



Exploring How Digital Platform Influence Herding and Speculation Globally

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Abstract

In the current interconnected world of finance, digital platforms have radically changed investor behaviour by speeding up information flow and facilitating international interaction. This research examines how social media networks, trading apps, and online communities affect herding and speculative investor behaviour globally. Employing a mixed-methods methodology—integrating surveys, statistical analysis, and thematic reviews—the study examines how real-time updates, trending material, and peer pressure influence investment choices. The research indicates that digital platforms enhance emotion-driven trading, magnify herding behaviour, and nurture speculative bubbles, particularly among inexperienced users. The research stresses the importance of more robust investor education, prudent platform design, and regulation in helping to contain risks while fuelling innovation. The research provides strategic recommendations for policymakers, investors, and developers to tread the changing digital investment landscape responsibly.

Keywords: Digital Platform; Herding; Speculation; Mixed-methods Methodology

1. Introduction

Overview

In the fast-changing world of global finance, digital platforms have become a revolutionary force, reshaping the way individuals and institutions obtain, exchange, and view information. From social media platforms and investment forums to algorithmic trading platforms, these online spaces are not only remaking market forces but also enhancing human behavioral traits such as herding and speculation. This dissertation aims to examine how virtual platforms, being strong communication and transaction avenues, drive these two crucial market phenomena at the international level.

Herding, which refers to the phenomenon where people tend to imitate the behaviour of a larger group,

has been of great interest in the study of behavioural finance. In the past, herding used to be witnessed in classical financial environments, where investors used to follow market drift or expert analysts' advice. But the spate of online platforms has greatly amplified this action. Sites such as Twitter, Reddit, and Telegram facilitate rapid spread of market sentiments, news, and rumours and create scenarios where millions of investors base their actions on viral entries or trending topics. This digital herding is not only typified by the velocity of information dissemination but also by the fact that online groups develop a shared identity and that these groups sway decision-making processes.

Speculation, however, refers to the act of carrying out risky monetary transactions in hope of making gains from short-run changes in markets. Online platforms have also transformed speculative activity by giving users greater than ever before access to sophisticated financial products, real-time market information, and algorithmic trading software. The emergence of apps such as Robinhood, Binance, and eToro has democratized trading, enabling even amateur investors to engage in high-risk activities with fewer barriers. This exposure, coupled with continuous exposure to social media frenzy and influencer narratives, has resulted in the growth of speculative bubbles, where assets witness steep price increases fueled by mass euphoria instead of inherent worth.

The global consequences of these events are significant. Such phenomena as the GameStop short squeeze of 2021 and the meteoric success and failure of digital currencies like Dogecoin illustrate how online platforms can activate market phenomena with worldwide implications. What is significant about digital platforms is their potential to bypass spatial boundaries, offering a borderless marketplace of ideas, speculation, and collective behaviour. This behaviour globalization implies that a social media message from one nation can initiate market responses across continents in minutes.

This dissertation seeks to analyze this intricate relationship between digital platforms, herding, and speculation using a multi-dimensional approach. It will examine the mechanisms by which online platforms spread information and shape behaviour, evaluate psychological and sociological drivers of digital herding and speculation, and consider case studies illustrating the real-world effects of such behaviours. With this analysis, the study will not only add to the literature of behavioural finance but also shed light on how regulators, investors, and platform creators can reduce the risk of digitally exaggerated herding and speculation.

Scope & Importance of the Study

This dissertation targets the analysis of the effects of digital platforms on herding and speculation in worldwide financial markets. The scope also involves the examination of different digital platforms, such as social media networks (Twitter, Reddit, and Telegram), trading applications (Robinhood, Binance, and eToro), and algorithmic platforms that enable automated trading. Through the examination of these platforms, the research attempts to determine the ways in which information sharing, social interactions, and platform designs influence herding and speculative trading among investors.

The research is not confined to one geographic area but instead takes a global approach, acknowledging that online platforms have broken national borders and created an edgeless marketplace. This global context enables the examination of herding and speculation dynamics in various financial markets, such as equities, cryptocurrencies, commodities, and foreign exchange. It also accounts for the influence of cultural and regulatory variations on user behaviour in online platforms.

In addition, the scope is expanded to both individual and institutional investors, recognizing that herding and speculation are phenomena not limited to retail traders. Institutional investors, driven by electronic market sentiment, also have herd-like tendencies or practice speculative moves. This extended scope guarantees an all-encompassing view of the subject matter.

Knowing how digital platforms affect herding and speculation is of utmost significance to various

stakeholders in the financial system. For regulators, this research offers information on how social media and digital trading platforms can enhance market volatility, with the implication that regulatory systems must safeguard investors without inhibiting innovation. Policymakers can apply the findings to create guidelines that encourage transparency and responsible information dissemination on digital platforms.

For both retail and institutional investors, this research provides further insight into how their own decisions can be inadvertently influenced by others' behaviour and by the architecture of the platforms they use. By being aware of the mechanisms of digital herding and speculation, investors can make more intelligent decision-making approaches, not falling into emotional behaviour based on social media noise or algorithmic impulses.

Platform developers and tech companies also have a lot to gain from this research. Knowing how their platform design affects behaviour can spur the implementation of features that foster responsible investing, including educational materials, risk management tools, and verification of real-time data. The findings from the study can inform platform improvement that balances user experience with ethical obligations.

Academically, the body of knowledge in behavioural finance and how digital technology affects financial markets. By concentrating on the nexus between psychology, technology, and finance, it adds depth to knowledge about how digital spaces influence economic behaviour. It also provides windows for further research, including looking at the part played by artificial intelligence in exacerbating herding or investigating cross-cultural variations in speculative behaviour in digital spaces.

Review of Literature

Over the past few years, online platforms have significantly altered the outlook of global financial markets, impacting investor behaviour in ways never seen before. With these platforms enabling swift information spreading and real-time interaction, they have emerged as key determinants of herding and speculative tendencies among investors. This literature review seeks to examine and combine current research into how online platforms influence these shared behaviours, providing insights into what they mean for global markets.

Cryptocurrency Markets and Digital Influence

Anti-Herding Behaviour During Crises: A research work by **Gyamerah (2021)** in **Applied Finance Letters** analyzed herding behaviour among major cryptocurrencies during the COVID-19 pandemic. Found herding behaviour during the pandemic, showing that investors had a tendency to imitate others' actions instead of using their own information.

Asymmetrical Herding Patterns: **Bharti (2022)**, in *Quantitative Finance and Economics*, examined herding behaviour in the cryptocurrency market between January 2017 and December 2020. The research used quantile regression methods and identified significant herding during bull periods, extreme down-markets, and high-volatility periods, particularly during the COVID-19 pandemic.

Social Media's Role in Stock Market Behaviour

Twitter and Stock Forecasts: **Bollen et al.'s (2011)** research had shown the group mood sentiment from Twitter as predicting the Dow Jones Industrial Average to a margin of up to 86.7% accuracy. The article published in the *Journal of Computational Science* showed that the sentiment of social media and analysis

could foretell market changes.

Reddit. The GameStop Phenomenon: The 2021 GameStop stock boom, fueled by participants of the Reddit forum r/WallStreetBets, is a testament to the strength of online forums in shaping market activity. According to a report by **Popper (2021) in Vanity Fair**, this coordinated effort by individual investors caused major market disturbances, putting conventional financial establishments at odds.

Digital Platforms and Speculative Bubbles

Feedback Loops and Market Volatility: The GameStop saga, reported by **Cassidy (2021) in The New Yorker**, shows how online communities can push stock prices above fundamental values, generating feedback loops that increase market volatility. This incident highlights the facilitation by digital platforms of speculative activity on the part of investors.

Herding in Emerging Markets

Market Phases and Herding Behaviour: **Gupta and Kohli (2021)**, in the **Indian Journal of Finance**, empirically examined the Indian stock market during a 15-year period. They identified evidence of herding behaviour in times of and following financial crises, indicating that digital platforms could be responsible for intensifying collective behaviour during times of uncertainty.

Structural Breakpoints and Trading Volumes: **Dhuri and Patkar (2024)**, in the **Asian Economic and Financial Review**, investigated herding behaviour in India's stock market and identified that herding was present at specific structural breakpoints and high trading volumes. This suggests that online platforms may have an effect on investor actions under certain market conditions.

Crowdfunding Platforms and Herding Behaviour

Influence of Experts on Investment Decisions: According to a study by **Colombo et al. (2015)** in the **Journal of Business Venturing**, posts by experienced sponsors on online platforms are quality signals that trigger herding behaviour in other investors. This suggests that online platforms can enhance the influence of perceived expertise on investment choices.

Technological Advancements and Market Behaviour

Accessibility of information and investor attitudes: Although having more access to varied information makes investors better decision-makers, tending to undermine herding behaviours, the transmission of misinformation electronically at high velocities can do so in reverse. This is acutely true amongst less informed investors, as stated by **Bikhchandani et al. (1992)** in the **Journal of Political Economy**.

Objectives of the Study

1. To identify the key digital platforms influencing herding and speculation.
2. To examine the factors on digital platforms that trigger herding behaviour among investors.
3. To analyze the impact of digital platforms on speculative trading activities across various asset classes.
4. To evaluate the role of social media, online forums, and trading apps in spreading speculative behaviour.

Limitations of the Study

- While this dissertation aims to provide a comprehensive analysis of how digital platforms influence herding and speculation globally, several limitations must be acknowledged.
- **Data Collection Limitations:** The research is based on information collected from publicly available data on online spaces like social networking sites and trading forums. Still, access to full user behaviour data is limited because of privacy policies and regulatory measures for the platforms. Such a limitation could lead to partial knowledge of user interactions and behaviour patterns.
- **Platform-Specific Bias:** Despite the multi-platform nature of the study (including Twitter, Reddit, Telegram, Robinhood, Binance, and eToro), results can be skewed by the very nature of the platforms themselves. Behavioural characteristics measured on those platforms might not perfectly reflect users' behaviour across other new digital platforms or other platforms with disparate users.
- **Temporal Constraints:** The analysis of the study takes place over a specified time period, possibly neglecting the long-term shifts in behaviour on online platforms. A regulatory overhaul, dramatic shift in the economy, or technological innovation could influence user behaviour outside the window of observation of the study.
- **Generalizability of Findings:** Although the research takes a global view, regional differences in culture, regulation, and economics could result in differences in herding and speculation activities. Therefore, the findings reached may not be generalizable to all markets.
- **Complexity of Psychological, Social, and Economic Drivers:** Herding and speculation are determined by a vast number of economic, social, and psychological factors. The research concentrates on the impact of online platforms, so other major drivers of such behaviour (e.g., people's cognitive biases, economic circumstances, or geopolitical factors) can remain uninvestigated.
- **Potential Algorithmic Impact:** Algorithms on various digital platforms select and order content, potentially exaggerating certain stories or viewpoints. The research will not be able to capture fully the sophistication of these algorithmic processes because access to proprietary algorithms is limited, and platform providers are not transparent.
- **Ethical and Privacy Issues:** The research follows ethical standards by anonymizing user information gathered from online sources and applying it solely for scholarly purposes. Ethical issues could, however, occur if sensitive data is analyzed unintentionally.

2. METHODOLOGY AND DATA BASE

Type of Research

Quantitative Research:

- This component entails gathering numerical information using surveys and online questionnaires sent to investors.
- Statistical software like SPSS and Excel will be applied to analyze data, allowing the measurement of how much digital platforms affect herding and speculation.
- Hypothesis testing (H0 and H1) will be carried out to ascertain statistical significance of digital platforms in shaping herding among investors.

Variables

1. Dependent Variables	2. Independent Variables:
Herding Speculation	Digital Platform Usage Platform Features Information Sources Social Media Influence Online Forums Educational Content Asset Classes User Demographics

Qualitative Research

- Qualitative information will be collected from investors through interviews and analysis of conversation on social media sites and online forums.
- Thematic analysis will be used to recognize patterns, views, and observations regarding the ways in which digital platforms lead to herding and speculative activity.

Descriptive Research Design:

The study utilizes a descriptive research design, whose objective is to offer a descriptive understanding of the ways in which digital platforms affect investor behaviour.

This methodology assists in describing the herding and speculation phenomenon systematically without altering any of the variables.

Sampling Technique

1. Method of Sampling:

- Probability Sampling (Simple Random Sampling) will be employed.
- This approach guarantees that each member in the population has an equal probability of being chosen, and selection bias is avoided.

2. Sample Size:

- 71 respondents will be randomly chosen.
- The respondents will be a diverse range of investors with no predetermined categories (institutional,

retail, or experts).

3. Sampling Frame:

- The sampling frame will be those who are active on:
- Online trading sites (Zerodha, Groww, Upstox).
- Social media sites (Twitter, Telegram).
- Online financial communities (Investment forums, Facebook groups, WhatsApp).

4. Sampling Procedure:

- A list of prospective respondents will be created by selecting active members of online trading communities and social media groups with a finance and trading interest.
- The respondents will be numbered, and a random number generator will select 71 respondents from the list.
- Randomly selected participants will be asked to take part in the survey through google form.
- Random selection will be ongoing until the desired number of 71 respondents is reached.

Sample Size

The sample for this research includes a total of 71 usable responses gathered from a structured online survey.

The sample size was considered sufficient for the extent of this descriptive and exploratory research, whose objective is to clarify how digital platforms affect herding and speculative activities in global financial markets. Although statistical generalizability to the entire population was not intended, the responses yield significant information about the behavioural habits of investors employing digital platforms.

Response Collection Method: The survey was administered through online platforms like WhatsApp, email, LinkedIn, and online investment forums (Twitter, Telegram). These platforms allowed for reaching a targeted group of respondents with competency and experience in trading and investment through online platforms.

While the research is based on non-random sampling, the volume and variability of responses enhance credibility and relevance for the research results.

Sample Design

The study's sample design relies on a non-probability purposive sampling approach, with respondents being chosen intentionally according to their applicability to the research issue. This section describes the process followed to choose the sample, the reasons for doing so, and how the sample supports the study's objectives.

• Population:

The target population is those with direct or indirect exposure to financial markets and who frequently employ digital platforms. These are:

Retail Investors: Those who utilize social media platforms (Twitter, Telegram) and online trading applications for trading purposes and investment decision-making.

Digital Platform Users: Those who leverage digital platforms for financial data, market analysis, or

investment guidance.

Active Members of Online Communities: Members of financial forums, group chats, and online investment communities.

• **Sampling Technique:**

Purposive Sampling (Non-Probability Sampling):

Participants were chosen for their active use of digital platforms for financial data, trading, or investment purposes.

This sampling technique guarantees that all participants have firsthand experience with digital platforms, ensuring their responses are extremely relevant to the research goals.

• **Sample Size:**

71 valid responses were gathered using a structured online survey.

• **Sampling Criteria:** Respondents needed to be familiar with digital platforms, such as social media, trading apps, or financial discussion forums.

The following were used to choose the respondents:

- Active use of digital platforms: Respondents need to be using one or more of the following platforms for financial information or trading:
- Social media platforms: Twitter, Telegram.
- Digital Platform: Zerodha, Groww, Upstox
- Financial Groups or Forums: Facebook investment groups, WhatsApp trading groups, YouTube financial channels.
- Level of Financial Knowledge: The survey gathered data on the financial knowledge (Beginner, Intermediate, Advanced) of respondents to get a diverse range of opinions.
- Frequency of Usage of Digital Platforms: Only those who use digital platforms occasionally, often, or always for financial decisions were included.

• **Sampling Frame:**

The sampling frame was made up of active users on the following digital platforms:

- Social Media Sites: Twitter, Telegram, LinkedIn.
- Trading Sites: Zerodha, Groww, Upstox
- Online Financial Communities: WhatsApp trading groups, Facebook investment forums, YouTube financial channels.

The survey was conducted online via WhatsApp, email, LinkedIn, and social media platform direct messages for wider geographical coverage.

• **Method of Response Collection:**

An online questionnaire with a structured format was employed to gather responses, organized into four

sections:

Section A: Demographic Details: Gathered information regarding respondents' age, gender, profession, and financial literacy level.

Section B: Use of Digital Platforms: Gathered information on which digital platforms respondents use, how often they use them, and if they have made investment choices based on digital content.

Section C: Herding Behaviour: Measured the influences on digital platforms that have the greatest impact on respondents' investment choices and their tendency to follow popular views.

Section D: Speculative Behaviour: Investigated the frequency of respondents' speculative trading driven by digital platforms and their understanding of the role played by these platforms in inducing urgency

• Limitations of the Sample Design:

As the study employs non-probability sampling, the findings cannot be generalized to the whole population of investors and traders across the globe.

The research could over-estimate active digital platform users at the expense of passive investors who might also engage in herding behaviour.

Selection bias is a possible risk because the respondents were selected mainly according to their use of digital platforms.

Data Analysis Tools

1. **Microsoft Excel:** For data preprocessing, filtering, and basic visualization.
2. **SPSS:** For statistical analysis such as cross-tabulations, chi-square tests, and cluster analysis.

The tools are selected to ensure both simplicity and sophistication in data handling. Microsoft Excel is ideal for initial data cleaning and visualization, while SPSS offers robust statistical analysis capabilities

3. DATA ANALYSIS ORDINAL LOGISTIC REGRESSION

Demographic Representation

This analysis of data examines the effects of online platforms on speculation and herding behavior in international financial markets. Drawing on evidence from different social media, trading platforms, and online forums, the research seeks to examine how digital interactions influence collective investor decision-making. The analysis finds trends of faster information spreading, which lead to co-ordinated trading activities and speculative bubbles. By examining such effects, stakeholders are in a better position to anticipate and cushion against the threats of digital-fueled market volatility.

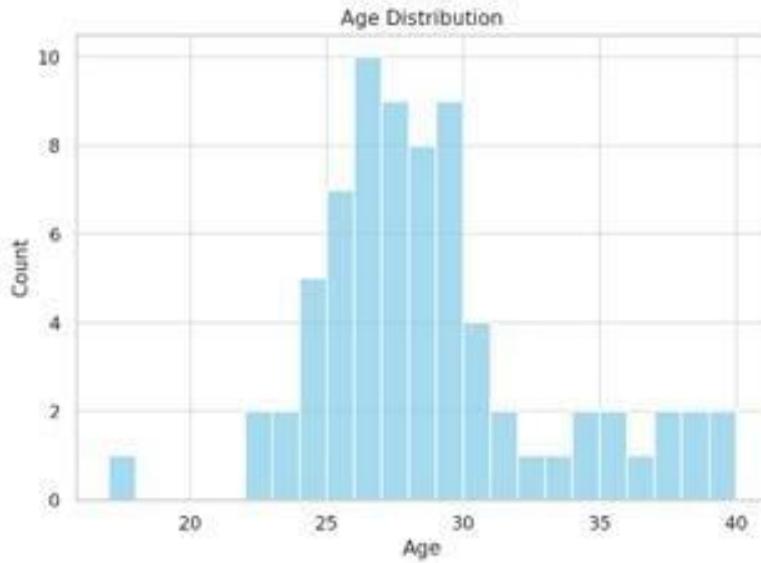


Figure 1: Age Distribution

Interpretation

The most frequent age group of respondents is 25 to 30 years, and the greatest number of respondents is between 27 to 28 years of age.

Few respondents were less than 22 years or more than 35 years of age.

The distribution is slightly bell-shaped, which shows a peak for participants in the late 20s.

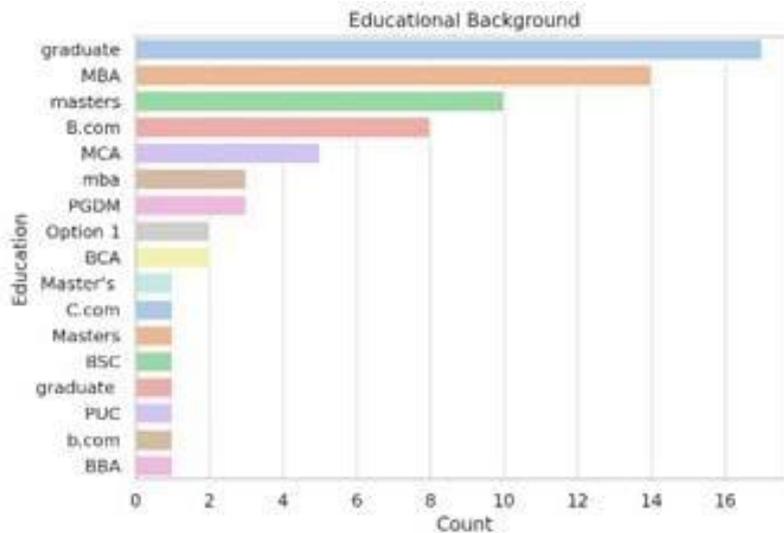


Figure 2: Education Background

Interpretation of Educational Background

The most prevalent qualification among the respondents is given as "graduate", then "MBA", and "masters". Other degrees frequently cited are B.Com, MCA, and PGDM.

Lesser-represented credentials are PUC, ISC, BBA, and some unclear ones such as "Option 1" and "graduate" listed twice (perhaps because of capitalization or formatting).

Implications

Most respondents show evidence of undergraduate or postgraduate business-related education, suggesting a population with general to advanced familiarity with financial subject matter, consistent with research on online trading platforms.

1. CORRELATION MATRIX

Correlation Matrix^a

	Speculation	Digital_Platform_Usage	Platform_Features	Information_Sources	Social_Media_Influence	Online_Forums	Educational_Content	Asset_Classes	User_Demographics	
Correlation	Speculation	1.000	-.001	-.129	-.071	-.164	-.220	-.042	-.168	-.050
	Digital_Platform_Usage	-.001	1.000	.326	.273	.171	.136	.347	.275	.387
	Platform_Features	-.129	.326	1.000	.367	.524	.266	.118	.194	.309
	Information_Sources	-.071	.273	.367	1.000	.406	.468	.244	.258	.075
	Social_Media_Influence	-.164	.171	.524	.406	1.000	.564	.263	.177	.202
	Online_Forums	-.220	.136	.266	.468	.564	1.000	.269	.374	.106
	Educational_Content	-.042	.347	.118	.244	.263	.269	1.000	.260	.417
	Asset_Classes	-.168	.275	.194	.258	.177	.374	.260	1.000	.417
	User_Demographics	-.050	.387	.309	.075	.202	.106	.417	.417	1.000
Sig. (1-tailed)	Speculation		.498	.141	.278	.086	.033	.365	.081	.340
	Digital_Platform_Usage	.498		.003	.011	.077	.129	.002	.010	.000
	Platform_Features	.141	.003		.001	.000	.012	.164	.052	.004
	Information_Sources	.278	.011	.001		.000	.000	.020	.015	.268
	Social_Media_Influence	.086	.077	.000	.000		.000	.013	.070	.046
	Online_Forums	.033	.129	.012	.000	.000		.012	.001	.190
	Educational_Content	.365	.002	.164	.020	.013	.012		.014	.000
	Asset_Classes	.081	.010	.052	.015	.070	.001	.014		.000
	User_Demographics	.340	.000	.004	.268	.046	.190	.000	.000	

a. Determinant = .110

Figure 3: Correlation Matrix

Interpretation

Negative weak correlation with social media (-0.164), forums (-0.220), and asset classes (-0.168). Reflects lower dependence on social and educational sources.

Digital Platform Usage:

Strong positive association with platform features (0.326) and asset classes (0.275). Active users use more features and diversify investments

Platform Features

Strongly associated with social media influence (0.524) and information sources (0.367). Feature-rich platforms enhance access to information.

Social Media Influence:

Strongly associated with online forums (0.564).
Indicates that social interaction results in active participation within forums.

Educational Content

Generally associated with asset diversification (0.260).
Learning is responsible for diversified investment decisions.

User Demographics:

Significant influence on asset diversification (0.417)
Demographics have a strong influence on investment decisions.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.702
Bartlett's Test of Sphericity	Approx. Chi-Square	146.334
	df	36
	Sig.	.000

Figure 4: KMO Test

Interpretation

1. Kaiser-Meyer-Olkin (KMO) Measure:

Value: 0.702
Interpretation:
KMO values between 0 and 1.
A value greater than 0.6 is acceptable, and a value greater than 0.7 is good.
Your KMO of 0.702 represents a "mediocre" but acceptable sampling adequacy level for factor analysis.

2. Bartlett's Test of Sphericity:

Approx. Chi-Square: 146.334
Degrees of Freedom (df): 36
Significance (Sig.): 0.000

Interpretation: This test checks if your correlation matrix is an identity matrix, i.e., there are no relationships between the variables.

A p-value (Sig.) of 0.000 (below 0.05) suggests that the relationships between the variables are statistically significant.

This implies factor analysis is appropriate for your data.

		Anti-image Matrices								
		Speculation	Digital_Platform_Usage	Platform_Features	Information_Sources	Social_Media_Influence	Online_Forums	Educational_Content	Asset_Classes	User_Demographics
Anti-image Covariance	Speculation	.929	-.045	.055	-.048	.023	.089	-.007	.087	-.015
	Digital_Platform_Usage	-.045	.726	-.136	-.108	.046	.027	-.149	-.063	-.125
	Platform_Features	.055	-.136	.598	-.133	-.234	.052	.128	.004	-.131
	Information_Sources	-.048	-.108	-.133	.663	-.048	-.156	-.082	-.071	.118
	Social_Media_Influence	.023	.046	-.234	-.048	.506	-.231	-.077	.082	-.035
	Online_Forums	.089	.027	.052	-.156	-.231	.527	-.063	-.183	.072
	Educational_Content	-.007	-.149	.128	-.082	-.077	-.063	.705	.004	-.217
	Asset_Classes	.087	-.063	.004	-.071	.082	-.183	.004	.679	-.227
Anti-image Correlation	User_Demographics	-.015	-.125	-.131	.118	-.035	.072	-.217	-.227	.612
	Speculation	.755 ^a	-.055	.073	-.061	.034	.128	-.009	.109	-.020
	Digital_Platform_Usage	-.055	.778 ^a	-.207	-.156	.076	.044	-.208	-.089	-.187
	Platform_Features	.073	-.207	.672 ^a	-.211	-.424	.092	.197	.007	-.217
	Information_Sources	-.061	-.156	-.211	.778 ^a	-.084	-.264	-.120	-.106	.185
	Social_Media_Influence	.034	.076	-.424	-.084	.687 ^a	-.447	-.129	.140	-.063
	Online_Forums	.128	.044	.092	-.264	-.447	.683 ^a	-.104	-.306	.126
	Educational_Content	-.009	-.208	.197	-.120	-.129	-.104	.713 ^a	.005	-.330
Asset_Classes	.109	-.089	.007	-.106	.140	-.306	.005	.698 ^a	-.352	
User_Demographics	-.020	-.187	-.217	.185	-.063	.126	-.330	-.352	.639 ^a	

a. Measures of Sampling Adequacy(MSA)

Figure 5: Anti Image Matrices

Interpreting MSA Values:

- **Speculation:** 0.755 (Good)
- **Digital_Platform_Usage:** 0.778 (Good)
- **Platform_Features:** 0.672 (Acceptable)
- **Information_Sources:** 0.778 (Good)
- **Social_Media_Influence:** 0.687 (Acceptable)
- **Online_Forums:** 0.683 (Acceptable)
- **Educational_Content:** 0.713 (Good)
- **Asset_Classes:** 0.698 (Acceptable)
- **User_Demographics:** 0.639 (Acceptable)

Total Variance Explained						
Component	Total	Initial Eigenvalues		Extraction Sums of Squared Loadings		
		% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.105	34.495	34.495	3.105	34.495	34.495
2	1.374	15.270	49.765	1.374	15.270	49.765
3	1.028	11.419	61.184	1.028	11.419	61.184
4	.895	9.939	71.123			
5	.744	8.264	79.387			
6	.701	7.792	87.180			
7	.489	5.436	92.616			
8	.364	4.043	96.659			
9	.301	3.341	100.000			

Extraction Method: Principal Component Analysis.

Figure 6: Total Variance Explained Table

Interpretation

1. Components (Factors) Identified:

Component 1: Accounts for 34.495% of the variance with an eigenvalue of 3.105.

Component 2: Accounts for 15.270% more, putting the cumulative variance at 49.765%, with an eigenvalue of 1.374.

Component 3: Accounts for 11.419%, totaling 61.184%, with an eigenvalue of 1.028.

2. Criteria for Selecting Components:

Components can be said to be significant if the Eigenvalues of their components are greater than 1.

Based on this criterion, the first three components are significant since they possess eigenvalues greater than 1.0:

Component 1: 3.105

Component 2: 1.374

Component 3: 1.028

3. Cumulative Variance Explained:

The three components combined account for 61.184% of the variance in the data.

This is usually satisfactory in social science research, wherein a cumulative variance of at least 60% is satisfactory.

Descriptive Statistics

Descriptive Statistics												
	N Statistic	Range Statistic	Minimum Statistic	Maximum Statistic	Mean		Std. Deviation Statistic	Variance Statistic	Skewness		Kurtosis	
					Statistic	Std. Error			Statistic	Std. Error	Statistic	Std. Error
Speculation	71	4	1	5	4.14	.124	1.046	1.094	-1.292	.285	1.151	.563
Digital_Platform_Usage	71	4	1	5	3.70	.126	1.061	1.126	-.557	.285	-.313	.563
Platform_Features	71	4	1	5	3.61	.126	1.062	1.128	-.248	.285	-.849	.563
Information_Sources	71	4	1	5	3.66	.128	1.082	1.170	-.607	.285	-.149	.563
Social_Media_Influence	71	4	1	5	3.54	.162	1.361	1.852	-.636	.285	-.798	.563
Online_Forums	71	3	2	5	3.82	.119	1.004	1.009	-.316	.285	-1.011	.563
Educational_Content	71	4	1	5	3.69	.113	.950	.903	-.363	.285	-.253	.563
Asset_Classes	71	4	1	5	4.06	.111	.939	.882	-.966	.285	.726	.563
User_Demographics	71	3	2	5	4.13	.106	.893	.798	-.750	.285	-.248	.563
Valid N (listwise)	71											

Figure 7: Descriptive Table

Interpretation

Respondents tend to concur with the items on speculation and educational content, which is reflected by the high means.

Negative skewness in most of the variables reveals that respondents slightly agree over disagreeing with the statements.

Variability is moderate for most of the items, but Social Media Influence has a high standard deviation (1.361), reflecting varied opinions.

ANOVA

The ANOVA table is used to test the significance of the regression model overall.

It tests whether the independent variables (predictors) together explain a substantial portion of variance in the dependent variable for data.

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.454	8	.682	.594	.779 ^b
	Residual	71.138	62	1.147		
	Total	76.592	70			

a. Dependent Variable: Speculation

b. Predictors: (Constant), User_Demographics, Information_Sources, Social_Media_Influence, Digital_Platform_Usage, Asset_Classes, Educational_Content, Platform_Features, Online_Forums

Figure 8: Anova Table

Coefficients

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.195	.827		6.283	.000
	Digital_Platform_Usage	.061	.141	.062	.434	.665
	Platform_Features	-.090	.155	-.091	-.577	.566
	Information_Sources	.070	.145	.072	.480	.633
	Social_Media_Influence	-.035	.132	-.046	-.266	.791
	Online_Forums	-.177	.174	-.170	-1.015	.314
	Educational_Content	.011	.160	.010	.070	.944
	Asset_Classes	-.142	.164	-.127	-.864	.391
	User_Demographics	.029	.183	.025	.159	.874

a. Dependent Variable: Speculation

Figure 9: Coefficients Table

Interpretation

Constant: The intercept (5.195) is significant statistically ($p = 0.000$), indicating the expected value of Speculation when all predictors are zero.

Predictor Variables:

All p-values (Sig.) for predictors are greater than 0.05, so none of the independent variables have a statistically significant impact on Speculation in this model.

The largest (in absolute value) standardized coefficient is for Online Forums (Beta = -0.170), but it is not significant ($p = 0.314$).

Chapter 4: Summary of Findings, Conclusions and Recommendations

SUMMARY OF KEY FINDINGS

- Analyzes the effects of online platforms on investor behaviour, i.e., herding and speculation in international financial markets.
- Emphasizes how online environments, such as social media networks and algorithmic trading programs, facilitate instantaneous information dissemination, resulting in collective investor actions.

- Emphasizes how these platforms reduce entry barriers, enabling even inexperienced users to participate in advanced financial activities, making emotionally driven, high-risk decisions more probable.
- Employs quantitative and qualitative approaches to thorough analysis.
- Deduces trading psychology based on survey evidence, statistical analysis, and literature review of how electronic participation influences it.
- Ponders global and cross-cultural insights, recognizing the influence of varying market structures and regulatory environments on user behaviour.
- Acknowledges the important role of platform design, educational content, and peer influence in fueling speculative trends.
- Illustrates how certain features like real-time notifications and trending suggestions inadvertently fuel herd behaviour.
- Unveils how demographic variables and social media exposure are associated with higher investment in risky assets.
- Seeks greater investor education to enhance financial literacy.
- Demands more platform accountability in reducing risky investor behaviour.
- Recommends creating policy frameworks that take into consideration the psychological vulnerabilities of users of digital finance.
- Offers prescriptive recommendations for financial stakeholders to better comprehend and navigate the behavioural effects of a digital investment environment.

CONCLUSION

The dissertation concludes that online platforms have significantly impacted how investors participate in financial markets, serving as drivers of herding and speculative trading. The findings of the research indicate that the ease with which one accesses trading instruments, coupled with the continuous flow of information and influence from peers on platforms such as Reddit, Twitter, and trading applications, has amplified emotionally driven investment choices. Though these sites represent unparalleled convenience and financial participation democratization, they enhance exposure to irrationality, especially from retail investors.

From the research, it is clear that amenities like alerts, hot stock suggestions, and discussion forums tend to enhance groupthink and synchronized market movements, frequently decoupled from basic analysis. The dissertation highlights the need for investor education, regulatory control, and prudent platform design to manage these risks. It also invites stakeholders like policymakers, platform builders, and finance educators to come together and forge a digital landscape that supports educated and rational investment. In the end, the research finds that although digital platforms have opened up markets to wider participation, they need to move towards striking a balance between innovation and measures to counter behavioural weakness.

RECOMMENDATIONS

- Improve Investor Education Programs
- Increased programs for investor education should be provided in order to enable investors to know the dangers of speculative trading and herd behaviour. Regulators and platforms must partner to include educational materials within trading forums and applications.
- Encourage Responsible Platform Design

- Electronic trading platforms must take on ethical design principles. These involve less emphasis on features promoting reckless behaviour (such as "top trending stocks") and inclusion of prompts for careful thought prior to carrying out trades.
- Implement Transparent Information Verification
- Platforms need to enforce stronger fact-checking mechanisms and instant verification of money news and influencer suggestions in order to discourage misinformation and cut down panic-trading.
- Investors must be given simple-to-use functionalities such as stop-loss features, portfolio diversification recommendations, and volatility warnings to facilitate risk management and make well-balanced decisions.
- Regulatory Oversight and Guidelines
- Financial regulators must establish clear guidelines for digital financial platforms, especially in the context of influencer-led advice, privacy of data, algorithmic trading, and the proliferation of unsubstantiated content that can be the cause of speculative waves.
- Foster Community Moderation and Accountability
- Online communities and groups must have live moderation mechanisms to ensure investment advice is fact-based rather than speculative. User rating systems for credibility and peer accountability can enhance content quality.
- Promote Behavioural Research Integration
- Developers and financial institutions must incorporate behavioural finance knowledge in developing tools and campaigns in an effort to minimize biases such as confirmation bias, overconfidence, and fear of missing out (FOMO).
- International Collaboration Among Stakeholders
- Since digital platforms are borderless, global collaboration among regulators, fintech companies, and educational institutions is imperative to establish harmonized standards for responsible online financial conduct.
- This dissertation examines the immense impact of online platforms on investor behaviour, especially herding and speculation among the world's financial markets. It focuses on how today's online environments—spanning social media networks to algorithmic trading applications—enable instant information dissemination, resulting in coordinated investor actions. These online platforms lower the barriers to entry, enabling even novice users to engage in sophisticated financial activity, which boosts the likelihood of emotionally charged high-risk choices. The study employs both quantitative and qualitative methods, utilizing survey evidence, statistical methods, and literature analysis to gain insight into how electronic participation influences trading psychology. It also recognizes the international and cross-cultural nature of the problem, taking into account how varying market structures and regulatory regimes influence user behaviour.
- The research emphasizes the important part played by platform design, learning content, and peer pressure in perpetuating speculative trends. Evidence indicates that particular features, such as real-time notifications and trending suggestions, can inadvertently encourage herd-like behaviour. The study also illustrates the ways demographic characteristics and social media exposure relate to intensified investment behaviour in riskier assets. In its policy suggestions, the research calls for enhanced investor education, platform responsibility, and policy structures that counteract the psychological frailties of digital finance users. Overall, the study provides useful insights for financial stakeholders who seek to comprehend and navigate the behavioural effects of a more digital investment environment.

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