Original Article

Predilection Of Indian Portfolio Framework In COVID-19 Infodemic - An Analysis

Venuka Sandhir[1], Jyoti Sinha[2], Dolly Rani[3], Megha Jha[4], Kavita Chahal[5],Vinod Kumar[6*]

[1]Department of Mathematics, School of Basic and Applied Sciences, K. R. Mangalam University, Gurugram, Haryana, India;
[2]Department of Pharmacy, School of health Sciences, Sushant University, Grurugram Sec 55, Haryana, India;
[3]Department of Pharmacognosy, Amity University, Noida, UP, India
[4]Department of Toxicology, Pinnacle Biomedical Research Institute, Bhopal, Madhya Pradesh, India
[5]Department of Botany, Govt College Bichhua, Chhindwara, Madhya Pradesh, India
[6]Department of Pharmacy, School of health Sciences, Sushant University, Grurugram Sec 55, Haryana, India

***Corresponding Author:** Dr Vinod Kumar

*Department of Pharmacy, School of health Sciences, Sushant University, Grurugram Sec 55, Haryana, India;
Email Id: vksingh38@yahoo.com,**ORCID Id**: 0000-0002-1510-8132
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Abstract

Investors are confronted with plethora of investment alternatives, to make their money work for them, based upon desired risk and return availability. An investment portfolio is a manifest of individual's investment behaviour towards various investment avenues. At this junction of Coronavirus pandemic, the financial portfolio has been acclimatized to maintain balance and profitability. Therefore, the study proposes to assess the influence of socio-economic profile during these turbulent times on the investor's awareness, motivation, risk bearing capacity and attitude towards risk and non-risk mapped financial instruments. A structured questionnaire was administered to a sample of 168 Indian investors using convenience sampling technique and parametric & non-parametric statistics was used for delineating the influence of infodemic on behavioural finance. With worries about a potential stagflation growing, the investors focussed on liquidity instead of growth and invested more in debt or income schemes.

Keywords: Covid-19, Economic impact, Investment avenues, Behavioural portfolio theory, Risk management

INTRODUCTION:

Since 2019 human race has been continuously struggling with a life threatening pandemic disease named COVID 19 caused by SARS-CoV-2 virus ((Kumar et al, 2021), first case of COVID 19 was reported on December 31, 2019 in Wuhan city, China (Kumar *et al*, 2020). The Covid-19 pandemic has abraded investor confidence, pulled down investment demand and contorted financial instruments. The healthcare cost has increased with decline in income results in shifting of investment paradigm depending upon economical frugality. To understand the investment propulsion in this pervasive pandemic towards true benchmark performance, we decided to work on survey-based indices instead of simulation models as many uncertainties are related to the disease and economic.

The main features of investments are security of principal amount, liquidity, income stability, approval and easy transferability (Manikandan and Muthumeenakshi, 2017). Behavioural portfolio theory (BPT) explains the portfolio design influenced by behavioural segmentation based on emotional competency and cognitive control (Senthamizhselvi and Vedantam, 2020). The socio-demographic characteristics segregate biased behaviour of investor towards market sentiment. The probability of selecting financial scheme among the wide range of traditional financial securities to non-security investment avenues allows the best fit financial inclusion in investor's overall portfolio allocation and decomposing the portfolio's return into a set of risk and non-risk mapped alternatives.

Ideally, choice of one investor should not affect the chance of another's preference as investment pivotal aspects differ by knowledge, surplus money, time, attitude and specific needs (Verma and Sahni, 2020). Generally, when a common man thinks about investment he will never go for any risky plan (Velmurugan et al., 2015). But fixed income products like FD, RD, NSC, KVP, MIS, PPF, SCSS, SSA etc. have been witnessed a rate cutting spree and market-based funds have changed monetary policies upside down which results in limited opportunities specially for conservative investors (Zhang et al., 2020). The prudent investment becomes a need not only for working adults or old-aged populace but to the millennials also under the guidance of fiduciaries so that the habit of consistent saving can be inculcated at the early age (Kumar et al., 2021).

In this study, the focus is on assessing the impact of demographical and sociological attributes such as age, gender, academic qualification, monthly income, marital status on investor's inclination to hold optimal returns with sustaining subsistence needs. The concept is strenuous to measure and time dependent (Bavel et al., 2020). The rest of the paper is structured as follows: Related works are discussed in Section 2 followed by the need of study in Section 3. In Section 4, research methodology is canvassed with hypotheses to test the significance of the attributes in assessing the impact of the

pandemic on portfolio management and the analysis results in Section 5 centres around how the investor's pattern has changed during Covid-19. Sections 6 provides conclusions and explores potential directions for future work.

Related Works: This article schlepped a review of related work to analyse the preferred performance attribute and risk-taking attitude of investors based on demographic characteristics in amidst of financial retrenchment due to Covid-19. (Reddy and Mahapatra, 2017) highlighted that mostly in-service and educated male acquired high yielding products having more risk. (Kaur and Kaushik, 2016) suggested that investors ignorance about mutual funds results in underperforming funds. (Bhardwaj and Saxena, 2020) examined that investors remained optimistic to invest less than 25% of earning and wanted to play safe by opting balanced risk aversion in times of Covid-19. (Khanooja, 2020) discussed investors conventional investment habits towards Health and Life Insurances, SIP and FD because of its retrievable characteristics. (Gopalan and Misra, 2020) affirmed that nationwide lockdown adversely affected all segments of society ensued several financial challenges in socio- economic stratum. (Domalewska, 2021) quantified a negative correlation of public economy - related perception as a reaction to the number of reported COVID-19 infected cases on social media. (Padhan and Prabheesh, 2021) surveyed the economic effects of the COVID-19 and suggested policy directions to mitigate its magnitude. (Gurbaxani and Gupte, 2021) observed lessen in SIP investments due to slacked household income, stock market crash, and investor preferences repositioned towards more non-risky investment options. (Goodell, 2020) promised that investor's delay in investment decisions due to tail stocks. (Ortmann et al., 2020) showed that male and older investors increased their trading activities, brokerage deposits and opened new accounts but reduced the usage of leverage.

Need of the study: The trends in financial markets have increased substantially due to destabilizing effects of the pandemic. The great uncertainty of the pandemic and its associated financial losses has caused markets to become dubious and extremely volatile (Donthu and Gustafsson, 2020). It becomes essential to analyse investor's perception towards portfolio management to identify the proclivity for investment in terms of risk and return. Analyst biggest piece of advice to smoothen the portfolio growth rate and to protect from succumbing social biases is diversification (Campbell and Pullan, 2007). For handling portfolio with noise, filtration on demographic segmentation need to be assessed on (i) the investment behaviour of investors (ii) the investor's preference towards risk and non-risk mapped investment alternatives (iii) the investors risk taking attitude (iv) the prioritized investment opportunities.

RESEARCH METHODOLOGY:

Descriptive research design has been adopted to demarcate the investor's perception towards financial portfolios. Only primary data was utilized for the study. A well-structured closed ended questionnaire was online circulated to 200 investors in the last month of Financial Year 2020-2021 from which only 168 were apportioned to invest in both risky and non-risky investment opportunities. Convenience sampling was applied to measure the potential of financial stability in investor's portfolio profile at this time of equivocal issues. A Likert scale was used to rank polytomous items to identify level of investors preferential selection of risk mapped schemes like Debt/Income schemes, Balanced Schemes or Equity/Growth schemes and non-risk mapped schemes like Saving Account, Fixed Deposits, Recurring Deposits, National Savings Certificate, Kisan Vikas Patra, Monthly Income Scheme, Public Provident Fund, Senior Citizens Saving Scheme, Sukanya Samriddhi Yojana or other government securities. The information collected was processed, coded and tabulated. The hypotheses composed for the study are as follows (i) investors have equal knowledge of financial instruments (ii) investors give equal preference to risky and non-risky financial products (iii) the risk bearing capacity of investors are same (iv) investors have common trait towards all investment alternatives.

To study intervention of portfolios, an adequate sample size (segment of target investors) with specific demographic characteristics, was estimated by modified Cochran Formula (Bujang et al., 2018). From table 1, the point estimate is number of investors interested in risky funds to the expected sample size, this value gives a sample size sufficiently large to guarantee an accurate estimation, with the confidence interval of 95% and 7 % of error of estimate which, when calculated, is 0.523. So, for this confined population, the sample size is rounded up to 164.

Items has been examined using sample analysis by mean scores, percentage analysis, parametric test (ANOVA) and non-parametric tests (Chi-Square, Kruskal Wallis, Friedman, McNemar) employed by SPSS software. Usual time, place and resources are the limiting factors. To some extent, the respondents may be biased to reveal financial matters.

ANALYSIS AND INTERPRETATION:

To analyse demographic variables, the study assumes that investors started their financial journey after attaining the age of 18 years with at least little bit knowledge of financial assets. In Table 1 the investor's characteristics are summarised on percentage analysis. Investors were 18 to 68 years old (M=30.11 years, SD = 12.2 years); 45.23 % (n=76) were women; approximately 66.66% (n= 92) reported were unmarried and almost half of the investors were young and working graduates. Many young investors earned around 25,000 or more monthly during pandemic situation. Investors preferred the investment plan for 1 to 3 years (n = 64, 38.1%) were more as compared to less than one year (n=48, 28.57 %), 3 to 5 years (n= 36, 21.43%) and more than 5 years (n=20, 11.9%) and having the tendency to invest monthly (n=64, 38.1%), quarterly (n=36,21.43%) semi-annually (n=12, 7.14%) and annually (n=56, 33.33%). It depicts that many young investors are holding the investment portfolio and remains optimistic to invest despite of lower revenue along with delayed receivables collection.

Normality of data has been measured with 0.813 value of reliability coefficient using Cronbach Alpha. One way ANOVA parametric test was employed to assess the assumption of similar awareness of risky and non-risky financial instruments among demographical variables with their preference. Table 2 clearly indicates that investors among all age groups

(F(3,164)=1.62, p >.05) irrespective of working or non-working (F(1, 162)=1.46, p >.05) have coequal knowledge of financial instruments. The motivation to invest in risky investment alternatives (F (1,166)=5.86 for gender; F(3,164)=11.03 for age; F(2,165)= 4.92 for academic level at p < .05) has been challenged by traditional diversification as correlation between them turn positive in this higher inflation scenario. Table 2 shows that investors are either currently experiencing or anticipating significant constraints towards portfolio vulnerability.

Table 1: Composition of Demographics

Variables	Sample Frequency n (%)
Gender	
Male	92 (54.76)
Female	76 (45.23)
Age Group	
Less than 25	96 (57.14)
25 - 40 Years	40 (23.80)
41 - 60 Years	24 (14.28)
More than 60 Years	8 (4.76)
Marital Status	
Unmarried	92 (66.66)
Married	46 (33.33)
Academic Qualification	
Under Graduate	96 (57.14)
Post Graduate	56 (33.33)
Professional Qualification	16 (9.52)
Occupation	
Working	136 (82.92)
Non-Working	28 (17.07)
Monthly Income	
< 20000	72 (42.85)
20000 -40000	60 (35.71)
40000 - 50000	12 (7.14)
> 50000	24 (14.28)

The chi-square non-parametric statistical test (Mircioiu and Atkinson, 2017) has been used to examine the risk management capacities of the investor towards dynamics avenues for uncertain times. Table 3 revealed that for maximizing their capital, investors are more inclined towards debt, balanced or equity schemes irrespective of demographic profiles (Kumar *et al*, 2018). To analyse the variance or difference in the median values of preferred mutual fund schemes and fixed income schemes, Kruskal-Wallis test (H value) (Nahm, 2016, Kumar 2019) and Friedman's test (Q value) (Scheff, 2016) were formulated respectively as shown in Table 3. It is evaluated that the computed H values of Kruskal-Wallis test are less than 5.991 with degree of freedom = 2 at 5% level of significance and Q values of Friedman's test are less then tabulated values with

Table 2: Result of ANOVA for demographical factors of the investors towards their awareness and motivation to invest in Risky and Non-Risky Investment Avenues

Demographical Variables	Awareness			Risk - Mapped Investments			Non-Risk Mapped Investments		
	Mean	F	Sig.	Mean	F	Sig.	Mean	F	Sig.
Gender									
Male	2.39	15.51	0.00	2.39	5.86	0.02	2.83	4.33	0.04
Female	2.95			2.74			3.11		
Age Group									
Less than 25	2.54	1.62	**0.19**	2.46	11.03	0.00	2.58	19.34	0.00
25 - 40 Years	2.70			2.50			3.60		
41 - 60 Years	3.00			3.33			3.33		
More than 60 Years	2.50			1.50			3.00		
Marital Status									
Unmarried	2.47	4.50	0.04	2.47	0.87	**0.35**	2.68	14.08	0.00
Married	2.78			2.61			3.17		
Academic Qualification									
Under Graduate	2.33	15.17	0.00	2.50	4.92	0.01	2.92	1.03	**0.36**
Post Graduate	3.14			2.79			3.07		
Professional Qualification	2.75			2.00			2.75		
Occupation									
Working	2.62	1.46	**0.23**	2.56	0.44	**0.51**	2.91	1.59	**0.21**
Non-Working	2.86			2.43			3.14		
Monthly Income									
< 20000	2.50	6.34	0.00	2.50	1.29	**0.28**	2.78	18.17	0.00
20000 -40000	2.53			2.47			2.67		
40000 - 50000	3.67			3.00			3.67		
> 50000	2.83			2.67			3.83		

Table 3: Non-parametric test results for assessing the influence of Demographic Profile on Investment Behaviour

Demographical Variables	Risk Bearing Capacity		Risk-Mapped Investments		Non-Risk Mapped Investments	
	χ^2_{value}	Elucidation	H value	Elucidation	Q value	Elucidation
Gender	23.258	Sig.	3.42	Sig.	8.07	Sig.
Age Group	28.951	Sig.	5.77	Sig.	10.85	Not-Sig.
Marital Status	19.093	Sig.	3.42	Sig.	8.07	Sig.
Academic Qualification	16.764	Sig.	4.35	Sig.	9.38	Sig.
Occupation	32.553	Sig.	2.48	Sig.	7.57	Sig.
Monthly Income	24.226	Sig.	5.02	Sig.	7.71	Sig.

Table 4: Friedman's Mean Rank Score preference on various investment schemes

Investment Schemes	Mean Rank	Rank
Fixed Deposit	6.97	8
PPF	4.5	5
Saving Schemes	4.38	4
NSC	2.8	2
Saving Account	8	9
Government Securities	3.5	3
Balanced Schemes	6.77	7
Debt/Income schemes	1.66	1
Equity/Growth schemes	6.38	6

Table 5: McNemar Test results on change in Investment Behaviour

	Post: Risk-Mapped	Post: Non-Risked Mapped	Row total
Pre: Risk-Mapped	35	52	87
Pre: Non-Risked Mapped	20	61	81
Column total	55	113	168

degree of freedom = 5 at 5% level of significance except for variable age. Hence investors did not have any common trait towards all investment alternatives. Moreover, the burden of expenses re-designed to resilient the pandemic is unevenly distributed across socio-demographic groups in ways that affect financial behaviour and thus potentially moved towards fixed income schemes as shown in Table 4.

Lockdowns and uncoordinated government strategies have led to a disruption in the financial markets. In order to analyse the allocation of investment preference during this phase, McNemar test was formulated as presented in Table 5 on paired pre-post groups. Despite of lower interest regime on fixed-income instruments, many investors have taken steps to maintain the liquidity and resolute to explore the options having low volatility rate.

CONCLUSION:

A choice between the people health and investment sentiment forced us to refurbish the financial strategies to provide greater impetus to socio-economic and behavioural capacities. The imminent decision to be done is re-designing of the portfolio profile to erode the stagflation sets in. This primary economic tragedy acts as a bridge to experience higher fluidity and allowed better portfolio performance. It contends that an integrated coherent action facilitates economic recovery and perpetuates vulnerabilities of Covid-19 recession.

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