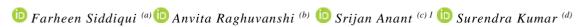
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IMPACT OF THE COVID-19 ON THE SPENDING PATTERN AND INVESTMENT BEHAVIOUR OF RETAIL INVESTORS Crossref



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ABSTRACT

The year 2020 has wimessed the highly infectious disease Corona Virus outbreak impacted across the globe. This unpredictable and unprecedented calamity has pushed economies to struggle and strive. Most of the sectors in the economy were severely hit, which led to financial suffering. There is a paradigm shift in the circular flow of income, which has affected the lifestyle and changed people's spending and investment habits. This study aims to understand how the Covid-19 pandemic has influenced the financial decision-making and investment preferences of retail investors. This research paper also studies the changes in the spending pattern of people during the lockdown due to Covid-19. A sample survey was conducted through a structured questionnaire to determine the impact of the pandemic on individual investment decisions in the city of Lucknow. A random sampling technique has been used to collect the data for the study. The study's findings show that people's lifestyles and spending habits have changed significantly due to the pandemic fear and lockdown. The study also indicates that there has been a shift in the spending preference of people towards healthy products and essentials.

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INTRODUCTION

The breakout of the highly infectious disease Corona Virus has affected across the globe and crucially disrupted human life. The government has taken steps to prevent the spread of Covid -19 in the country, such as social distancing, self-isolation, and lockdown, which has huge economic implications. Among all the measures taken by the government, the lockdown has affected the income, spending, and investment pattern of people. Factories were shut, manufacturing was stopped, offices were working virtually, and many people had lost their jobs. The countries are still suffering financial crises apart from heavy loss of life due to the Covid -19 pandemic.

Covid-19 impacted investment patterns and portfolios and people's overall outlook on life. The focus has shifted, and health investment has taken precedence. Following Covid-19, investors have begun to seek out safer, more stable, and low-risk investment opportunities. The first and most important characteristic of investing in safety and liquidity. Individual investors' investment patterns have shifted dramatically due to their fear of losing money. The majority of investors have altered their preferences due to the lockout. People's income has also been impacted by Covid-19. Additionally, people's spending habits have shifted.

Sands et al. (2016) have studied the economic impact of infectious diseases on an economy. Khan et al. (2020) have studied the effects of Covid-19 on the investment pattern of investors regarding traditional investment and market based financial products in the financial capital of India, Mumbai, and Gurbaxani and Gupte (2021) have studied the impact

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of Covid-19 on Investors behavior of individuals in a small town in the state of Madhya Pradesh, India. Since very few studies have been conducted during this period, the study aims to find out whether there is a similar impact in the capital city of Uttar Pradesh, Lucknow.

The present paper attempts to analyze the impact of the Covid-19 pandemic on investment patterns, investment portfolio changes due to income change, and investment preferences due to Covid-19. This paper also studies the change in the spending pattern of people due to the outbreak of the Covid -19 pandemic. The motivation behind the study is that some researchers have studied the impact of investment behavior and spending patterns on the Covid-19 pandemic. However, no major studies have investigated the changes in investment behavior due to changes in the spending pattern of the people. This research paper has tried to fill the gap.

REVIEW OF LITERATURE

The spread of Covid-19 has revolutionized how people interact, greet, work, and buy goods and services. Everything has changed. Although social isolation and home quarantine have reduced Covid-19 cases, they are causing psychological pain among those affected. Epidemics and pandemics have dearly cost economies around the world—pandemic danger and development: a study. According to the author, a serious pandemic can cost USD 3 trillion. As with absolute poverty in a developing country, the author writes that a pandemic can have disastrous effects. The OECD, among others, sees a severe pandemic as a top global catastrophic risk (Jonas, 2013), highlighting public concern. The author concluded that a global pandemic would only bring misery, economic collapse, and societal disturbances, affecting the poor and those in unstable states

Fan et al. (2016) approximated the cost of a pandemic needed to battle the pandemic. A pandemic's cost is equal to climate change. It means that battling a pandemic costs as much as tackling climate change. The authors also cautioned that the world would face a pandemic similar to 1918 because the world has not learned from its mistakes and has shown little interest in preparing for one. According to Bloom and Canning (2006), the USA has not learned from former pandemics and is poised for another calamity. The estimated global mortality cost ranges from 0.3 percent to 1.6 percent of GNI for high-income to lower-middle-income countries (Fan et al., 2016).

Sands et al. (2016) examined the economic impact of infectious disease crises and why a global pandemic may reoccur. A lack of investment in infectious disease outbreak preparedness and response is attributed to underestimating the threat to human lives and livelihoods. Infectious illness emergencies have significant economic repercussions. A research conducted by Khan et al. (2020), A study on the impact of Covid-19 on the investment pattern of investors regarding traditional investment and market based financial products in Mumbai - The impact of Covid-19 on investors' investment patterns were investigated, as well as the degree of investor preference for specific asset classes such as gold, stock, and real estate. Before and after the Covid-19 outbreak, Covid-19 has a considerable impact on investors' preference for real estate but has had no meaningful impact on investors' preference for gold or stock, according to the study's findings. Analytical analysis of Investment pattern and Investment Preferences of Retail Investors Post Covid-19 according to a paper by Kumthakar and Nerlekar (2020), this study aims to examine the influence of Covid-19 on retail investors' investing patterns and changes in their investment preferences following the epidemic. The study also wants to see if investors are willing to put money into a pandemic. According to the study's findings, most people adjusted their portfolios after the outbreak of Covid-19. Changes in incomes are mostly to blame for this shift in the portfolio. However, following the pandemic of Covid-19, respondents have become more risk conservative and are transferring their investments to Fixed Income Securities.

Effect of Covid-19 Pandemic on Savings and Investment Habits by Khanooja (2020) the goal of this study is to see how Covid-19 affects people's saving habits in Kota, Rajasthan. The goal is to determine how much savings helped ordinary citizens weather the Covid-19 storm and investigate changes in the savings and investment patterns in general. The methodology used was to go to different parts of Kota and ask people about their lives before and after Covid-19, income sources, and savings patterns. Kumar and Abdin (2021) conducted a study titled "Impact of diseases and pandemics on consumption patterns" 2021. This study aims to see if epidemics and pandemics affect consumer behavior in India's rural and urban areas. Using the pandemic Covid-19 as a case study, it was investigated how the pandemic affected Indian consumers' consumption patterns. What differences or similarities were discovered between rural and urban consumers' consumption habits in the aftermath of the Covid-19 epidemic. A questionnaire was used to acquire the necessary primary data. After analyzing the replies, it was discovered that pandemics significantly impact rural and urban consumers' purchase patterns. According to the report, consumer purchase habits have shifted dramatically, with people spending primarily on necessities. The consumption habits of urban consumers have changed more than those of rural customers.

A study on the impact of Covid-19 on Investors' Behaviour of Individuals in a small town in the state of Madhya Pradesh, India, by Gurbaxani and Gupte (2021) the study shows how the Covid-19 epidemic has influenced people's investment and financial decisions in tiny towns in underdeveloped countries like India. In Madhya Pradesh, a sample survey was done to examine the impact of Covid-19 on individual financial transactions. The study concludes that there is a significant link between Covid-19 prevention measures and individual income. These preventative measures had a direct impact on savings and investment behavior. During the Covid-19 epidemic, respondents reported a 43 percent decline in SIP investment. McKinsey and Company (2020) found Covid-19's long-term impact on customers. The poll found that Covid-19 had a significant impact on consumers' personal lives and daily activities. Due to lower wages, consumers are spending primarily on necessities and non-discretionary items.

Covid-19 has eight direct repercussions for consumer behavior; according to Sheth (2020), hoarding, improvisation, pent-up demand, embracing digital technology, blurring of work-life boundaries, shop to home, reunions with family and friends, and talent discovery. According to the report, while consumer behaviors will shift, they will not die, and marketers will have new opportunities. Covid-19 has also increased its use of social media platforms like Facebook,

Instagram, WhatsApp, Twitter, and Zoom, resulting in increased word-of-mouth. According to the author, more technology is required to assess consumer mentality. As a result of changing demography, governmental policy, and technology, new habits emerge.

Covid-19 has a huge influence. It has influenced economic, social, environmental, and cultural elements and consumers and consumption patterns. Studies have been done to assess the impacts. Chakraborty and Maity (2020) examine Covid-19's impact on migration, society, and the environment. Covid-19 will reduce yearly GDP growth by about 2% every month, according to the authors. Tourism has been hurt the most, with a 50% to 70% drop in output. COVID-19 has proven to be good for the environment as the closure of companies, factories, etc., has reduced trash emissions, which has had a favorable impact on the global ecology. Various researches have revealed similar conclusions to Chakraborty and Maity (2020) about Covid-19's environmental impact. Saadat et al. (2020) observed that economic activity closures during lockdown improved air quality in numerous places globally; Zambrano-Monserrate et al. (2020). Covid-19 has a good impact on the environment in India, according to Sharma et al. (2020). The study found a 17% rise in O3 (ozone layer) and no change in SO2. There was a 44% fall in the Air Quality Index (AQI) during the Lockdown in India, which confirms that the air quality improved throughout the lockdown.

Ali and Alharbi's study Covid-19 (2020) reveals that global economic closures have severely harmed countries, particularly the travel and tourist industry. Authors express concern over academic institution closures preventing students from receiving a quality education. The lack of quality education will also cause long-term losses to the world, say the authors. The paper stresses the necessity for dedicated research centers and upgraded science and technology to help battle future disasters.

Individuals' investment patterns may vary Post-Covid, according to experts. Most people will avoid short-term dangers and move their money into less unpredictable and hazardous investments. This shift in the portfolio is largely due to income fluctuations throughout the pandemic. In addition to job losses and compensation reductions, low/no business has affected investor portfolios. Regardless of Income, many may invest in mutual funds, NSC, and equities markets during the pandemic. This shows that these investors took advantage of market volatility, which is usually a good investment time. Due to market instability, investors may opt to invest exclusively in avenues that guarantee a return (Kumthakar & Nerlekar, 2020).

RESEARCH OBJECTIVES

- To study the impact of Covid-19 on Investors' behavior.
- To study the change in spending patterns after the outbreak of the Covid-19 pandemic.
- To study pre and post changes in the preference of Investment of Investors.

RESEARCH METHODOLOGY

Research Design: Exploratory research design has been used for the study. **Research Approach:** Survey approach has been adopted for the study.

Research Instrument: Open-end and close-end questionnaires have been used as study instruments.

Sampling: About 200 respondents have contacted the survey questionnaire. However, despite their best efforts, only 150 complete survey questionnaires were returned to the researchers by respondents. The city of Lucknow has been selected as a test site located in the Indian state of Uttar Pradesh.

Data Collection: The primary data for the present study were collected through a questionnaire.

Nature of the Data: The following tables show the nature of the data:

Table 1. Data Profile

PROFILE	PARAMETER	NO. OF RESPONDENTS
Gender	Male	67
	Female	83
Age	18 - 25	92
	35	36
	36 - 45	22
Monthly Income	Less than 15,000	73
•	15,001 - 25,000	35
	25,001 - 50,000	23
	More than 50,000	19
Educational	Diploma/UG	64
Qualification	Higher Secondary	19
	Post Graduation	56
	Ph.D. or equivalent	11
Marital Status	Unmarried	104
	Married	42
	Divorced	04
Occupation	Private Employee	27
-	Government Employee	11
	Business/ Profession	27
	Retired/housewife	04
	Others	81
Domicile_Status	Rural	21
	Semi-Urban	38

	Urban	91
Experience in	Less than 2 years	86
Investment	2 - 5 years	36
	5 - 10 years	20
	More than 10 years	08
Type of Investor	Conservative (risk avert)	61
	Moderate (risk-neutral)	72
	Aggressive (risk taker)	17
Monthly Investment in	Less than 10,000	96
Market	10,001 - 20,000	31
	20,001 - 50,000	19
	More than 50,000	04
Covid affect income	It has Reduced	92
	Remain Same	48
	It has Increased	10

Source: Author's own compilation

Out of 150 respondents majority are male respondents i.e. 83 (55.3%) and female respondents are 67 (44.7%). 92 (61.3%) respondents are of age group 18-25 years while 36 (24%) respondents are in 26-35 years age group rest 22 (14.7%) are under 36-58 years age group. There are 73(48.7%) respondents earning is less than Rupees 15,000, 35 (23.3%) respondents earning is in between Rupees 15001 to 25,000, 23 (15.3%) respondents earning is in between Rupees 25,001 to Rupees 50,000, only 19 (12.7%) respondents earning is above Rupees 50,000.

Out of 150 respondents, 92 (61.2%) respondents' income has been reduced due to Covid-19, while 48 (32%) respondents' income unaffected by Covid-19, unexpectedly 10(6.7%) respondents' income has been increased. 64(42.7%) respondents have a Diploma/UG qualification, 19(12.7%) respondents are Higher Secondary, 56(37.3%) respondents have Post Graduation degree, and 11(7.3%) respondents have a Ph.D. or equivalent qualification. 104(69.3%) respondents are unmarried, 42(28%) respondents are married, and 4(2.7%) respondents are Divorced. 27(18%) respondents are private employees, 11(7.3%) respondents are Government Employees, 27(18%) respondents are in Business/Profession, 4(18%) respondents are Retired/Housewife, 81(54%) respondents are in other categories of occupation. There are 21(14%) respondents from rural areas, 38 (25.3%) respondents are from the Semi-Urban area, and 91(60.7%) respondents are from urban areas.

Out of 150 respondents, 86(57.3%) respondents have less than 2 years experience in investment, 36(24%) respondents have 2-5 years of experience in investment, 20 respondents have 5-10 years of experience in investment, and only 8(5.3%) respondents have more than 10 years of experience. 61(40.7%) respondents are Conservation types of investors, 72(48%) respondents are moderate types of investors, and 17(11.3%) respondents are aggressive types of investors. There are 96(64%) respondents who are investing less than Rupees 10,000 in the market, 31(20.7%) respondents are investing in between rupees 10,001 to 10,000, 10,000, 10,000, 10,000, 10,000, only 10,000, only 10,000, investor investing more than rupees 10,000.

Table 2. Categorical Data Analysis of Experience in Investment and Change in investment

Experience in Investment	Change in the investment due to COVID-19.					
	Yes	No				
Less than 2 Years	71	15				
2 - 5 Years	26	10				
5 - 10 Years	9	11				
More than 10 Years	6	2				

Source: Author's own compilation

Out of 150 respondents, 86 have less than 2 years of investment experience, out of which 71 respondents have made changes in their investment, and 15 respondents have not made any changes in their investment. Thirty-six respondents have 2-5 years of experience, out of which 26 respondents have made changes in their investment, and 10 respondents have not made any changes in their investment. Twenty respondents have 5-10 years of experience in investment, out of which 9 have made changes in their investment, and 11 respondents have not made any changes in their investment. Eight respondents have more than 10 years of experience, out of which 6 have made changes in their investment, and 2 respondents have not made any changes.

Table 3. Impact of Income vs. Change in Portfolio due to income

Covid 19 affected your income.	Any changes in the investment portfolio during COVID-19				
income.	Yes	No			
It has Increased	5	5			
It had Reduced	66	26			
Remain Same	0	18			

Source: Author's own compilation

Out of 150 respondents, 10 respondents' income has increased; out of 10, 5 have made the changes in the investment portfolio, while the rest 5 has not made any changes in their portfolio. Eighty-two respondents' income has been reduced; still, 66 respondents have changed their investment portfolio, while 26 respondents have not made any changes. Eighteen respondents' income remained the same during Covid-19, so they did not change their portfolios during Covid-19.

Statistical Tools: The data in the study were analyzed using correlation, paired sample t-test, and chi-square test. The SPSS Statistics version 22 program was used to analyze the collected data.

ANALYSIS AND INTERPRETATION

Impact of Covid -19 Pandemic on Investors' Behavior

Covid-19 has affected the investment pattern of investors. Due to this, the investors have also made changes in their preferences. They have shifted their investment into less risky avenues. The study covers the differences in investment preferences pre and posts Covid-19. This part analyses and evaluates the data gathered for research purposes.

Statements of Hypotheses (Objective 1):

Ha1: There is a significant difference in preference of investors Investment pattern of Investors towards mutual funds in pre and post Covid-19 scenarios.

Ha2: There is a significant difference in preference of the Investment pattern of Investors towards Fixed Deposits in pre and post Covid-19 scenarios.

Ha3: There is a significant difference in preference of Investment pattern of Investors towards Fixed Income Securities in pre and post Covid-19 scenarios.

Ha4: There is a significant difference in preference of the Investment pattern of Investors towards Gold in pre and post Covid-19 scenarios.

Ha5: There is a significant difference in preference of the Investment pattern of Investors towards Real estate in pre and post Covid-19 scenarios.

Table 4. Paired Samples Statistics

Paired S	Samples Statistics	Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Rate of preference Avenue Pre-Covid 19 in Mutual Fund	4.09	150	1.300	.106
	Rate preference Avenue Post-Lockdown in Mutual Fund	3.98	150	1.245	.102
Pair 2	Rate of preference Avenue Pre-Covid 19 in Fixed Deposit	3.99	150	1.156	.094
	Rate preference Avenue Post-Lockdown in Fixed Deposit	3.82	150	1.093	.089
Pair 3	Rate preference Avenue Pre-Covid 19 in Fixed Income Securities	3.71	150	1.167	.095
	Rate preference Avenue Post-Lockdown in Fixed Income Securities	3.61	150	1.110	.091
Pair 4	Rate preference Avenue Pre-Covid 19 in Gold	3.73	150	1.231	.101
	Rate preference Avenue Post-Lockdown in Gold	3.41	150	1.227	.100
Pair 5	Rate preference Avenue Pre-Covid 19 in Real estate	3.55	150	1.329	.108
	Rate preference Avenue Post-Lockdown in Real estate	3.25	150	1.312	.107

Source: Author's own compilation

Table 5. Paired Samples Correlations

Paired Sa	amples Correlations	N	Correlation	Sig.
Pair 1	Rate of preference Avenue Pre-Covid in Mutual Fund & Rate preference Avenue Post-Lockdown in	150	.706	.000
	Mutual Fund			
Pair 2	Rate of preference Avenue Pre-Covid in Fixed Deposit & Rate preference Avenue Post-Lockdown in	150	.674	.000
	Fixed Deposit			
Pair 3	Rate preference Avenue Pre-Covid in Fixed Income Securities & Rate preference Avenue Post-	150	.564	.000
	Lockdown in Fixed Incomes Securities			
Pair 4	Rate preference Avenue Pre-Covid in Gold & Rate preference Avenue Post-Lockdown in Gold	150	.511	.000
Pair 5	Rate preference Avenue Post-Lockdown in Real estate & Rate preference Avenue Post-Lockdown in	150	.566	.000
	Real-estate			

Source: Author's own compilation

From the above tables, we can conclude that:

- The accompanying table shows a high degree of correlation between investor preferences for mutual funds before Covid 19 and after Covid 19. The p-value is less than 0.05 at a 5% significance level, indicating that the correlation is significant.
- The accompanying table shows a moderate degree of correlation between investor preferences for Fixed Deposit before Covid 19 and after Covid 19. The p-value is less than 0.05 at a 5% significance level, indicating that the correlation is significant.

- The accompanying table shows a moderate correlation between investor preferences for Fixed Income Securities Deposit before Covid 19 and after Covid 19. The p-value is less than 0.05 at a 5% significance level, indicating that the correlation is significant.
- The accompanying table shows a moderate correlation between investor preferences for gold before Covid 19 and after Covid 19. The p-value is less than 0.05 at a 5% significance level, indicating that the correlation is significant.
- The accompanying table shows a moderate degree of correlation between investor preferences for Real Estate before Covid 19 and after Covid 19. The p-value is less than 0.05 at a 5% significance level, indicating that the correlation is significant.

Table 6. Paired Samples Test

Paired Samples Test			Paired Differences					df	Sig. (2-tailed)
	•	Mean	Std. Deviation	Std. Error Mean	95% Interval Difference	Confidence of the	-		
					Lower	Upper	•		
P A I R	Rate of preference Avenue Pre Covid in Mutual Fund Rate preference Avenue Post Lockdown in Mutual Fund	.1070	.9770	.0800	0510	.2640	1.3370	149	.1830
P A I R 2	Rate of preference Avenue Pre Covid in Fixed Deposit Rate preference Avenue Post Lockdown in Fixed Deposit	.1730	.9100	.0740	.0260	.3200	2.3320	149	.0210
P A I R	Preference Avenue Pre Covid in Fixed Income Securities Rate preference Avenue Post Lockdown in Fixed income securities	.0930	1.0640	.0870	0780	.2650	1.0740	149	.2840
P A I R	Rate preference Avenue Pre Covid in Gold Rate preference Avenue Post Lockdown in Gold	.3130	1.2160	.0990	.1170	.5100	3.1560	149	.0020
P A I R 5	Rate preference Avenue Post Lockdown in Real State Rate preference Avenue Post Lockdown in Real estate	.3000	1.2300	.1000	.1020	.4980	2.9870	149	.0030

Source: Author's own compilation

The above result shows that:

- Given that the p-value is 0.183, we may conclude that investors' preferences for Mutual Fund did not change significantly before or after Covid − 19. As a result, Covid − 19 appears to have had no impact on mutual fund investor choice.
- Fixed Deposit: We accept the alternative hypothesis because the p-value is 0.021, less than 0.05 at a 5% threshold of significance. We can deduce a substantial difference in investors' preferences for Fixed Deposit before and after Covid − 19. As a result, Covid − 19 may be said to have had a major impact on investor preference for Fixed Deposits.
- Fixed Income Securities: Because the p-value is 0.284, which is greater than 0.05 at a 5% threshold of significance, we may deduce that there is no significant variation in investors' preferences for Fixed Income Securities before and after Covid 19. As a result, Covid 19 does not appear to have had a major impact on investor preference for fixed-income securities.
- Gold: We accept the alternative hypothesis since the p-value is 0.002, which is less than 0.05 at a 5% significance level. We may deduce a considerable difference in investor preference for Gold before Covid 19 and after Covid 19. As a result, it is reasonable to conclude that Covid 19 has had a major impact on gold investor preference.
- Real Estate: We accept the alternative hypothesis since the p-value is 0.003, which is less than 0.05 at a 5% significance level. We may deduce a considerable difference in investor preference for Real Estate before Covid 19 and after Covid 19. As a result, it is reasonable to conclude that Covid 19 has a considerable impact on real estate investor preference.

Spending pattern Post Lockdown

Covid-19 has also affected the spending pattern of people. The majority of the people have drastically changed their spending habits. They have started spending on essential and healthy products. During the lockdown, people have reduced their spending on non-essential items like clothes, traveling, entertainment, etc.

Statements of Hypotheses (Objective 2)

Ha1: There is a substantial difference in spending pattern during Covid 19.

Ha2 There is a substantial difference in spending pattern changes on food during Covid 19.

Ha3: There is a significant difference in spending pattern changes on Medicine during Covid 19.

Ha4: There is a significant difference in spending pattern changes on sanitization and hygiene during Covid 19.

Ha5: There is a significant difference in spending pattern changes on Ayurvedic products.

Ha6: There is a significant difference in spending pattern changes on entertainment and personal accomplishment.

Ha7: There is a significant difference in spending pattern changes on health insurance policies.

Ha8: There is a significant difference in spending pattern changes on non-essential items like clothes, traveling, etc.

Table 7. Chi-Square Statistic- Spending pattern Post Lockdown

	Spending Pattern Change During Covid 19	Spending More on Food	Spending More on Medicines During Covid 19	Spending More on Ayurvedic Products	Stop Spending on Entertainment Personal Accomplishment	Stop Spending on Entertainment Personal Accomplishment	Started Spending on Health Insurance	Reduce Spending on Essential like Cloth Travelling
Chi-	69.360ª	44.333 ^b	82.800 ^b	110.333 ^b	75.867 ^b	59.133 ^b	132.933 ^b	79.467 ^b
Square								
Df	1	4	4	4	4	4	4	4
Asym. Sig.	.000	.000	.000	.000	.000	.000	.000	.000

Source: Author's own compilation

From the above table, we can conclude that:

- Changes in Spending Patterns in Covid 19: As shown in the table above, the p-value is 0.000, which is less than 0.05 at a 5% level of significance, meaning that we accept the alternative hypothesis that there is a significant difference in spending patterns in Covid 19.
- Changes in food spending patterns: The p-value is 0.000, which is less than 0.05 at a 5% threshold of significance, indicating that we accept the alternative hypothesis that there is a significant difference in food expenditure patterns during Covid 19.
- Changing medical expenditure patterns: As shown in the table above, the p-value is 0.000, which is less than 0.05 at a 5% significance level, indicating that we accept the alternative hypothesis that there is a significant difference in medical spending patterns during Covid 19.
- Changes in sanitization and hygiene spending patterns: The p-value in the preceding table is 0.000, which is less than 0.05 at a 5% level of significance, indicating that we accept the alternative hypothesis of a substantial difference in sanitization and hygiene spending patterns.
- Changing Ayurveda product spending patterns: The p-value in the preceding table is 0.000, which is less than 0.05 at a 5% level of significance, showing that there is a significant difference in ayurvedic product spending patterns.
- Entertainment and personal accomplishment spending patterns: The p-value for leisure and personal accomplishment is 0.000, which is less than 0.05 at a 5% level of significance, indicating a significant difference in leisure and personal accomplishment spending patterns.
- Health insurance policy spending patterns: As shown in the table above, the p-value is 0.000, which is less than 0.05 at a 5% threshold of significance, indicating that we accept the alternative hypothesis that there is a significant difference in health insurance policy spending patterns.
- P-value in the preceding table is 0.000, which is less than 0.05 at a 5% level of significance, indicating that we accept the alternative hypothesis that there is a substantial difference in spending pattern changes on non-essential things such as clothes and travel so on.

Investment Preferences: Pre and Post Covid-19

After the highly infectious disease Covid-19, investors changed their investments during the lockdown. Some investors redeem their investment in fear of loss, whereas some investors have increased their investment to earn more interest in the future. Some have shifted their investment into less risky avenues to be in safe heaven

Statements of Hypotheses (Objective 3)

Hal: There is a significant difference in the investment during the lockdown.

Ha2: There is a significant difference in the redemption of investment during the lockdown.

Ha3: There is a significant difference in the investment increase during the lockdown.

Ha4: There is a significant difference in the decrease of investment during the lockdown.

Ha5: There is a significant difference in investment avenues from risky to less risky.

Ha6: There is a significant difference in changing my investment pattern.

Ha7: There is a significant difference in changes in an investment portfolio.

Table 8. Chi-Square Statistic- Investment Preferences: Pre & Post Covid-19

	During Lock- down, Continue Investments	During Lock- down, Redeem Investments	During Lock- down, Increase Investments	During Lock- down, Stop Investments	During Lock- down Shift Risky to Less Risky Investments	During Lock- down Change Investment Pattern	During Lock- down Change Portfolio	During Lock- down Shift Health Care Personal Safety Policies
Chi-Square	77.333ª	44.667 ^a	46.467 ^a	42.867 ^a	85.133ª	52.800 ^a	43.133 ^a	74.133 ^a
Df	4	4	4	4	4	4	4	4
Asymp. Sig.	.000	.000	.000	.000	.000	.000	.000	.000
a O cells (O O%	(a) have expected f	requencies less t	han 5 The minin	num expected cel	l frequency is 30	0		

Source: Author's own compilation

From the above table, we can conclude that:

- Investments Continued During the Lockdown: Because the p-value is 0.000, which is less than 0.05 at a 5% level of significance, we accept the alternative hypothesis, implying a substantial difference in investment during the lockdown. As a result, it is possible to assert a difference in investment levels during the lockdown.
- Investment Redemption during Lockdown: Because the p-value is less than 0.05 at a 5% level of significance, we accept the alternative hypothesis, implying a substantial difference in investment during the lockdown. The report shows that numerous individuals redeemed their investments throughout the lockdown period.
- Rise in investment during Lockdown: Because the p-value is less than 0.05 at a 5% threshold of significance, we can deduce a significant difference in the increase in investment during the lockdown. As a result, several respondents boosted their investment during the lockout.
- Stop investment during Lockdown: Because the p-value is less than 0.05 at a 5% threshold of significance, we can deduce a significant difference in stop investment. This suggests that other investors also halted their investments during the lockout.
- Investment route from hazardous to less risky: Because the p-value is greater than 0.05 at the 5% level of significance, we can deduce that there is no significant difference in Investment Avenue from risky to less risky. As a result, it may be asserted that people did not switch from risky to less dangerous investing channels during the lockdown.
- Change investment pattern: Because the p-value is less than 0.05 at a 5% threshold of significance, we can deduce that there is a meaningful difference in changing my investment pattern. The study demonstrates a shift in investment patterns during the lockdown.
- Portfolio change: Because the p-value is less than 0.05 at the 5% significance level, we accept the alternative hypothesis, meaning a significant difference in the investment portfolio during the lockdown.
- Because the p-value is 0.000, or less than 0.05 at the 5% level of significance, we accept the alternative hypothesis, meaning a substantial difference in investment shifted on health care and personal safety regulations. As a result, people's investments in health care and personal safety precautions have moved in response to the advent of Covid-19.

DISCUSSION

As per the study, major changes in the investment pattern and investment portfolio are due to changes in income and high market volatility as the market prices continually go down during lockdown. The majority of the respondents whose reduced income has changed their investment portfolio. Respondents whose income has also been increased made changes in the investment, while the respondents with the same income have not changed their investment. It can also see in the study that the respondents, who are investing for a long duration having more experience in investment, have made changes in the investment pattern during Covid-19.

Many people have also increased their investment during the lockdown as the market goes down continually after the outbreak of Covid-19. Literature shows that the stock market was highly volatile from March 2020 to May 2020 because of Covid-19 fear. Due to reduced income and returns, some people have redeemed and stopped their investments during the lockdown. Most investment avenues have started giving poor returns due to the Covid-19 pandemic.

Investors' preference for investment has also been changed post lockdown. People are unwilling to take any risk and want to shift their investment into less volatile & less risky avenues. As seen in the data, the investors prefer a mutual fund as a popular investment avenue both pre and post Covid-19. Post Covid-19, respondents have preferred to invest in fixed deposits as they carry less risk and decent returns than the risk taken. No major change has been seen in the investment of gold and real estate, while fixed-income securities have been affected due to the outbreak of the Covid-19 pandemic.

The pandemic Covid-19 has also affected the lifestyle and impacted the spending pattern of the people. As per the data collected, most respondents have drastically changed their spending habits. During Covid-19, people have started spending on medicine, sanitization, ayurvedic products, health insurance policies, etc. During the lockdown, people have reduced their spending on non-essential items like clothes, traveling, entertainment, etc.

Consumers have shifted their spending towards healthy products during Covid-19 to boost their immunity. Spending on data packs has also increased during Covid-19 as it was the only source of entertainment for people during the lockdown. It has also increased as many jobs are going online during the lockdown.

FINDINGS

- Covid-19 has impacted investors' preferences toward Gold, Fixed deposit, and Real Estate. People prefer to invest in fixed deposits as they are unwilling to take any risk and want to shift their investment to less risky avenues. However, there is no significant impact on investors' preference toward Mutual Funds and Fixed income securities.
- Income is a significantly influential factor in changes in investment patterns and investment portfolios, as many people have lost their jobs and faced a reduction in income due to Covid-19.
- Experience in investment has been significantly influential as the majority of the respondent investing for many years has made changes in their portfolios after the outbreak of the Covid-19 Pandemic.
- There is a significant correlation among the investment avenues, namely real estate, gold, mutual funds, fixed deposit, and fixed income securities.

During the lockdown, some people have continued investing. It can be seen in the study that many people have increased their investments, whereas some have redeemed their investments. There is a change in investment patterns and portfolios as many people have shifted their investment to less risky avenues, health care, and personal safety policies. The pandemic Covid-19 has also impacted the spending pattern of the people. The spending habits of the respondents have gone a sea change. The majority of the respondents have shifted their spending towards healthy products, essentials, sanitization, and hygiene. People have reduced their spending on non-essentials like clothes, traveling, entertainment etc.

CONCLUSION

Investors' preferences are vigorous and influenced by some external factors. The pandemic Covid-19 was an unpredictable calamity that has changed the paradigm of the entire world and has established a "new normal". The government has taken many measures to prevent the spread of Covid-19. Among all the measures, the lockdown has badly affected the economy. Many people have lost their job and affected people's income, investment, and spending patterns. From the present study, it can be concluded that investors' investment patterns and preferences have changed after the outbreak of the Covid-19 pandemic. Investor seems to become more risk-averse and shift to investment in less risky avenues. Investors have also changed their investment portfolios due to poor returns provided during the lockdown. Covid-19 has also drastically affected the spending pattern of people during the lockdown. People have shifted their spending to more essential items and reduced spending on non-essentials.

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REFERENCES

- Ali, I., & Alharbi, O. M. (2020). COVID-19: Disease, management, treatment, and social impact. *Science of the total Environment*, 728, 138861. https://doi.org/10.1016/j.scitotenv.2020.138861
- Bloom, D.E., & Canning, D. (2006). Epidemics and economics. Retrieved from https://cdn1.sph.harvard.edu/wpcontent/uploads/sites/1288/2013/10/BLOOM_CANNINGWP9.2006.pdf
- Chakraborty, I., & Maity, P. (2020). COVID-19 outbreak: Migration, effects on society, global environment and prevention. *Science of the Total Environment*, 728, 138882. https://doi.org/10.1016/j.scitotenv.2020.138882
- Fan, V. Y., Jamison, D. T., & Summers, L. H. (2016). *The inclusive cost of pandemic influenza risk* (No. w22137). National Bureau of Economic Research. Retrieved from www.nber.org/paper/w22137
- Gurbaxani, A., & Gupte, R. (2021). A study on the impact of COVID-19 on investor behaviour of individuals in a small town in the state of Madhya Pradesh, India. *Australasian Accounting, Business and Finance Journal*, 15(1), 70-92. https://doi.org/10.14453/aabfj.v15i1.6
- Jonas, O. B. (2013). Pandemic risk, *World Development Report*. Retrieved from https://openknowledge.worldbank.org/bitstream/handle/10986/16343/WDR14_bp_Pandemic_Risk_Jonas.pdf?se quence=1
- Khan, S., Upadhyaya, C., Gautam, S., & Natu, P. (2020). A study on the impact of covid-19 on the investment pattern of investors with specific reference to traditional investment (real estate and gold) and market based financial products (equities) in mumbai. *European Journal of Molecular & Clinical Medicine*, 7(11), 5644-5660.
- Khanooja, D. R. (2020). Effect of covid-19 pandemic on saving and investment habits. *International Journal of Current Research*, 12, 14660-14661.
- Kumar, R., & Abdin, M. S. (2021). Impact of epidemics and pandemics on consumption pattern: evidence from Covid-19

- pandemic in rural-urban India. *Asian Journal of Economics and Banking*, 5(1), 2-14. https://doi.org/10.1108/AJEB-12-2020-0109.
- Kumthakar, S., & Nerlekar, V. (2020). Analytical Study of Investment Patterns and Investment Preferences of Retail Investors Post Covid 19. *Journal of Seybold Report*, 15(8).
- McKinsey and Company (2020). Consumer sentiment is evolving as countries around the world begin to reopen. Retrieved from www.mckinsey.com/business-functions/marketing-and-sales/ourinsights/a-global-view-of-how-consumer-behavior-is-changing-amid-covi%E2%80%A6
- Saadat, S., Rawtani, D., & Hussain, C. M. (2020). Environmental perspective of COVID-19. *Science of the Total environment*, 728, 138870. https://doi.org/10.1016/j.scitotenv.2020.138870.
- Sands, P., El Turabi, A., Saynisch, P. A., & Dzau, V. J. (2016). Assessment of economic vulnerability to infectious disease crises. *The Lancet*, *388*(10058), 2443-2448. https://doi.org/10.1016/S0140-6736 (16)30594-3.
- Sharma, S., Zhang, M., Gao, J., Zhang, H., & Kota, S. H. (2020). Effect of restricted emissions during COVID-19 on air quality in India. *Science of the Total Environment*, 728, 138878. https://doi.org/10.1016/j.scitotenv.2020.138878.
- Sheth, J. (2020). Impact of Covid-19 on consumer behaviour: will the old habits return or die?. *Journal of Business Research*, 117, 2020, 280-283. https://doi.org/10.1016/j.jbusres.2020.05.059.
- Zambrano-Monserrate, M. A., Ruano, M. A., & Sanchez-Alcalde, L. (2020). Indirect effects of COVID-19 on the environment. *Science of the total environment*, 728, 138813. https://doi.org/10.1016/j.scitotenv.2020.138813.

ABBREVIATIONS

OECD- Organisation for Economic Co-operation and Development, **SIP-** Systematic Investment Plan, **NSC-** National Savings Certificate, **df-** Degree of Freedom, **Std. Deviation-** Standard Deviation, **N-** Total Number of Responses, *Sig.- Significance* Level, **Std. Error Mean-** Standard Error of the Mean, **Asym. Sig.-** Asymptotic Significance, **Sig. (2-tailed)-** *Two-tailed* p-value, **USA-** United States of America

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