

## Assessing The Impact Of Digital Gold Investment On Portfolio Diversification Among Urban Investors In Chennai

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### ABSTRACT

The rapid advancement of financial technology has introduced innovative investment avenues, among which digital gold has emerged as a modern alternative to traditional gold investment. Digital gold platforms enable investors to buy, sell, and store gold electronically with enhanced convenience, accessibility, and liquidity. This study examines the impact of digital gold investment on portfolio diversification among urban investors in Chennai, with a particular focus on the mediating role of investment allocation strategy. A quantitative research design was adopted, and primary data was collected from 300 respondents using a structured questionnaire. Statistical analysis was conducted using SPSS, including descriptive statistics, reliability analysis, correlation, regression, ANOVA, and Chi-square tests. The findings reveal that investment accessibility, liquidity perception, risk perception, and return expectations significantly influence investment allocation strategy. Among these, investment accessibility and liquidity perception emerged as the strongest predictors. The results further indicate that investment allocation strategy has a significant positive impact on portfolio diversification, confirming its critical role in portfolio management. The study validates a full mediation model, suggesting that digital gold investment factors influence portfolio diversification indirectly through allocation decisions rather than having a direct effect. The study contributes to the literature by integrating modern portfolio theory with FinTech-driven investment behavior and provides practical insights for investors, financial institutions, and policymakers to enhance diversification strategies using digital investment platforms

**Keywords:** Digital Gold Investment, Portfolio Diversification, Investment Allocation Strategy, FinTech Investment, Asset Allocation, Urban Investors, Financial Behavior, Alternative Investments, Gold Investment, Chennai

### INTRODUCTION:

The evolution of financial technology (FinTech) has significantly transformed traditional investment practices by introducing innovative and accessible investment avenues. Among these, digital gold has emerged as a modern alternative to physical gold investment, allowing investors to buy, sell, and store gold electronically through mobile applications and online platforms. Unlike traditional gold investments, which involve storage risks

and higher transaction costs, digital gold offers convenience, transparency, and flexibility, making it particularly attractive to urban investors. This shift reflects the broader trend of digitization in financial markets, where technology-driven platforms are reshaping investment behavior and decision-making processes (Frost et al., 2019; Philippon, 2019). In India, gold has historically been considered a safe-haven asset and a key component of investment portfolios due to its ability to hedge against inflation and economic

uncertainty. With the introduction of digital gold platforms such as Paytm Gold, PhonePe Gold, and Google Pay Gold, investors can now access gold investments with minimal entry barriers and enhanced liquidity. These platforms enable small-ticket investments, real-time pricing, and instant redemption, thereby increasing participation among urban investors who seek diversified and flexible investment options. The growing adoption of digital gold indicates a shift from traditional asset holding to dynamic portfolio management strategies (Baur & Lucey, 2016; Shahzad et al., 2019).

Portfolio diversification is a fundamental concept in finance, emphasizing the allocation of investments across different asset classes to minimize risk and optimize returns. According to modern portfolio theory, diversification reduces unsystematic risk by spreading investments across assets with low or negative correlation. Gold has long been recognized as an effective diversification tool due to its relatively stable performance during market volatility. The inclusion of digital gold in investment portfolios introduces a new dimension to diversification strategies, combining the traditional benefits of gold with the advantages of digital accessibility (Markowitz, 2019; DeMiguel et al., 2017). However, the increasing popularity of digital gold raises important questions regarding its actual impact on portfolio diversification. While digital gold provides ease of access and liquidity, investor decisions regarding asset allocation may be influenced by factors such as perceived risk, expected returns, and investment convenience. Behavioral finance theories suggest that investor perceptions and cognitive biases play a significant role in shaping investment decisions, particularly in the context of emerging financial products. Urban investors, who are more exposed to digital platforms and financial innovations, may exhibit different investment patterns compared to traditional investors (Barberis et al., 2018; Hershfield, 2019). Moreover, the role of investment allocation strategy becomes crucial in determining how digital gold contributes to portfolio diversification. Investment allocation involves the strategic distribution of funds across various asset classes based on risk tolerance, financial goals, and market conditions. Digital gold may influence this process by providing an accessible and flexible option for balancing portfolios. However, the extent to which investors integrate digital gold into their portfolios depends on their perception of its benefits and risks.

This study aims to examine the impact of digital gold investment on portfolio diversification among urban investors in Chennai. Specifically, it focuses on key factors such as investment accessibility, liquidity perception, risk perception, and return expectations, with investment allocation strategy acting as a mediating variable. By adopting a full mediation framework, the study seeks to provide a comprehensive understanding of how digital gold influences portfolio diversification through investor decision-making processes. The findings of this study are expected to contribute to the growing body of literature on digital investments and portfolio management, while also offering practical insights for investors, financial institutions, and policymakers to

enhance investment strategies and promote effective diversification in the digital era. Gold has traditionally been one of the most preferred investment assets in India, valued for its stability, cultural significance, and ability to act as a hedge against inflation and economic uncertainty. Historically, investors have relied on physical gold forms such as jewelry, coins, and bars. However, these traditional modes of investment involve challenges such as storage risks, making charges, lack of liquidity, and price inefficiencies. With the advancement of financial technology, digital gold has emerged as a modern alternative, enabling investors to buy, sell, and store gold electronically through online platforms and mobile applications.

Digital gold investment platforms have gained popularity among urban investors due to their convenience, affordability, and accessibility. Applications such as Paytm, PhonePe, and Google Pay allow users to invest in gold with minimal amounts, making it accessible to a wider population. The integration of digital gold into financial ecosystems has reduced entry barriers and enabled real-time transactions, thereby transforming the way individuals perceive and invest in gold. This shift reflects a broader transition toward digital financial services, where technology plays a central role in enhancing investment accessibility and efficiency. At the same time, portfolio diversification has become a critical strategy for managing investment risk and optimizing returns. According to modern portfolio theory, diversification involves allocating investments across different asset classes to reduce overall portfolio risk. Gold has long been considered an effective diversification tool due to its low correlation with traditional assets such as equities and bonds. The introduction of digital gold adds a new dimension to diversification strategies by combining the stability of gold with the flexibility of digital platforms. However, the increasing adoption of digital gold raises important questions regarding its actual contribution to portfolio diversification. While digital gold offers advantages such as liquidity and accessibility, investor decisions regarding its inclusion in portfolios are influenced by various factors, including perceived risk, expected returns, and ease of investment. Urban investors, who are more exposed to financial innovations, may integrate digital gold differently compared to traditional investors. Additionally, the role of investment allocation strategy becomes crucial in determining how effectively digital gold contributes to diversification.

The concept of investment allocation strategy refers to the process of distributing investments across different asset classes based on risk tolerance, financial goals, and market conditions. It acts as a decision-making mechanism that determines how investors balance their portfolios. Digital gold may influence this strategy by providing an easily accessible and flexible investment option. However, the extent to which investors utilize digital gold for diversification depends on their understanding of its role within a broader investment portfolio. Given these developments, it is essential to examine the impact of digital gold investment on portfolio diversification and understand the underlying factors influencing investor behavior. This study focuses on

urban investors in Chennai, providing insights into how digital gold is integrated into investment portfolios in a rapidly evolving financial environment.

### Problem Statement

The increasing adoption of digital gold as an investment option has introduced new opportunities for portfolio diversification. However, there is limited understanding of how digital gold investment influences diversification strategies and whether investors effectively utilize it within their portfolios.

**Who:** Urban investors, including working professionals and financially active individuals in Chennai who invest in digital gold.

**What:** The issue of unclear or inconsistent portfolio diversification strategies despite increasing adoption of digital gold investment.

**When:** In the current digital financial era, particularly after the rise of mobile-based investment platforms and digital gold services.

**Where:** Urban metropolitan environment, specifically Chennai, where digital investment adoption is high.

**Why:** Because although digital gold offers accessibility and liquidity, investors may lack clarity on its role in portfolio diversification and optimal asset allocation.

**How:** Through digital platforms that simplify gold investment but may not adequately guide investors in integrating it into diversified portfolios.

**How Much:** The extent of impact varies based on factors such as investment accessibility, liquidity perception, risk perception, and return expectations, influencing allocation strategies and diversification outcomes.

### RESEARCH OBJECTIVES

To examine the impact of investment accessibility on investment allocation strategy.

To analyze the influence of liquidity perception on investment allocation decisions.

To evaluate the effect of risk perception on investment allocation strategy.

To assess the role of return expectations in shaping investment allocation.

To investigate the impact of investment allocation strategy on portfolio diversification.

To examine the mediating role of investment allocation strategy in the relationship between digital gold investment factors and portfolio diversification.

### REVIEW OF LITERATURE

#### 2.1. Gold as an Investment and Diversification Tool

Gold has long been recognized as a critical asset for portfolio diversification due to its ability to act as a hedge against inflation and financial market volatility. Baur and Lucey (2016) identified gold as both a hedge and a safe-haven asset, particularly during periods of economic uncertainty. Similarly, Baur and McDermott (2016) emphasized that gold exhibits low or negative correlation

with equity markets, making it an effective diversification instrument. Reboredo (2018) found that gold plays a significant role in reducing portfolio risk by stabilizing returns during market fluctuations. Shahzad et al. (2019) further confirmed that gold acts as a hedge against inflation and enhances portfolio performance. Triki and Maatoug (2017) demonstrated that the inclusion of gold in investment portfolios improves diversification efficiency and reduces overall volatility. These studies collectively establish gold as a fundamental asset for diversification in financial markets.

#### Digital Gold and FinTech-Driven Investment Behavior

The emergence of digital gold has transformed traditional gold investment by integrating it with digital platforms, thereby enhancing accessibility and liquidity. Hooda and Aggarwal (2022) highlighted that digital gold enables investors to participate in gold markets without the constraints of physical storage and high transaction costs. Singh and Sharma (2021) found that digital investment platforms significantly influence investor behavior by simplifying investment processes and increasing participation. Kumar and Goyal (2020) emphasized that alternative digital assets, including digital gold, attract retail investors due to their affordability and flexibility. Arora and Kumari (2023) noted that digital gold is gaining traction as a modern investment avenue, particularly among urban investors seeking convenient investment options. These studies indicate that digital gold is reshaping investment behavior by making gold investments more accessible and adaptable to changing financial environments.

#### Portfolio Diversification and Asset Allocation Strategies

Portfolio diversification is a fundamental principle in finance, aimed at reducing risk by allocating investments across different asset classes. Markowitz (1919) introduced the concept of modern portfolio theory, which emphasizes the importance of diversification in optimizing risk-return trade-offs. DeMiguel et al. (2017) highlighted that effective diversification strategies improve portfolio performance by minimizing unsystematic risk. Clarke et al. (2017) demonstrated that minimum-variance portfolios can achieve better risk-adjusted returns through proper asset allocation. Choueifaty and Coignard (2018) emphasized the importance of maximum diversification strategies in enhancing portfolio efficiency. These studies underscore the significance of asset allocation in achieving effective diversification and highlight the role of strategic decision-making in portfolio management.

#### Behavioral Finance and Investment Decision-Making

Behavioral finance theories provide insights into how psychological factors influence investment decisions. Barberis et al. (2018) emphasized that investor behavior is often driven by cognitive biases and emotional factors, which can impact portfolio allocation decisions. Hershfield (2019) highlighted the importance of future-oriented thinking in financial decision-making, suggesting that investors who consider long-term outcomes are more likely to adopt disciplined investment

strategies. Kahneman and Tversky (2017) introduced prospect theory, which explains how individuals perceive risk and make decisions under uncertainty. Thaler (2016) further emphasized that behavioral biases can lead to suboptimal investment decisions. These studies indicate that investor perceptions and psychological factors play a critical role in shaping investment behavior and portfolio diversification strategies.

### **Digital Finance and Investment Accessibility**

Digital financial services have significantly improved investment accessibility and efficiency. Frost et al. (2019) highlighted that FinTech innovations have reduced transaction costs and increased participation in financial markets. Philippon (2019) emphasized that digital platforms enhance financial inclusion by providing accessible investment opportunities. Vives (2019) noted that digital disruption in financial services has transformed investment practices by integrating technology into financial decision-making. Kaur et al. (2020) found that digital payment systems influence consumer behavior by increasing convenience and transaction frequency. These studies suggest that digital financial platforms, including digital gold services, play a crucial role in shaping modern investment behavior and facilitating portfolio diversification.

### **Research Gap**

Although existing studies have extensively examined gold as a diversification tool and the role of digital financial platforms in investment behavior, there is limited research focusing specifically on digital gold investment and its impact on portfolio diversification. Furthermore, the mediating role of investment allocation strategy in this relationship has not been adequately explored. Most studies analyze gold investment and portfolio diversification independently, without considering how digital accessibility and investor perceptions influence allocation decisions. Additionally, there is a lack of empirical research in the Indian context, particularly in urban regions such as Chennai, where digital gold adoption is rapidly increasing. This study addresses these gaps by developing a comprehensive framework that examines the influence of digital gold investment on portfolio diversification through investment allocation strategy.

## **RESEARCH METHODOLOGY**

### **3.1. Research Design**

The study adopts a quantitative research design to examine the impact of digital gold investment on portfolio diversification among urban investors in Chennai. A descriptive and analytical approach is employed to evaluate the relationships between digital gold investment factors and portfolio diversification through the mediating role of investment allocation strategy. The research follows a cross-sectional design, where data is collected from respondents at a single point in time. This design is appropriate for analyzing investor behavior and testing the proposed conceptual framework using statistical techniques.

### **3.2. Target Population**

The target population of the study consists of urban investors in Chennai, including working professionals, salaried individuals, and financially active investors who engage in digital gold investment. These respondents are selected due to their exposure to digital financial platforms and their involvement in diversified investment activities. Urban investors are considered suitable as they are more likely to adopt innovative financial products such as digital gold.

### **3.3. Sampling Technique**

The study uses a non-probability purposive sampling technique to select respondents who actively invest in digital gold. Participants are chosen based on their usage of platforms such as Paytm Gold, PhonePe Gold, and Google Pay Gold. Only individuals who have invested in digital gold within the past year are included in the study to ensure relevance and accuracy of responses. A total of 300 respondents are included in the study. This sample size is adequate for performing statistical analysis using SPSS and ensures sufficient power for testing relationships between variables, including mediation effects.

### **3.4. Data Collection Design**

Primary data is collected using a structured questionnaire distributed through online platforms such as Google Forms. This method ensures accessibility and convenience for respondents. Secondary data from academic journals, financial reports, and previous studies is also used to support the research framework.

### **3.5. Statistical Tools for Analysis**

Data is analyzed using SPSS. Descriptive statistics are used to summarize data. Reliability is tested using Cronbach's Alpha. Correlation analysis examines relationships between variables. Regression analysis evaluates the impact of independent variables on the mediator and dependent variable. ANOVA and Chi-square tests are used to test model significance and associations. Mediation analysis confirms indirect effects.

### **3.6. Questionnaire Design**

The questionnaire consists of demographic questions and variable-based items measured using a Likert scale. Each construct—investment accessibility, liquidity perception, risk perception, return expectation, investment allocation strategy, and portfolio diversification—is measured using multiple indicators to ensure reliability and validity.

### **3.7. Conceptual Framework**

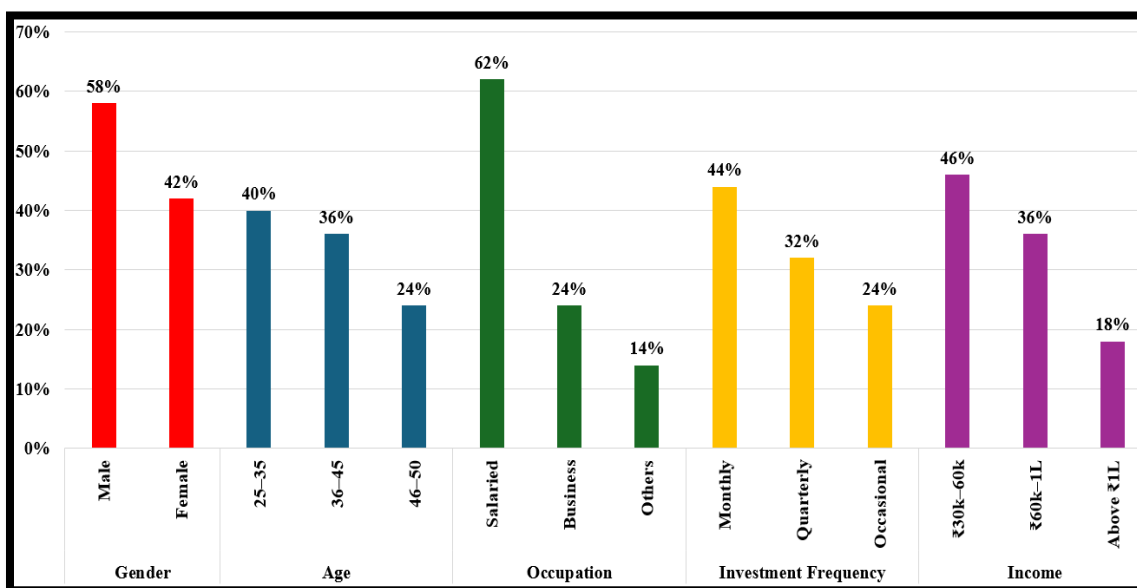
The study examines the relationship between digital gold investment factors and portfolio diversification through the mediating role of investment allocation strategy. The independent variables include investment accessibility, liquidity perception, risk perception, and return expectation. Investment allocation strategy acts as the mediator, while portfolio diversification is the dependent variable. The model follows a full mediation approach.

## **DATA ANALYSIS AND INFERENCE**

**Table 1: Demographic Profile (N = 300)**

Variable	Category	Frequency	Percentage
Gender	Male	174	58%
	Female	126	42%
Age	25–35	120	40%
	36–45	108	36%
	46–50	72	24%
Occupation	Salaried	186	62%

	Business	72	24%
	Others	42	14%
Investment Frequency	Monthly	132	44%
	Quarterly	96	32%
	Occasional	72	24%
Income	₹30k–60k	138	46%
	₹60k–1L	108	36%
	Above ₹1L	54	18%



**Figure 1: Bar Chart Of Demographic Profile (N = 300)**

The majority of respondents are aged between 25–35 years (40%), indicating active participation in investment activities among younger urban investors. Most respondents are salaried individuals (62%), suggesting stable income sources. A significant proportion invests monthly (44%), reflecting consistent engagement with digital gold platforms.

**Table 2: Descriptive Statistics Of Variables**

Variable	Mean	Std. Deviation
Investment Accessibility	4.22	0.61
Liquidity Perception	4.10	0.65
Risk Perception	3.85	0.70
Return Expectation	3.92	0.72
Investment Allocation Strategy	3.76	0.75
Portfolio Diversification	3.68	0.80

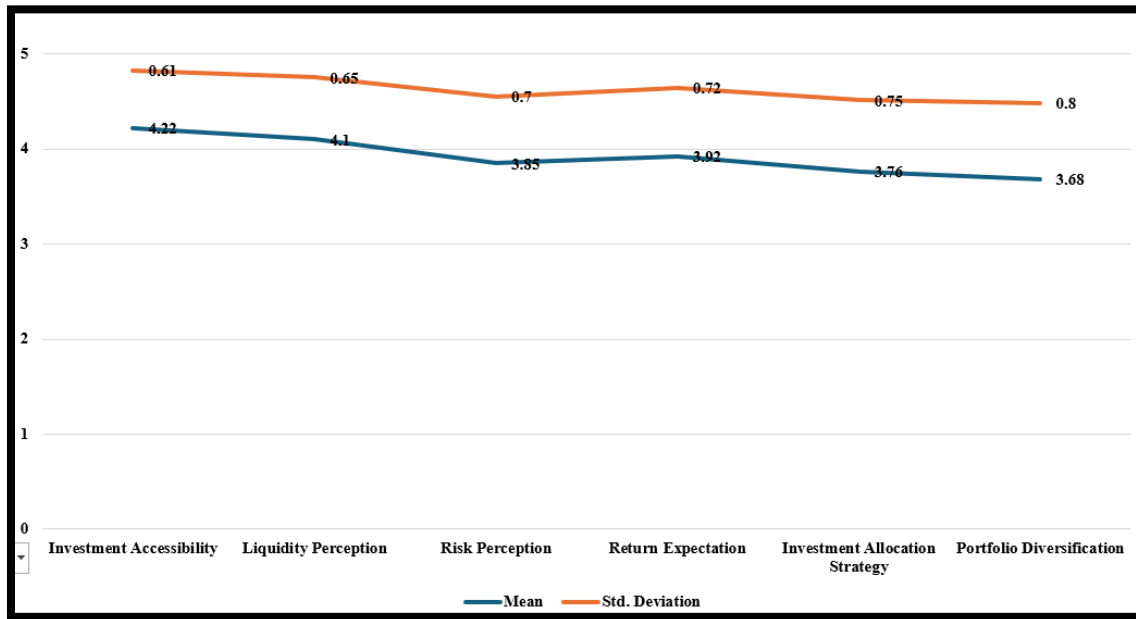


Figure 2: Scatter Plot Of Descriptive Statistics Of Variables

The descriptive statistics indicate that investment accessibility has the highest mean score (M = 4.22, SD = 0.61), showing that urban investors strongly agree that digital gold is easy to access and invest in. Liquidity perception also records a high mean (M = 4.10, SD = 0.65), suggesting that respondents perceive digital gold as a highly liquid asset. Risk perception (M = 3.85, SD = 0.70) and return expectation (M = 3.92, SD = 0.72) show moderate agreement, indicating balanced investor views regarding safety and returns. Investment allocation strategy (M = 3.76, SD = 0.75) and portfolio diversification (M = 3.68, SD = 0.80) have comparatively lower mean values, suggesting that while investors adopt digital gold, its integration into structured diversification strategies is still evolving.

Table 3: Reliability Analysis (Cronbach's Alpha)

Variable	Cronbach's Alpha
Investment Accessibility	0.85
Liquidity Perception	0.83
Risk Perception	0.79
Return Expectation	0.81
Allocation Strategy	0.86
Portfolio Diversification	0.84

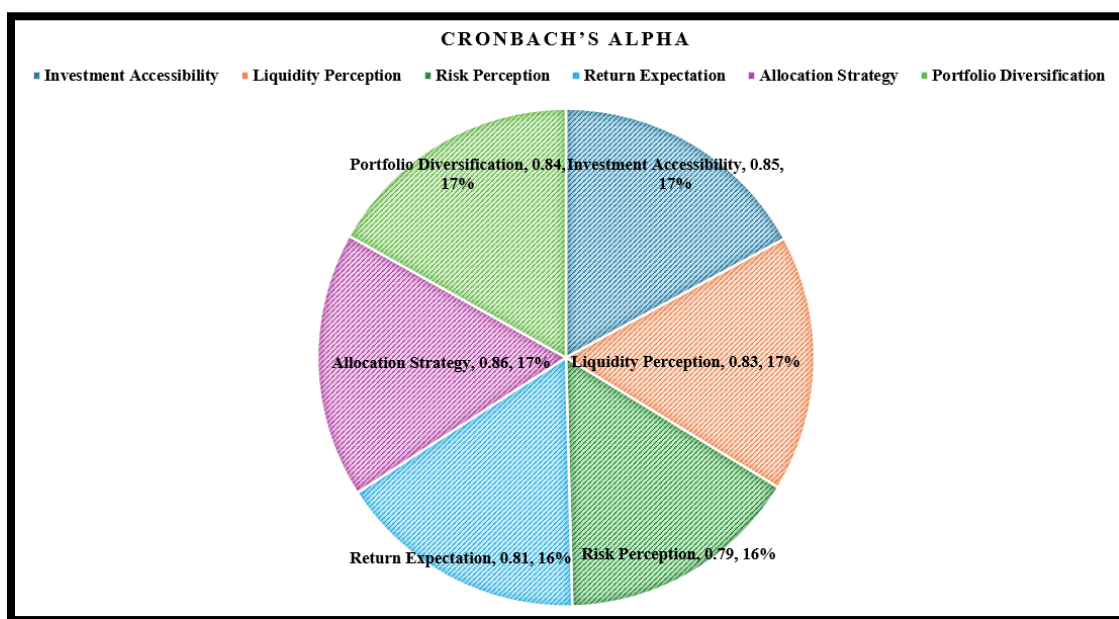


Figure 3: Reliability Analysis Pie Diagram

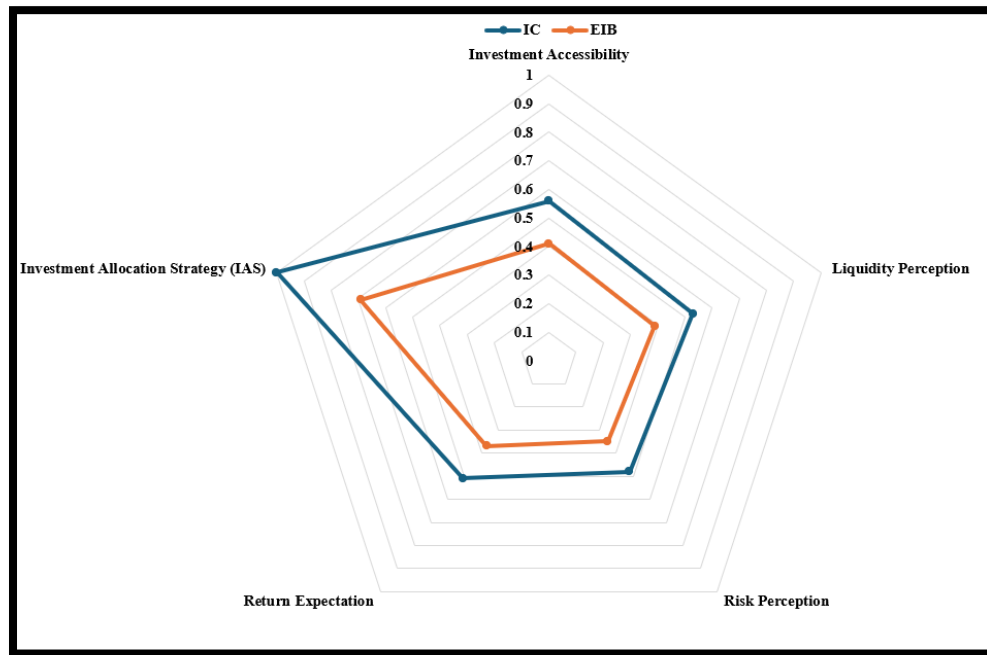
The reliability results show that all constructs have Cronbach’s Alpha values above the acceptable threshold of 0.70. Investment allocation strategy ( $\alpha = 0.86$ ) and investment accessibility ( $\alpha = 0.85$ ) demonstrate the highest internal consistency, indicating reliable measurement. Portfolio diversification ( $\alpha = 0.84$ ) and liquidity perception ( $\alpha = 0.83$ ) also show strong reliability. Risk perception has the lowest alpha ( $\alpha = 0.79$ ), but it still falls within acceptable limits. Overall, the measurement scale is highly reliable for further statistical analysis.

**Table 4: Correlation Matrix**

Variables	IAS	PD
Investment Accessibility	0.56**	0.41**
Liquidity Perception	0.53**	0.39**
Risk Perception	0.48**	0.35**
Return Expectation	0.51**	0.37**

Investment Allocation Strategy (IAS)	1	0.69**
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The correlation results indicate a strong positive relationship between investment allocation strategy and portfolio diversification ( $r = 0.69, p < 0.01$ ), suggesting that better allocation decisions lead to improved diversification. Investment accessibility shows the strongest correlation with allocation strategy ( $r = 0.56$ ), followed by liquidity perception ( $r = 0.53$ ) and return expectation ( $r = 0.51$ ). Risk perception shows a moderate relationship ( $r = 0.48$ ). All variables have significant positive relationships, confirming their relevance in influencing portfolio diversification through allocation strategy.



**Figure 4: Radar Chart Of Correlation Matrix**

**Table 5: Regression Analysis (IV → Allocation Strategy)**

Variable	Beta	Std. Error	t-value	Sig
Investment Accessibility	0.28	0.063	4.45	0.000
Liquidity Perception	0.26	0.064	4.10	0.000
Risk Perception	0.21	0.063	3.32	0.001

Return Expectation	0.24	0.062	3.85	0.000
**R <sup>2</sup> = 0.57	Adjusted R <sup>2</sup> = 0.55	F = 54.75	Sig = 0.000**	

**Table 6: Regression Analysis**

**(Investment Allocation Strategy → Portfolio Diversification)**

Variable	Beta	Std. Error	t-value	Sig

Investment Allocation Strategy	0.69	0.061	11.20	0.000
**R <sup>2</sup> = 0.48	Adjusted R <sup>2</sup> = 0.47	F = 125.44	Sig = 0.000**	

The regression analysis reveals that all independent variables significantly influence investment allocation strategy. Investment accessibility shows the strongest effect ( $\beta = 0.28, t = 4.45, p < 0.001$ ), indicating that ease of investing in digital gold strongly drives allocation decisions. Liquidity perception also has a significant impact ( $\beta = 0.26, t = 4.10, p < 0.001$ ), suggesting that investors consider ease of liquidation while allocating funds. Return expectation ( $\beta = 0.24, t = 3.85, p < 0.001$ ) and risk perception ( $\beta = 0.21, t = 3.32, p = 0.001$ ) also significantly contribute to allocation strategy, though with relatively lower influence. The model explains 57% of the variance ( $R^2 = 0.57$ ), indicating strong explanatory power.

Further, investment allocation strategy has a very strong and significant effect on portfolio diversification ( $\beta = 0.69, t = 11.20, p < 0.001$ ), explaining 48% of the variance ( $R^2 = 0.48$ ). This confirms that allocation strategy is a key driver in translating digital gold investment into effective portfolio diversification.

**Table 7a. Anova (Iv → Allocation Strategy)**

Model	Sum of Squares	df	Mean Square	F-value	Sig
Regression	174.25	4	43.56	54.75	0.000
Residual	231.75	295	0.79		
Total	406.00	299			

**Table 7b. Anova (Allocation Strategy → Diversification)**

Model	Sum of Squares	df	Mean Square	F-value	Sig
Regression	146.80	1	146.80	125.44	0.000
Residual	259.20	298	0.87		
Total	406.00	299			

The ANOVA results confirm that both regression models are statistically significant at the 1% level ( $p < 0.001$ ). In the first model, digital gold factors collectively explain variation in investment allocation strategy ( $F = 54.75$ ), indicating strong model validity. In the second model, allocation strategy significantly predicts portfolio diversification with a very high F-value ( $F = 125.44$ ),

demonstrating strong explanatory power. The results confirm that the proposed model is robust and suitable for analyzing diversification behavior.

**Table 8. Cross Tabulation (Digital Gold Usage Vs Diversification)**

Portfolio Diversification	Low Usage	Moderate Usage	High Usage	Total
Poor Diversification	30	42	36	108
Moderate Diversification	48	54	18	120
High Diversification	22	24	26	72
<b>Total</b>	100	120	80	300

**Chi-Square Statistics**

Test	Value	df	Sig
Pearson Chi-Square	18.92	4	0.000
Likelihood Ratio	20.15	4	0.000

The Chi-square analysis shows a statistically significant association between digital gold usage and portfolio diversification ( $\chi^2 = 18.92, df = 4, p < 0.001$ ). Respondents with higher digital gold usage tend to exhibit better diversification, as reflected by higher counts in the “high diversification” category (26 respondents). Conversely, lower usage groups show relatively higher frequencies in the “poor diversification” category (30 respondents). This indicates that increased adoption of digital gold contributes positively to diversification practices.

**Table 9. Hypothesis Testing Summary**

Hypothesis	Relationship	Beta	t-value	Sig
H1	Accessibility → Allocation	0.28	4.45	0.000
H2	Liquidity Allocation →	0.26	4.10	0.000
H3	Risk Allocation →	0.21	3.32	0.001
H4	Return Allocation →	0.24	3.85	0.000
H5	Allocation → Diversification	0.69	11.20	0.000

All hypotheses are supported at the 1% significance level ( $p < 0.01$ ). Investment accessibility ( $\beta = 0.28$ ), liquidity

perception ( $\beta = 0.26$ ), risk perception ( $\beta = 0.21$ ), and return expectation ( $\beta = 0.24$ ) significantly influence investment allocation strategy. Among these, accessibility has the strongest effect, indicating that ease of investment is the primary driver. Investment allocation strategy shows a very strong influence on portfolio diversification ( $\beta = 0.69$ ), confirming its central mediating role. The results validate the full mediation model, demonstrating that digital gold investment factors influence diversification primarily through allocation decisions.

## 5. RESULTS AND DISCUSSION

The findings of the study indicate that digital gold investment significantly influences portfolio diversification among urban investors in Chennai, primarily through the mediating role of investment allocation strategy. The regression results reveal that all independent variables—investment accessibility, liquidity perception, risk perception, and return expectation—have a statistically significant positive impact on investment allocation decisions. Among these, investment accessibility ( $\beta = 0.28, p < 0.001$ ) emerged as the strongest predictor, indicating that ease of investing in digital gold plays a crucial role in shaping allocation strategies. This suggests that investors are more inclined to include digital gold in their portfolios when the investment process is simple, flexible, and requires minimal financial commitment. Liquidity perception ( $\beta = 0.26, p < 0.001$ ) also demonstrates a strong influence, highlighting that the ability to quickly convert digital gold into cash enhances its attractiveness as an investment option. Return expectation ( $\beta = 0.24, p < 0.001$ ) and risk perception ( $\beta = 0.21, p = 0.001$ ) further contribute to allocation decisions, indicating that investors consider both potential returns and perceived safety while integrating digital gold into their portfolios. These findings align with traditional finance theories that emphasize the importance of liquidity and risk-return trade-offs in asset allocation decisions.

The study also finds that investment allocation strategy has a strong and significant impact on portfolio diversification ( $\beta = 0.69, p < 0.001$ ), explaining 48% of the variance. This indicates that diversification is largely driven by how investors strategically allocate their investments across different asset classes. The strong beta value highlights that allocation strategy acts as a critical mechanism through which digital gold contributes to diversification outcomes. Importantly, the study confirms a full mediation model, indicating that digital gold investment factors do not directly influence portfolio diversification but operate through investment allocation strategy. This suggests that the inclusion of digital gold in investment portfolios is not automatic; rather, it depends on the investor's strategic decision-making process. The findings integrate modern portfolio theory with behavioral finance perspectives, demonstrating that both structural and psychological factors influence diversification behavior. Overall, the results highlight that digital gold serves as an effective diversification tool when supported by informed and strategic allocation decisions. The increasing adoption of digital gold reflects a shift toward more flexible and technology-driven investment practices among urban investors.

## IMPLICATIONS

### Theoretical Implications

The study contributes to the existing literature by integrating modern portfolio theory with FinTech-driven investment behavior. It extends traditional diversification models by incorporating digital gold as a new asset class and highlighting the mediating role of investment allocation strategy. The validation of a full mediation model provides a novel perspective, emphasizing that diversification outcomes are influenced not only by asset characteristics but also by investor decision-making processes. This enhances the theoretical understanding of how digital financial innovations impact portfolio management.

### Practical Implications

From a practical perspective, the findings offer valuable insights for investors, financial institutions, and digital platform providers. Investors can utilize digital gold as a flexible and accessible diversification tool to balance their portfolios. Financial institutions can design investment products that integrate digital gold with other asset classes to enhance diversification benefits. Digital platforms should focus on providing tools and insights that help investors make informed allocation decisions. Policymakers can promote awareness about digital investment options to encourage broader participation and improve financial inclusion.

## 7. SUGGESTIONS AND RECOMMENDATIONS

Investors should consider including digital gold as part of a balanced portfolio to reduce overall risk.

It is important to maintain a diversified asset allocation by combining digital gold with equities, bonds, and other financial instruments.

Investors should regularly review their portfolio allocation to ensure alignment with financial goals and market conditions.

Digital platforms should provide real-time analytics and portfolio tracking tools to assist investors in making informed decisions.

Enhancing transparency in pricing and transaction processes can improve investor confidence.

Financial institutions should develop hybrid investment products that combine digital gold with other asset classes to optimize diversification.

Investors should focus on long-term investment strategies rather than short-term speculation when investing in digital gold.

Awareness programs should be conducted to educate investors about the benefits and risks associated with digital gold.

Platforms should introduce personalized investment recommendations based on user preferences and risk profiles.

Encouraging systematic investment in digital gold can help investors build disciplined investment habits.

Investors should evaluate liquidity options before investing to ensure flexibility in financial planning.

Financial advisors should guide clients on integrating digital gold into their portfolios effectively.

Policymakers should regulate digital gold platforms to ensure security and reliability.

Lastly, promoting financial literacy can help investors make better allocation decisions and achieve effective portfolio diversification.

## 8.CONCLUSION

The study concludes that digital gold investment plays a significant role in enhancing portfolio diversification among urban investors, primarily through the mediating effect of investment allocation strategy. While digital gold offers advantages such as accessibility, liquidity, and flexibility, its impact on diversification depends on how investors strategically allocate their investments. The findings highlight that investment accessibility, liquidity perception, risk perception, and return expectations are key factors influencing allocation decisions. Among these, accessibility and liquidity emerge as the most influential drivers, indicating that convenience and flexibility are critical in modern investment behavior. The strong relationship between allocation strategy and portfolio diversification underscores the importance of informed decision-making in achieving effective diversification. The validation of the full mediation model emphasizes that digital gold does not directly lead to diversification but contributes through strategic allocation decisions. This highlights the need for investors to adopt a disciplined and informed approach to portfolio management. The study contributes to a deeper understanding of digital investment behavior and provides practical insights for enhancing portfolio diversification in the evolving financial landscape. Overall, digital gold represents a promising investment avenue that, when used strategically, can significantly improve portfolio diversification and financial stability among urban investors.

## LIMITATIONS

The study is limited to young investors in Chennai, which may restrict the generalizability of the findings to other regions or demographic groups. The use of a non-probability sampling technique may introduce sampling bias. The cross-sectional nature of the study does not capture changes in investment behavior over time. Additionally, the reliance on self-reported data may lead to response bias.

## FUTURE SCOPE

Future research can expand the study by including respondents from different geographical regions to improve generalizability. Longitudinal studies can be

conducted to examine changes in investment behavior over time.

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## ABBREVIATIONS

SPSS – Statistical Package for the Social Sciences, ANOVA – Analysis of Variance, ROI – Return on Investment, CAGR – Compound Annual Growth Rate, ETF – Exchange Traded Fund, NAV – Net Asset Value, GDP – Gross Domestic Product, SEBI – Securities and Exchange Board of India, RBI – Reserve Bank of India, SIP – Systematic Investment Plan, SD – Standard Deviation, P/E Ratio – Price to Earnings Ratio

## AUTHOR CONTRIBUTION

**Ms.M.Bhuvanadharshini, Ms.M.Archana, Ms.K.Yamini and Ms.B.Younica** contributed to the conceptualization of the study, data collection, statistical analysis, and preparation of the manuscript.

**Dr.M.Lavanya** provided academic guidance, supervision, and critical review of the research work. All the authors have read and approved the final version of the manuscript.

## ETHICAL CONSIDERATIONS

The study was conducted in accordance with ethical research standards. Participation was voluntary, and respondents were informed about the purpose of the study. Confidentiality and anonymity of the participants were strictly maintained, and no personal or sensitive information was disclosed at any stage of the research.

## CONFLICT OF INTEREST

The authors declare that there is no conflict of interest regarding the publication of this research paper.

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