



A Comparative Study of Generation Z and Generation X Investors: Differences in Investment Motivation, Technological Influence, Investment Strategies, and Financial Literacy

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1.1 ABSTRACT

This study undertakes a comparative examination of Generation Z and Generation X investors to identify differences in investment motivation, technological influence, investment strategies, and financial literacy. Using a quantitative comparative design, primary data were collected from 250 individual investors, including 112 Generation Z and 138 Generation X respondents. Descriptive statistics, Levene's test, and independent samples t tests were employed to assess generational differences across the selected dimensions. The results reveal statistically significant differences between the two generations across all four variables, with Generation Z investors reporting higher mean scores. The study contributes to the literature on generational investment behaviour and offers practical insights for financial institutions, advisors, and policymakers seeking to align investment products, digital platforms, and financial education initiatives with generational characteristics.

Keywords : *Generation Z, Generation X, generational differences; investment motivation, investor perceptions; technological influence; investment strategies*

1.2 INTRODUCTION

Investment behaviour has undergone significant transformation in recent years due to technological advancement, increased access to financial information and the entry of younger cohorts into capital markets. Generational differences in attitudes, knowledge and decision-making processes have become increasingly relevant as financial markets grow more complex and digitally driven. Investors from different generational groups often exhibit distinct preferences, motivations and behavioural patterns, shaped by their socio-economic experiences and exposure to technology. Understanding these differences is essential for interpreting contemporary investment trends and for developing effective financial products and advisory strategies.

Generation X investors typically developed their investment habits during periods characterised by traditional financial advisory systems and limited digital access. In contrast, Generation Z investors have entered financial markets in an environment dominated by online platforms, mobile applications and real-time financial information. These contextual differences are likely to influence not only how individuals access investment opportunities but also how they evaluate risk, plan strategies and perceive their own financial competence. As a result, generational comparisons provide valuable insights into evolving investment behaviour.

Investment motivation plays a central role in determining whether individuals engage actively with financial markets and pursue long-term financial objectives. Similarly, technological influence has emerged as a critical factor shaping investment accessibility, confidence and frequency of participation. Investment strategies reflect the degree to which investors rely on systematic planning, diversification and risk assessment, while financial literacy underpins informed decision-making and effective interpretation of financial information. Examining these dimensions together allows for a comprehensive assessment of generational investment behaviour.

Although prior research has acknowledged generational variation in financial attitudes, limited empirical studies have directly compared Generation Z and Generation X investors across multiple investment-related dimensions within a single analytical framework. This limitation is particularly evident in studies that integrate motivation, technological influence, strategic behaviour, and financial literacy. Addressing this gap remains important for strengthening both academic understanding and practical application in contemporary investment contexts.

Against this background, the present study aims to examine whether significant differences exist between Generation Z and Generation X investors with respect to investment motivation, technological influence, investment strategies and financial literacy. By adopting a comparative quantitative approach, the study seeks to contribute to a deeper understanding of how generational context shapes investment perceptions and behaviours in an increasingly digital financial environment.

1.3 REVIEW OF LITERATURE

(Prakash, Pathak, & Kumar, 2020) examined behavioural biases and investment decision making from a generational perspective, with particular attention to differences in motivation and risk perception. Using survey-based quantitative analysis, the study demonstrated that younger investors exhibit stronger motivational drivers and a greater willingness to engage with market opportunities compared to older cohorts. The findings underscore the relevance of generational context in shaping investment motivation and behavioural orientation.

(Bianchi, 2021) analysed the role of financial literacy in shaping portfolio diversification behaviour using empirical evidence from retail investors. The study employed econometric modelling to assess how knowledge of financial concepts influences strategic investment choices. Results indicated that higher financial literacy is associated with more structured and diversified investment strategies, highlighting the foundational role of financial knowledge in effective investment decision making.

(Lim, Soutar, & Lee, 2021) investigated factors influencing investment intentions across generational groups using a comparative quantitative design. The analysis revealed significant generational variation in motivational intensity and strategic orientation, with younger investors displaying greater openness to market participation and innovation. The study provides empirical support for examining investment motivation through a generational lens.

(Aren & Hamamci, 2021) explored the relationship between risk aversion, financial literacy and investment choice behaviour. Based on survey data and regression analysis, the findings indicated that financial literacy moderates risk perception and supports more systematic investment strategies. The study reinforces the importance of financial knowledge in guiding informed and planned investment behaviour.

(Hsiao & Tsai, 2022) focused on the influence of digital investment platforms on investor behaviour. Using structural modelling techniques, the study demonstrated that technological accessibility enhances investor confidence, engagement and monitoring behaviour. The findings are particularly relevant to understanding how technological influence shapes contemporary investment practices.

(Nguyen et al., 2022) examined the effects of financial literacy on investment behaviour using data from individual investors. The study employed quantitative methods to assess relationships between financial knowledge, risk assessment and decision quality. Results showed that higher financial literacy significantly improves investment confidence and strategic decision making.

(Bapat & Kumar, 2023) conducted a comparative analysis of generational differences in investment decision making. Using empirical survey data, the study identified significant variation across generations in motivation, strategy adoption and technology use. The findings highlight the importance of integrating generational characteristics when analysing investor behaviour.

(Farid & Ali, 2023) analysed technology adoption patterns among retail investors and their behavioural implications. The study found that digital tools and platforms significantly influence investment frequency, accessibility and engagement, particularly among younger investors. These results emphasise the growing role of technology in shaping investment behaviour.

(Singh & Sharma, 2024) examined investment motivation and behavioural intention across generational groups using quantitative techniques. The findings indicated that younger generations demonstrate stronger motivation and higher behavioural intention toward investing. The study contributes to understanding motivational differences across investor cohorts.

(Kaur, Vohra, & Arora, 2024) Investigated the combined influence of financial literacy and digital tools on investment strategies among young investors. Using survey-based analysis, the study revealed that technological competence and financial knowledge jointly support structured, informed, and proactive investment strategies. The findings align closely with research examining generational variation in investment behaviour.

Existing literature highlights that investment behaviour varies across generations, particularly with respect to motivation, technological engagement, strategic orientation, and financial literacy. Prior studies have examined these dimensions independently, demonstrating that younger investors often display stronger motivation, greater openness to technology, and higher engagement with digital platforms, while financial literacy consistently supports more systematic investment strategies. However, there remains limited empirical integration of these dimensions within a single comparative framework focused explicitly on Generation Z and Generation X investors, indicating the need for comprehensive comparative analysis.

1.4 RESEARCH OBJECTIVES

To examine whether there are significant differences in investment motivation, technological influence, investment strategies and financial literacy between Generation Z and Generation X investors.

1.5 RESEARCH METHODOLOGY

1.5.1 Research Design

The study adopted a comparative research design to examine differences between Generation Z and Generation X investors with respect to investment motivation, technological influence, investment strategies and financial literacy. This design was considered appropriate as it allows for systematic comparison between two distinct generational groups, thereby directly addressing the stated research objective of identifying significant mean differences across the selected investment-related dimensions.

1.5.2 Research Approach

A quantitative research approach was employed in this study. The approach was suitable given the use of structured variables, numerical measurement through Likert scale responses, and the application of

inferential statistical techniques, particularly independent samples t tests, to assess generational differences in mean scores across the identified constructs.

1.5.3 Population and Sample

The target population comprised individual investors belonging to Generation Z and Generation X. A comparative sampling framework was adopted, and data were collected from a total sample of 250 respondents, consisting of 138 Generation X investors and 112 Generation Z investors. This sample size was considered adequate for conducting parametric statistical analysis and ensuring sufficient statistical power for detecting mean differences between the two independent groups.

1.5.4 Research Variables

Generation served as the grouping variable, categorised into Generation Z and Generation X. The test variables included investment motivation, technological influence, investment strategies and financial literacy. Investment motivation refers to the degree to which individuals are driven to invest for long term goals, security and returns. Technological influence denotes the perceived role of digital platforms and tools in shaping investment decisions. Investment strategies represent planned and systematic approaches adopted while investing. Financial literacy reflects the respondent's understanding of investment concepts, risk assessment and interpretation of financial information.

1.5.5 Data Collection Procedure

Primary data were collected through a questionnaire-based survey administered to investors from both generations. The data collection process was carried out over a defined period using a structured format, ensuring uniformity in administration and minimising response bias.

1.5.6 Statistical Tools and Techniques

Descriptive statistics, including mean and standard deviation, were used to summarise the responses for each variable across both generations. Levene's test was applied to examine the equality of variances prior to hypothesis testing. Independent samples t tests were employed to test all four hypotheses and determine whether significant differences existed between Generation Z and Generation X investors in terms of investment motivation, technological influence, investment strategies and financial literacy. Each statistical technique was directly aligned with the corresponding hypothesis and the comparative nature of the study objectives.

1.6 MEASUREMENT INSTRUMENT

Data were collected using a structured questionnaire comprising Likert-type statements. Each of the four test variables was measured using five statements, resulting in a total of twenty items. Responses were captured on a five-point scale ranging from strongly disagree to strongly agree. The instrument was designed to capture respondents' perceptions consistently across both generational groups.

Table 1.1: Opinion of the Respondent regarding Investment Motivation

	Statement	Gen	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I am motivated to invest to achieve long-term financial goals.	X	1	26	74	33	4
		Z	0	10	59	34	9
2	Investment helps me secure my future financial stability.	X	1	27	55	46	9
		Z	2	13	46	42	9
3	I feel personally driven to participate in investment activities.	X	3	22	65	38	10
		Z	1	12	37	49	13
4	I actively look for opportunities to invest my savings.	X	0	16	74	42	6
		Z	2	18	44	40	8
5	Achieving higher returns motivates my investment decisions.	X	2	31	62	35	8
		Z	1	17	47	42	5

Table 1.2: Opinion of the Respondent regarding Technological Influence

	Statement	Gen	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
6	Online platforms make investing easier for me.	X	0	24	64	42	8
		Z	1	15	41	40	15
7	Technology increases my confidence in making investment decisions.	X	1	16	66	46	9
		Z	3	15	48	30	16
8	Mobile apps influence how frequently I invest.	X	3	18	61	47	9
		Z	0	12	46	46	8
9	Digital tools help me monitor my investments effectively.	X	2	24	59	39	14
		Z	0	15	42	47	8
10	Technology has simplified access to investment information.	X	3	28	62	40	5
		Z	0	20	53	37	2

Table 1.3: Opinion of the Respondent regarding Investment Strategies

	Statement	Gen	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
11	I follow a clear strategy when making investments.	X	0	17	57	53	11
		Z	1	13	39	47	12
12	Diversification is an important part of my investment approach.	X	4	21	65	39	9
		Z	2	15	48	40	7
13	I regularly review and adjust my investment portfolio.	X	2	21	63	45	7
		Z	5	8	57	35	7
14	Risk assessment guides my investment strategy.	X	2	25	68	37	6
		Z	1	18	44	41	8
15	I rely on planned strategies rather than impulsive decisions.	X	4	15	69	46	4
		Z	1	15	43	49	4

Table 1.4: Opinion of the Respondent regarding Financial Literacy

	Statement	Gen	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
16	I understand basic investment concepts.	X	3	25	62	41	7
		Z	0	16	37	53	6
17	I am confident in interpreting financial information.	X	2	22	54	53	7
		Z	3	9	51	39	10
18	I can assess the risk associated with different investments.	X	0	30	59	44	5
		Z	1	9	49	47	6
19	I understand how market changes affect investments.	X	4	23	60	43	8
		Z	2	15	48	41	6
20	My financial knowledge supports my investment decisions.	X	1	22	55	52	8
		Z	0	15	43	44	10

1.7 RESEARCH HYPOTHESES

1.7.1 Testing of Hypothesis H₀₁

H₀₁: There is no significant difference in the mean investment motivation scores between Generation Z and Generation X investors.

An independent samples t-test was conducted to examine differences in investment motivation between Generation Z and Generation X investors.

Table 1.5 Descriptive statistics

		n	Mean	Std. Deviation
Investment Motivation Mean	Gen X	138	3.191	0.377
	Gen Z	112	3.380	0.390

Table 1.6: Levene test of variance equality

Test	F	df1	df2	p
Levene's Test (Mean)	0.149	1	248	.7

Table 1.7: t-Test for independent samples

		t	df	p
Investment Motivation Mean	Equal variances	-3.885	248.000	<.001
	Unequal variances	-3.871	234.014	<.001

An independent samples t test was conducted to examine differences in investment motivation between Generation Z and Generation X investors. Levene's test indicated that the assumption of equal variances was met, $F(1, 248) = 0.149$, $p = .700$. The t test revealed a statistically significant difference in mean investment motivation scores between Generation Z ($M = 3.380$, $SD = 0.390$) and Generation X ($M = 3.191$, $SD =$

0.377), $t(248) = -3.885$, $p < .001$, the null hypothesis was rejected, indicating a significant generational difference

1.7.2 Testing of Hypothesis H₀₂

H₀₂: There is no significant difference in the mean technological influence scores between Generation Z and Generation X investors.

Table 1.8 Descriptive statistics

		n	Mean	Std. Deviation
Technological Influence Mean	Gen X	138	3.255	0.358
	Gen Z	112	3.380	0.395

Table 1.9: Levene test of variance equality

Test	F	df1	df2	p
Levene's Test (Mean)	3.164	1	248	.077

Table 1.10: t-Test for independent samples

		t	df	p
Technological Influence Mean	Equal variances	-2.628	248.000	.009
	Unequal variances	-2.601	226.928	.01

For technological influence, Levene's test showed that the assumption of homogeneity of variance was satisfied, $F(1, 248) = 3.164$, $p = .077$. The independent samples t-test indicated a significant difference between Generation Z ($M = 3.380$, $SD = 0.395$) and Generation X ($M = 3.255$, $SD = 0.358$), $t(248) = -2.628$, $p = 0.009$, The null hypothesis was rejected, indicating a significant generational difference

1.7.3 Testing of Hypothesis H₀₃

H₀₃: There is no significant difference in the mean investment strategies scores between Generation Z and Generation X investors.

Table 1.11 Descriptive statistics

		n	Mean	Std. Deviation
Investment Strategies Mean	Gen X	138	3.248	0.369
	Gen Z	112	3.355	0.396

Table 1.12: Levene test of variance equality

Test	F	df1	df2	p
Levene's Test (Mean)	0.557	1	248	.456

Table 1.13: t-Test for independent samples

		t	df	p
Investment Strategies Mean	Equal variances	-2.216	248.000	.028
	Unequal variances	-2.200	230.077	.029

Regarding investment strategies, Levene's test confirmed equality of variances, $F(1, 248) = 0.557$, $p = .456$. The t-test results demonstrated a statistically significant difference in mean investment strategies scores between Generation Z ($M = 3.355$, $SD = 0.396$) and Generation X ($M = 3.248$, $SD = 0.369$), $t(248) = -2.216$, $p = .028$; the null hypothesis was rejected, indicating a significant generational difference.

1.7.4 Testing of Hypothesis H₀₄

H₀₄: There is no significant difference in the mean financial literacy scores between Generation Z and Generation X investors.

Table 1.14 Descriptive statistics

		n	Mean	Std. Deviation
Financial Literacy Mean	Gen X	138	3.233	0.342
	Gen Z	112	3.400	0.407

Table 1.15: Levene test of variance equality

Test	F	df1	df2	p
Levene's Test (Mean)	2.229	1	248	.137

Table 1.16: t-Test for independent samples

		t	df	p
Financial Literacy Mean	Equal variances	-3.516	248.000	.001
	Unequal variances	-3.454	216.995	.001

For financial literacy, Levene's test indicated no violation of variance equality, $F(1, 248) = 2.229$, $p = .137$. The t test showed a significant difference between Generation Z ($M = 3.400$, $SD = 0.407$) and Generation X ($M = 3.233$, $SD = 0.342$), $t(248) = -3.516$, $p = .001$, the null hypothesis was rejected, indicating a significant generational difference

1.8 FINDINGS

1. Analysis of Likert scale responses related to investment motivation shows that both generations largely agree on the importance of long term financial goals and future security. However, Generation Z respondents consistently show higher agreement on items related to personal drive, active participation, and return-focused investing.

2. With respect to technological influence, Generation Z respondents consistently report higher agreement levels regarding ease of investing through online platforms, confidence gained through technology, and the role of mobile applications. Generation Z respondents also report slightly higher engagement in regular portfolio review and planned investment approaches.
3. The Likert scale analysis of investment strategies indicates that both generations value planned approaches, diversification, and risk assessment. Generation Z respondents show marginally higher agreement with statements related to regular portfolio review and reliance on structured strategies, suggesting greater engagement with systematic investment behaviour.
4. In the area of financial literacy, Generation Z respondents exhibit higher agreement with statements related to understanding investment concepts, interpreting financial information, and assessing risk. Generation X respondents demonstrate moderate agreement, indicating adequate but comparatively lower perceived financial knowledge.

1.9 OVERALL CONCLUSION

The findings directly address the research objective by confirming significant differences between Generation Z and Generation X investors across all four examined dimensions. Overall, the results suggest that Generation Z investors demonstrate higher levels of engagement and confidence in their investment decisions compared to Generation X investors. These patterns highlight the influence of generational context on investment perceptions and behaviours, particularly in an environment increasingly characterised by digital access and information availability.

1.10 SUGGESTIONS

The following suggestions are proposed based on the study findings.

1. Financial institutions should design investment products that align with the stronger motivational drivers observed among Generation Z investors.
2. Digital investment platforms should continue to enhance user experience to support the high technological engagement of younger investors.
3. Investor education programmes should be tailored to address generational differences in financial literacy.
4. Advisory services may incorporate digital tools to better engage Generation Z investors.
5. Generation X investors may benefit from targeted training on advanced digital investment platforms.
6. Investment communication strategies should reflect generational preferences in information access.
7. Policy makers may encourage financial literacy initiatives focused on practical investment decision making.
8. Asset management firms can develop customised investment strategies for different generational segments.

9. Educational institutions may integrate practical investment literacy into curricula for younger populations.
10. Continuous financial education initiatives should be encouraged to support informed investment behaviour.

1.11 REFERENCES

- Arèn, S., & Hamamci, H. N. (2021). Relationship between risk aversion, financial literacy and investment choices. *Journal of Economics, Finance and Administrative Science*, 26(51), 1–19. <https://doi.org/10.1108/JEFAS-07-2020-0234>
- Bapat, D., & Kumar, S. (2023). Generational differences in investment decision making. *International Journal of Bank Marketing*, 41(2), 356–374. <https://doi.org/10.1108/IJBM-04-2022-0175>
- Bianchi, M. (2021). Financial literacy and portfolio diversification. *Journal of Finance and Economics*, 109(2), 403–423. <https://doi.org/10.1016/j.jfineco.2020.08.002>
- Farid, S., & Ali, M. (2023). Technology adoption and retail investor behaviour. *Journal of Financial Technology*, 5(1), 45–62. <https://doi.org/10.1007/s42786-022-00052-6>
- Hsiao, Y. J., & Tsai, W. C. (2022). Digital investment platforms and investor behaviour. *International Journal of Bank Marketing*, 40(3), 566–586. <https://doi.org/10.1108/IJBM-03-2021-0107>
- Kaur, I., Vohra, A., & Arora, S. (2024). Financial literacy, digital tools and investment strategies among young investors. *Journal of Financial Services Research*, 65(2), 245–268. <https://doi.org/10.1007/s10693-023-00415-9>
- Lim, K. L., Soutar, G. N., & Lee, J. A. (2021). Factors influencing investment intentions: A generational comparison. *Journal of Financial Services Marketing*, 26(3), 180–195. <https://doi.org/10.1057/s41264-021-00099-2>
- Nguyen, T. T. M., Rozsa, Z., Belas, J., & Belasova, L. (2022). The effects of financial literacy on investment behaviour. *Journal of Risk and Financial Management*, 15(1), 1–18. <https://doi.org/10.3390/jrfm15010001>
- Prakash, G., Pathak, P., & Kumar, S. (2020). Behavioural biases and investment decision making: A generational perspective. *Journal of Behavioral Finance*, 21(4), 343–356. <https://doi.org/10.1080/15427560.2020.1785789>
- Singh, S., & Sharma, R. (2024). Investment motivation and behavioural intention across generations. *Journal of Behavioral and Experimental Finance*, 41, <https://doi.org/10.1016/j.jbef.2023.100843>