

Is Gen Z in India Moving Towards Financial Independence? - A Study of Their Investment Preferences

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ABSTRACT

Gen Z are financially more sophisticated than any previous generation was at their age and are only at the beginning of their journey to financial independence. With increasing evidence of Gen Z investing in India, the current study aims to explore their investment preferences. A survey was conducted for age group 15-25 asking them about their source of monthly funds, proportions and reasons for saving, investment preferences including proportions, avenues, time frame, risk perceptions and behaviour of investing. The study finds that saving habits of Gen Z are significantly different across gender, age and annual family income and they are gradually moving towards financial independence by relying on their own earnings. Consequently, we found that Gen Z's investments were largely influenced by higher saving proportions and investing experience of their family members. We also observe that Gen Z is investing long term in assets like Equity Shares, Mutual funds, Fixed Deposit and Gold/Silver, and intraday in risky assets like Crypto. Factors like rate of return, long term gains and historical performance were found to influence their investment decisions as more than 50% of the Gen Z were found likely to invest in Growth and SIP's of mutual funds, Growth and Value equity stocks and in Banking and Information Technology sector. Lastly, we see that majority of Gen Z follows a herd behaviour, uses new age investing apps, fearing losses find it difficult to take the first step in investing but are optimistically ready to learn and improve their investing skills.

Introduction

Investment – in simple terms signifies putting money into an asset with an expectation of receiving returns in future, either in the form of growth in the value of asset or income from the asset or both (Napoletano and Curry,2022).

Investing is one of the best ways to build wealth and save for financial goals including retirement or dream home. Generally, people start investing only as adults, but many studies have shown that, an early start on the investing journey can give a head start on saving for the future and learning the importance of financial literacy (Gobler, 2022). Getting to know about the investing world and planning for future can prove to be a smart decision to meet financial goals, like saving for college, buying a home, and retirement (Schock, SEC). A 2018 National Financial Capability Study from the Financial Industry Regulatory Authority (FINRA) found that 53% of Americans consider their finances to be a source of anxiety, with respondents ages 18 through 34 reporting the highest levels of stress. Financial literacy at a young age may reduce stress and anxiety on money matters in future (Gobler, 2022).

Generation Z (Gen Z) who are between 18 and 25 years old, have been found to be more financially sophisticated than any previous generation was at their age (Investopedia's Financial Literacy Survey,2022). The survey claims that, more than half of Gen Z understand the stock market, are already invested and are quite

confident about financial concepts like spending and saving (Lauria, 2022). They may not be the demographic typically associated with the stock market, but there is a growing population of Gen Z who are beginning to dip their toes in the world of investing and trading (Desai, 2022). Generation Z can more easily access the stock market and other investments than any previous generation (Albright, 2022) and also understand that they are only at the beginning of their journey to financial independence. The advent of social media, emerging financial technologies, changes in regulatory environment, such as allowing teenagers to have parentally supervised accounts have opened the doors to Gen Z's investing endeavors. According to Investopedia's survey, Gen Z is the most video-forward generation when it comes to learning about personal finance in particular. YouTube is the most popular source to them for consuming finance-related information, followed by conversations with friends and family, Internet search, TikTok, and financial information sites (Lauria, 2022). They are not just confronting expanding intricacy in investment products, management and services, but also they are bound to bear financial risk later on.

In the context of emerging economies like India, as per the 2022 revision to the World Population Prospects, over 50% of the country's population is aged below 25 and over 65% below 35. India has more Gen Z population than US and China combined, while no country in the Europe is in the top 20. Changing demographics are set to benefit India as the working age population continues to grow and become wealthier (Sanjeev et al. 2021). India has seen an immense change from cash investing to complicated technology driven online trading, thereby creating a need for more rational financial choices rather than parking money in the banks. The pace at which financial dealings have changed especially after demonetization, has not only put the Generation X and Millennial in action, even the technically driven more youthful age – Generation Z thinks that it is complex while at the same time strolls on independent way of managing their finances (Sanjeev et al. 2021).

Recently, the Central Depository Services Limited, India, reported that there has been a growing interest in stocks among younger people as they saw 5 million new DEMAT accounts opening in the first nine months of 2020. One of India's largest retail brokerage, Zerodha, claims that 69% of its investors are in the 20-30 age group, up from 50-55% pre-Covid. They also believe that while the average age of their users is currently between 28 and 35, it will come down to 26-27 in the coming years (Desai, 2022). According to Deepak Shenoy, CEO and founder of Capital Mind, it's interesting to see that the trend of young traders is an international one. There has been a growing interest from young investors across the globe, fuelled by trading apps like Robinhood. Bloomberg charted the rise of the TikTok trader with hashtags like #stock and #invest notching up millions of views (Desai, 2022).

The growing interest of Gen Z towards investing, both globally and specifically in India, is clearly evident from the preceding discussion, but very limited academic research has been done to analyse the investment preferences of the budding Gen Z investors. Previous research was limited to only investment preferences of Generation X and Millennials. Also, studies were restricted to studying only investment preferences and did not explore the relationship between saving habits, investment behaviour and investment decisions. Thus, motivated by the increasing evidence of Gen Z investing in India, the current study aims to explore the investment trends of Gen Z in India in entirety, by investigating into their sources of funds, saving habits, investment preferences and behaviour guiding their investment decisions.

The objective of the current study is to bridge the research gap by seeking answers to the following questions:

What are primary source of funds to Gen Z? Do demographics influence their sources?

What are the saving habits of Gen Z? Do demographics influence their saving habits?

What are investment preferences of Gen Z? Do demographics influence their investment choices?

Does the behaviour of Gen Z impact their investment choices?

Having presented the background and the motivation behind this study, section two touches upon the data and methodology used for the study. The detailed analysis of data is presented in section 3 followed by the conclusions and findings in section 4. Finally, in section five we allude to avenues for future research.

Data and Methodology

Research Design

The research design used for the study is descriptive research. Descriptive research includes a structured approach to collection of data. This research is more concerned with what, where and how rather than why something has happened. Therefore, observation and survey tools are often used to gather data (Gall, Gall, & Borg, 2007). Given the objective of the study as defined above we find descriptive research is more appropriate.

Type of Data and Sampling

The data required for the study is primary in nature. The primary data has been collected by making use of a structured questionnaire. The type of sampling used is non-probability - convenience sampling. The target population for this research is Gen Z of India in the age group 15-25.

Data Collection

The data was collected through a Google Form, a link for which was circulated through Whats App. The form was initially created and sent to ten participants as a pilot. Taking the feedback from the pilot responses with respect to its relevance, clarity and completeness, a revised questionnaire was finally created. The revised questionnaire contained 30 questions relating to demographics, source of monthly funds, proportions and reasons for saving, investment preferences including proportions, avenues, time frame, risk perceptions and behavioural aspects of investing. The survey was conducted online from December 2022 to February 2023 and 104 responses were collected from participants in the age group 15-25 across India, majority of them being from the city of Ahmedabad.

Tools of Analysis

The analysis was carried with the help of Microsoft Excel and Statistical Package of Social Science (SPSS). Descriptive Analysis, Percentage Analysis, Hypothesis Testing through - One Proportion Z – Test, Chi Square Test of Independence, and One way ANOVA Test were done for statistical analysis at 5% level of significance.

Descriptive analysis was done to describe the characteristics/attributes of the data variables in the study and provide a clear understanding for further quantitate analysis. One proportion Z- Test was done to compare the proportion of the study sample to a larger population proportion in terms of investing preference claims of Gen Z made in the study. Chi square test of independence was done to check the statistical significance of the observed association from cross tabulated data between various demographic factors and saving or investing preferences of Gen Z. A One way ANOVA was done to test the statistical significance of the variations in the means of proportion of investments made by Gen Z across various avenues.

Data Analysis

Table 1 exhibits the classification of the respondents across various demographic factors. Majority of the Gen Z respondents are male (65%) with female being 35%. Though the broader group of respondents is Gen Z,

largely (55%) are in the age group 19-22 with 26% and 19% being in the age group 15-18 and 23-35 respectively. This is consequently reflected in 51% of them studying at the undergraduate level who would ideally be in the age group 19-22. Similarly 34% of the respondents are doing postgraduate studies while only 15% of the respondents are in high school.

Almost half of the respondents (51%) are having their annual family income between INR 0.5 to 2.5 million. While 18% of them have annual family income under both the lowest (up to INR 0.5 million) and highest (above INR 5 million) income bracket, 12% of the respondents have annual income in the range of INR 2.5 – 5 million). When asked about the prevalence of family members investing in capital markets, we found that almost 67% of them have family members with limited exposure to capital markets whereas 15% of them have actively investing family members. Only 18% of them could be the first generation investors in the family.

Table 1. Descriptive Analysis

	Demographic Factors	Frequency	Percentage
1.	Gender		
	Male	68	65%
	Female	36	35%
2.	Age		
	15-18	20	19%
	19-22	57	55%
	23-25	27	26%
3.	Education Level		
	High School	16	15%
	Undergraduate	53	51%
	Postgraduate	35	34%
4.	Annual Family Income (INR)		
	Up to 0.5 million	19	18%
	0.5 -2.5 million	53	51%
	2.5 – 5 million	12	12%
	Above 5 million	20	19%
5.	Family Members Investing in Capital Markets		
	A lot of them! Runs in the blood	16	15%
	Maybe a few	70	67%
	No one	18	17%
	Total	104	

Source: Primary Survey

Analysis of Monthly Source of Funds to Gen Z

We first asked the Gen Z’s about their monthly source of funds which we believe will stimulate their saving and investment habits. Figure 1 reveals that, for the Gen Z population in the study, monthly funds largely come from their own earnings ([72]-38%) and pocket money ([67]-35%). Having said that, gifts from friends and relatives and personal investments also attribute around 13% (25/27) each to their monthly collection of funds. This gives a sense that, saving and investment activities of Gen Z’s participating in this study could primarily be fuelled through their active employments and parental financial support. Earning own money is becoming

popular for the youngest generation entering the workforce and almost 65% of Gen Z are having side hustle as per a Lending Tree Survey (Measom, 2023).

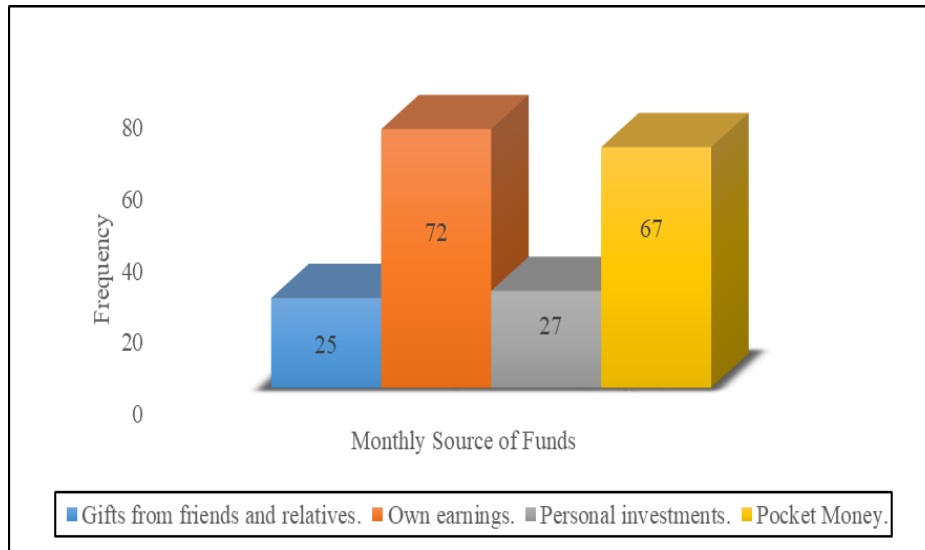


Figure 1. Monthly Source of Funds

Comparative Analysis of Sources of Funds across Various Demographic Factors

For the comparative analysis, we propose the following null hypotheses to be tested through the Chi –Square test of independence at 5% level of significance:

H01: There is no significant relationship between gender and Gen Z’s monthly sources of funds

H02: There is no significant relationship between age and Gen Z’s monthly sources of funds

H03: There is no significant relationship between annual family income and Gen Z’s monthly sources of funds

In Table 2, the results of Chi Square test for H01 reveal that the p value (0.101) is more than 0.05 and hence we fail to reject the null hypothesis and infer that male and female do not significantly differ with regard to their sources of monthly funds as observed in Table 2.

In terms of age, the results of Chi Square test for H02 reveal that the p value (0.000) is less than 0.05 and hence we reject the null hypothesis. This indicates that Gen Z across various age groups differ significantly with regard to their monthly source of funds. We can also infer that with more maturity in terms of age, Gen Z is gradually moving from parental financial support to their own earnings to achieve financial independence.

Finally, the results of Chi Square test for H03 reveal that the p value (0.993) is more than 0.05 and hence we fail to reject the null hypothesis and infer that Gen Z with varied annual family income does not differ significantly with regard to their monthly source of funds.

Table 2. Comparative Analysis of Source of Funds across Demographic Factors

	Percentage of Gen Z’s Monthly Source of Funds Across Demographic Factors					
Demographics	Gifts from friends & relatives	Own earnings	Personal investment	Pocket Money	Total	Chi Square Coefficient

Gender	Male	13	34	17	36	100	6.219 (0.101)
	Female	16	38	4	42	100	
Age	15-18	15	21	15	50	100	26.63 (0.000)*
	19-22	18	28	11	44	100	
	23-25	5	64	17	14	100	
Annual Family Income	Up to 0.5 million	13	32	16	39	100	1.891 (0.993)
	0.5-2.5 million	16	34	11	39	100	
	2.5-5 million	13	39	17	30	100	
	Above 5 million	12	38	12	38	100	
* p value < 0.05							

Analysis of Saving Habits of Gen Z

After exploring the source of funds, we further explore the saving habits of Gen Z. Figure 2 shows that 23% (24), 48% (50) and 27% (28) of the respondents save always, most of the time and sometime respectively with just 1% of the Gen Z not saving. When we checked the magnitude of their monthly savings, Figure 3 represents that majority of them (55%) are saving up to 20%, whereas 35% save between 20-50% monthly and only 8% save more than 50%. This clearly indicates that Gen Z is strongly motivated to inculcate saving habits though at a varying extent which is fairly reasonable depending on their spending motives (Kealey Roberts, 2019). In other words, Gen-Z is proving to take their finances into their own hands by saving earlier than generations before them (<https://hsastore.com/learn-gen-z-saving-habits.html>). Next, we explore the saving habits of Gen Z across various demographic factors considered in the study.

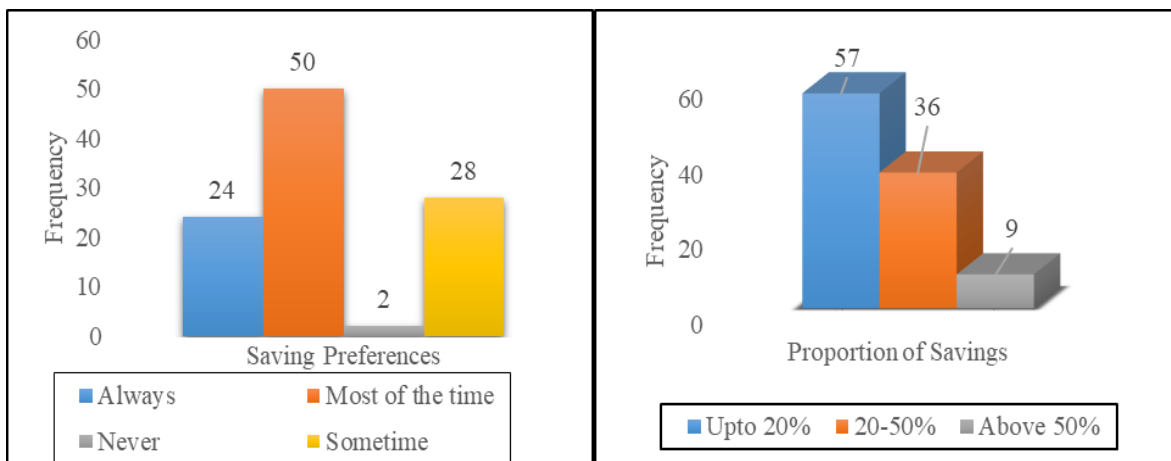


Figure 2. Saving Preferences of Gen Z

Figure 3. Saving Proportion of Gen Z

Comparative Analysis of Saving Proportions across Various Demographic Factors

For the comparative analysis, we propose the following null hypotheses to be tested through the Chi-Square test of independence at 5% level of significance:

H04: There is no significant relationship between gender and Gen Z's saving proportion

H05: There is no significant relationship between age and Gen Z's saving proportion

H06: There is no significant relationship between annual family income and Gen Z's saving proportion. The results of Chi Square test for H04, H05 and H06 in Table 3 reveal that the p value (0.000) is less than 0.05 for all the demographic factors and hence we reject all the three null hypotheses. We can therefore infer that male and female significantly differ with regard to their saving proportions. Similarly, Gen Z across various age groups and those with varied annual family income also differ significantly with regard to their saving proportions. Thus we can infer that demographics are significantly affecting the saving habits of Gen Z (Owusu, 2020).

Table 3. Comparative Analysis of Saving Proportions across Various Demographic Factors

Demographic Factors		Percentage of Gen Z's Saving Proportions Across Demographic Factors				Chi Square Coefficient
		Up to 20%	20-50%	Above 50%	Total	
Gender	Male	48	42	10	100	109.326 (0.000)*
	Female	71	23	6	100	
Age	15-18	55	30	15	100	110.225 (0.000)*
	19-22	64	30	6	100	
	23-25	39	50	11	100	
Annual Family Income	Up to 0.5 million	63	32	5	100	111.155 (0.000)*
	0.5-2.5 million	61	33	6	100	
	2.5-5 million	25	58	17	100	
	Above 5 million	55	30	15	100	
* p value < 0.05						

Reasons for Saving

Getting a sense of the saving preferences and proportions of Gen Z, we wanted to see the reasons that inspired their motivations to save. Figure 4 objectively denotes that Gen Z has been saving for a variety of reasons almost in the same proportions. More specifically, almost 22% (49 and 50) of the respondents have been saving equally for meeting daily personal expenses like food, travel, leisure, shopping and also planning for future contingencies like education and business (Bump, 2022). Whereas, 25% (56) of them are saving for creating a fund for buying personal assets like two-wheelers, latest mobile phones, laptops or watches, 24% (53) are saving for making financial investments. Uniquely, we also find around 5% (11) of the respondents also save to donate for a cause. Given this background, we further analyse the reasons for saving across various saving proportions to understand the saving habits of Gen Z in more detail.

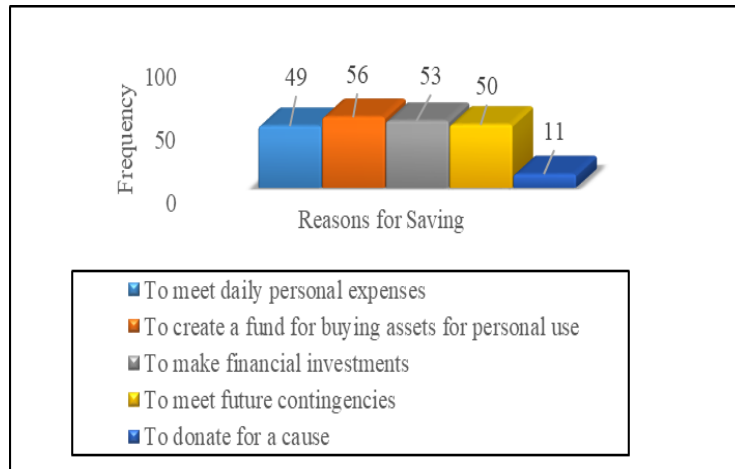


Figure 4. Reasons for Saving

Comparative Analysis of Saving Proportions across Reasons for Saving

For the comparative analysis, we propose the following null hypotheses to be tested through the Chi –Square test of independence at 5% level of significance:

H07: There is no significant relationship between the reasons for saving and Gen Z’s saving proportion.

The results of Chi Square test for H07 in Table 4 reveal that the p value (0.203) is more than 0.05 and hence we fail to reject the null hypothesis. We can therefore infer that saving proportions of Gen Z do not differ significantly while saving for different reasons.

Table 4. Comparative Analysis of Saving Proportions across Reasons for Saving

Reasons for Saving	Percentage of Gen Z’s Saving Proportions Across Reasons for Saving				Chi Square Coefficient
	Up to 20%	20-50%	Above 50%	Total	
To meet daily personal expenses	71	20	9	100	10.976 (0.203)
To create a fund for buying assets for personal use	60	45	5	100	
To make financial investments	45	43	11	100	
To meet future contingencies	54	34	12	100	
To donate for a cause	64	27	9	100	

Analysis of Investment Preferences of Gen Z

In the previous section covering the saving preferences of Gen Z, we have observed that 25% of the respondents (Figure 4) have been saving to make personal investment and 88% of them are saving up to 50% of their funds to make financial investments (Table 4). Based on this background, we claim that majority (at least 50%) of the Gen Z is actively investing, and to test our claim we undertake a one proportion Z- test of the population at 5% level of significance, for which we propose the following null hypothesis:

H08: Majority of the Gen Z is not actively investing.

	Null Hypothesis	Test	Sig.	Decision
1	The categories defined by Investing Proportion = YES and NO occur with probabilities 0.5 and 0.5.	One-Sample Binomial Test	.004	Reject the null hypothesis.
2	The categories defined by Code ≤ 0.50 and > 0.50 occur with probabilities 0.5 and 0.5.	One-Sample Binomial Test	.004	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Figure 5. Z- Test for Gen Z Investing

Figure 5 indicates the outcome of Z- test, where the p value (0.004) is less than 0.05 and hence we can reject the null hypothesis H_0 and thus infer that at least 50% of the Gen Z population are actively investing (Lauria, 2022). To further probe into how Gen Z is investing, we asked the respondents about their investment proportions.

Figure 6 clearly reflects the responses wherein, about 51% are investing up 20% of their funds and 38% of them are investing between 20-50%. Very few (11%) are investing more than 50%. We can therefore infer that though majority of them are investing, the proportions are largely limited to 20% which may be because they are still amateurs to the world of investing and may also be constrained with limited source of funds.

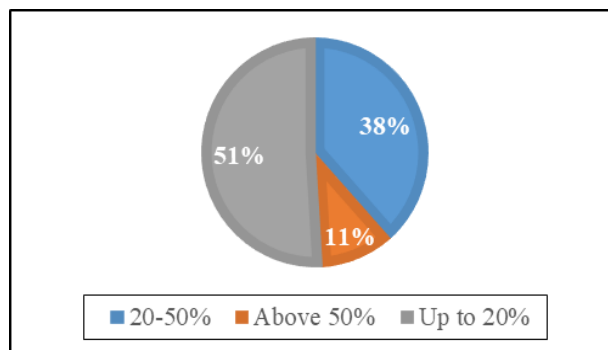


Figure 6. Proportion of Gen Z Investing

Having confirmed the interest of a majority of Gen Z in investing activities, we now try to correlate if factors like saving habits of Gen Z, demographics and prevalence of their family members investing in capital markets have any influence on their investing proportions. To analyse this, we propose the following null hypotheses to be tested through the Chi –Square test of independence at 5% level of significance:

H09: There is no significant relationship between the saving proportions and investing proportions of Gen Z.

H10: There is no significant relationship between the demographic factors (gender, age, annual family income) and investing proportions of Gen Z

H11: There is no significant relationship between the prevalence of family members investing in capital markets and investing proportions of Gen Z

Table 5. Comparative Analysis of Investment Proportions across Saving Proportions

Factors		Investing Proportion of Gen Z (In Percentage)			Total	Chi Square Statistic
		Up to 20%	20-50%	Above 50%		
Saving Proportion	Saving Up to 20%	74	21	6	100	35.264 (0.000)*
	Saving 20-50%	38	49	13	100	
	Saving Above 50%	12	53	35	100	
Gender	Male	46	42	12	100	1.847 (0.397)
	Female	65	29	6	100	
Age	15-18	44	56	-	100	2.859 (0.582)
	19-22	53	38	9	100	
	23-25	50	33	17	100	
Annual Family In- come	Up to 0.5 million	71	29	-	100	9.604 (0.142)
	0.5-2.5 million	58	32	10	100	
	2.5-5 million	33	56	11	100	
	Above 5 million	23	54	23	100	
Family Members Investing in Capi- tal Markets	A Lot of them	27	47	26	100	9.978 (0.041)*
	May be a few	61	33	6	100	
	No one	33	67	-	100	
* p value < 0.05						

Table 5 explicitly exhibits a direct relationship between the saving and investing proportions as well as the prevalence of family members investing in capital markets and investing proportions. We observe that, higher the saving and more the members in the family investing in capital markets, higher the proportion of investments made by Gen Z. The statistical significance of these relationships is explained through the results of Chi Square test for H09 and H11 which show that the p values (0.000 and 0.041) are less than 0.05 and hence we reject both the null hypotheses. Thus, we can say that, both saving habits of Gen Z and investing experience of their family members influence their investing endeavors and may go a long way in achieving their quest for financial independence (Owusu, 2020).

However, the results of Chi Square test for H10 for demographics like gender, age and annual family income, reflect p values 0.397, 0.582 and 0.142 respectively which are all greater than 0.05 and hence we fail to reject the null hypothesis. We can therefore infer that male and female do not differ with regard to their investing proportions. Similarly, Gen Z across various age groups and those with varied annual family income also do not differ significantly with regard to their investing proportions.

While we discover that a majority of Gen Z are moving towards investing to meet their financial needs, we also try and seek out as to how are they educating themselves about the various avenues before they make their investment decisions. Figure 7 captures the ranking (1 being the highest) given by Gen Z to various sources of information which they consider before making investment decisions. We observe that majority of the respondents (about 30-40%) rank (1 and 2) information from certified professionals, brokers and you tube videos

higher than the traditional sources like newspapers, news channels, friends and family. Some of them (approximately 20-30%) seem to be neutral (rank 3) across the use of various sources to plan their investments. Thus, we can see that Gen Z is relying more on new age technology based mediums and professional sources rather than on traditional sources to make informed and rational investment decisions (Lauria, 2022, Hawkins et al., 2022).

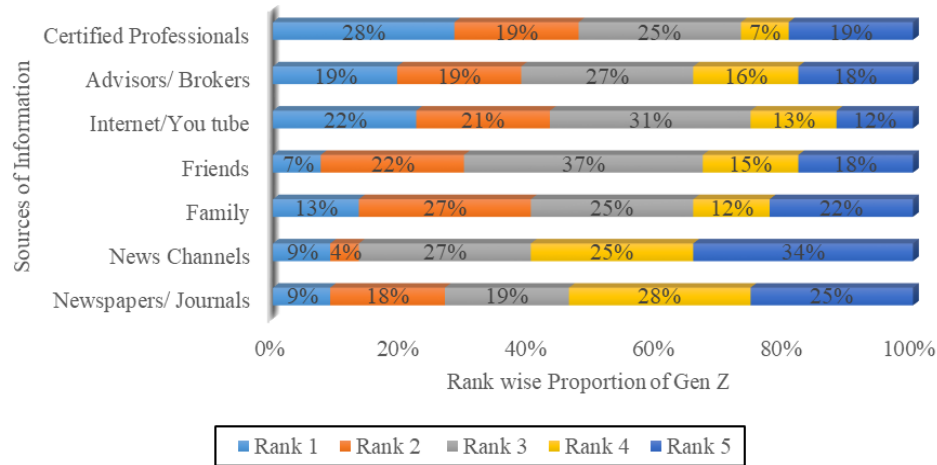


Figure 7. Sources of Information Used by Gen Z

Analysis of Investment Avenues for Gen Z

We further analyse as to where and how much Gen Z is investing. **Figure 8** intricately displays the preferences of Gen Z across various investment avenues. While majority (60-70%) of the Gen Z invest only up to 20% of their funds in assets like ETF's, Crypto, Debentures, Commodities, Savings Account, some (50-60%) also invest the same proportion in Mutual Funds, Gold/ Silver and Fixed Deposits. We also find that about 30-40% of Gen Z on an average invest between 20-50% of their funds across all the investment avenues. This shows their exposure across various options at least to some extent. Interestingly, we witness that, the categories that attract Gen Z to invest more than 50% of their funds are limited to Mutual Funds, Fixed Deposits, Commodities, Gold/ Silver and the most popular being Equity Shares (Albright, 2022, Hawkins et al., 2022). We therefore observe Gen Z investing across various avenues in varying proportions.

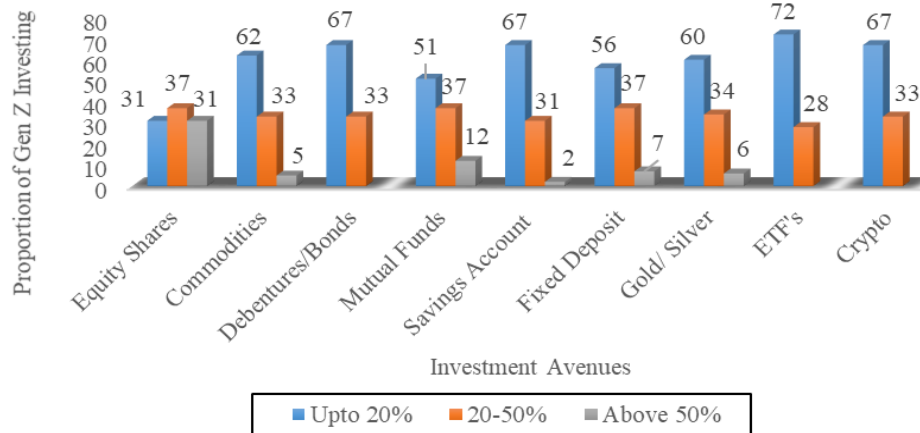


Figure 8. Investment Avenues of Gen Z

To check the statistical significance of the behaviour between the proportion of investments and the investment avenues as discussed above, we propose the following null hypotheses to be tested through the Chi-Square test of independence at 5% level of significance:

H12: There is no significant relationship between the investing avenues and investing proportions of Gen Z

Table 6. Comparative Analysis of Investment Proportions across Investment Avenues

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	43.924 ^a	16	0.000*
Likelihood Ratio	43.027	16	0.000
N of Valid Cases	286		
* p value < 0.05			

The results of Chi Square test for **H12** in **Table 6** reveal that the p value (0.000) is less than 0.05 and hence we reject the null hypothesis and infer that investing proportions of Gen Z are strongly associated with the investment avenues and may differ across the avenues.

To further confirm if there are variations in the means of proportion of investments made by Gen Z across various avenues we frame the following hypothesis to be tested through the one way ANOVA at 5% level of significance.

H13: There is no significant difference in the proportion of investments made by Gen Z across the different avenues of investment.

Table 7. Result of One Way ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	11441.6	8	1430.2	5.925872	5.15E-07	1.971907
Within Groups	66853.51	277	241.3484			
Total	78295.1	285				

Table 7 shows that the p value (0.000) is less than 0.05 and hence we reject the null hypothesis **H13** and thus infer that the proportion of investments made by Gen Z across various avenues differ significantly. In other words, though Gen Z is found to invest in a wide range of options, the amount of investment they make across each of them, varies significantly. This may be because of difference in their preferences, risk aptitude, liquidity, duration and expectations for return.

Trends of Gen Z Investing Across Specific Investment Avenues

From the above discussion, while we understand the general trends of Gen Z investing across various asset classes we tried to probe little more into some specific asset classes like Mutual Funds and Equity Shares. Figure 9 very prominently exhibit that majority of Gen Z who prefer investing in Mutual Funds are inclined to do so in Growth (45%) and Systematic Investment Plans (43%). Very few are exploring the Bonus (3%) and Dividend (9%) plans. This trend indicates that most of them are looking for capital appreciation through growth stocks and are willing make regular investments through SIP's to earn better returns (Albright, 2022, Hawkins et al., 2022).

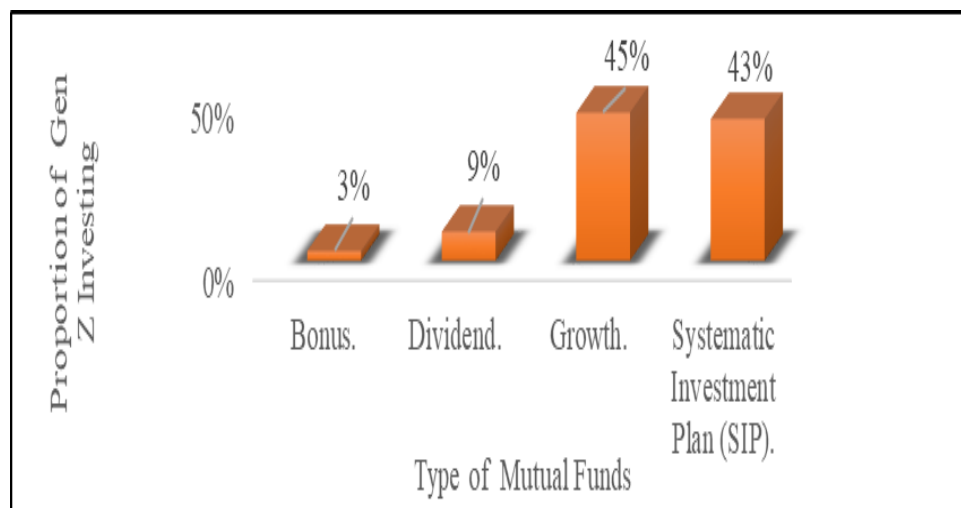


Figure 9. Preferences of Gen Z across Types of Mutual Funds

Further, Figure 10 captures the preferences of Gen Z while investing in Equity Shares. Incidentally, here also we see that majority of the respondents are preferring Growth stocks (28%) followed by Value stocks (26%) with very few exploring Dividend stocks ((9%). In terms of stocks as per market capitalization we observe that Gen Z is preferring more of Large Cap (12%) and Blue Chip (12%) stocks as compared to Small Cap stocks. Thus, this affirms our previous finding that Gen Z are more inclined to investing in stocks of companies that are fundamentally strong and are capable of giving better long term returns through capital appreciation rather than stable dividend income (Albright, 2022, Hawkins et al., 2022).

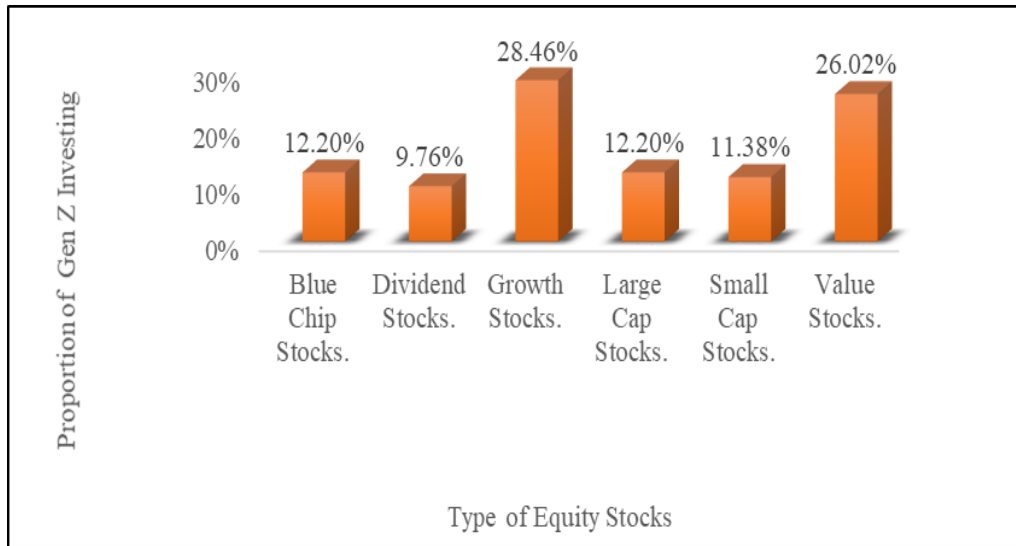


Figure 10. Preferences of Gen Z across Types of Equity Stocks

Figure 11 additionally gives a sense of the mode of equity investments preferred, wherein we observe that largely, 56% of Gen Z prefer transacting through the cash mode, but fairly 35% of the respondents also transact through both cash and derivatives mode. Figure 12 further explains this behaviour in detail where we observe that, of those who prefer derivative trading, majority of them are preferring Options (48%) followed by Futures (39%) and Forwards (12%). This indeed is an interesting observation which also unveils the awareness of this nascent generation towards a more complex modes of investing (Albright, 2022, Hawkins et al., 2022).

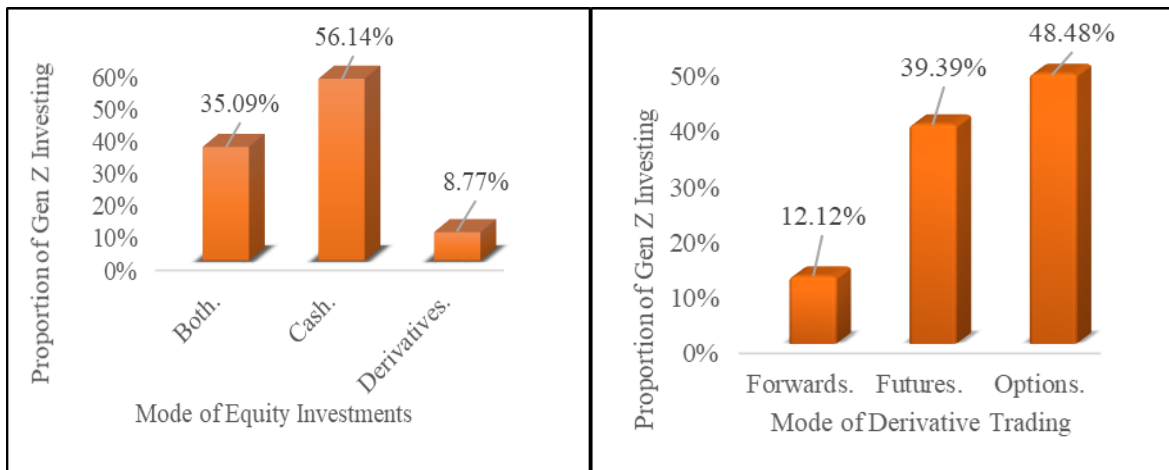


Figure 11. Preferences of Gen Z for Mode of Equity Investments

Figure 12. Preferences of Gen Z for Mode of Derivative Trading

Figure 13 gives a snapshot of the Gen Z's sector preferences while investing in equity shares. The top two sectors that Gen Z finds lucrative to invest are Information Technology (12%) and Banking and Financial

Services (13%) (Albright, 2022, Hawkins et al., 2022). Other sectors which is catching their attention are Energy (8%), Oil and Gas (8%), Pharmaceuticals and Health Care (7%), FMCG (7%), Automobiles (7%) and Infrastructure (7%).

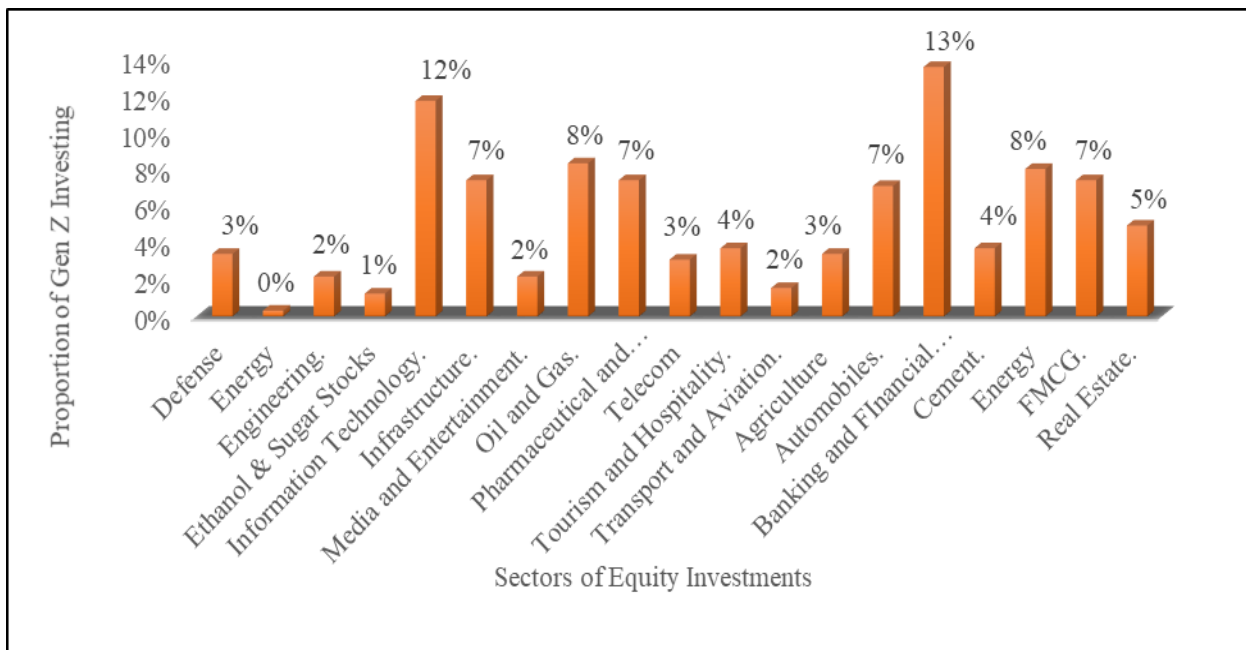


Figure 13. Sector Preferences of Gen Z in Equity Investments

After exploring some specific trends of Gen Z investing, we make some claims for which we undertake a one proportion Z- test of the population at 5% level of significance through the following null hypotheses:

- H14: Majority of the Gen Z is not actively investing in Growth Plans of Mutual Funds.
- H15: Majority of the Gen Z is not actively investing in SIP's of Mutual Funds.
- H16: Majority of the Gen Z is not actively investing in Growth Stocks.
- H17: Majority of the Gen Z is not actively investing in Value Stocks.
- H18: Majority of the Gen Z is not actively investing in Banking Sector.
- H19: Majority of the Gen Z is not actively investing in Information Technology Sector

Hypothesis Test Summary				
	Null Hypothesis	Test	Sig.	Decision
1	The categories defined by Growth MF = Yes and No occur with probabilities 0.5 and 0.5.	One-Sample Binomial Test	.000	Reject the null hypothesis.
2	The categories defined by Growth MF-Code <=0.50 and >0.50 occur with probabilities 0.5 and 0.5.	One-Sample Binomial Test	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Figure 14. Z- Test for Gen Z Investing in Growth Plans of Mutual Funds

Figure 14 indicates the outcome of Z- test, where the p value (0.000) is less than 0.05 and hence we can reject the null hypothesis H14 and thus infer that at least 50% of the Gen Z are investing in Growth plans of Mutual Funds.

	Null Hypothesis	Test	Sig.	Decision
1	The categories defined by SIP = Yes and No occur with probabilities 0.5 and 0.5.	One-Sample Binomial Test	.000	Reject the null hypothesis.
2	The categories defined by SIP - Code <=0.50 and >0.50 occur with probabilities 0.5 and 0.5.	One-Sample Binomial Test	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Figure 15. Z- Test for Gen Z Investing in SIP's of Mutual Funds

Figure 15 indicates the outcome of Z- test, where the p value (0.000) is less than 0.05 and hence we can reject the null hypothesis H15 and thus infer that at least 50% of the Gen Z are investing in SIP's of Mutual Funds

	Null Hypothesis	Test	Sig.	Decision
1	The categories defined by Growth Stock = Yes and No occur with probabilities 0.5 and 0.5.	One-Sample Binomial Test	.013	Reject the null hypothesis.
2	The categories defined by Growth stock-code <=0.50 and >0.50 occur with probabilities 0.5 and 0.5.	One-Sample Binomial Test	.013	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Figure 16. Z- Test for Gen Z Investing in Equity Growth Stocks

Figure 16 indicates the outcome of Z- test, where the p value (0.013) is less than 0.05 and hence we can reject the null hypothesis H16 and thus infer that at least 50% of the Gen Z are investing in Equity Growth stocks.

	Null Hypothesis	Test	Sig.	Decision
1	The categories defined by Value Stock = Yes and No occur with probabilities 0.5 and 0.5.	One-Sample Binomial Test	.099	Retain the null hypothesis.
2	The categories defined by Value stock - Code <=0.50 and >0.50 occur with probabilities 0.5 and 0.5.	One-Sample Binomial Test	.099	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Figure 17. Z- Test for Gen Z Investing in Equity Value Stocks

Figure 17 indicates the outcome of Z- test, where the p value (0.099) is more than 0.05 and hence we fail to reject the null hypothesis H17 and thus infer that at least 50% of the Gen Z are not investing in Equity Value stocks.

	Null Hypothesis	Test	Sig.	Decision
1	The categories defined by Banking = Yes and No occur with probabilities 0.5 and 0.5.	One-Sample Binomial Test	.000	Reject the null hypothesis.
2	The categories defined by Banking Code <=0.50 and >0.50 occur with probabilities 0.5 and 0.5.	One-Sample Binomial Test	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Figure 18. Z- Test for Gen Z Investing in Banking Sector

Figure 18 indicates the outcome of Z- test, where the p value (0.000) is less than 0.05 and hence we can reject the null hypothesis H18 and thus infer that at least 50% of the Gen Z are investing in the Banking sector.

	Null Hypothesis	Test	Sig.	Decision
1	The categories defined by IT = No and Yes occur with probabilities 0.5 and 0.5.	One-Sample Binomial Test	.003	Reject the null hypothesis.
2	The categories defined by IT -Code <=0.50 and >0.50 occur with probabilities 0.5 and 0.5.	One-Sample Binomial Test	.003	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Figure 19. Z- Test for Gen Z Investing in IT Sector

Figure 19 indicates the outcome of Z- test, where the p value (0.003) is less than 0.05 and hence we can reject the null hypothesis H19 and thus infer that at least 50% of the Gen Z are investing in the IT sector

Analysis of Time Frame and Risk Perceptions of Gen Z’s Investing Preferences

Having explored the preferences of Gen Z across investments avenues in general, and some in particular, we were curious to know if they also had some preferences of duration over which they would invest across their preferred investment options. Figure 20 reveals some interesting patterns with respect to the time frame that Gen Z is considering while investing. A large proportion of the respondents are looking for long term benefits as they prefer to invest for more than 1 year in assets like Equity (37%), Debentures (30%), Mutual Funds (58%), Savings Account (51%), Fixed Deposits (59%), Gold/ Silver (56%) and ETF’s (24%). An interesting observation is that when it comes to assets like Crypto (36%) and Commodities (40%), Gen Z is looking for short term gains where majority of them prefer to invest intra-day and for 1 month respectively. Having said this, we also observe Gen Z spreading off their investment choices across various time frames in a balanced manner especially for assets like Equity shares, ETF’s and Debentures.

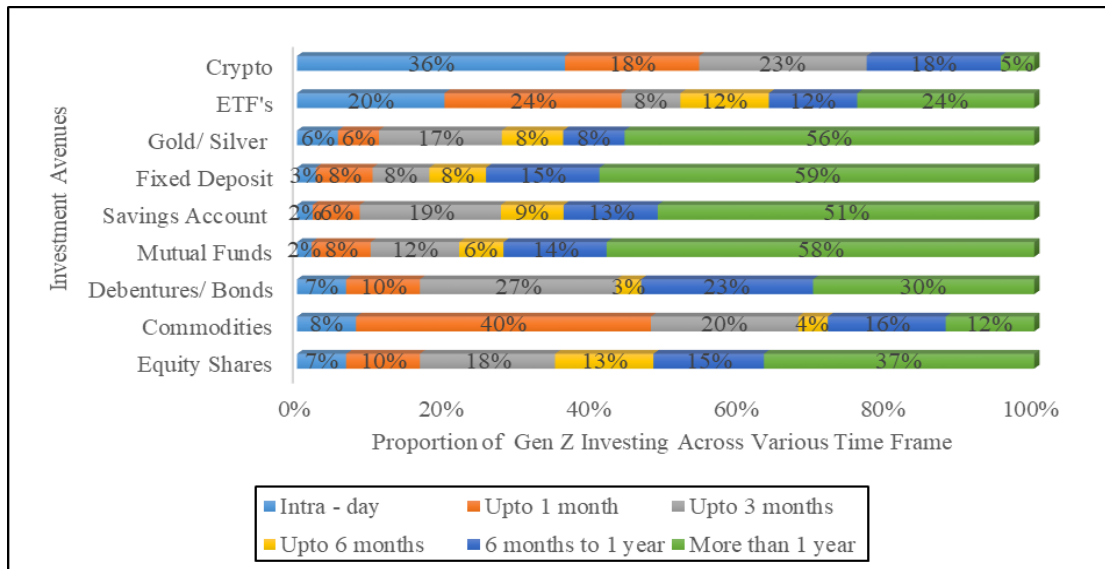


Figure 20. Time Frame of Gen Z Investing across various Avenues

Risk return assessment in investing activities is generally co-related to risk levels attached to the nature of assets. Figure 21 captures Gen Z’s risk perceptions across various assets classifying them between High, Moderate and Low levels of risk. As expected, Savings account (84%), Fixed Deposits (81%), Gold/ Silver (68%) and Debentures (55%) are ranked by most of them to be low risk investment options considering assured return with less volatility. These are also options where they have been investing long term as discussed above. Similarly Crypto (89%) where most of them are investing intraday is considered as a high risk option, followed by Equity shares (33%) and Commodities (30%) (Lutfi, 2010, Albright, 2022). Many Gen Z respondents also seem to find assets like Mutual Fund (58%), Equity shares (52%) and Commodities (47%) to be carrying moderate risk, maybe because of the possibility to diversify risk across various stocks.

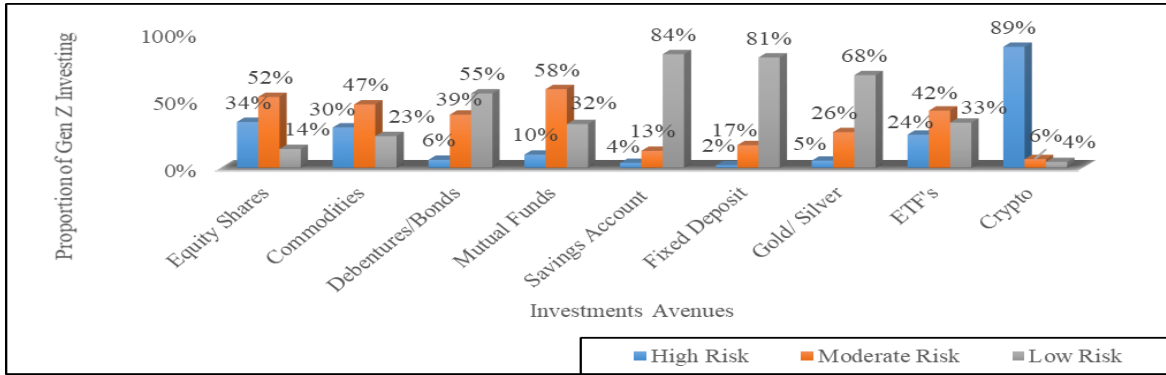


Figure 21. Risk Preferences of Gen Z across Investment Avenues

Analysis of Investment Behaviour of Gen Z

While, understanding investment preferences of Gen Z to move towards financial independence was the primary objective of the study, another important aspect was to understand the behaviour of Gen Z that would inadvertently influence their choice of investment avenues. Figure 22 clearly exhibits the factors that influence the behaviour of Gen Z in prioritizing their investment options. We observe that factors like historical performance, liquidity, risk diversification, source of passive income are ranked 1 and 2 by most of the respondents cumulatively (40-50%) which means these are equally important to most of them. Observation worth noting is that, a large proportion of the respondents consider Rate of return (64%), Long term gain (51%), and Knowledge of industry (43%) as the most important factors to make investment decisions (Albright, 2022).

These observations are in line with our earlier findings which highlighted the preference of Gen Z (i) to invest in growth stocks (both equity and mutual funds) with an expectation of high returns, and (ii) to prefer long term investments with an expectation of long term gains.

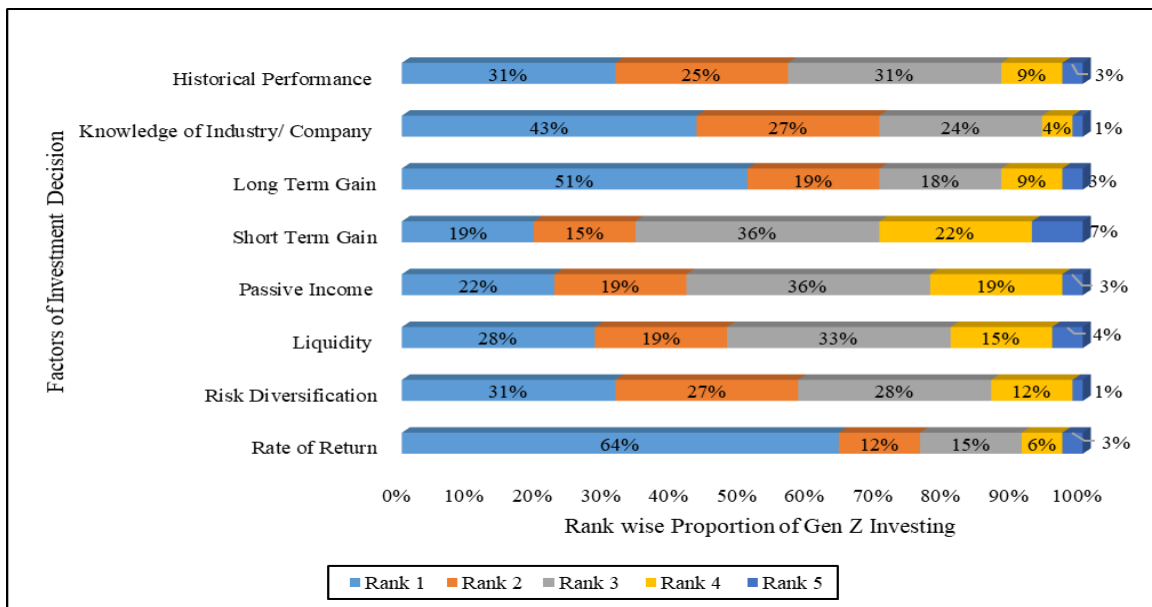


Figure 22. Factors Guiding Investment Decisions of Gen Z

Figure 23 furthermore captures how Gen Z is behaving while making their investment decisions. We observe that, while very few (18%) do their own research, some (3% and 9 %) also follow expert tips on YouTube and rely on the expertise of the broker respectively before they plan their investment decisions. Interestingly, we also observe that majority of them (58%) study investments patterns of others and 12% also blindly follow their friend’s investments patterns. Given the observations, we can therefore infer herd behaviour of investing for Gen Z (Putri et al., 2020, Rosdiana, 2020).

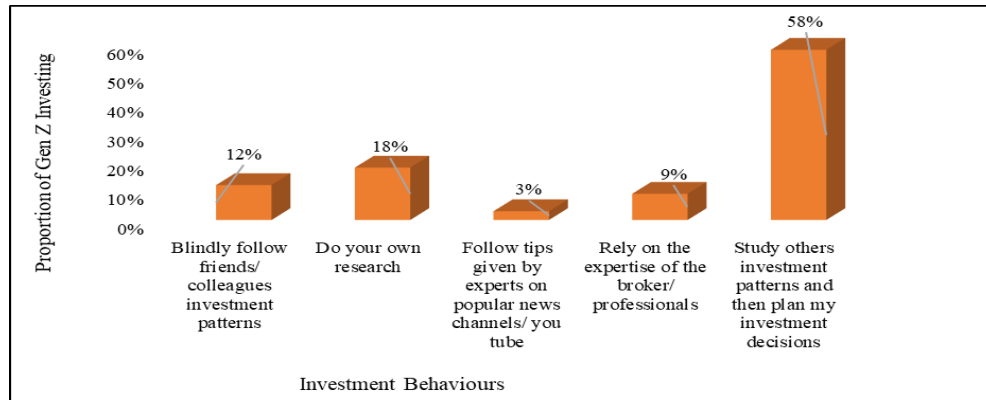


Figure 23. Proportion of Gen Z across different Investment Behaviour Patterns

To assess the level of awareness of and significance for Gen Z, we checked the frequency with which they track their investing activities. **Figure 24** shows that largely 58% of them follow up on their transactions almost daily, followed by 6 to 16% of them checking often and monthly respectively. 18% of them do check occasionally and there is hardly any who do not check. This gives a sense of their priority to invest rationally by giving enough time to follow up and make modifications wherever required (Hawkins et al., 2022).

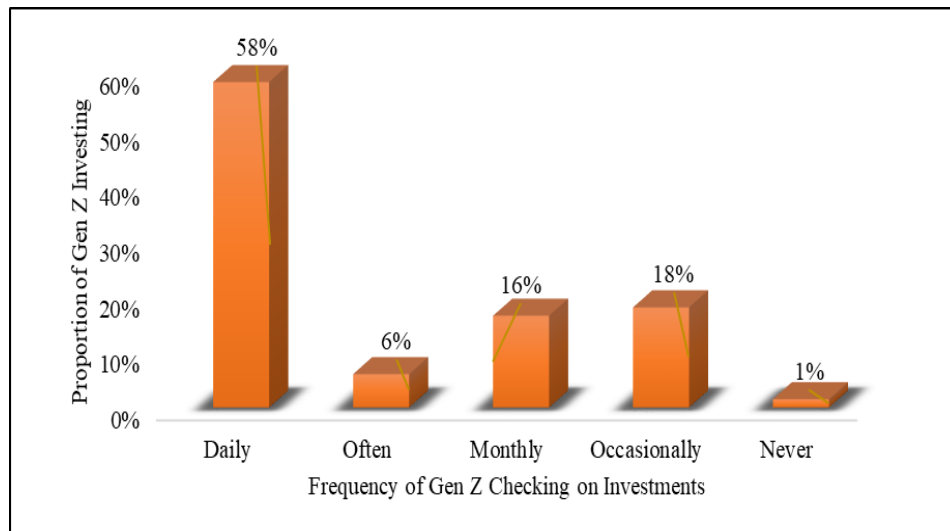


Figure 24. Frequency of Gen Z Checking on Investments

Figure 25 also depicts an interesting trend wherein we observe that 67% of the Gen Z are using new age investing applications to process their investment transactions and only 15% are still preferring the traditional methods, with 18% of them using both options. This clearly indicates the increased use of technology by the budding Gen Z investors (Lauria, 2022).

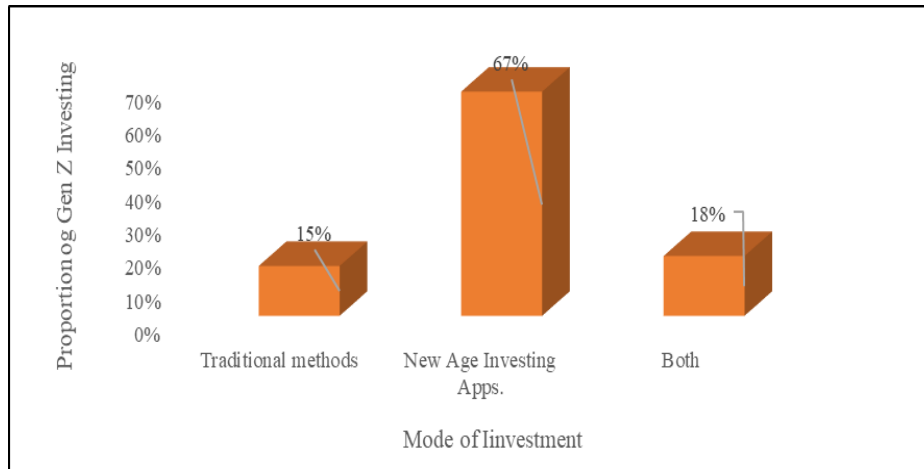


Figure 25. Mode of Investments used by Gen Z

After exploring the investment behaviour of Gen Z, we finally asked them of the problems that they might face while exploring their investing endeavors. While 19% of them didn't seem to have any problems, almost 30% of the respondents believe that taking the first step is the biggest hurdle in their investing journey. Furthermore, 15% of them have the fear of incurring losses and around 8% of them seem to be struggling with the lack of awareness about investment avenues and advice from certified professionals. Very few face issue like inconvenient technology (6%) and problems in linking bank accounts (6%). An eye opening observation is that, earlier, while we observed many of them relying on their friend's investment patterns to make investment decisions we also see 6% of them fearing being wrongly guided by their peers.

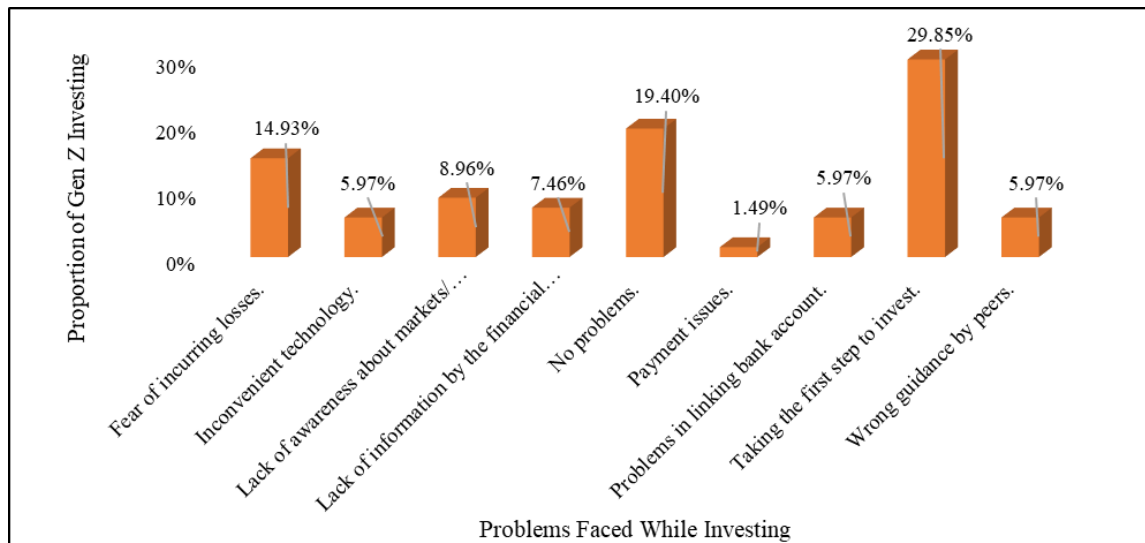


Figure 26. Proportion of Gen Z Problems faced while investing

Having understood the problems faced by Gen Z, we tried to assess if they were open to learning and improving their investment skills in future. Figure 27 very optimistically reflects that 46% of them agree and 40% of them are most likely to agree in indulging themselves towards acquiring better knowledge and skills to invest in future.

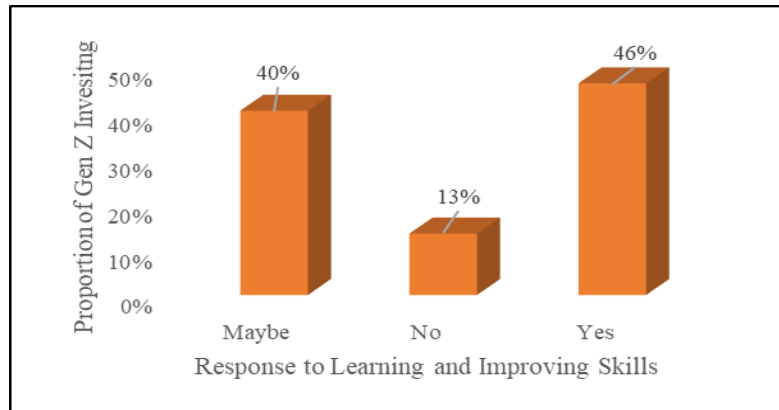


Figure 27. Proportion of Gen Z Open to Learning Investing Skills

Findings and Conclusions

With increasing evidence of Gen Z investing in India, the current study has tried to fill the research gap by exploring the investment trends of Gen Z in India by investigating into their sources of funds, saving habits, investment preferences and behaviour guiding their investment decisions. In this section, we draw conclusions by summarizing the findings from the data analysis done in the previous section.

The respondents in the study were majorly male (65%) and also most of them were in the age group 19-22 (55%) studying at the undergraduate level, which signifies the participation of Gen Z in the survey. Additionally, largely (51%) these respondents had annual family income level in the range of INR 0.5 to 2.5 million and interestingly 67% of them had family members having exposure to capital market investing.

The monthly source of funds to Gen Z, which might ultimately shape their saving and investment habits, majorly come from their own earnings and pocket money received from parents. These sources do not significantly differ between male and female or varying annual family income of the participants. However, we do find that with maturity in terms of age, funding for Gen Z comes more from their own earnings rather than pocket money from parents or gifts from friends and relatives. Thus, from the pattern of funding received, we may infer that Gen Z is seeming to gradually move towards financial independence by relying on their own earnings (Measom, 2023).

Saving motivations of the Gen Z seem to be quite impressive, as almost all the respondents believe in practicing saving habits, though the proportions of savings have been found to vary with majority of them saving at least 20% of their available funding resources. Additionally, we also found that saving proportions are significantly different amongst Gen Z in terms of their gender, age and annual family income. Majority of the female Gen Z, those in the age group 15-22 and those with annual family income up to 2.5 million have found to save up to 20%. Conversely, majority of male Gen Z, those of the age above 22 and those with annual family income above 2.5 million have found to save between 20 -50% and above. These differences could primarily be because of varying motives of saving (Kealey Roberts, 2019). The various reasons for which majority of the Gen Z was saving, broadly included, creating funds for buying assets like vehicles, mobile phones or laptops for person use, making financial investments, meeting daily expenses of food, travel and shopping,

and budgeting for future education (Bump, 2022). A very small section of the participants also mentioned they would save for the purpose of donating for a cause. Largely, Gen Z's plan to buy personal assets and meeting daily expenses can be managed by saving up to 50%. Interestingly, they also save more than 50% to make financial investments. On the whole, we can say that saving habits are found to be deeply rooted in the financially conscious Gen Z participants which will take them a long way in achieving financial independence. (<https://www.pgimindiamf.com/pgim-india-insights/>)

It is impressive to find that with more than 50% of the Gen Z is enthused to invest, and 89% of them are investing atleast 50% of their personal funds. Having said that, we observe that saving habits and prevalence of family members investing in the capital markets has a direct relation with the investing proportions of Gen Z. In other words, Gen Z's investment motivations are largely influenced by higher saving proportions and the investing experience of the family members (Owusu, 2020). To make informed investment decisions, Gen Z has been found to rely more on new age technology based mediums like You tube and specialized sources like certified professionals and brokers (Lauria, 2022, Hawkins et al., 2022).

In terms of the investment avenues, while Gen Z has been found to invest across a variety of assets they significantly differ in terms of the proportion of investments made across various options. In assets like Equity shares, ETF's, Crypto, Debentures, Commodities, Mutual Funds, Gold/ Silver and Fixed deposits they invest anywhere up to 50% of their funds. However, Gen Z's are convinced to invest more than 50% only in a few assets like Equity Shares, Mutual funds, Commodities and Gold/Silver. The difference in investment preferences may be because of their varied perceptions in terms of risk aptitude, liquidity, duration and expectation of returns (Lutfi, 2010, Hawkins et al., 2022). More specifically, we found statistical evidence that more than 50% of the Gen Z are likely to actively invest in Growth plans and SIP's of mutual funds, Growth and Value equity stocks and companies in Banking and Information Technology sector. This trend indicates their preference for long term returns through capital appreciation by investing in fundamentally strong companies (Albright, 2022, Hawkins et al., 2022). Also, though cash mode was preferred by most of the Gen Z while investing in Equity shares, Futures and Options mode of derivative trading was also popular with almost 40% of the participants indicating the awareness of the nascent generation towards complex modes of investing.

Duration of investing being of essence, Gen Z was largely found to look for long term returns by investing for more than 1 year in most of the asset classes with an exception for Crypto and Commodities where they preferred intraday and short term investments of up to 1 month (Albright, 2022). Consequently, assets where they are investing long term are ranked as Low or Moderate risk by them and assets where they are investing short term or intraday are ranked as High risk items by them. This indicates how time frame and risk levels of assets are influencing the risk return assessment and investment objectives of Gen Z (Lutfi, 2010). Additionally, guiding factors prioritized for their investment decisions included rate of return, long term gains and historical performance of companies, which correlates to their inclinations of investing in growth stocks, preferring time frame of more than 1 year and in financially strong companies (Albright, 2022). This investing ideology would ultimately help them gain a strong footing in terms of financial independence very early in life.

With regard to their investment behaviour, Gen Z today is reflecting a herd behaviour wherein majority of them either study or blindly follow the investments patterns of other investors before making their investment decisions (Putri et al., 2020, Rosdiana, 2020). Very few do their own research or reach out to experts for advice. However, majority of them diligently follow up on their investments regularly to keep a track and plan follow on actions (Hawkins et al., 2022). Being Gen Z, most of them use technology based new age investing applications to make their transactions (Lauria, 2022).

Finally, even though they have accepted this responsibility of being financially independent many of them do face the issue of taking the first step towards their investment journey. Furthermore, many also encounter problems like fear of incurring losses, lack of awareness about prospective avenues, inconvenient technology and fear of being wrongly guided. Having said that, given an opportunity, Gen Z today is optimistically ready to learn and improve their investing skills.

Limitations and Avenues for Future Research

The current study is the first step in exploring the saving habits, investment preferences and investment behaviour of the budding Gen Z investors in India using inferential statistical tools. The scope of the current study is limited to India, with majority of the participants being from Ahmedabad. In future, the scope of the study could be extended to include a diverse sample across India or even Gen Z participants across the globe. This might help looking at trends at both national and global level. Also advanced techniques like regression analysis or structure equation modelling could be explored to study the causal relationships between various factors considered for the study. Future research can also be undertaken to make a comparative analysis of investment preferences across Gen Z and Gen X or Millennials.

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