

# **The Impact of Covid-19 on the Investment Preferences of Retail Investors, With Reference to the Irish Stock Market.**

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## **DECLARATION**

“I, Aimua Oviawe, declare that this dissertation that I have submitted to Dublin Business School for the award of Master of Science, Financial Analytics is the result of my own investigations, except where otherwise stated, where it is clearly acknowledged by references. Furthermore, this work has not been submitted for any other degree.”

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## ABSTRACT

The role of covid-19 pandemic in altering retail investment preferences is one that has been speculated since its first recorded occurrence in 2020. The Covid-19 pandemic led to a variety of consequences which influenced investor preferences and the subsequent changes to investment behaviour. This study is aimed at evaluating the effect of the Covid 19 pandemic on retail investors investment choices using the Irish stock market as a yardstick. Five objectives were cited as vital to the completion of this study: (1) to evaluate the impact of Covid-19 on the investment preference in stocks by the retail investors in the Irish stock market, (2) to understand whether retail investors are willing to invest money in stocks considering the pandemic effect (3) to identify the stock preferences of retail investors post Covid-19 and their causative factors, (4) to analyze the changes in returns given by investment in stocks based on the effect of Covid-19, (5) to provide investment options through the collation and analysis of investment choices by retail investors located in Dublin. Using a mixed research design, survey participants (N=100) provided data on their investor objectives, preferences, and rationale. Upon analysis, findings of the study revealed that; (1) There is a significant change in retail investor preference during the pandemic, (2) There is no significant relationship between high functioning industrial sectors and investor preferences during the pandemic and (3) There is a significant relationship between changes in investor portfolio and investor preferences. Conclusively, the impact of covid-19 on investment preferences is just a microcosm of the general impact across all spheres and aspect of the economy. However, the extent of such changes in preferences was simply measured primarily without appropriate secondary data to back it up. As such, it is important for other research studies to build on this research to provide additional information on the extent of changes in investor preferences as reflected in investment portfolios of the investors as well as the statistical data that supports it.

## Chapter 1: Introduction

### 1.1 Background to The Study

Economic changes on a regional and global level are often major influences in changing investor preferences. These preferences may vary for the different types of investors in the market hence, such activities of decision making are subject to the optimal expected utility theory. For individual or retail investors, these preferences are doubly important due to the unique position that they are in because of their individuality, the scale of investments, lower access to financial information and personal bias (Sohail *et al.*, 2020). As such situational factors may influence the investment choices of retail investors (Seth *et al.*, 2020). One such situational factor in recent times that has shifted investor objectives is the Covid-19 pandemic.

The Covid-19 pandemic began in the Chinese city of Wuhan in October 2019 has been observed to have disrupted human activities and existence from general and economic perspectives (Nicks & Do, 2020). As of September 22, 2020, the global number of cases of the Covid-19 pandemic had surpassed 31 million, with over 900,000 deaths. Apart from the human effects, the covid-19 pandemic has significant monetary, financial, and commercial consequences globally (IMF, 2020). According to the OECD (2020a), the impact of the covid-19 pandemic and the subsequent lockdown was in the form of loss in output of one-fifth to one-quarter in most economies. This, from the macroeconomic point of view, had predictably influenced a significant drop in global GDP (Gross Domestic Product), placing the global economy within the throes of recession (Abdul & Mia, 2020).

The economic fallout and uncertainty caused by the pandemic's duration has heavily influenced market volatility and, by extension, retail investor participation as a segment of the

financial services industry that is constantly feeling the pandemic's rippling effects. Furthermore, the global market lockdown enacted by regional governments may have inadvertently improved market access for this group of investors, facilitating a variety of investment preferences, especially as information technology-enabled financial services supported stock trading through an online interface (Aggarwal *et al.*, 2021a), allowing for 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 are bound to change to maximize funds. It is against this backdrop of information that the study aims to provide veritable information on the preferences of retail investors within the Irish stock market.

## **1.2 Statement Problem**

Retail investors have always existed, and unlike institutional investors, who trade on a larger size and appear to be more visible, they trade on a smaller scale to limit their losses. The unique Covid19 pandemic outbreak in 2020, on the other hand, has altered investor perceptions of stock investments. A plethora of economic literature on the effects of the pandemic on global and regional economies, have shown that there have been significant decreases in turnover and employment (Apedo Amah *et al.*, 2020; Bartlett & Morse, 2020; Chetty *et al.*, 2020), wide-scale and intermittent closures (Bartik *et al.*, 2020), increased failure risks and lower productivity levels (Kalemli Ozcan *et al.*, 2020). On the other hand, the pandemic has spawned technological and medical breakthroughs forcing a boom in certain sectors of the economy. This boom is bound to draw the attention of investors (retail and institutional) for subsequent investment. With majority of research papers focusing on the pandemic's investment patterns and influence on global economies, it is pertinent to note that there is a paucity of specific information on the changes in

investor preferences as facilitated by the pandemic. Thus, the importance of this study in filling in that knowledge gap.

### **1.3 Aim and Objectives of The Study**

The pandemic has proven to be a leveler of businesses as only the ones that remained innovative and relevant have thrived. Thus, this study aims to evaluate the effect of the Covid-19 pandemic on retail investors investment choices using the Irish stock market as a yardstick. To accomplish this aim, the following specific objectives are being considered:

- i. The impact of Covid-19 on the investment preference in stocks by the retail investors in the Irish stock market.
- ii. To understand whether retail investors are willing to invest money in stocks considering the pandemic effect.
- iii. To identify the stock preferences of retail investors post Covid-19 and their causative factors.
- iv. To analyze the changes in returns given by investment in stocks based on the effect of Covid-19.
- v. To provide investment options through the collation and analysis of investment choices by retail investors in Dublin.

### **1.4 Research Question**

This study will answer the following research questions via the effective use of its methodology:

1. Has there been a change in retail investor preference during the pandemic?

2. How has the preference of retail investors been influenced by the pandemic?
3. What is the new range of preferences of retail investors post-pandemic?

## **1.5 Scope of The Study**

The researcher's assessment on the evaluation of the effect of the covid-19 pandemic on retail investors investment choices using the Irish stock market as a yardstick is the focus of this study. The Republic of Ireland is a member of the European Union and as such provides economic data which is then streamlined, calculated, and analyzed under the umbrella of the EU. However, the Irish stock market operates independently of the European Union and as such, investments are made within the Irish jurisdiction. Furthermore, this study is focused on the investment preferences of retail investors only and such would exclude data from other investor types for the purpose of accurate analysis.

## **1.6 Limitation of The Study**

Based on the nature of the study, the following are regarded as the limitations of the study:

- The geographical scope of this study is limited to retail investors in Dublin.
- Most of the investors have basic or no knowledge of the stock markets and other contemporary investment options. They are however familiar with the traditional investing methods such as fixed deposits and treasury bills.
- Respondent's Availability: Due to the current Covid-19 pandemic, respondents might be terrified of having a face-to-face in-depth interview with the researcher. Instead, this would be done through social media at the convenience of the respondent's time.

- Time Constraint: The research duration is for a limited timeline. The researcher can however incorporate time management skills in the collection and analysis of the data to ensure timely delivery.
- Financial limitations: The nature of my research tools would rely on the internet and other paid tools to facilitate the research. The researcher intends to be as frugal as possible to manage limited resources.

## **1.7 Structure of The Study**

The first chapter explains the study's introduction and background, as well as the research's goals and objectives, as well as the research questions it wants to answer. It also outlines the research technique that will be used in the study. The literature review in Chapter Two covers an exhaustive conceptual overview of the dependent and independent variables, as well as the link between the two ideas, and then it goes into detail about the theoretical framework that will be used in the research effort.

The research technique, which includes the research strategy and philosophy, research design, data collecting and analysis, and ethical considerations, is discussed in Chapter Three. The presentation and analysis of data from both quantitative and qualitative approaches are covered in Chapter Four. The information is analyzed and understood, and a discussion argument is developed. Chapter Five summarizes the research analysis, contribution to knowledge, and presents a definitive conclusion, recommendations, and future research.

## **Chapter 2: Literature Review**

### **2.1 Theoretical Background**

This chapter establishes a conceptual framework that describes the main ideas of this study, such as investment behaviour, the effect of covid-19 on the economy's investment sector, and the retail investment segment of the Irish stock market. This chapter also presents an empirical review of the research on similar challenges within the context of the retail investment sector of the Irish economy.

### **2.2 Conceptual Review**

#### **2.2.1 Investment Behaviour**

In recent years, financial market investing has become more dynamic and diverse to reduce risk (Priyanka & Tripathi, 2019). Recently, the approach of investing in multiple financial alternatives has become popular, not just among institutional investors but among retail investors (Bikas *et al.*, 2013). The developing world's financial markets account for two-thirds of global investment (Obstfeld, 2009).

Investment entails the utilization of funds and assets to earn and obtain regular income or capital appreciation (Venkateshraj, 2015; Bishnoi, 2014). The investment concept's reasoning is difficult to grasp and is influenced by several elements (Lerner *et al.*, 2015). Researchers from several countries have analysed investor behaviour and attempted to expand our understanding of how investors might handle their investments in various states (Kaur & Kaushik, 2016). Thus, the role of investment behaviour in affecting the functioning of financial markets is essential.

According to Nguyen *et al.* (2020), three elements influence investment behaviour: risk perception, satisfaction, and profitability rate. The moderating variable in this study is the uncertainty about Covid-19 and how it affects the financial market. Global perceptions of investment behaviour and risk perceptions produced by various investors in the financial sector were documented depending on current scenarios and circumstances (Ainia & Lutfi, 2019).

Risk perception emerges from decisions made to improve investors' financial health and condition. Furthermore, the overall risk of tolerance changes over time, implying that risk perception is unique to each investor (Nguyen *et al.*, 2020). Existing research has established the following stylised facts concerning the trading of individual investors:

1. Contrarian trading: The aggregate net trading of individual investors is negatively related to both current and past results. Contrarian trading has been documented both on a cross-sectional level based on net buying (selling) of winner (loser) stocks (Kaniel *et al.*, 2008; Onishchenko and Ülkü, 2020) and a time-series level based on negative impulse responses of market wide net individual trading flows to market return shocks in VARs (Ülkü and Weber, 2013). Individual investors' contrarian trading has been considered as an implicit liquidity provision to institutional pricing pressure, providing positive average returns but possibly impeding on the integration of new data (Kaniel *et al.*, 2008; Barrot *et al.*, 2016). (Kaniel *et al.*, 2008; Eom *et al.*, 2019). One theory for the source of this contrarian trait is that individual investors try to place out-of-money limit orders, which contributes to endogenous contrarian trading driven by institutional liquidity consumption, resulting in an adverse selection process (Linnainmaa, 2010). Such trading forms are crucial for the negative association with contemporaneous returns. Also contributing to the negative link

between historical returns are behavioural factors such as the disposition effect and a belief in mean reversion. Onishchenko and Ülkü (2020) classify all these impacts as an "uninformed attempt to purchase low and sell high using recent prices as heuristic reference points."

2. Speculative positive feedback buying: As with contrarian trading, there is evidence of investor involvement with speculative positive feedback trading. Kamesaka *et al.* (2003), for example, report positive feedback trading by both foreign institutions and local individual investors in Japan, classifying the former as information-based and the latter as behavioural-based. Individual investors are frequently blamed for speculative buying frenzy that involves an element of positive feedback trading and herding in financial media and some academic research. In an example by Wang *et al.* (2017), underperformance following a high volume of stocks dominated by individual investors in the Chinese stock market. Onishchenko and Ülkü (2020) reconcile these seemingly contradictory arguments about whether individual investors are positive or negative feedback traders by demonstrating that individual investors are contrarian in institutional investor habitat (i.e., large-cap stocks) and exhibit attention driven speculative positive-feedback buying (as established).

According to research, price fluctuations, investor faith, herding government policies, broker guidance, good governance, and financial returns are important considerations, but social position, religious faiths, and family opinion play the least role in individual investors' stock selection (Mutereko, 2021).

### **2.2.2 Investment Behaviour of Retail Investors**

Retail investors differ from institutional investors in investment size, resources, research access, and professional assistance (Bhattacharya *et al.*, 2012). Furthermore, when deciding where and when to invest, retail investors are influenced by several rational and irrational variables (Seth *et al.*, 2020). Aside from that, these investors have a distinct strategy for handling their finances. Some investors, for example, save more than others or conduct more in-depth analyses before making financial decisions, whereas others are instinctive when making investments (Fünfgeld & Wang, 2009). Scholars have recognized that psychological elements play a crucial role in moulding individuals' financial behaviour and have underlined the significance of thoroughly investigating these factors (Strömbäck *et al.*, 2017). In this sense, financial attitude is an individual's fundamental understanding of money and capacity to make financial decisions (Shim *et al.*, 2009). As a result, financial attitude insights can serve as a barometer of individuals' financial knowledge, which can be learnt through education. It is consequently crucial to analyse retail investors' attitudes because their investment attitudes (Grable & Lytton, 1998), as well as their financial behaviour and knowledge (Joo & Grable, 2004), can influence their well-being and pleasure (Falahati *et al.*, 2012).

### **2.2.3 The Effect of Covid-19 on The Investment Sector**

The Covid-19 pandemic has forced governments worldwide to make the most difficult decision of all: lockdowns. Since the outbreak, lockdowns have been instituted as a containment measure, first tightly and then more loosely. The lockdown has had an impact on human activity and has nearly brought the economy to its knees. The global economic loss for 2020 has been projected between 0.1 per cent and 0.4 per cent of global GDP, driving the economy into recession (Abdul & Mia, 2020).

Major economic problems such as cessation of commercial activity, tourism, employment loss and supply-chain damage were some of the effects of lockdown (Leduc & Liu, 2020), which also harmed the financial system. For example, the restrictions imposed in the aftermath of the pandemic elevated the banking sectors' systemic risk in many impacted economies (Rizwan *et al.*, 2020), although the pandemic may also have substantial economic implications in the future as well (Goodell, 2020).

Scholars had expressed concerns about the susceptibility and fragility of economies to health pandemics before the Covid-19 pandemic began (Zach, 2003; Bloom *et al.*, 2018). The suspicion of stock market vulnerability was validated when Covid-19 was designated a pandemic in March 2020, resulting in a drop in the value of global markets. 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 has been more dangerous than the 2008 crisis (Georgieva, 2020), with financial markets coming perilously close to collapsing in its aftermath (Adam, 2020). Comparatively, the 2008 financial crisis was solely ascribed to the collapse of institutional structures and practices in the global economy, whereas the epidemic has affected all parts of human existence, making it considerably harder to regulate. Additionally, the 2008 crisis was primarily a financial upheaval that impacted the global economy, resulting in a drop in GDP (World Bank, 2009). As the 2008 financial crisis spread, central banks worldwide implemented several monetary policy measures to help stabilize prices and financial markets (Collingro & Frenkel, 2020). In contrast, in reaction to the Covid-19 pandemic, governments prioritized public health measures over economic recovery strategies.

In addition to its national and global impact, the panic caused by the pandemic's life-threatening component may have influenced the mindset and behaviour of retail investors, forcing

them to make sub-optimal investment decisions. The historical literature has established the relationship between panic and stock market activity, indicating the role of sentiment and irrational thought processes in investment decisions (Aggarwal *et al.*, 2021b). Scholars, for example, have noted that the panic induced by terrorist attacks has resulted in temporary declines within the stock market. This insight is relevant in the current context because academics have linked the pandemic to terrorist attacks due to the fear, panic, and uncertainty it has instilled (Goodell, 2020; Ortmann *et al.*, 2020).

The movement of stock markets around the world confirmed the pandemic's devastating impact on investors. All markets fell precipitously in March 2020, one after the other. The US market, which had only touched a circuit breaker once in 1997, did so four times in ten days in March 2020. (Zhang *et al.*, 2020). The situation was similar in Europe and Asia, with the FTSE (UK's top index) falling more than 10% in a single day and Japan losing more than 20% of its peak achieved in December 2019. (Vishnoi & Mookerjee, 2020). Such volatility not only reduced aggregate market capitalization but also diminished retail investor wealth, potentially influencing their short and long-run investing decisions and choices.

#### **2.2.4 The Irish Stock Exchange**

The Irish stock exchange became legally recognized in 1799, with the passing of the Exchange (Dublin) Act by the Irish Parliament. The exchange was originally based on the Royal Exchange and was designed to allow businessmen to sell goods and commodities as well as trade bills of exchange (Mulligan, 1996). The ISE has included several regional exchanges throughout its history, including the Cork and Dublin exchanges. The Irish stock exchange merged with the British and other Irish stock exchanges in 1973 to form the International Stock Exchange of Great Britain and Ireland (now called the London Stock Exchange).

It regained its independence in 1995, and in April 2014, it demutualised, changing its corporate structure, and becoming a public limited company owned by several stockbroking firms. Four years later, it was purchased by Euronext, and renamed as Euronext Dublin (Live.euronext.com, n.d.).

ISE (now Euronext Dublin) operates four markets: the Main Securities Market (MSM), the primary market for Irish and international companies; the Enterprise Securities Market (ESM), an equity market intended for growth companies; the Global Exchange Market (GEM), a specialist debt market for professional investors; and the Atlantic Securities Market (ASM), a market dedicated to companies seeking to dual list in Ireland and the United States (Live.euronext.com, n.d.).

The ISE provides internal trade and overseas membership for trading in shares, ETFs, Irish Government bonds, and other equities on a global scale, using world-class, easily available, and cost-effective trading and post-trade infrastructure.

As the main centre of liquidity in Irish shares, The ISE has two debt securities markets: the Global Exchange Market (GEM), an exchange-regulated market and multilateral trading facility (MTF) for banks, companies, and sovereigns listing debt, and the Main Securities Market (MSM). Vodafone plc, Whirlpool, Canada Pension Plan Investment Board, Kingdom of Saudi Arabia, Barclays, Goldman Sachs, Ryanair, Coca-Cola, and Ferrari are among the major global companies that list debt on ISE's markets (Live.euronext.com, n.d.).

In 2017, the ISE said it ranked first in the world for bond and investment fund listings, with over 36,700 securities listed; had the world's largest-ever Sukuk listing, as well as sovereigns, green bonds, banks, European, Middle East, North and Latin American, and Chinese corporates

among 10,000 new debt listings; and raised 5.1 billion euros in equity funds, including AIB(Allied Irish Bank), Europe's largest IPO in 2017 (Investopedia, n.d.).

## **2.3 Theoretical Framework**

Previous studies have provided several theories to explain investor behaviour. These theories provide a logical backdrop to the concepts being discussed and help relate concepts with each other. Based on the aim of the study, the chosen theories are Prospect and Heuristic theories.

### **2.3.1 Prospect Theory**

Prospect theory holds that investment decisions should be based on the probable gain rather than the decision's efficacy. It also claims that several psychological factors impact investor decisions. It has been noticed that people are more risk averse during bullish periods but less risk averse during negative periods.

An alternative to the expect utility theory, the prospect theory hypothesizes that decision makers prefer certain conclusions over possible outcomes, which is referred to as the certainty effect. This effect increases risk aversion as investors face persuaded gains and risk seeking as they face specific losses (Kahneman and Tversky, 1979). Without a doubt, it can be argued this theory and its applications can enable the impacts of framing, nonlinear preferences, reliance on source, and loss aversion dominate investor rational decision-making (Tversky and Kahneman, 1992). Nonetheless, prospect theory does not suggest that market reaction or the disclosure of any economic event will influence an investor's decision. It simply implies that a person's risk-taking strategy in any known conditions is determined by the individual's specific economic interpretation, and if the incident is viewed favourably, the individual is more likely to be risk averse, and vice versa (Bovi, 2009).

According to Barberis, Mukherjee, and Wang (2016), when making an investment decision, investors mentally visualize the stock distribution in the manner suggested by prospect theory. As a result, investors orient their portfolios toward equities with appealing previous return distributions under prospect theory, causing them to become overvalued and generate subsequent low returns.

### **2.3.2 Heuristics Theory**

Since "rules of thumb" are a phenomenon that tends to make decision making simpler and easier, especially in complex circumstances and under uncertain settings, they are particularly useful in providing some meaning to the "Heuristic Theory" (Ritter, 2003). This theory includes the process of lowering such complications through probability of assessing and simple judgments to forecast the values (Kahneman & Tversky, 1979). Heuristic effects are important under general settings, particularly when time is restricted (Waweru *et al.*, 2008). On the other side, other researchers attempted to demonstrate that heuristic effects frequently result in bias (Kahneman & Tversky, 1979; Waweru *et al.*, 2008). It is widely accepted that Kahneman and Tversky (1979), who are widely regarded as the first writers on the issue, investigated three other critical aspects, which were labeled as: representativeness, availability bias, and anchoring, and incorporated them in the heuristic theory. Waweru *et al.* (2008) added two more aspects to the heuristic theory: 'overconfidence' and 'gambler's fallacy.'

It is widely held that 'overconfidence' promotes persistence, mental capacity, drive, and risk tolerance. To be more specific, it aids in the promotion of professional efficiency and performance, as well as the enhancement of others' perceptions and skills to accomplish faster promotions and longer investment durations (Oberlechner & Osler, 2004; Ngoc *et al.*, 2013). For example, if an investor aims to overestimate his ability to gain appropriate knowledge to become

fully acquainted with the data at hand, the previous projections may be underestimated. As a result, an 'overconfident investor' is someone who overestimates the precision and accuracy of his own informative signals instead of relying on public informative signals (Daniel *et al.*, 1998; Daniel and Hirshleifer, 2015). Such folks are referred to as "overconfident investors" because they believe their decisions are better than they appear to be. (Trivers, 1991). Such people's behaviour is regarded as "overconfident" in psychological literature and contemporary finance ideas. More research has revealed that overconfidence in human behaviour is the primary contributing factor that leads to extraordinary overtrading in the financial market by investors. Barber and Odean (2001) contributed to the argument that the increased volume trading might be attributed to investors' overconfidence, and that they frequently regret their own previous judgements and decisions as being incomparable with the assessments of others.

## **2.4 Empirical Review of Literature**

Toma (2015) explored the psychological aspects influencing investment in Bucharest's Romanian Stock Exchange. In this market, investors displayed overconfidence, herding behavior, the disposition effect, and the component of representativeness bias. The age of investors and their frequency of trading had the greatest impact on market returns and profitability.

Vieira and Pereira (2015) investigated the behavior of investors in the Portuguese financial market. They discovered that herding intensity is negative and statistically significant, indicating that investors imitate one another in a systematic manner rather than exploiting private information and acting irrationally.

Aydogan (2016) evaluated the influence of investor sentiment on volatility in nine stock markets from January 2004 to June 2015, capturing the asymmetry in terms of negative and

positive news. The findings suggest that in some countries, stock market volatility is sensitive to negative shocks in investor mood, lending credence to the existence of the leverage effect. Surprisingly, such occurrences had no effect on Ireland.

Using publicly available retail transaction data, Boehmer *et al.* (2020) investigated retail investors' purchases and sales of equities for six years, from January 2010 to December 2015. They discovered that retail investors who net acquire individual stocks outperformed stocks with a negative imbalance, and the level was about 5% annualized over the next few weeks. Furthermore, retail investors have a superior understanding of small stocks with lower pricing, but they lack the capacity to time the market.

Dyakov and Wipplinger (2020) used data from 13,807 trades in active mutual funds between 2001 and 2014 to explore the relationship between institutional ownership, trading, and succeeding risk-adjusted revenues. Their findings demonstrated a negligible positive relationship between institutional ownership and impending risk-adjusted revenues. Simultaneously, they discovered that positive future revenues cannot be predicted using institutional trading in addition to some of the measurements.

Glossner *et al.* (2020) explored the critical role institutional investors played in the Covid-19 pandemic-related market crisis in the United States. Using data from a large discount brokerage firm, they discovered that active short-term domestic institutional investors performed poorly. In addition, an in-depth investigation of the swings in the first quarter of 2020 revealed that hedge funds sold stocks arbitrarily. Investment advisors, pension funds, and mutual funds, on the other hand, preferred stocks with more cash and less debt. Meanwhile, ordinary investors served as liquidity providers.

Ikizlerli (2019) investigated the influence of institutional investors on the volatility of returns to South Korea's stock market from 4 January 2000 to 15 September 2017. The study discovered that the volatility of institutional investors' returns has risen at the market rate. However, no evidence has been given to confirm that the South Korean equity market's downturn harmed institutional investors' trading operations.

Caporale, Karanasos, Kartsaklas, and Yfanti (2020) investigated how institutional and non-institutional investors affected stock market volatility. During the Asian financial crisis, they discovered an unequal influence on trading with buy and sell orders, which stabilize and destabilize respectively. Their findings also demonstrated that purchasing and selling trades had a beneficial impact on volatility across all subsamples. Meanwhile, retail investors' buying and selling behaviours have deteriorated, demonstrating that having less knowledge has influenced their psychological biases in buying and selling decisions. Finally, before the onset of the crisis, buying foreign trades had a negative influence on volatility, but selling had a positive impact on volatility. Purchasing and selling trades, on the other hand, produced a positive response to volatility before the onset of the crisis. Furthermore, buy trades were more informative than sell trades, which may be classified as momentum trades.

Liu *et al.* (2020) examined the short-term impact of the Covid-19 pandemic on the top 21 stock market indexes. Using the event technique, the study found that stocks in nations hit by the Covid-19 pandemic plummeted quickly. Asian stock markets (for example, Japan, South Korea, and Singapore) experienced more negative anomalous returns than bordering regions. Furthermore, investors' concern acted as a moderator for the coronavirus's impact on the stock markets.

Trifan (2020) investigated the relationship between numerous behavioral biases and stock market returns in Romania, Poland, Hungary, Slovenia, the Slovak Republic, and the Czech Republic and discovered that judgment and emotions had a substantial impact on the stock market. According to the findings, investors in Poland are pessimistic, whereas optimism drives trading activity in Romania, Hungary, and the Czech Republic.

Obayori and George-Anokwuru (2020) examined the effects of the global financial crisis on Nigeria's capital market from 1980 to 2018. Using the AutoRegressive Distributed Lag (ARDL) model to analyse time-series data, they discovered that, on the one hand, Nigeria's capital market experienced an indirect impact over a short period. Furthermore, the liquidity crisis — a substitute for the loss of foreign reserves — had a significant influence on the capital market. The long-run results, on the other hand, revealed long-run relationships between the variables.

## **2.5 Summary and Conclusion**

This section is focused on the extensivity of literature explored on the back of the research topic. The review of these studies has seen a strong focus on investment behaviour as a foundation upon which investor preferences can be built. The occurrence of the covid-19 pandemic has upended all the traditional investment preferences, leaving behind sectors that have remained functional and highly successful. Taking this into consideration, it imperative to add that this study is as novel as it is intersectional, with important implications for understanding investor behaviour in future crisis scenarios.

## Chapter 3: Research Methodology

### 3.1 Research Design

The study aims to evaluate the impact of the Covid 19 pandemic on retail investors investment choices using the Irish stock market as a yardstick. A cross-sectional survey research method is adopted for this study. This is deemed appropriate since survey design, in general, may be utilized to properly study problems in realistic settings. The survey technique also enables the researcher to study several factors and evaluate data using multivariate statistics. A survey uses a questionnaire or interviews to collect data about practices and situational views at a certain point in time. A case study is essentially an attempt to describe real-world interactions. The positivist research model, which includes a critical realism ontological position and rational epistemology, is used in this cross-sectional investigation. The philosophy is positivism, and the approach is scientific and positivist because the study focuses on acquiring objective facts by statistically quantifying the relationship between research variables (MacKenzie and Knipe, 2006; Mack, 2010).

The goal was to have unambiguous access to existing reality; thus, the preceding ontology and epistemology were considered because they had allowed researchers to explore factual facts in an acceptable manner (MacKenzie and Knipe, 2006; Mack, 2010). Ontology refers to a researcher's beliefs about what is real and what is believed to be true (Bryman 2008). Positivism and Interpretivism are the two major approaches to study methodology in social sciences. Positivists prefer quantitative scientific procedures, whilst Interpretivists prefer qualitative humanistic ones. An interpretivist view of social research would be far more qualitative, utilizing methods like interviews or participant observation, whereas positivists prefer quantitative methods like social surveys, questionnaires, and official statistics due to their reliability and

representativeness. Positivism is regarded to be a sort of empiricism advancement because it is frequently associated with experimentation and quantitative study.

Empiricism is one of two varieties of foundationalist philosophy – rationalist or empiricist that thinks information should be impartial and unbiased based on the researcher's beliefs and principles, according to Phillips and Burbules (2000). Interpretivists criticize scientific sociology' (Positivism) because many of the numbers upon which it is based are socially produced. However, positivists argue that research on the social world uses the same methods and procedures that "natural" sciences like biology and physics do. Researchers should use "scientific" methodologies to identify the rules that govern societies, just as scientists have discovered the laws that regulate the physical world. According to positivists, the reality is the same for everyone, and measurements tell us what that reality is. As a result, positivism is used in the survey since it is suited to obtaining meaningful information about retail investors investment behaviour and choices using the Irish stock market. In quantitative research, researchers generally collect multiple types of data to provide a more complete picture of what is going on in the field.

Qualitative research data, on the other hand, is usually always in the form of what people say or in words. This information is typically derived from interviews, documents such as newspapers or journals, observation, and audiovisual assets such as movies or audio. Quantitative research is often deductive, depending on existing theories and facts to help generate research questions and define how data is collected and processed (Creswell, 2009). The final report of quantitative research is stricter and in the form of a statistical statement that informs the decision to use a quantitative research method.

### **3.2 Population of the Study.**

The segment of the population selected for this research is retail investors in Dublin. The number of respondents that would participate in this process would be determined through theoretical saturation when there is an overarching response made over time with no new information added (Faulkner and Trotter, 2017).

Using a mixed method, the researcher would adopt probability sampling and non-probability sampling in the quantitative and qualitative approaches. The qualitative approach would be carried out through snowball purposeful sampling while the quantitative method will be done through Stratified Random Sampling.

### **3.3 Sample Size and Sampling Technique**

Each type of quantitative study necessitates the application of well-proven methodologies to produce statistically valid and meaningful results. To achieve such results, a validated (through scientific techniques) estimation of sample size must be performed. Within the field of research, the word "sample size" refers to the percentage of a specified population that will be investigated.

The sample size is determined by the study's research design, the method used, and the model established by previous research endeavors (Tejumaye, 2017). The sample size is usually estimated numerically as a representation of the target population using multiple formulae according to each sampling procedure. Because convenience sampling is used, the sample size chosen has no direct interpretation (and thus no influence) on the data to be collected. The survey, on the other hand, will be done with 150 people picked at random.

### **3.4 Data Sourcing and Collection**

The researcher would make use of secondary and primary data collection. The secondary data collected would be texts from books, journals, and other credit worthy publications that will help in building the literature review and theoretical framework. Access to most of the secondary data would be provided by the Dublin Business School Library. Primary data will be collected qualitatively via interviews and quantitatively via surveys.

The qualitative section of the primary data involves the use of in-depth interview to extract information from the sample population. The information would then be collated and analyzed using the Nvivo qualitative data analysis software. On the other hand, the quantitative approach would employ the use of Google forms as the questionnaire survey tool. Data collected would be assigned to the database system, the data will be transferred to SPSS data analytics software package and R programming software to assist in the data analysis. Quantitative data will be analyzed using descriptive and inferential statistics. Furthermore, the Regression analysis test and the Pearson Product Moment Correlation (PPC) will be used to analyze collected data.

### **3.5 Validity and Reliability of Instrument**

To measure the validity and reliability of the proposed instrument to be used in this study, copies of the questionnaire will be shared among randomly selected investor population. To establish the reliability co-efficient of the instrument, the Cronbach-alpha test/method will be conducted. The instrument's validity will be done in three phases: Face validity, Concurrent validity, and Content validity.

## **Chapter 4: Analysis of Results**

### **4.1 Analysis of Data and Interpretation of Result**

This section presents the data analysis of the research study and then interprets the results.

The following is the study's goal:

- i. The impact of Covid-19 on the investment preference in stocks by the retail investors in the Irish stock market.
- ii. To understand whether retail investors are willing to invest money in stocks considering the pandemic effect.
- iii. To identify the stock preferences of retail investors post COVID 19 and their causative factors.
- iv. To analyze the changes in returns given by investment in stocks based on the effect of Covid-19.
- v. To provide investment options through the collation and analysis of investment choices by retail investors located in Dublin.

### **4.2. Summary Statistics**

A total of 101 respondents confirmed that the information provided in the questionnaire is well read and understood and they are willing to take part in the survey. Statistical Packages Social Science (SPSS) version 26 was used to treat the data.

Table 1 Gender of Respondents.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	72	71.3	71.3	71.3
	Female	29	28.7	28.7	100.0
	Total	101	100.0	100.0	

Of these one hundred and one (101) respondents, 72 are males and 29 females.

Table 2 Age of Respondents.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-30 years	31	30.7	30.7	30.7
	31-40 years	42	41.6	41.6	72.3
	41-50 years	24	23.8	23.8	96.0
	> 50 years	4	4.0	4.0	100.0
	Total	101	100.0	100.0	

31-40 years is the most frequent age in the survey (41.6%), followed by age between 20-30 years (30.7%). 23.8% of the questionnaire participants are between 41-50 years old. The least are those older than 50 years and they are 4% of the survey population.

Table 3 Marital Status of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	70	69.3	69.3	69.3
	Married	28	27.7	27.7	97.0
	Separated	3	3.0	3.0	100.0
	Total	101	100.0	100.0	

By marital status, seventy (70) out of the 101 respondents are single, 28 married and 3 separated.

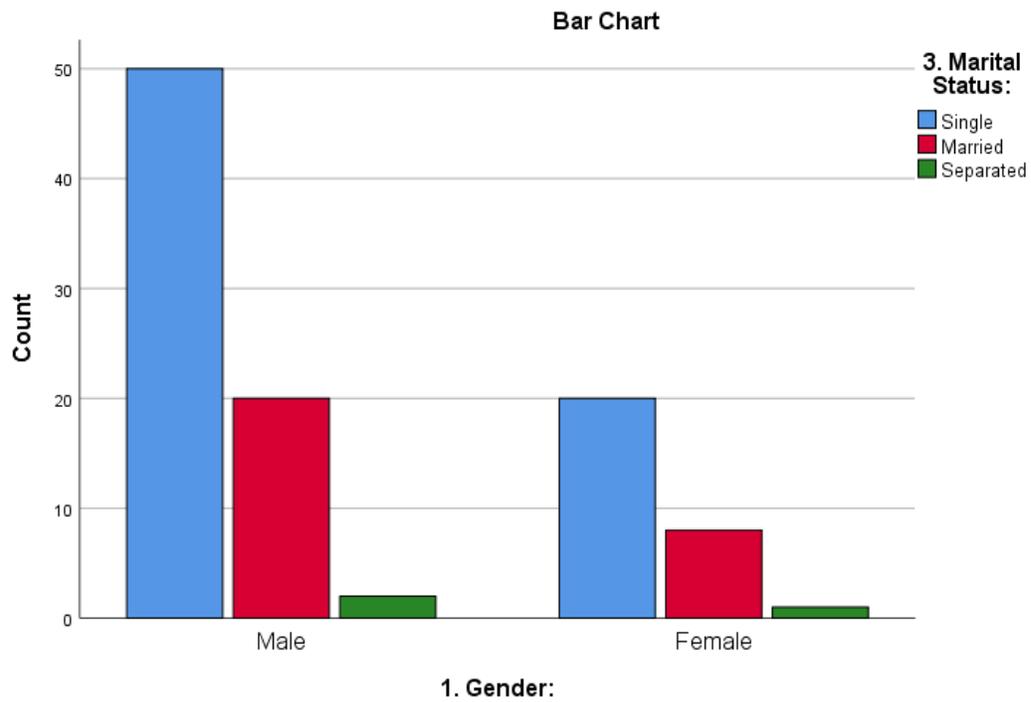


Figure 1

Table 4 Academic Qualifications of Respondents.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Level 6	1	1.0	1.0	1.0
	National diploma	1	1.0	1.0	2.0
	School Leaving Certificate	8	7.9	7.9	9.9
	BSc	39	38.6	38.6	48.5
	MSc	50	49.5	49.5	98.0
	Phd	2	2.0	2.0	100.0
	Total	101	100.0	100.0	

In terms of academic qualification, the number of respondents with Masters' degree and Bachelors' degree ousted the other categories with 49.5% and 38.6% respectively out of the total percentage. Respondents with level 6 and national diploma are the least participants of this survey.

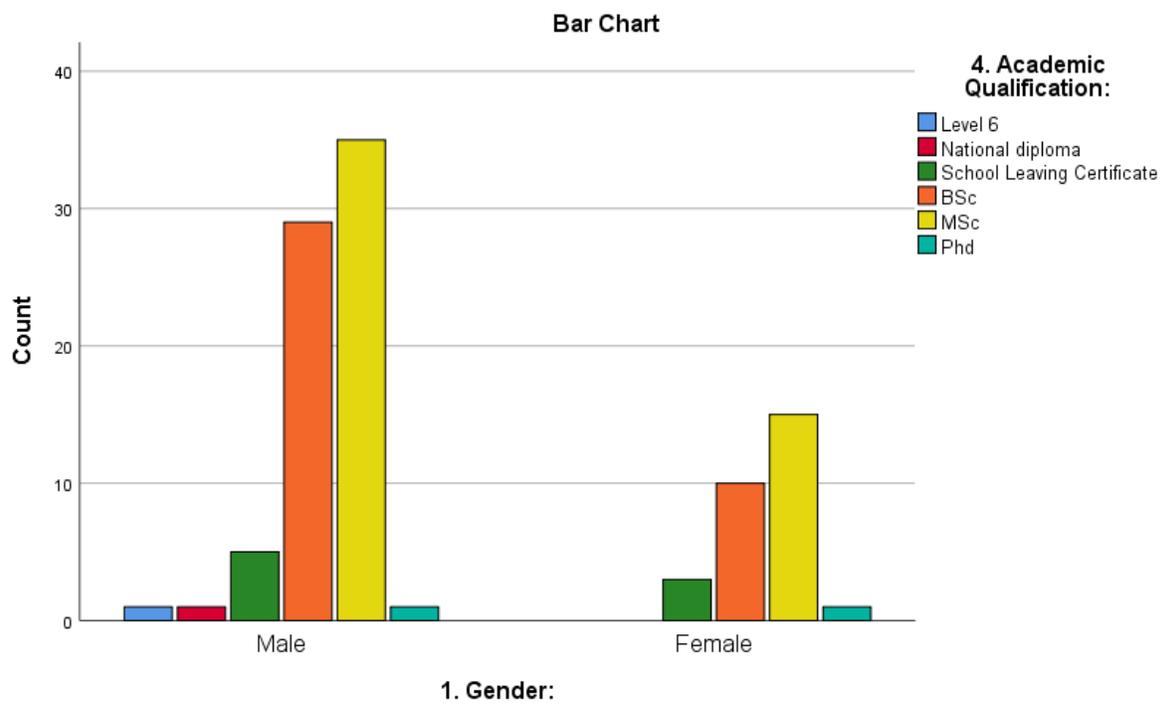


Figure 2

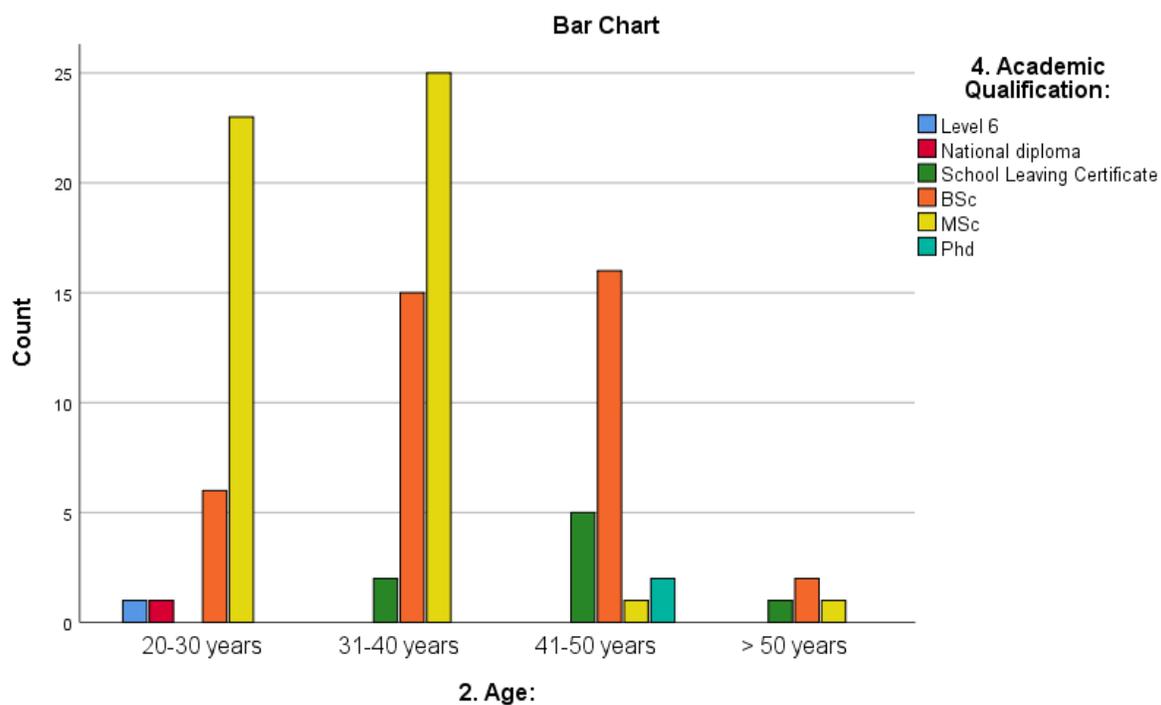


Figure 3

Table 5 Occupation of Respondent.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student	1	1.0	1.0	1.0
	Part time	1	1.0	1.0	2.0
	Self-Employed	28	27.7	27.7	29.7
	Engineer	1	1.0	1.0	30.7
	Private Services	59	58.4	58.4	89.1
	Government Services	11	10.9	10.9	100.0
	Total	101	100.0	100.0	

By occupation, participants who render services to private organizations are the most frequent (58.4%), followed by those that are self-employed and then those that are working with the government (10.9%). Participants that are students, part-time jobbers and engineers share 1% each of the total percentage.

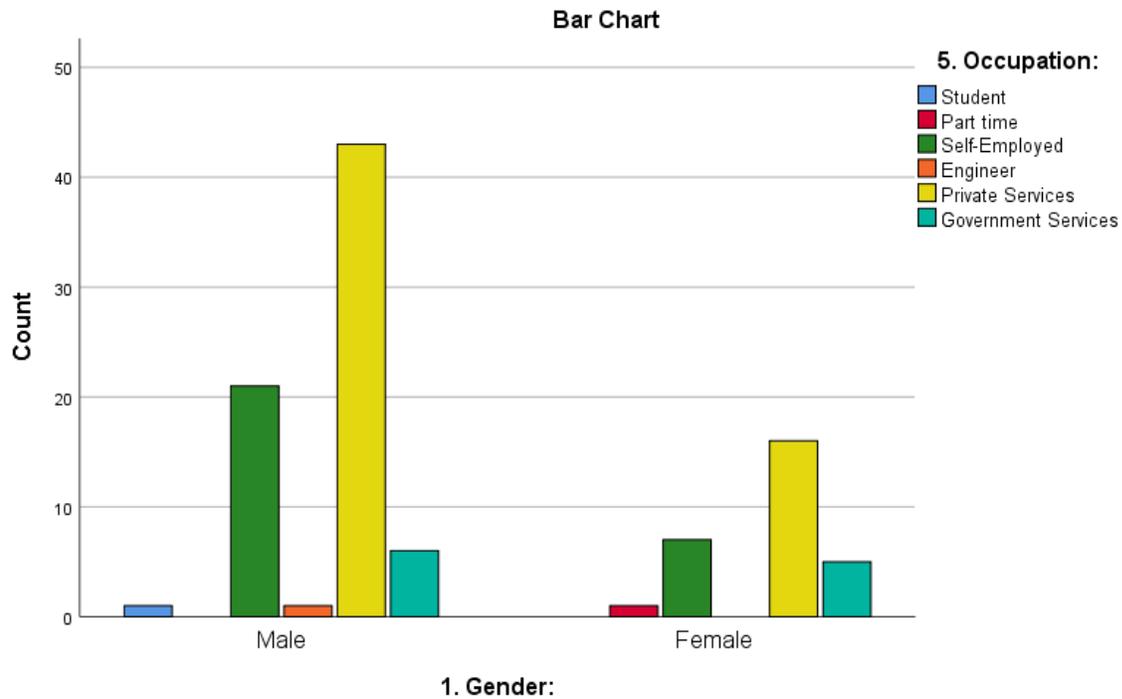


Figure 4

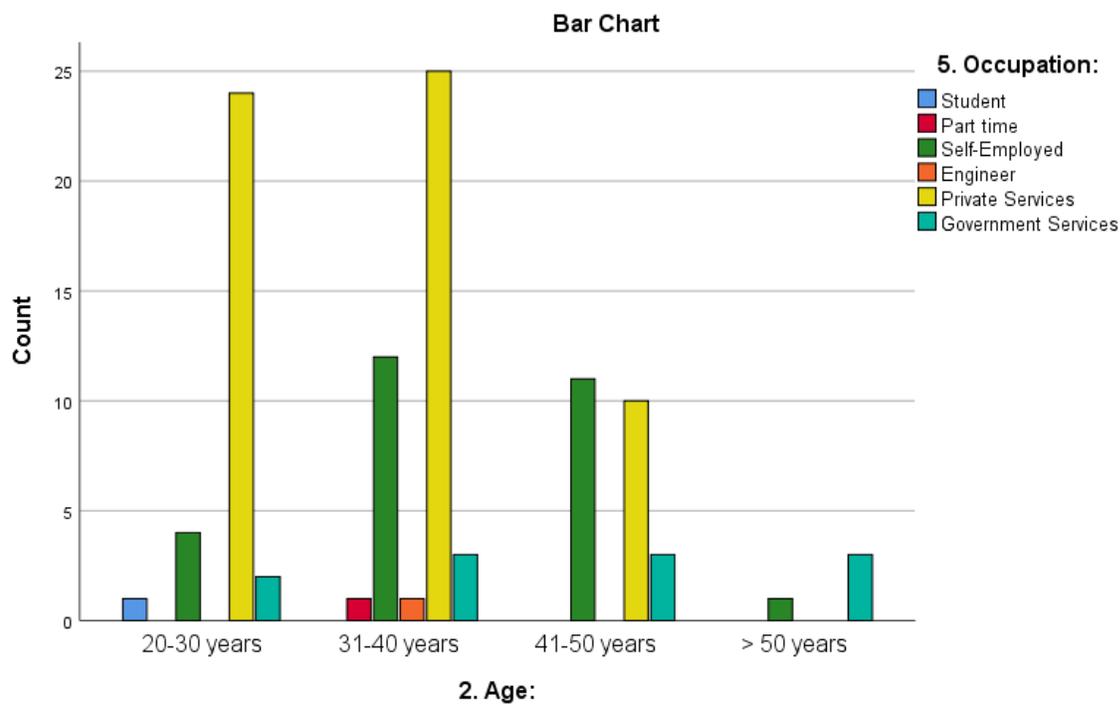


Figure 5

Table 6 Annual Income (in Euros).

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below 30,000	27	26.7	26.7	26.7
	30,000 - 50,000	26	25.7	25.7	52.5
	50,000 - 70,000	33	32.7	32.7	85.1
	70,000 - 100,000	14	13.9	13.9	99.0
	Above 100,000	1	1.0	1.0	100.0
	Total	101	100.0	100.0	

In terms of annual income, participants who earned between 50,000 to 70,000 Euros were the most frequent (35.7%), followed by participants earning below 30,000 Euros (29.7%) then the

participants earning between 30,000 to 50,000 Euros (25.7%) and then participants earning between 70,000 to 100,000 Euros. Participants earning above 100,000 Euros were recorded as the smallest group in the survey with a 1% representation.

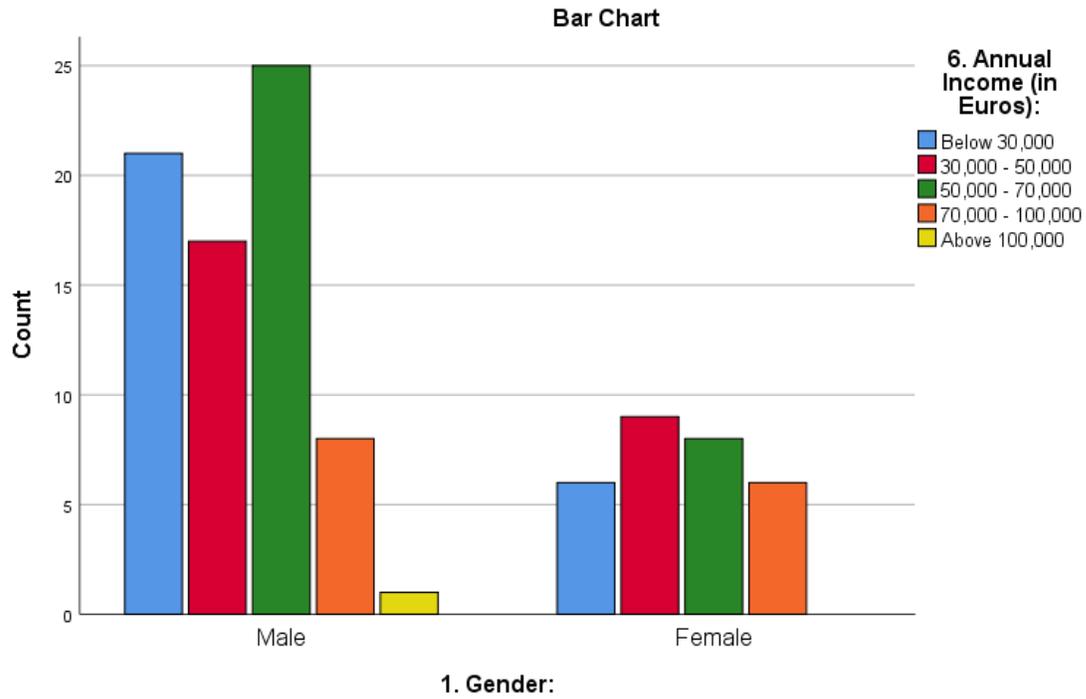


Figure 6

Table 7 How would you describe your overall financial situation?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	poor	14	13.9	13.9	13.9
	Stable	63	62.4	62.4	76.2
	Rich	19	18.8	18.8	95.0
	Wealthy	5	5.0	5.0	100.0
	Total	101	100.0	100.0	

In describing overall financial situation, majority (62.4%) asserted that they are stable, 18.8% described themselves as rich, 13.9% described themselves as poor while only 5% said they are wealthy

Table 8 What do you consider as factors that influence your tendency to invest?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Funds	25	24.8	24.8	24.8
	Risks	16	15.8	15.8	40.6
	Professional Advice	20	19.8	19.8	60.4
	Perceived preferences	16	15.8	15.8	76.2
	All of the above	22	21.8	21.8	98.0
	None of the above	2	2.0	2.0	100.0
	Total	101	100.0	100.0	

By considering investment, 24.8% of respondents said that availability of funds influences their tendency to invest, 19.8% of the respondents noted that professional advice influences their decision to invest, 21.8% decide on what to invest on by considering various factors including funds, risks, perceived preferences, and professional advice while 2% do not engage in investment.

Table 9 How much money are you willing to invest (in percentage)?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-10%	30	29.7	29.7	29.7
	11-20%	39	38.6	38.6	68.3
	21-30%	25	24.8	24.8	93.1
	31-40%	7	6.9	6.9	100.0
	Total	101	100.0	100.0	

In terms of amount investors were willing to invest, 38.6% of respondents were willing to invest 11-20% of their funds and this made up the majority, followed by 29.7% and 24.8% willing to invest 1-10% and 21-30% of their funds respectively.

Table 10 Investment sector preference.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Programming and Computer technology	36	35.6	35.6	35.6
	Financial Institutions	11	10.9	10.9	46.5
	Energy	11	10.9	10.9	57.4
	Healthcare and Pharmaceuticals	21	20.8	20.8	78.2
	Public Services	9	8.9	8.9	87.1
	Building and Manufacturing	13	12.9	12.9	100.0
	Total	101	100.0	100.0	

For investment sector preference, 35.6% of the participants indicated that they would prefer to invest in programming and computer technology while 20.8% indicated that healthcare and pharmaceuticals would be the investment sector of choice, followed by building and manufacturing with 12.9% of the participants. Furthermore, energy and financial institutions as investment sectors were tied at 10.9% and public services was the least preferred at 8.9%.

Table 11 Investment Frequency.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Monthly	50	49.5	49.5	49.5
	Quarterly	28	27.7	27.7	77.2
	Annually	15	14.9	14.9	92.1
	Bi-Annually	8	7.9	7.9	100.0
	Total	101	100.0	100.0	

Analyzing the frequency of investments being made by the participants, 49.5% of the participants reported that it was done monthly, followed by 27.7% who invested on a quarterly basis while 14.9% and 7.9% of the participants invest on annual and bi-annual bases respectively.

Table 12 Return on investment (ROI) time frame.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Short term	29	28.7	28.7	28.7
	Mid term	38	37.6	37.6	66.3
	Long term	34	33.7	33.7	100.0
	Total	101	100.0	100.0	

As for return on investment (ROI), 37.6% of the participants indicate that they invest for mid-term returns followed by 33.7% for long-term and 28.7% for short term returns on investment respectively.

Table 13 Reason for Investment.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Long term profit seeking/freedom from risk	31	30.7	30.7	30.7
	Future security	49	48.5	48.5	79.2
	Short term profit seeking/Steady Income	8	7.9	7.9	87.1
	Tax benefits	11	10.9	10.9	98.0
	Others	2	2.0	2.0	100.0
	Total	101	100.0	100.0	

48.5% of the participants revealed that they invested for the sole purpose of future securities, followed by 30.7% for long term profit and 10.9% for tax benefits. Furthermore, 7.9% and 2% of the participants indicated that they invested for short term profit and others respectively.

Table 14 Type of Investment?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stocks	37	36.6	36.6	36.6
	Investments	1	1.0	1.0	37.6
	Business	1	1.0	1.0	38.6
	Mutual funds and ETFs	26	25.7	25.7	64.4
	Tech	7	6.9	6.9	71.3

Securities and Bonds	14	13.9	13.9	85.1
Real estates	1	1.0	1.0	86.1
Crypto	2	2.0	2.0	88.1
Annuities	6	5.9	5.9	94.1
Predicting	1	1.0	1.0	95.0
Bank Products	5	5.0	5.0	100.0
Total	101	100.0	100.0	

For the different types of investment as seen in table, 36.6% of the participants indicated that their investment portfolio comprised largely of stocks, followed by 25.7% of the participants investing in mutual funds and ETFs and 13.9% for securities and bonds. 6.9%, 5.9% 5% and 2% of the participants indicated that they invested in tech, annuities, bank products and cryptocurrencies respectively. Other types of investment represented in the survey such as investments, business, real estates and predicting all recorded 1% each.

Table 15 Which of the following is most likely to influence your investment decision?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Regular Income/Liquidity	19	18.8	18.8	18.8
	Expectations about high rate of returns	32	31.7	31.7	50.5
	Safety and Security	26	25.7	25.7	76.2
	Risk Tolerance	24	23.8	23.8	100.0
	Total	101	100.0	100.0	

For factors that influence investment decision, 31.7% of the participants pointed to expectations on high returns 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 the participants indicated that liquidity and regular income contributed to their overall investment decisions.

Table 16 How stable is the Irish Stock market?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Stable	19	18.8	18.8	18.8
	Uncertain	56	55.4	55.4	74.3
	Unstable	26	25.7	25.7	100.0
	Total	101	100.0	100.0	

On the stability of the Irish stock market, 55.4% of the participants admitted that they were unsure whether the Irish market is unstable or not while 25.7% of the participants perceived the ISE as unstable with a high volatility rate. Conversely, 18.8% of the participants perceived the ISE as stable with low volatility.

Table 17 How confident are you in your investment portfolio when covid-19 became a global concern?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Confident	14	13.9	13.9	13.9
	Not confident	23	22.8	22.8	36.6
	Indifferent	35	34.7	34.7	71.3

Scared	22	21.8	21.8	93.1
Very confident	7	6.9	6.9	100.0
Total	101	100.0	100.0	

Addressing investor confidence in their portfolios during Covid-19, 34.7% of the participants indicated indifference on how how their portfolio was doing during the height of the pandemic followed by 22.8% of the participants who indicated their lack of confidence in their portfolio then 21.8% of the participants who indicated their fear of their portfolio doing poorly. Furthermore, 13.9% were confident about their investment portfolio doing well during the pandemic, 6.9% were very confident about their portfolio's performance during the pandemic.

Table 18 Diversity of investment portfolio pre-covid19.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Moderate	36	35.6	35.6	35.6
	Not diverse	35	34.7	34.7	70.3
	Diverse	21	20.8	20.8	91.1
	Very Diverse	9	8.9	8.9	100.0
	Total	101	100.0	100.0	

Analyzing the diversity of investor participant's portfolio before covid-19, 35.6% of the participants said their investment portfolios before the onset of Covid-19 were a moderate mix, followed by 34.7% who reported to having a single type of investment that lacked diversity pre-Covid-19 and 20.8% of the participants that said they had portfolios that were diversified across

different investment types before the pandemic. Finally, 8.9% of the participants had portfolios that were well diversified.

Table 19 Diversity of investment portfolio post-covid19.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Moderate	35	34.7	34.7	34.7
	Not diverse	14	13.9	13.9	48.5
	Diverse	38	37.6	37.6	86.1
	Very diverse	14	13.9	13.9	100.0
	Total	101	100.0	100.0	

Alternatively, data collated on the diversity of investor participant's portfolio after the initial Covid-19 pandemic indicated that 37.6% of the participants had diversified their investment portfolios followed by 34.7% of the participants had a moderate mix of investment portfolios. Participants who had single type investments and very diverse investment portfolios each had 13.9% of the total sampled population during the study.

Table 20 After the events of Covid19, what sectors would you think it would be best to invest in?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cryptocurrency	23	22.8	22.8	22.8
	Telecommunications	10	9.9	9.9	32.7
	Healthcare and Pharmaceuticals	43	42.6	42.6	75.2
	Shipping and Transportation	2	2.0	2.0	77.2
	Energy	9	8.9	8.9	86.1
	Fast Moving Consumer Goods	10	9.9	9.9	96.0
	Banking	2	2.0	2.0	98.0
	Engineering and Mining	2	2.0	2.0	100.0
	Total	101	100.0	100.0	

Analyzing the best sectors to invest in post covid-19 by the participants, 42.6% of the participants revealed that they had plans to invest in healthcare and pharmaceuticals due to their performances during the heights of the covid-19 pandemic and the lockdown. 22.8% of the participants revealed that cryptocurrency was their investment of choice while those who had telecommunications and fast-moving consumer goods (FMCG) in mind were represented by 9.9% each. Furthermore, energy and shipping and transportation sectors were not considered by large groups as they were represented with 8.9% and 2% respectively.

### 4.3 Regression Analysis

The research hypotheses are, in theory, a direct indication of the research questions posed. The following hypotheses were developed in response to the research questions:

1. There is no significant change in retail investor preference during the pandemic.
2. There is no significant relationship between high functioning industrial sectors and investor preferences during the pandemic.
3. There is no significant relationship between changes in investor portfolio and investor preferences.

Regression analysis of the hypothesis are being addressed below:

**Hypothesis One:** There is no significant change in retail investor preference during the pandemic.

Table 21 R-Regression Table for the first Hypothesis

	<b>Estimate</b>	<b>Std. Error</b>	<b>t value</b>	<b>Pr(&gt; t )</b>
<b>(Intercept)</b>	1.83631	0.22118	8.302	6.91e-13***
<b>sB14</b>	0.08027	0.06669	1.204	0.232

**Source: R-programming Output.**

Regression analysis using R-programming software above shows that there is a statistically significant relationship in retail investor preference during the height of the pandemic and the subsequent lockdown. This statistical relationship between the investor preference and the covid-19 event is seen in table 21 (at  $\beta = 0.080$ ;  $t = 1.204$ ,  $p = 0.232$ ) revealed that there is a significant change in retail investor preference during the pandemic. Thus, it can be surmised that the regression analysis rejects the null hypothesis and accepts the alternate hypothesis which is there is a significant change in retail investor preference during the pandemic.

**Hypothesis Two:** There is no significant relationship between high functioning industrial sectors and investor preferences during the pandemic.

Table 22 R-Regression Table for the Second Hypothesis

	<b>Estimate</b>	<b>Std. Error</b>	<b>t value</b>	<b>Pr(&gt; t )</b>
<b>(Intercept)</b>	3.3235	0.4742	7.009	2.97e-10 ***
<b>sB14</b>	-0.1466	0.1723	-0.851	0.397

**Source: R-programming Output.**

Regression analysis using R-programming software above shows that there is no statistically significant relationship between high functioning industrial sectors and investor preferences during the pandemic. This relationship between the high performing sectors (as potential investment points) and investor preferences are seen in table 22 (at  $\beta = -0.1466$ ;  $t = -0.851$ ,  $p = 0.397$ ) revealing that there is no significant relationship between high functioning industrial sectors and investor preferences during the pandemic. Thus, it can be surmised that the regression analysis accepts the null hypothesis and rejects the alternate hypothesis.

**Hypothesis Three:** There is no significant relationship between changes in investor portfolio and investor preferences.

Table 23 R-Regression Table for the Third Hypothesis

	<b>Estimate</b>	<b>Std. Error</b>	<b>t value</b>	<b>Pr(&gt; t )</b>
<b>(Intercept)</b>	2.87567	0.38232	7.522	4.35e-11***
<b>sB2</b>	0.01115	0.10809	0.103	0.918

**Source: R-programming Output.**

Regression analysis using R-programming software above shows that there is a statistically significant relationship between investor portfolio and investor preferences during the pandemic. This relationship between the changes in investor portfolio and investor preferences are seen in table 23 (at  $\beta = 0.011$ ;  $t = 0.103$ ,  $p = 0.918$ ) revealing that there is a significant relationship between changes in investment portfolio and investor preferences during the pandemic. Thus, it can be surmised that the regression analysis rejects the null hypothesis and accepts the alternate hypothesis which is there is a significant relationship between changes in investor portfolio and investor preferences.

#### **4.4 Qualitative Thematic Analysis of Interview**

The interview session was carried out with respondents who were willing to provide the relevant information needed for the analysis of the data for the study. 5 respondents were interviewed as a result and their data collated from the interview. These respondents are drawn from a larger pool of investors previously sampled with the questionnaire for the quantitative analysis. Following thematic analysis of the interview via Nvivo software, the respondents were able to provide answers that were directly related to the answering of the research questions.

Answering the preliminary questions, the interviewees indicated that they all had stable financial backgrounds as they utilized 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 per cent of the interviewees were new to investment, attributing their beginner's interest to influence from investment bankers. Addressing the research questions of the study, the following themes were discovered and analyzed:

Addressing the first research question, changes in investor preferences during the pandemic were confirmed by the participants of the interview. As seen by the data collated in the interview, 80 percent of the participants changed their portfolio types during and after the lockdown; with partial alterations to investment portfolio type the most common feature of the change. Furthermore, the participants indicated that these changes in investor preferences were linked to the performances of their investments as against the performances of other investment types. Furthermore, Nvivo analysis for the investment preferences indicate that investment preferences pre-covid were focused on Agro-Tech (Agricultural Technology) shares, cryptocurrency as the main investment points, other notable investment mentioned are bank products, tech shares and p2p (peer to peer) lending capital. These preferences were visibly noticed to have changed when

analyzed for post-covid-19 purposes. The new investment that was mentioned by the participants includes Tech shares and cryptocurrencies.

Analysis of second research question as posed to the participants revealed that these changes to investment preferences were indeed facilitated by their stability/volatility and performances during the duration of the pandemic. Investors who had shares with companies with high volatility were more likely to sell their investments in such companies in a bid to invest in more stable investment types. Nvivo also reported that investment stability and low investment risk were also factors that were considered in the selection of new investment targets by the investors. However, such attempts to acquire stocks from the high performing sectors could only be done after the lockdown, as such decisions are often made after a thorough observation of the stock market for high-performing and stable stock options.

Finally, the range of preferences could be argued to have become more diverse pre-, during and after covid-19. This is reflected in the preferences that were either considered or acted upon by the investors. Based on the reported data, Nvivo analysis revealed that there were fewer investment categories invested in by participants pre-covid-19 as compared to the post-covid-19 period. The most mentioned post-covid pandemic investments according to Nvivo analysis was cryptocurrency, tech shares and agrotech investments. Furthermore, potential investments as mentioned by the participants are entertainment shares (such those of Netflix), shares from telecommunications sector as well as healthcare and pharmaceutical shares. The interview transcript also revealed that about 40 per cent of the participants made concerted efforts to purchase these investment types or already had them ahead of time.

Summarily, qualitative analysis of the interview data has shown that investor preferences indeed changed throughout the duration of the pandemic, which corroborates the statistical inferences already made in the quantitative section of this research.

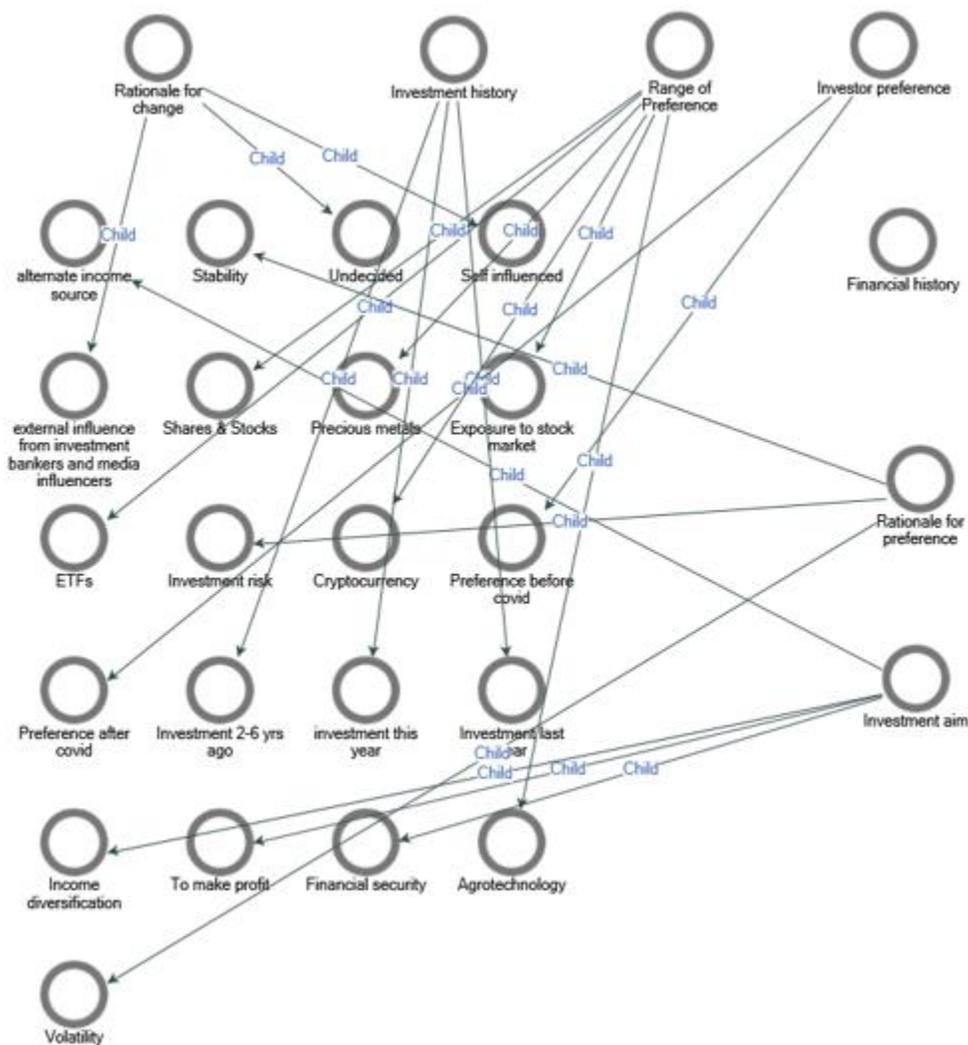


Figure 7

## 4.5 Discussion of findings

Summarily, the following were discovered to be the findings of this study:

- There was a significant change in retail investor preference during the pandemic.

The pandemic that occurred in 2020 is one that facilitated the upheaval of several social and economic structures and trends that had been in existence for decades. It also placed an increased dependence of certain types of industries and parts of the economy, such that their stocks and shares gained tremendous increment in value during the space of the global lockdown that ensued. This increase in value is bound to have attracted a lot of investors to these sectors based on their performances and as such would directly or indirectly influence the preference of retail and institutional investors global.

Quantitative and qualitative results of the study have revealed that there has indeed been a significant change in investor preferences (particularly that of retail investors) during the pandemic. While the quantitative data affirms that there is a relationship between the change(s) in retail investor preferences due to the covid-19 pandemic (at  $\beta = 0.080$ ;  $t = 1.204$ ,  $p = 0.232$ ), qualitative data has provided a variety of reasons for such changes. According to the data provided, reasons such as high performance and stability were considered. Furthermore, it is also interesting to note that these changes were partial and not complete; lending credence to the fact that diversification of the investment portfolio is one of the safest ways to go in investing. These findings corroborate Nguyen *et al* (2020)'s research on investment behavior, reflecting the concepts of risk perception and profitability rate. To put it in context, investors are more likely to go for investments with high profitability rate with medium to low risks. This ensures that they get good value for their money with maximum profitable returns over the allotted time.

- There is no significant relationship between high functioning industrial sectors and investor preferences during the pandemic.

The early days of the pandemic was characterized by the freefall in share volume as all news on humanity's survival of the Sars-Cov-2 pathogen; responsible for covid-19 seemed grim. However, several weeks later, moves by the government such as the release of stimulus packages for workers and the heavy investment into biomedical, pharmaceutical, and healthcare research meant that these economic sectors witnessed a jump start in their economic activity. These economic steps injected a new lease of life into investment types attached to these industrial sectors pushing for better performance than other investments.

Data garnered from this study as at this time reveals that this is not the current case. Quantitative analysis of collated data via the regression approach reveals that there is no significant relationship between high functioning industrial sectors ( $\beta = -0.1466$ ;  $t = -0.851$ ,  $p = 0.397$ ) and investor preferences during the pandemic. Supporting this, information from the interview revealed the plausible reason(s) for this: such as external influences on the preferences. Examples of such external influences could be professional advice, history of volatility and the general stock market trends. Given that high functioning sectors may be characteristically high in volatility, possess variable profitability rates and fluctuating returns on investment (ROI), it only makes sense for there to be a delayed action on the parts of the investors as such sectors are properly monitored for certainty over medium to long term investment (Buszko *et al.*, 2021). In the case of the pandemic, such attempts to acquire stocks from the high functioning sectors could only be done after the lockdown, as such decisions are often made after a thorough observation of the stock market for high-performing and stable stock options.

- There is a significant relationship between changes in investor portfolio and investor preferences.

Investor preferences are often than not reflected in their investment portfolios. Data from the survey show that most of the survey participants prefer to have diverse to semi-diverse portfolios to reduce liquidity and increase risk tolerance (Strömbäck *et al.*, 2017). Furthermore, changes in preference are likely to translate into changes in investor portfolio content as the investor takes steps to acquire the favoured investment type while selling off those with perceived lost value.

Regression analysis of quantitative data has shown that there is a significant statistical relationship between the changes in investor portfolio and investor preferences (at  $\beta = 0.011$ ;  $t = 0.103$ ,  $p = 0.918$ ) during the duration of the pandemic. Such associations become evident when qualitative data reports that there was an increase in portfolio diversity as the investors began to spread their funds across their preferred investment types. Following the data provided by the interview and analyzed with Nvivo software, cryptocurrency, tech shares and aggrotech investments were the most common investment types pre-covid-19 while cryptocurrency, programming and tech shares and stocks, aggrotech investments, entertainment shares (such those of Netflix) telecommunications, healthcare and pharmaceutical shares become the most predominant post-covid-19. This data is also reflected in the survey as the bulk of survey participants listed computer programming and tech share as well as health care and pharmaceutical shares as investment types that they were willing to investigate and purchase.

## **CHAPTER 5: Contribution of This Research, Its Limitations, and Suggestions for Further Research**

This section describes the research summary as well as the study's implications. Recommendations were also provided, as well as limitation and suggestion for future research.

### **5.1 Implications of Findings for the Research Questions**

The role of covid-19 pandemic in altering retail investment preferences is one that has been speculated since its first recorded occurrence in 2020. The pandemic affected most parts of the global economy negatively resulting in wide-scale and intermittent closures, economic stagnancy and regression, increased failure risks and lower productivity levels. However, some sections of the economy experienced a boom due to an increased dependency on their services for the survival of humans. This came with a variety of consequences some of which are changes in investor preferences and the consequent changes in investment behaviour. Having identified the pandemic as the independent variable that influences all other dependent variables such as investor behaviour and global economics and finance, this study aimed at evaluating the effect of the Covid-19 pandemic on retail investors investment choices using the Irish stock market as a yardstick. Four objectives were cited as vital to the completion of this study: (1) to evaluate the impact of Covid-19 on the investment preference in stocks by the retail investors in the Irish stock market, (2) to understand whether retail investors are willing to invest money in stocks considering the pandemic effect (3) to identify the stock preferences of retail investors post Covid-19 and their causative factors, (4) to analyze the changes in returns given by investment in stocks based on the effect of Covid-19, (5) to provide investment options through the collation and analysis of investment choices by retail investors located in Dublin. Three research questions and hypotheses were then presented to lead the investigation based on the stated objectives. Quantitative and qualitative

analysis methods were used to obtain data from the participants. During this research, the following conclusions were reached:

- i. There is a significant change in retail investor preference during the pandemic: The study was able to determine that the covid-19 pandemic affected investment behavior via changes to investor preferences during the lockdown. These changes resulted in moves being made by retail investors to diversify their portfolio via fund investments in cryptocurrencies as well as stocks and shares of companies that were performing well.
- ii. There is no significant relationship between high functioning industrial sectors and investor preferences during the pandemic: The study also discovered that there was no statistically significant relationship between high functioning industrial sectors and investment preferences. Data from the study indicated that external influences may be responsible for the disconnect between both variables. Furthermore, the features of such sectors (such as volatility and low ROI) may also factor in delayed interest and by extension investor preference.
- iii. There is a significant relationship between changes in investor portfolio and investor preferences: This study also found that there is a statistically significant relationship between changes in investor portfolio and preferences. Based on the analyzed data reports, an increase in portfolio diversity occurred as the investors began to spread their funds across their preferred investment types post-covid-19 lockdown.

## **5.2 Contribution to the body of Knowledge**

The findings of this study have shown that investor's preferences have been sufficiently impacted by the covid-19 pandemic for it to change over the timeframe of the global lockdown. Such preferences have been attributed to several intrinsic and extrinsic factors which range from personal reasons to investment characteristics and performances within the stock market. Also, it was discovered that the retail investors sampled for the study had a very poor knowledge about the ISE (Euronext Dublin) as most of their investments were domiciled abroad. It is also pertinent to note that stocks and shares remain the most invested in for mid-term to long term ROI, with cryptocurrencies coming up as the upcoming investment portfolio of interest for the participants. These two forms of investment have been adjudged to have high profitability rates hence the increased preference for investment by retail investors.

## **5.3 Limitations of the Research**

The following limitations were encountered during the study:

- Limited information available on the Irish stock exchange market and this hindered the volume of information that would have been used for the study.
- The extent of changes in preferences was simply measured primarily without appropriate and sufficient secondary data to back it up. As such, it is important for other research studies to build on this research to provide additional information on the extent of changes in investor preferences as reflected in investment portfolios of the investors as well as the statistical data that supports it.

#### **5.4 Recommendations for Future Research**

The findings of this study have revealed the impact of covid-19 on investor preferences during and after the pandemic. However, the extent of such changes in preferences was simply measures qualitatively without appropriate secondary data to back it up. As such, it is important for other research studies to build on this research to provide additional information on the extent of changes in investor preferences as reflected in investment portfolios of the investors as well as the statistical data that supports it.

## **5.5 Conclusion**

The findings of this study show that the covid-19 pandemic had a heavy influence on retail investors preferences and investment choices as there were observable changes in the composition of their investment portfolio. Furthermore, these changes resulted in a more diversified portfolio with the purposes of reducing liquidity, improving financial security. However, data curated from the study quantitatively and qualitatively revealed that most of these investment choices were directed at foreign based investment such as those in the UK or USA. This was attributed to the little-known nature of the ISE or Euronext Dublin by retail investors, hence the willingness of the investors to take their funds abroad for investment.

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## **APPENDICES**

### **APPENDIX 1: INDEPTH INTERVIEW**

#### **Respondent 1**

**Aimua:** Hello

#### **Respondent 1: Hi**

**Aimua:** My name is Aimua Oviawe and I want to thank you for taking time out to allow this interview. I would love to inform you that this interview is recorded for academic purposes. Is this fine by you?

#### **Respondent 1: Yes**

**Aimua:** Why do you Invest?

**Respondent 1:** I personally started investing this year-last year because I wanted to make more money. Staying at home was a bit difficult and the world was changing, and I felt it was a good way to start investing. I wanted my money to make more money for me. Furthermore, interactions with investment bankers and online platforms exposed and encouraged me to invest. So, my sole purpose of investing was to use my money to make more money.

**Aimua:** How long have you been investing?

**Respondent 1:** I started investing actively this year. However, it must be said that I already had stocks based on those purchased on my behalf by my father.

**Aimua: How would you describe your overall financial situation?**

**Respondent 1:** I think it decent. My financial background is okay. I have more than enough after settling my bills, so I can comfortably invest. I take my investment from my savings.

**Aimua: what constituted your investment portfolio pre-covid19?**

**Respondent 1:** Before Covid19 I did not have an investment portfolio in the sense of actual ownership since my father practically bought my first set of shares for me. Also, I had investment share bankers trying to persuade me to go into investment. I also did a bit of personal research before going into it fully. But I would say I had a small portfolio that was focused on agrotech and bank products.

**Aimua: How did well did the portfolio perform during the lockdown?**

**Respondent 1:** Since I was largely interested on Agrotech, the investment portfolio in that sector did brilliantly during the lockdown because food supplies had to maintained and everyone needed food. However, my major investments during the lockdown period were in cryptocurrencies and bank stocks. The investments faced a lot of swings, ups and downs so I think it was one of mixed fortunes and high volatility.

**Aimua: What experience or rationale influenced the change?**

**Respondent 1:** Having had a change in perspective, I would say the influence came from investment bankers and social media influencers. They had a major influence on my budding interest in cryptocurrencies at the time, hence I had shifted my attention from Agrotech to crypto. Based on my observation, I have been closely monitoring the pharmaceuticals and environmentally sustainable related stocks. I most definitely be investing in pharmaceutical stocks and eventually would go back to Agrotech.

**Aimua: what amount of risk do you feel you have taken with past financial decisions?**

**Respondent 1:** I took a lot of risks and have paid dearly for it in the past.

**Aimua: How would you rate yourself as an investor?**

**Respondent 1:** A heavy risk taker is what I am.

**Aimua: What was your impression of the Irish stock market before, during and after covid19?**

**Respondent 1:** I have had not had a big impression of the Irish stock market since it is not as popular as the New York stock exchange. I think it exists on a low.

**Aimua: What constituted your investment portfolio post covid?**

**Respondent 1:** Largely cryptocurrency.

**Aimua: Will you be willing to invest or advice that other people invest in the stock market?**

**Respondent 1:** I would say one should consult a professional to invest. Also, if you have a heart for it then go ahead. Make sure you understand the market and do personal research so you can make informed decisions.

**Aimua:** Thank you for your time.

**Respondent 1:** You are welcome.

**Respondent 2**

**Aimua:** Hello

**Respondent 2:** Hi

**Aimua:** My name is Aimua Oviawe and I want to thank you for taking time out to allow this interview. I would love to inform you that this interview is recorded for academic purposes. Is this fine by you?

**Respondent 2:** Yes

**Aimua: why do you invest?**

I invest for the rainy days. I invest for financial backup and future security.

**Aimua: How long have you been investing?**

**Respondent 2:** I have been investing for over 6 years and it has been a good turnover so far. I usually work with the best financial advice from people who understand these things. I started as a novice that was heavily dependent on professional advice.

**Aimua: How would you describe your overall financial situation?**

**Respondent 2:** Just stable. I have just enough to enough after settling my bills. I typically invest 40 per cent monthly.

**Aimua: what constituted your investment portfolio pre-covid19?**

**Respondent 2:** I invested in Agriculture and agrotech products. The returns were decent before covid19 and the lockdown.

**Aimua: How did well did the portfolio perform during the lockdown?**

**Respondent 2:** The returns initially suffered as demands on some products were severely affected but it later stabilized and has soared ever since. During the locked cryptocurrencies, healthcare and pharmaceutical stock piqued my interest as I figured they would be some of the investments that would have benefitted the most from the lockdown.

**Aimua: What experience or rationale influenced the change?**

**Respondent 2:** Considering the amount of profit that was accrued by healthcare and pharmaceutical companies, I don't think it would be a bad idea for me to shift my attention to them. This is because there is a lot need for healthcare products in these times. Also, I have my eyes on cryptocurrency also I haven't decided on it yet.

**Aimua: what amount of risk do you feel you have taken with past financial decisions?**

**Respondent 2:** I am a careful financial investor; I usually watch carefully and consult thoroughly before investing.

**Aimua: How would you rate yourself as an investor?**

**Respondent 2:** I am a safe player. I prefer to play safe and hedge my bets on safe securities and stocks. Although I may try some high risk, high return approaches in the future.

**Aimua: What was your impression of the Irish stock market before, during and after Covid19?**

**Respondent 2:** Well, I am not exactly conversant with the Irish stock market but for the moment I am not into the Irish stock market. As for how they coped during the pandemic, the stock market lost points during the lockdown even though that's all I can say.

**Aimua: What constituted your investment portfolio post covid?**

**Respondent 2:** I think entertainment stocks such as those of Netflix is something I would look into for investment. I am doing this for diversification purposes.

**Aimua: Will you be willing to invest or advice that other people invest in the stock market?**

**Respondent 2:** I would advise that people invest in the stock market because it serves a stable alternative source of income.

**Aimua:** Thank you for your time.

**Respondent 2:** You are welcome

**Respondent 3**

**Aimua:** Hello

**Respondent 3:** Hi

**Aimua:** My name is Aimua Oviawe and I want to thank you for taking time out to allow this interview. I would love to inform you that this interview is recorded for academic purposes. Is this fine by you?

**Respondent 3:** Yes

**Aimua: why do you invest?**

**Respondent 3:** I invest to gain an extra source of income on the capital that I have. I think my investment is somewhat mid to long term but with a bit of variability to it.

**Aimua: How long have you been investing?**

**Respondent 3:** I started investing in December 2020 which has been almost a year. It has been a big learning experience and I have had to do a lot of research. I have experienced the highs and lows of investing in this one year and I plan to keep going.

**Aimua: How would you describe your overall financial situation?**

**Respondent 3:** I am currently happy with where I am. I am not disappointed. I invest a variable number of percentages of my capital and recently it has been as high as 50 per cent of my salary per month.

**Aimua: what constituted your investment portfolio pre-covid19?**

**Respondent 3:** I did not really invest pre-covid19. I did dabble in p2p (peer to peer) lending in the past, but I changed to cryptocurrencies as time went on.

**Aimua: How did well did the portfolio perform during the lockdown?**

**Respondent 3:** The profits from p2p were not too high and it was static compared to other investment portfolio. Also, the interest percentages were much lower than others. This meant that p2p performed marginally poorly when compared to most other investment portfolios.

**Aimua: What experience or rationale influenced the change?**

**Respondent 3:** Increase in my capital influenced my investment preferences.

**Aimua: what amount of risk do you feel you have taken with past financial decisions?**

**Respondent 3:** It depends. I can't exactly say I have taken that much risk when compared to others. I think I would refer to myself as someone in between both groups. Not an out and out risk taker nor a safe investor.

**Aimua: How would you rate yourself as an investor?**

**Respondent 3:** I would consider myself as one that researches investment a lot before investment

**Aimua: What was your impression of the Irish stock market before, during and after covid19?**

**Respondent 3:** I know very little, my journey into cryptocurrency had me focused on the US stock market. There is very little information on the Irish market in the news and internet. In terms of

fees as well, the US had lower fees with smaller investment volatility when compared to the Irish stock market.

**Aimua: What constituted your investment portfolio post covid?**

**Respondent 3:** Majorly cryptocurrencies. The small part that is in stock is focused on block chain and crypto mining.

**Aimua: Will you be willing to invest or advice that other people invest in the stock market?**

**Respondent 3:** I think the stock market is good for long term investment. However, I would recommend that people invest only after doing thorough research and practice.

**Aimua:** Thank you for your time.

**Respondent 3:** You are welcome

**Respondent 4**

**Aimua:** Hello

**Respondent 4:** Hi

**Aimua:** My name is Aimua Oviawe and I want to thank you for taking time out to allow this interview. I would love to inform you that this interview is recorded for academic purposes. Is this fine by you?

**Respondent 4:** Yes

**Aimua: why do you invest?**

**Respondent 4:** I invest to make more money instead of leaving my money in the bank. I invest for future securities and as an alternate source of income.

**Aimua: How long have you been investing?**

**Respondent 4:** I started this year just after cryptos first major dip in value.

**Aimua: How would you describe your overall financial situation?**

**Respondent 4:** I am comfortable and stable. I invest due to curiosity garnered from watching others do so. I initially invested in bits then increased it to about 20-25 per cent in recent times.

**Aimua: what constituted your investment portfolio pre-covid19?**

**Respondent 4:** I did not have a pre-covid19 investment portfolio. I did invest in crypto and stocks in 2019 though.

**Aimua: How did well did the portfolio perform during the lockdown?**

**Respondent 4:** It performed surprisingly well. The investment portfolio rose because the services were heavily patronized.

**Aimua: What experience or rationale influenced the change?**

**Respondent 4:** The need to increase my income stream through investment was the major reason for the change. Having observed and researched crypto, I realized I could make a killing from it and so I started invested in it more intentionally.

**Aimua: what amount of risk do you feel you have taken with past financial decisions?**

**Respondent 4:** I don't like taking risks. I tend to invest small percentages, so I don't feel the hit too much in case I lose it.

**Aimua: How would you rate yourself as an investor?**

**Respondent 4:** I see myself as a long-term investor. But I try to recycle based on cryptocurrency trends.

**Aimua:** What was your impression of the Irish stock market before, during and after covid19?

**Respondent 4:** I do not know much about the Irish market because all my investment are US based. I went for the US stock market due to the nature of my job.

**Aimua:** What constituted your investment portfolio post covid?

**Respondent 4:** Aside's cryptocurrency, I have interest and I hope I can invest in gold, silver, and the different precious metals. Other interesting investments would be entertainment stocks like those of Netflix.

**Aimua:** Will you be willing to invest or advice that other people invest in the stock market?

**Respondent 4:** I would totally advise people to invest in the stock market.

**Aimua:** Thank you for your time.

**Respondent 4:** You are welcome.

**Respondent 5**

**Aimua:** Hello

**Respondent 5:** Hi

**Aimua:** My name is Aimua Oviawe and I want to thank you for taking time out to allow this interview. I would love to inform you that this interview is recorded for academic purposes. Is this fine by you?

**Aimua: why do you invest?**

**Respondent 5:** I invest for financial security, to generate returns and a way for me to diversify my earnings.

**Aimua: How long have you been investing?**

**Respondent 5:** I have been investing (albeit passively in ETFs and shares) for 3-5 years now.

**Aimua: How would you describe your overall financial situation?**

**Respondent 5:** I would say, stable. I invest a specific percentage to set targets for myself monthly. Like 10-15 per cent.

**Aimua: what constituted your investment portfolio pre-covid19?**

**Respondent 5:** I focused on tech company shares before the pandemic while experimenting on crypto at the beginning.

**Aimua: How did well did the portfolio perform during the lockdown?**

**Respondent 5:** They did exceptionally well. As you may have noticed, tech companies literally became gold mines during the lockdown due to the increased demands for services that were hosted on platforms made by these companies.

**Aimua: What experience or rationale influenced the change?**

**Respondent 5:** With the advent on covid-19, I started considering the pharmaceutical space as it is looking very promising. Also, crypto volatility is not my thing.

**Aimua: what amount of risk do you feel you have taken with past financial decisions?**

**Respondent 5:** I am averse to taking risks. Only risk was over crypto and that was while I was experimenting.

**Aimua: How would you rate yourself as an investor?**

**Respondent 5:** I am more of a mid to long-term investor that like stability and not volatility.

**Aimua: What was your impression of the Irish stock market before, during and after covid19?**

**Respondent 5:** The Irish stock market is not as diverse as those of the US and UK markets. The market is small but has been growing with more firms investing. But it must be said that there are limited opportunities for those looking for long term stability.

The Irish market dropped a couple points during the lockdown but not at a very large scale.

**Aimua: What constituted your investment portfolio post Covid-19?**

**Respondent 5:** After covid19, I stayed with the Tech shares and move out of crypto and towards pharmaceutical stocks. So, I can say I diversified.

**Aimua: Will you be willing to invest or advice that other people invest in the stock market?**

**Respondent 5:** I think it something that people should consider after rigorous research and consultation with professionals.

**Aimua:** Thank you for your time.

**Respondent 5:** You are welcome.

## Appendix 2: Online Questionnaire

The Impact of Covid-19 on The Investment Preference of Retail Investors, With Reference to The Irish Stock Market.

Hello, my name is Aimua Oviawe. I am an MSc student of Financial Analytics in Dublin Business School. The research seeks to understand the impact of COVID-19 on the investment preference of retail investors using the Irish stock market as a point of study. This research is of good interest to me because I want to understand what drives the average retail investor in making investment decisions. This project has been approved by the Research Ethics Committee.

### WHAT WILL HAPPEN

In this questionnaire, you will be asked to answer 20 questions to help the researcher in carrying out the research work. The questions are pointed at collating data and information on investor preferences pre and post Covid 19 to enable the researcher to make an informed decision in answering the research question and answering the aims and objectives of the study.

### TIME COMMITMENT

The questionnaire will take approximately 4 minutes to complete.

### DATA PROTECTION

The data you provide as a participant in this survey will be fully anonymous as no personally identifying data will be requested. Your responses will be collated into a larger data-set and analyzed at a group level.

## CONSENT

If you would like to voluntarily participate in the survey, kindly read the below consent statements carefully and confirm your consent by ticking off the consent box afterwards.

I understand that I am not obliged to take part in this survey and that my participation is entirely voluntary. I understand that I don't have to take part in this study and that I can opt-out at any time.

I understand that I don't have to give a reason for opting out and I understand that opting out won't affect any future interactions

I understand that my responses will be anonymous and in the case of completing an anonymous questionnaire, it will not be possible to subsequently withdraw my data because there will be no personally identifying information attached to my responses.

I understand that I will not benefit directly from participating in this research, but I will be contributing significantly to the body of knowledge on social media marketing penetration on the Irish market.

I understand that I am free to contact the researcher to seek further clarification and information.

Researcher's email: [10571750@mydbs.ie](mailto:10571750@mydbs.ie)

I confirm that I have read and fully understood the information provided/statements above, and I willingly accept to take part in this survey.

1. I confirm that I have read and fully understood the information provided/statements above, and I willingly accept to take part in this survey.

I Agree

## 2. Gender

- Male
- Female
- Prefer not to say

## 3. Age

- 20-30 years
- 31-40 years
- 41-50 years
- 51-60 years
- Above 60 years

## 4. Marital Status

- Single
- Married
- Divorced
- Separated

## 5. Academic Qualification

- BSc
- MSc
- PhD
- Other

## 6. Occupation

- Government Services
- Private Services
- Self-Employed
- Other

## 7. Annual Income (in Euros)

- Below 30,000
- 30,000 - 50,000
- 50,000 - 70,000
- 70,000 - 100,000
- Above 100,000

## 8. How would you describe your overall financial situation?

- Stable
- Wealthy
- Rich
- Poor

## 9. What do you consider as factors that influence your tendency to invest?

- Funds
- Risks
- Perceived preferences
- Professional advice
- All of the above
- None of the above

10. How much money are you willing to invest (in percentage)?

- 1-10 %
- 11-20 %
- 21-30 %
- 31-40%

11. Investment sector preference:

- Programming and Computer technology
- Healthcare and Pharmaceuticals
- Financial Institutions
- Building and Manufacturing
- Public Services
- Energy

12. Investment Frequency

- Monthly
- Quarterly
- Annually
- Bi-Annually

13. Return on investment (ROI) time frame:

- Short term
- Mid-term
- Long term

14. Reason for Investment:

- Short term profit seeking/Steady Income
- Long term profit seeking/freedom from risk
- Tax benefits
- Future security
- Other

15. Type of Investment?

- Stocks
- Securities and Bonds
- Mutual funds and ETFs
- Bank Products
- Annuities
- Other

16. Which of the following is most likely to influence your investment decision?

- Safety and Security
- Regular Income/Liquidity
- Risk Tolerance
- Expectations about high rate of returns

17. How stable is the Irish Stock market? \*

*Mark only one oval.*

- Stable
- Unstable
- Uncertain

18. How confident are you in your investment portfolio when covid-19 became a global concern?

*Mark only one oval.*

- Very confident
- Confident
- Indifferent
- Not confident
- Scared

19. Diversity of investment portfolio pre-covid19

- Very diverse
- Diverse
- Moderate
- Not diverse

20. Diversity of investment portfolio post-covid19 \*

- Very diverse
- Diverse
- Moderate
- Not diverse

21. After the events of Covid19, what sectors would you think it would be best to invest in?

- Healthcare and Pharmaceuticals
- Telecommunications
- Shipping and Transportation
- Banking
- Engineering and Mining
- Fast Moving Consumer Goods
- Energy
- Cryptocurrency

**INTERVIEW CONSENT FORM****PROJECT TITLE:**

The Impact of Covid-19 on the Investment Preferences of Retail Investors, With Reference to the Irish Stock Market

**PROJECT SUMMARY:**

The research seeks to understand the impact of COVID-19 on the investment preference of retail investors using the Irish stock market as a point of study. This research is of good interest to me because I want to understand what drives the average retail investor in making investment decisions.

By signing below, you are agreeing that: (1) you have read and understood the Participant Information Sheet, (2) questions about your participation in this study have been answered satisfactorily, (3) you are aware of the potential risks (if any), and (4) you are taking part in this research study voluntarily (without coercion).

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Participant's signature

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Participant's Name (Printed)

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Student Name (Printed)

Student Name signature

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Date