As a result, financial attitude insights can serve as a barometer of individual financial knowledge, which can be learned through education. “Consequently, it is important to analyze the attitude of retail investors because their investment attitudes, as well as their behavior and financial knowledge” (Joo & Grable, 2004:162), “can influence their well-being and enjoyment” (Falahati et al., 2012:190).

2. The Effect of Covid-19 on the Investment Sector

The Covid-19 pandemic has forced governments around the world to make the most difficult decision yet: lockdown. Since the outbreak, lockdowns have been invoked as a measure of containment, first strictly and then more loosely. Lockdown has impacted human activities and almost brought the economy to its knees. Global economic losses for 2020 have been projected to be between 0,1% and 0,4% of GDP, pushing the economy into recession (Abdul & Mia, 2020). Major economic problems such as cessation of commercial activities, tourism, loss of jobs, and breakdown of supply chains are some of the impacts of lockdowns, which are also detrimental to the financial system. Bloom et al., (2018) expressed concern about the vulnerability and fragility of the economy to health pandemics before the Covid-19 pandemic began. Suspicions of stock market vulnerability were validated when Covid-19 was declared a pandemic in March 2020, resulting in a drop in global market values. Specifically, global stock markets fell 15%–20% over the period under consideration, losing 15%–20% of their value. Researchers have stated that the financial crisis triggered by the pandemic was more dangerous than the one in 2008 (Georgieva, 2020), with financial markets nearly collapsing in its aftermath. In comparison, the 2008 financial crisis was solely ascribed to the collapse of institutional structures and practices in the global economy, whereas the pandemic affected all parts of human existence, making it much more difficult to regulate. In addition, the 2008 crisis was primarily a financial upheaval that impacted the global economy, resulting in a decline in GDP (World Bank, 2009). As the 2008 financial crisis spread, central banks around the world implemented several monetary policy measures to help stabilize prices and financial markets. Instead, in reaction to the Covid-19 pandemic, the government is prioritizing public health measures over economic recovery strategies.

In addition to its impact at national and global levels, the panic caused by the life-threatening elements of this pandemic has affected the mindset and behavior of individual investors, forcing them to make suboptimal investment decisions. Historical literature has made links between panic and stock market activity, highlighting the role of sentiment and irrational thought processes in investment decisions. Stock market movements around the world have highlighted the devastating impact the pandemic is having on investors. In March 2020, one market after another collapsed. “In 1997 he touched a circuit breaker only once in the US market, in March 2020 he touched a circuit breaker four times in 10 days” (Zhang et al., 2020:101528). “The situation is similar in Europe and Asia, where the FTSE (the UK's highest index) has fallen more than 10% in his day, and Japan has fallen more than 20% from the peak he reached in December 2019” (Vishnoi & Mookerjee, 2020). Such volatility not only reduces market capitalization but can also reduce individual investors' assets and affect short- and long-term investment decisions and decisions. The stock exchange was legally recognized in 1799, with the passing of the Exchange Act by Parliament. “This exchange was originally based on the Royal Exchange and was designed to allow entrepreneurs to sell goods and commodities as well as trade bills of exchange” (Mulligan, 1996:122).

3. Theoretical Framework

Previous studies have provided several theories to define investor behavior. Some theories provide a logical background for the concepts being discussed and help connect the concepts. Based on the research objectives, the theory chosen is the theory of Prospects and Heuristics.

Prospect Theory (PT)

PT argues that investment decisions should be based on the probable return rather than the efficacy of that decision. PT also claims that several psychological factors influence investors' decisions. It has been found that people are more risk-averse during bullish periods but less risk-averse during negative periods. As an alternative to expected utility theory, PT hypothesizes that decision makers prefer particular outcomes to possible outcomes, called the certainty effect. This effect increases investors' risk aversion in the face of compelling gains and risk-taking in the face of certain losses. (Kahneman&Tversky, (1979)). Without a doubt, it can be argued that this theory and its applications can allow framing effects, nonlinear preferences, resource dependence, and loss aversion to dominate investors' rational decision-making (Tversky&Kahneman, (1992)). However, PT does not suggest that market reactions or disclosures of any economic events will affect investors' decisions. This simply means that an individual's willingness to take risks under certain conditions is determined by that individual's particular economic interpretation and that if the event is viewed as favorable, the person It means that you are likely to be risk-averse and vice versa. According to Barberis, Mukherjee&Wang (2016), when making investment decisions, investors mentally visualize the distribution of shares in a way suggested by PT. As a result, investors direct their portfolios toward equities with an attractive distribution of prior returns under PT, causing them to become overvalued and generate subsequent low returns.

Heuristic Theory (HT)

Since "rules of thumb" are phenomena that tend to make decision-making simpler and easier, especially in complex circumstances and under uncertain settings, they are very useful in giving some meaning to "Heuristic Theory" (Ritter, (2003)). This theory includes the process of compressing these complications over the possibility of checking and uncomplicated experience to predict values (Kahneman & Tversky, 1979). Heuristic effects are important in general settings, especially when time is limited (Waweru et al., 2008). Besides that, Kahneman&Tversky, (1979) and Waweru, (2008) initiated to show that heuristic impact regularly produce bias. It is widely accepted that Kahneman&Tversky, (1979), who is widely considered to be the first author on this issue, investigated three other important aspects, which are labeled as representativeness, availability bias, and restraint, and incorporated them into heuristic theory. Waweru, (2008) adds 2 more characteristics to the HT: "overconfidence" and the "gambler's fallacy".

It is widely acknowledged that 'overconfidence' increases persistence, mental quantity, run, and hazard resistance. "More specifically, it helps in promoting professional efficiency and performance, such as enhancing the perceptions and skills of others to achieve quick promotions and longer investment timeframes" (Oberlechner & Osler, 2004; Ngoc et al., 2013). "An 'overconfident investor' is someone who overestimates the precision and accuracy of his information signals instead of relying on public information signals" (Daniell and Hirshleifer, 2015). Such people are referred to as "overconfident investors" because they believe that their decisions are better than they appear to be, the behavior of such people is considered "overconfidence" in the psychological literature and contemporary financial ideas (Trivers, 1991).

4. Literary Empirical Review

The age of investors and the frequency of their trades have the greatest impact on market returns and profitability. Vieira and Pereira (2015) found that grazing strength was (-) and analytically important, suggesting that investors systematically duplicated mutually rather than exploit private information and act irrationally. Aydogan (2016) evaluated the effect of investor sentiment on pleasure in 9 stock markets and captured the asymmetry in terms of negative and positive news. The findings show that in some countries, stock market pleasure is sensitive to negative shocks in investors' moods, lending credence to the leverage effect. Boehmer et al. (2020) find that retail investors who earn net on individual stocks outperform stocks with negative imbalances, and this level is around 5% annualized over the next few weeks. Also, retail investors have a better understanding of smaller, lower-priced stocks, but they cannot time the market. Dyakov and Wiplinger (2020) find a negligible positive relation between organizational ownership and future risk-adjusted income. Simultaneously, positive future earnings cannot be predicted using organizational trading other than a few measurements.

Glossner et al., (2020) explored the important model that organizational shareholders played in the market crisis related to the Covid-19 pandemic, and the result shows that active short-term domestic organizational shareholders underperformed. Additionally, an in-depth analysis of fluctuation in the first ¼ of 2020 disclosed that hedge funds were selling stock promptly. Investment advisors, pension funds, and mutual funds, on the other hand, prefer stocks with more cash and less debt. While ordinary investors act as providers of liquidity.

Caporale, (2020) analyzed how organizational and non-organizational investors influenced stock market volatility during the Asian financial crisis, and found that the effect was unequal to trading by buy and sell orders, which were stable and unstable, respectively. The findings also show that buying and selling trades have a beneficial effect on pleasure across all subsamples. Meanwhile, the deteriorating buying and selling behavior of retail investors indicates that lack of knowledge has impacted their psychological bias in buying and selling decisions. Finally, before the start of the crisis, buying foreign trade hurt volatility, but selling had a positive effect on volatility. Buying and selling trades, on the other hand, generates a positive response to the pleasure before the start of a crisis. In addition, buy trades are more informative than sell trades, which can be classified as momentum trades. Liu, (2020), who inspected the short-term effect of the Covid-19 pandemic on the highest twenty-one stock market indicators using an event technique, found that stocks in countries hit hard by the Covid-19 pandemic fell immediately. Asian stock markets are experiencing more negative anomalous returns than the adjacent region. In addition, investors' concerns are acting as a moderator of the effect of COVID on the stock market.

RESEARCH METHODOLOGY

1. Research Method

A cross-sectional survey research method was adopted for this research which, in general, can be used to study the problem precisely in a realistic setting. Survey techniques also make it possible to study multiple factors and evaluate data using multivariate statistics. Surveys use questionnaires or interviews to collect data on situational views and practices at a given point in time. Case studies are attempts to describe real-world interactions. The positivist research model, which includes the ontological positions of critical realism and rational epistemology, was used in this cross-sectional investigation. The philosophy is positivism, and the approach is scientific and positivist because this research focuses on commanding equitable cases by statistically measuring the relation in research variables. The interpretive view of social research would be much more qualitative, using methods as well as participant investigation, although (+) would choose quantitative methods as well as social surveys and official analytics because of the accuracy and representativeness.

“Empiricism is one of two types of foundationalist philosophy – rationalist or empiricist which holds that information should be impartial and impartial based on the beliefs and principles of the researcher” (Phillips and Burbules (2000). However, positivists argue that research on the social world uses the same methods and procedures as do "natural" sciences such as biology and physics. Researchers must use "scientific" methodology

to identify the rules that govern society, just as scientists have discovered the laws that govern the physical world. According to positivists, the reality is the same for everyone, and measurement tells us what reality is. As a result, positivism is used in surveys because it is suitable for obtaining meaningful information about the behavior and investment choices of retail investors using the stock market. In quantitative research, several types of data are collected to bring a more complicated figure in the field. Qualitative research data, on the other hand, is usually what people say or say in words. This information is usually obtained from interviews, documents such as newspapers or journals, observations, and audiovisual assets such as films or audio. The final report of quantitative research is more rigorous and in the form of a statistical statement that informs the decision to use quantitative research methods.

2. Study Population, Sample Size, and Sampling Technique

The population segment selected for this research is retail investors. The number of respondents who will participate in this process will be determined through theoretical saturation when there are overall responses made from time to time without adding new information (Faulkner and Trotter, 2017:2). With mixed methods, this study adopts probability and non-probability sampling in both quantitative and qualitative approaches. The qualitative approach was carried out through snowball purposive sampling while the quantitative method was carried out through Stratified Random Sampling. Any type of quantitative study requires the application of well-proven methodologies to produce valid and statistically meaningful outcomes. To achieve such results, a validated (through scientific techniques) estimation of sample size should be carried out. In the field of research, the word "sample size" refers to a certain percentage of the population to be investigated. The sample size is determined by the study's research design, the methods used, and the model established by previous research efforts (Tejumaye, 2017). The specimen size is usually estimated numerically as a depiction of the goal of the population adopting several formulas according to different specimens procedure. Because convenience sampling was used, the specimen content chosen has no explicit clarification (and thus no effect) on the data to be collected. The survey, on the other hand, will be conducted with 150 people randomly selected.

3. Data Source and Collection

Secondary data collected will be in the form of text from books, journals, and other creditworthy publications that will help build a literature review and theoretical framework. Primary data will be collected qualitatively over dialogue and quantitatively through surveys. The qualitative part of the primary data involves the use of in-depth interviews to extract information from the sample population. The information will then be collated and analyzed using the Nvivo qualitative data analysis software. Moreover, a quantitative method would use a Google form as a questionnaire survey tool. The collected data will be transferred to the SPSS data analytics software package and R programming software to assist in data analysis. Quantitative data will be analyzed using descriptive and inferential statistics. Furthermore, Regression and Pearson analysis tests "*Product Moment Correlation*" will be adopted to investigate the collected data. In terms of Instrument Validity

and Reliability, copies of the questionnaire will be distributed among a randomly selected population of investors to measure the validity and reliability of the instruments proposed for use in this study. To determine the reliability coefficient of the data, the "Cronbach-alpha" test/method will be carried out. Instrument validity was carried out in three stages, namely face validity, concurrent validity, and content validity.

DATA ANALYSIS

A total of 101 respondents (72 is men and 29 were women) stated that the information provided in the questionnaire had been read and understood properly and they were willing to take part in the survey. Statistical Packages Social Science (SPSS) version 26 is used to process data. In terms of academic qualifications, the number of respondents with Masters's and Bachelors's degrees outperformed the other categories by 49.5% and 38.6% of the total percentage, respectively. Respondents with level 6 and a national diploma were the least part of this survey. Based on occupation, the participants mostly provided services to private organizations (58.4%), followed by the self-employed and then working with the government (10.9%). Participants who are students, part-time workers, and engineers each share 1% of the total percentage. In terms of annual income, participants earning between 50,000 and 70,000 Euros were the most frequent (35.7%), followed by participants earning under 30,000 Euros (29.7%) than participants earning between 30,000 and 50,000 Euros (25, 7%) and then participants earn between 70,000 to 100,000 Euros. Participants earning above 100,000 Euros are recorded as the smallest group in the survey with a 1% representation. In describing their overall financial situation, the majority (62.4%) stated that they were stable, 18.8% described themselves as rich, 13.9% described themselves as poor and only 5% said they were rich.

In considering an investment, 24.8% of respondents said that the availability of funds influenced their inclination to invest, 19.8% of respondents noted that professional advice influenced their decision to invest, 21.8% decided what to invest considering various factors including funds, risk, perceived preference, and professional advice while 2% are not involved in investing. In terms of the number of investors willing to invest, 38.6% of respondents are willing to invest 11-20% of their funds and this constitutes the majority, followed by 29.7% and 24.8% willing to invest 1-10% and 21-30 % of their respective funds. In terms of investment sector preference, 35.6% of participants indicated they would prefer to invest in programming and computer technology while 20.8% indicated healthcare and medicine would be the preferred investment sector, followed by building and manufacturing with 12.9 % of participants. In addition, energy and financial institutions as the investment sector were tied at 10.9% and public services were the least preferred at 8.9%.

Analyzing the frequency of investments made by participants, 49.5% of participants reported that it was done monthly, followed by 27.7% who invested quarterly while 14.9% and 7.9% of participants invested annually and biannually. each. For return on investment (ROI), 37.6% of participants indicated that they invest for medium-term returns, followed by 33.7% for long-term returns on investments and 28.7% for short-term returns on investments. 48.5% of participants disclosed that they invest only for future securities, followed by 30.7% for long-term gains and 10.9% for tax advantages. Additionally, 7.9% and 2% of participants indicated

that they invest for short-term and other gains. For different types of investments, 36.6% of participants indicated that their investment portfolio consisted mainly of stocks, followed by 25.7% of participants investing in mutual funds and ETFs and 13.9% in securities and bonds. 6.9%, 5.9% 5% and 2% of participants indicated that they invest in technology, annuities, bank products, and cryptocurrencies, respectively. Other types of investment represented in the survey such as investment, business, real estate, and predictions all accounted for 1% each.

For factors influencing investment decisions, 31.7% of participants indicated high return expectations as the main influence for their investment decisions, followed by 25.7% and 23.8% for safety and security and risk tolerance, respectively. Finally, 18.8% of participants indicated that liquidity and regular income contributed to their overall investment decision. Regarding the stability of the stock market, 55.4% of participants said they were not sure whether the market was unstable or not, while 25.7% of participants considered it unstable with a high level of volatility. In contrast, 18.8% of participants considered it stable with low volatility. Addressing investors' confidence in their portfolios during Covid-19, 34.7% of participants indicated indifference about how their portfolios performed during the peak of the pandemic followed by 22.8% of participants who indicated a lack of confidence in their portfolios then 21.8% of participants who showed fear they will underperform their portfolio. In addition, 13.9% believe their investment portfolio is doing well during the pandemic, and 6.9% are very confident about the performance of their portfolio during the pandemic.

Analyzing the diversity of investor participants' portfolios before Covid-19, 35.6% of participants said their investment portfolio before the onset of Covid-19 was moderately mixed, followed by 34.7% who reported having one type of investment that lacked diversity before the pandemic. -Covid-19 and 20.8% of participants said they had a diversified portfolio across various types of investments before the pandemic. Finally, 8.9% of participants have a well-diversified portfolio. Alternatively, data compiled on the diversity of investor participant portfolios after the initial Covid-19 pandemic showed that 37.6% of participants had diversified their investment portfolios followed by 34.7% of participants having a moderate mix of investment portfolios. Participants who have one type of investment and very diverse investment portfolios each have 13.9% of the total sample population during the study. Analyzing the best sectors to invest in post covid-19 by participants, 42.6% of participants revealed that they have plans to invest in health care and medicines due to their performance while the crest of the covid-19 pandemic and lockdowns. 22.8% of participants indicated that cryptocurrencies were their investment of choice, while those thinking of telecommunications and fast-moving consumer goods (FMCG) were represented by 9.9% respectively. In addition, the energy and shipping, and transportation sectors are not accounted for by the large group as they represent 8.9% and 2%, respectively.

Regression analysis

Hypothesis One: There has been no significant change in retail investor preferences during the pandemic.

Table 1. First Hypothesis Regression Table

| | Estimate | Std. Error | t value | Pr(> t) |
|--------------------|----------|------------|---------|-------------|
| (Intercept) | 1.83631 | 0.22118 | 8.302 | 6.91e-13*** |
| sB14 | 0.08027 | 0.06669 | 1.204 | 0.232 |

Source: R-programming Output.

The regression analysis using the R-programming software above shows that there is an analytically powerful relationship between the preferences of retail investors during the peak of the pandemic and subsequent lockdowns. The statistical relationship between investor preferences and the covid-19 event can be seen in table 1 (at $\hat{\alpha} = 0.080$; $t = 1.204$, $p = 0.232$) it was revealed that there was a significant change in retail investor preferences during the pandemic. Thus, it can be presumed that the regression analysis refuses the null hypothesis and accepts the optional hypothesis, namely that there has been a powerful change in retail investor preferences during the pandemic.

Hypothesis 2: There is no powerful relation between high-functioning industrial sectors and investor preferences during the pandemic.

Table 2. Second Hypothesis R-Regression Table

| | Estimate | Std. Error | t value | Pr(> t) |
|--------------------|----------|------------|---------|--------------|
| (Intercept) | 3.3235 | 0.4742 | 7.009 | 2.97e-10 *** |
| sB14 | -0.1466 | 0.1723 | -0.851 | 0.397 |

Source: R-programming Output.

The regression analysis using the R-programming software above shows that there is no analytically powerful relation between highly functioning industrial sectors and investor preferences during the pandemic. The relationship between high-performing sectors (as a potential investment point) and investor preferences can be seen in table 2 (at $\hat{\alpha} = -0.1466$; $t = -0.851$, $p = 0.397$) attributing that there is no power relationship between high-functioning industrial sectors and investor preferences during the pandemic. Thus, it can be assumed that the regression analysis accepts the null hypothesis and rejects the alternative hypothesis.

Hypothesis Three: There is no powerful relation between changes in investor portfolios and investor preferences.

Table 3 Table of R-Regression of the Third Hypothesis

| | Estimate | Std. Error | t value | Pr(> t) |
|--------------------|-----------------|-------------------|----------------|--------------------|
| (Intercept) | 2.87567 | 0.38232 | 7.522 | 4.35e-11*** |
| sB2 | 0.01115 | 0.10809 | 0.103 | 0.918 |

Source: R-programming Output.

The regression analysis using the R-programming software above shows that there is an analytically powerful relation between investor portfolios and investor preferences during a pandemic. The relationship between changes in investor portfolios and investor preferences can be seen in table 3 (at $\beta = 0.011$; $t = 0.103$, $p = 0.918$) attributing that there is a powerful relationship between changes in investment portfolios and investor preferences during the pandemic. Thus, the regression analysis refuses the null hypothesis and obtains the different hypothesis that there is a powerful relation between changes in investor portfolios and investor preferences.

Qualitative Thematic Interview Analysis

Interview sessions were controlled by the participant that was active to bring consistent data essential for research data investigation. As a result, 5 respondents were interviewed and their data was collected from the interviews. These respondents were drawn from a larger pool of investors who were previously sampled with a questionnaire for quantitative analysis. After the thematic analysis of the interviews through the Nvivo software, respondents can provide answers that are directly related to answering the research questions. In response to initial questions, the interviewees indicated that they all have a stable financial background as they use their excess funds to invest. Furthermore, the interviewees indicated that their reason for investing was solely to make more money and financial securities. However, 80 percent of the interviewees were new to the investment field, attributing their fledgling interest to the influence of investment bankers. Addressing the research questions of this study, the following themes were discovered and analyzed:

Answering the first research question, changes in investor preferences during the pandemic were confirmed by interview participants. From the data collected in the interviews, 80 percent of the participants changed their portfolio type during and after the lockdown; with a partial change in the type of investment portfolio being the most common feature of the change. In addition, the participants indicated that this change in investor preferences was related to the performance of their investments compared to the performance of other types of investments. Furthermore, Nvivo's analysis of investment preferences shows that pre-covid investment preferences were focused on Agro-Tech (Agriculture Technology) stocks, and cryptocurrencies as the main investment point, other important investments mentioned were bank products, technology stocks, and p2p (peer-to-peer) capital loan. This preference appears to have changed when analyzed for post-covid-19 purposes. New investments mentioned by participants included Tech stocks and cryptocurrencies.

Analysis of the second research question posed to participants revealed that this change in investment preferences was indeed facilitated by its stability/volatility and performance over the duration of the pandemic. Investors who own shares of companies with high volatility are more likely to sell their investments in these companies to invest in more stable types of investments. Nvivo also reports that investment stability and low investment risk are also factors that are considered in the selection of new investment targets by investors. However, attempts to acquire shares from such a high-performing sector can only be undertaken after a lockdown, as such decisions are often made after a thorough scrutiny of the stock market for high-performing and stable stock options. Lastly, the range of preferences can be said to have become more diverse before, during, and after COVID-19. This is reflected in the preferences considered or acted upon by investors. Based on reported data, Nvivo analysis revealed that there were fewer investment categories invested by participants before covid-19 correlated to the post-covid-19 interval. The most mentioned post-covid pandemic investments according to Nvivo analysis are cryptocurrencies, tech stocks, and aggrotech investments. In addition, the investment potentials mentioned by the participants are entertainment stocks (such as Netflix), telecommunications sector shares as well as health and pharmaceutical stocks. The interview transcripts also revealed that about 40 percent of the participants made a concerted effort to buy this type of investment or had owned it before. In summary, the qualitative analysis of the interview data shows that investors' preferences did change over the duration of the pandemic, which corroborates the statistical conclusions that have been made in the quantitative part of this study.

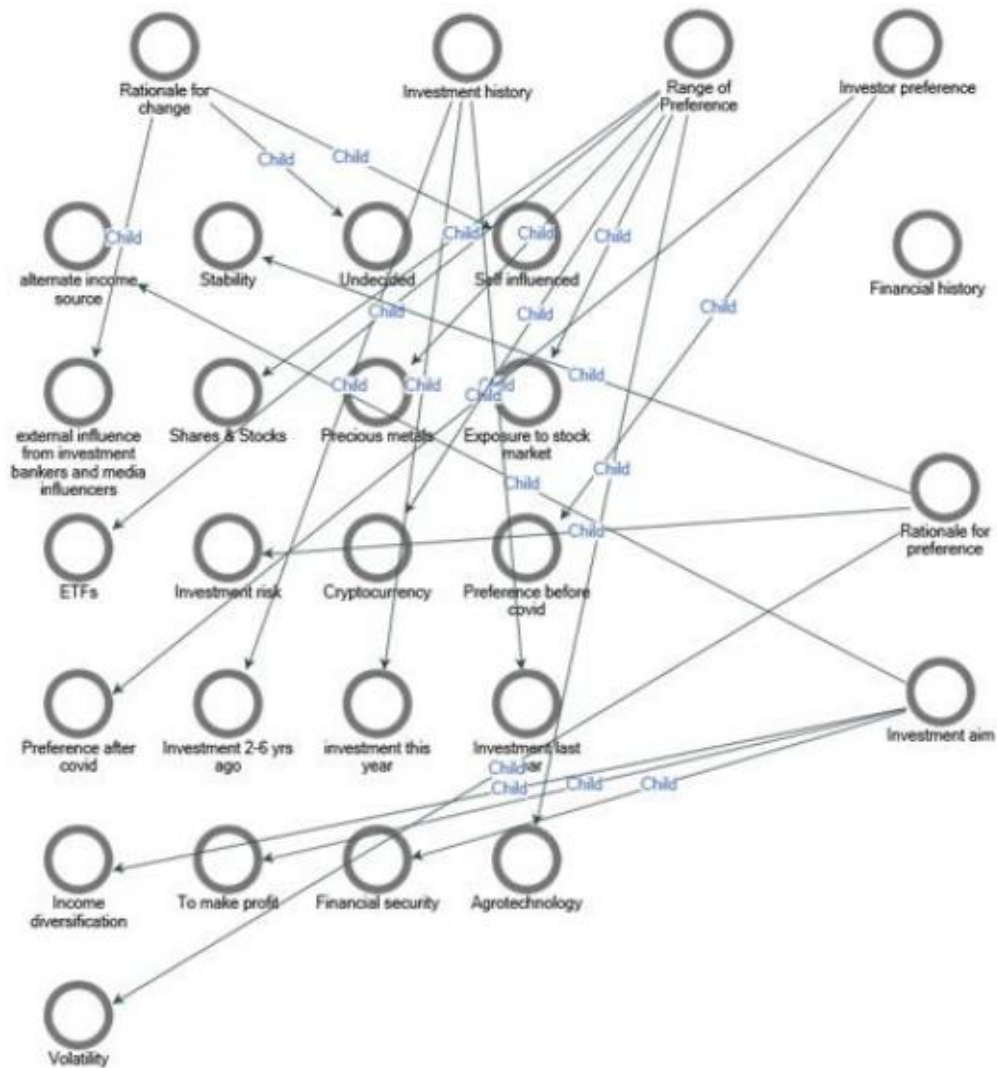


Figure 1 Nvivo analysis results

RESEARCH RESULT

There has been a powerful advance in retail investor preferences during the pandemic. The pandemic that occurred in 2020 facilitated the upheaval of several social and economic structures and trends that had existed for decades. It also places increased reliance on certain types of industries and parts of the economy, so that their stocks and shares acquired an extraordinary increase in value during the global lockdown space that followed. This increase in value must have attracted a lot of investors to these sectors based on their performance and thus will directly or indirectly influence the preferences of global retail and institutional investors. The results of the quantitative and qualitative studies reveal that there has indeed been a significant change in investor preferences (especially retail investors) during the pandemic. While the quantitative data confirms a relationship between changes in retail investor preferences due to the COVID-19 pandemic (at $\alpha = 0.080$; $t = 1.204$, $p = 0.232$), the qualitative data provide multiple reasons for such changes. According to the

data provided, reasons such as high performance and stability are considered. In addition, it is also interesting to note that these changes are partial and not complete; which lends credence to the fact that a diversified investment portfolio is one of the safest ways to invest. These findings corroborate Nguyen et al's (2020) research on investment behavior, which reflects the concept of perceived risk and level of profitability. In short, investors are more likely to choose investments with high levels of profitability with moderate to low risk. This ensures that they get the best value for their money with maximum profitable returns over the allotted time.

There is no significant relationship between highly functioning industrial sectors and investor preferences during the pandemic. The early days of the pandemic were marked by a free fall in stock volume due to all the news about the human survival of the “Sars-Cov-2” pathogen; answerable for covid-19 looks bleak. However, weeks later, government measures such as the release of a stimulus package for workers and massive investments into biomedical, pharmaceutical, and healthcare research meant that these sectors of the economy witnessed an initial jump in their economic activity. These economic measures inject new life into the types of investments inherent in this industrial sector driving better performance than other investments. The data collected from this current study reveals that this was not the case at this time. Quantitative analysis of the data collected through the regression approach expresses that there is no powerful relation between high-functioning industrial sectors ($\beta = -0.1466$; $t = -0.851$, $p = 0.397$) and investor preferences during the pandemic. Supporting this, information from interviews reveals plausible reasons for this: such as external influences on preferences. Examples of such external influences could include professional advice, historical volatility, and general stock market trends. Given that highly functioning sectors may be characterized by high volatility, varying levels of profitability, and fluctuating return on investment (ROI), it makes sense that there is delayed action on the part of investors as the sectors are properly monitored for certainty. medium to long-term investment (Buszko et al., 2021). In the case of a pandemic, attempts to acquire shares from high-functioning sectors can only be made after a lockdown, as such decisions are often made after a thorough scrutiny of the stock market for stable, high-performing stock options.

There is a powerful relationship in advance investor portfolios and investor preferences. Investor preferences are often reflected in their investment portfolios. Data from the survey shows that most survey participants prefer diverse to semi-diverse portfolios to reduce liquidity and increase risk tolerance (Strömbäck et al., 2017). In addition, changes in preferences are likely to translate into changes in the content of investors' portfolios as investors take steps to acquire preferred types of investments while selling investments deemed to have lost value. Regression analysis of quantitative data shows that there is a statistically powerful relation in advance in shareholder portfolios and shareholder preferences ($\beta = 0.011$; $t = 0.103$, $p = 0.918$) during the duration of the pandemic. The association becomes clear when the qualitative data report that there is an increase in portfolio diversity as investors begin to spread their funds across different types of investments of their choice. Following data provided by interviews and analyzed with Nvivo software, cryptocurrency, technology stocks,

and agrotech investments were the most common types of investment pre-covid-19 while cryptocurrency, programming and technology stocks and stocks, agrotech investments, entertainment stocks (such as Netflix's) telecommunication, health, and pharmaceutical stocks became the most dominant post-covid-19. This data is also reflected in the survey as most survey participants listed computer programs and technology shares as well as healthcare and pharmaceutical stocks as the types of investments they would like to investigate and buy.

RESEARCH CONTRIBUTION

Implications of the Result for Research Questions

The role of the covid-19 pandemic in changing retail investment preferences has been speculated on since its first recorded occurrence in 2020. The pandemic negatively impacted large parts of the global economy resulting in large-scale and intermittent shutdowns, economic stagnation and regression, increased risk failures, and lower productivity rates. However, some parts of the economy are experiencing a boom due to the increasing dependence on their services for human survival. This brings various consequences, some of which are changes in investor preferences and the consequences of changes in investment behavior. After identifying the pandemic as an independent variable that affects all other dependent variables such as investor behavior and the global economy and finance, this research objective is to calculate the effect of the Covid-19 pandemic on the investment choices of retail investors by using the stock market as a yardstick. Quantitative and qualitative analysis methods were used to obtain data from participants.

There has been a powerful range in retail investor preferences during the pandemic: This research was able to regulate that the covid-19 pandemic influenced investment behavior through changes in investor preferences during the lockdown. This change resulted in moves being made by retail investors to diversify their portfolios through investing funds in cryptocurrencies as well as stocks and shares of companies that are performing well. There is no significant relationship between highly functioning industrial sectors and investor preferences during the pandemic: This research also found that there is no statistically powerful relationship between high-functioning industrial sectors and investment preferences. Data from research suggests that external influences may be responsible for the disconnect between the two variables. In addition, features of the sectors (such as volatility and low ROI) may also factor into delayed interest and by extension investor preference. There is a powerful relation between advances in investor portfolios and investor preferences: This study also finds that there is a statistically powerful relationship between advances in stockholders' portfolios and preferences. Based on the data reports analyzed, the increase in portfolio diversity occurred because investors began to spread their funds to various types of investments of their choice after the Covid-19 lockdown.

Knowledge Contribution

It is known that the retail investors who were used as the research sample have very poor knowledge because most of their investments are domiciled abroad. It is also important to note that stocks and stocks remain the most heavily invested for medium to long-term ROI, with cryptocurrencies emerging as an attractive investment portfolio for participants. Both forms of investment are considered to have a high level of profitability so that retail investor preference increases.

Limitation

The limited information available on the stock exchange hampers the volume of information used for this research. In addition, the level of preference change is only measured mainly without sufficient secondary data. Therefore, it is important for other studies in building on this research to provide additional information about the extent to which changes in investor preferences are reflected in investors' investment portfolios as well as statistical data that support them.

Recommendations for Future Research

The findings of this study confess the effect of COVID-19 on investor preferences during and after the pandemic. However, the extent to which changes in preferences are only measured qualitatively without appropriate secondary data to support it. Therefore, other studies need to build on this research to provide additional information about the extent to which changes in investor preferences are reflected in investors' investment portfolios and the statistical data that support them.

CONCLUSION

The dawning of the covid-19 pandemic has turned all traditional investment preferences upside down, leaving behind functioning and highly successful sectors. Taking this into account, it is very important to add that this research is as new as it is intersectional, with important implications for understanding investor behavior in future crisis scenarios. The result of this research indicates that the COVID-19 pandemic has had a major influence on the preferences of retail investors and investment choices due to changes in the composition of their investment portfolios. In addition, this change resulted in a more diversified portfolio to reduce liquidity, increasing financial security. However, data curated from quantitative and qualitative research reveals that most of these investment choices are directed at foreign-based investments. This is due to the nature of Euronext which is less known to retail investors, hence the willingness of investors to bring their funds abroad for investment.

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