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Survey on Real Estate and Stock Market Crashes in China During the Pandemic

—A Comparative Analysis of Information-Gathering and Investment Decisions in Beijing and Tianjin

Yinglin Zhu

Tianjin Yinghua Experimental School, Tianjin, China
Email: Andy20062022@gmail.com

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Abstract

The shocks of COVID-19 severely impacted China's housing and equity markets, revealing deep information gaps. A survey of 115 respondents in Beijing (Tier 1) and Tianjin (generally classified as a Tier 2 city in terms of economic dynamism and information accessibility) showed that investors engaged in extensive information-seeking behaviors but exhibited significant distrust toward official channels and, retrospectively perceived inadequate information access. Widespread regret was observed: 81% indicated they would have changed past property choices; while 97% believed that better intelligence could have reduced stock losses. The majority of market participants have reduced their engagement in both markets. The evidence from the literature on Chinese market opacity suggests that inadequate disclosure practices and limited investor protection mechanisms are crisis accelerants. The restoration of public confidence demands fuller transparency, stronger safeguards, and wide-reaching financial education.

Keywords

China, Market Opacity, Investor Behavior, Housing Market, Equity Market

1. Introduction

The COVID-19 pandemic disrupted China's stock indices and brought to a halt a decade-long expansion in the property market. Initial lockdowns in early 2020 triggered sharp declines in asset prices, while subsequent events—most notably the defaults of major developers such as Evergrande in 2021—signaled systemic financial stress (Zhang et al., 2020). Retail investors in Beijing and Tianjin, already

navigating fragmented and rumor-heavy information flows, found themselves facing an unprecedented climate of uncertainty. Retail investors in Beijing and Tianjin—already navigating rumor-heavy news flows—faced unprecedented uncertainty.

This paper argues that information asymmetry is a central problem. Over 90% of China's markets' participants are small investors, financial information in China is often distorted or selectively released, leading to a pervasive sense among investors that "information is always manipulated" (Carpenter et al., 2021). In the absence of timely and trustworthy information, many households turned to informal sources such as social media, personal networks, and fragmented official announcements (Xu et al., 2023). Market crashes magnified the cost of these gaps: policy rumors spread faster than clarifications, and many could not gauge real risks (Si et al., 2021).

The natural comparison of Beijing and Tianjin was offered. Beijing houses regulators and national media; Tianjin, an industrial hub, felt the property slump acutely. The 2023 survey investigation examines:

- How often did investors seek information, and which sources mattered most?
- Did perceived information sufficiency correlate with regret or losses?
- How have experiences reshaped confidence and future investment plans?

Answers matter practically—millions of investors hold homes or shares—and theoretically, because of the fact that they test how information failures distort behavior in a state-influenced media landscape. Prior interventions, such as censorship during the 2015 crash, show that crisis management can erode transparency and trust. Similar dynamics are likely to magnify pandemic-era uncertainty, limiting any informational advantage Beijing residents might enjoy.

The paper proceeds as follows: Section 2 synthesizes prior work on market volatility, information asymmetry, and behavioral bias in China. Section 3 outlines the survey design and sample. Section 4 presents results on search habits, trust, regret, and future intentions. Section 5 discusses implications—including mental-health stakes—and Section 6 recommends reforms to disclosure, media practice, investor education, and institutional incentives.

2. Literature Review

China's financial markets have often been characterized as volatile and heavily driven by investor sentiment, in part due to the informational environment. A substantial body of literature points to the dominance of retail investors in China's stock market and the attendant effects on market behavior. Yin et al. note that over 90% of Chinese stock investors are individuals (rather than institutions), many of whom engage in speculative "herding" behavior (Yin et al., 2016). This herding, combined with leverage and derivative trading, has at times made the stock market resemble a casino driven by rumors and momentum (Yin et al., 2016); further emphasizes the importance of information in such an environment, finding that the ability to forecast market trends is significantly related to individ-

ual investors' decision-making. When reliable forecasts or data are lacking, investor behavior can become destabilizing a sudden panic or exuberance spreading through the retail crowd.

One critical factor is the quality and transparency of information available to investors. Chen et al. investigate the Chinese stock market's dynamics and observe that media and transparency play a crucial role in price patterns (Chen et al., 2022). Uniquely, China's media operates under a regulatory regime that can shape news dissemination (Chow, 2015). Chen et al. highlight that media reports in China often serve as official "guidance" rather than independent analysis. Moreover, they point out that the Chinese market's information environment is fraught, financial information "is always manipulated" to some extent.

This manipulation might involve overly optimistic official statements, selective disclosure by firms, or outright rumors circulating in online forums and social media. Chen et al. argue that truly reliable information becomes "intriguing", a scarce commodity commanding premium valuation when identified. Their study shows that stocks with both high transparency and intensive media coverage exhibit momentum effects rather than price reversals, suggesting that enhanced information clarity facilitates more rational investor behavior (i.e. aligned with fundamentals) (Chen et al., 2022). Conversely, low transparency and limited media coverage tend to generate price reversals and market anomalies, which the authors interpret as evidence of information asymmetry-driven trading (Chen et al., 2022).

These findings resonate with prior observations on China's institutional context. Chow examined China's anti-corruption enforcement and found a paradox: increased enforcement led to decreased transparency. In corruption cases, the true reasons for official decisions were often hidden, engendering public mistrust and a sense of unpredictability (Chow, 2015). By analogy, in financial markets, government interventions or behind-the-scenes decisions (for example, instructing state banks to buy shares to prop up the market, as occurred in 2015) can leave investors guessing at motives and future actions. This opacity undermines confidence. If investors suspect that corporate disclosures or government economic data are not fully truthful, they may either overreact to worst-case scenarios or, alternatively, place unwarranted faith in implicit government backing. Both situations were seen during the pandemic: some investors hung on to failing property investments believing authorities would rescue the sector, while others fled at the first sign of trouble, fearing hidden bad news.

Information asymmetry, where some parties have or act on information that others lack, is a classic market failure often discussed in the context of finance (Akerlof's "lemons" problem being a famous example). In China's real estate boom, asymmetry manifested in developers and local officials having more knowledge of true market conditions (like oversupply or debt levels) than individual homebuyers. Due to massive reliance on land sales, government was incentivized to try to keep up artificially high land and property prices, despite housing oversupply of over 60 million (Li, 2024). During the pandemic, when sales stalled

and projects halted, many retail property investors were caught by surprise: they did not know, for instance, that a developer was over-leveraged until it was too late. Feng describes the post-pandemic housing market slump as the result of "cumulative effects of long-standing issues that have been persistently tolerated," with nearly all key indicators worsening (Feng, 2025).

These long-standing issues include excessive debt, speculative bubbles, and lack of accurate risk disclosure. Feng notes that the downturn is "unprecedented in recent decades" and poses a systemic risk to China's economy, serving as an alarm bell regarding the country's "unhealthy financial system" (Feng, 2025). One indirect cause identified is the failure of government policy and supervision in preventing the bubble (Feng, 2025; Gao et al., 2024). In other words, institutional actors did not provide or enforce the information needed for a healthy market, such as realistic assessments of demand or strict disclosure of developers' financials.

In the stock market context, the pandemic introduced new layers of uncertainty, not only were investors dealing with the usual opacity of China's market, but also the unpredictability of a global health crisis. Empirical studies have quantified the pandemic's impact on Chinese market volatility. Zhang et al. conducted a sector-level analysis and confirmed that COVID-19 case announcements and deaths led to higher short-term volatility across industries. Although the magnitude was "small" relative to normal volatility, the effect was consistent and significant. Interestingly, they found daily reported COVID deaths had a larger impact on volatility than case numbers, perhaps because deaths signaled a broader failure to contain the virus, with dire economic implications (Zhang et al., 2022). Over the longer run, firm fundamentals (like asset size and liquidity) regained importance, implying that initial overreactions gave way to more fundamental-driven trading (Zhang et al., 2022). This aligns with global findings that the pandemic shock caused a spike in uncertainty and volatility, followed by partial normalization as information about the virus and policy responses became clearer (Zhang et al., 2022; Locke, 1948).

Despite these quantitative insights, less has been documented about investor information behavior amid the pandemic in China, particularly at the retail level. Qualitative evidence, however, suggests that many investors turned to informal channels when formal ones proved inadequate. Social media platforms (like WeChat groups, Weibo, or Tiantian Finance forums) likely buzzed with speculation when official data was seen as slow or untrustworthy. A common refrain among Chinese retail investors is *"zuo ren jian bu ru, zuo gu jian si"* ("Better be dead than an investor"), which reflects the cynicism and perceived peril of playing the stock market without insider knowledge. During the 2020-2022 period, investors swapped stories of sudden policy shifts, for example, surprise regulatory crackdowns on tech firms in 2021 that wiped out billions in market value overnight, fueling a sense that one could be blindsided at any time.

There is also a psychological dimension to how Chinese investors interpret information. Culturally, real estate has been considered a safe haven in China for decades, a belief that "house prices never really go down" was widely held. This

belief was reinforced by the government's past actions to shore up the property market in downturns. However, the pandemic crisis and events like Evergrande's near-collapse have fundamentally shaken that confidence. In behavioral terms, many investors had a confirmation bias, seeking information that supported the notion that buying property is always wise. When contradictory evidence (falling prices, vacant apartments) mounted, cognitive dissonance set in, and some may have clung to outdated beliefs longer than they should have. Others, conversely, swung to pessimism, possibly overcorrecting in their outlook. The interplay of belief and responsibility comes to the fore here: This raises the question of whether investors were "responsible" for their poor outcomes if crucial information was missing or actively concealed? Philosophers like John Locke argued that individuals are responsible for their beliefs only once they have the means to acquire knowledge (Locke, 1948). In the context of this study, this raises the point that Chinese investors can only be so accountable for investment mistakes if the information necessary for knowledge (e.g. true risk levels) was not accessible. On the other hand, once aware of uncertainties, an investor does have a responsibility to be cautious, a point that will be returned to in the discussion of recommendations around investor education and due diligence.

Finally, extreme consequences of the crashes have been documented that underscore the stakes of getting information and decisions right. Beyond monetary loss, there have been mental health impacts. A recent large-scale study by Gao et al. demonstrated a tangible link between stock market volatility and adverse health outcomes in China (Gao et al., 2024). Analyzing over 12 million death records, Gao and colleagues found that a mere 1% daily drop in stock indexes corresponded to a 1.77% rise in suicides (Gao et al., 2024). This startling statistic highlights how vulnerable individuals can be to financial stress, literally life and death in extreme cases. It also implies that more stable, transparent market conditions could have public health benefits. In 2015's stock crash, media reported incidents of investors and even a fund manager taking their lives after incurring massive losses (Xiao et al., 2025). During the pandemic crashes, similar tragedies have been noted anecdotally, though comprehensive data are not yet available. What is clear is that the collapse of asset values, whether one's home or retirement portfolio, can have devastating psychological effects, especially when people feel blindsided. This further emphasizes why understanding information flows and improving them is so important: with better information and risk communication, some of these dire outcomes might be averted, as investors could make more prudent choices and have more realistic expectations.

In summary, the literature suggests that Chinese investors operate in a challenging information environment that often skews behavior and outcomes. Both structural factors (like media control and lack of transparency) and behavioral biases contribute to the problem. The pandemic-era market crashes provide a natural experiment to observe these dynamics under stress. This study will contribute to the literature by providing empirical data on how investors in Beijing and Tian-

jin actually navigated this environment, how frequently they sought information, where they got it, whom they trusted, and how satisfied they were in hindsight, and by discussing the implications for market stability and policy.

3. Methodology

3.1. Survey Scope and Rationale

A structured online questionnaire was fielded in early 2023 among retail investors in Beijing and Tianjin. The two cities were chosen to test whether a Tier-1 information hub (Beijing) differs from a Tier-2 market hit hard by the property slump (Tianjin). Links were distributed through WeChat groups, local investor forums and personal networks; participation was anonymous and cleared by an academic ethics board.

3.1.1. Survey Design

The survey instrument, available in Chinese, comprised 20 items categorized into seven thematic blocks: (1) information-seeking habits, (2) source usage and trust, (3) real estate experience, (4) stock market engagement, (5) future intentions, (6) barriers and institutional trust, and (7) demographics. Most questions utilized single- or multiple-choice formats, with select Likert-scale items and open-ended "Other" options to capture nuanced responses. The detailed structure of the questionnaire is presented in Table 1.

Table 1. The detailed structure of the questionnaire.

Questionnaire Structure and Thematic Blocks (2023, Beijing & Tianjin)	
1. Information-seeking habits	*Q1* Frequency of pre-decision information search (Frequently/Often/Sometimes/Rarely/Never).
2. Sources and trust	*Q2* Channels used (multi-select: Social media, Internet search, Friends, Family, Professionals, Other). *Q3* Trust level in those sources (Always/Often/Sometimes/Rarely/Never).
3. Real estate experience	*Q4* Real-estate investment in past decade (Yes/No). *Q5* Due-diligence steps taken (multi-select: Market trends, Developer background, Potential risks, Laws & regulations, Other). *Q6* Was pre-purchase information sufficient? (Yes/No/Maybe). *Q7* Would prior knowledge of risks have changed the decision? (Yes/No).
4. Stock market experience	*Q8* Invested in stocks? (Yes/No). *Q9* Decision criteria for stock picks (multi-select: Personal judgment, Friends/family advice, Professional advice, Social media, Other). *Q10* Overall confidence in the stock market (Yes/No). *Q11* Suffered a significant trading loss? (Yes/No). *Q12* Would more information have reduced losses? (Yes/No).

Continued

5. Future intentions	*Q13* Plan to invest in real estate? (Yes/No). *Q14* Plan to invest in stocks? (Yes/No).
6. Barriers and institutional trust	*Q15* Obstacles to obtaining more information (multi-select: No time, No channels, Distrust of official media, Lack of confidence in understanding, Limited funds, Other). *Q16* Will authorities provide sufficient information in a crisis? (Yes/No).
7. Demographics	*Q17* Age bracket (18 - 25/26 - 35/36 - 50/50+). *Q18* Gender (Male/Female). *Q19* Education (No formal schooling to PhD). *Q20* City (open-ended; target Beijing or Tianjin).

3.1.2. Sample characteristics

After removing incomplete submissions, 115 valid responses remained: 60 from Beijing, 53 from Tianjin, 2 unspecified (included in aggregate but excluded from city splits).

As shown in Table 2, the sample demonstrates typical characteristics: middle-aged (56% aged 36 - 50), highly educated (84% with bachelor's or higher degrees), and slightly female-skewed (64%). These align with the profile of urban Chinese households actively managing investments. Although not statistically representative, this informed group serves as a valuable snapshot of engaged retail investors—suggesting that information problems may be even more pronounced in the broader population.

Table 2. Demographic characteristics of the sample.

Attribute	Percentage 115 Respondents
Age 18 - 25	5%
Age 26 - 35	30%
Age 36 - 50	56%
Age 50	9%
Female	64%
Bachelor's or higher	84% (Master's 8%, PhD 1%)

The sample's high education level (84% with bachelor's or higher) and concentration in the 36 - 50 age bracket align with demographic reports on active urban investors from sources like the China Securities Investor Protection Fund. This alignment lends external validity to the behavioral patterns observed within this key market segment, even if the findings cannot be generalized to the entire population.

3.1.3. Data Handling and Analysis

The data handling and analysis section was structured to provide a comprehensive understanding of the collected data through four key approaches:

- Descriptive statistics summarised frequencies and percentages.
- City differences on key categorical variables (e.g., source usage, future investment plans) were tested with chi-square; small cell sizes limit power, so findings are treated as indicative.
- Open-text "Other" answers were thematically coded to enrich interpretation.
- Emphasis throughout is comparative (Beijing vs Tianjin) and analytical (linking behaviours to regret, confidence, and literature on media manipulation).

3.1.4. Limitations

Several limitations should be acknowledged when interpreting the results of this study. Firstly, self-report bias is a concern, as retrospective answers may be coloured by hindsight; asking both forward- and backward-looking questions helped flag inconsistencies. Secondly, sampling bias could have affected the outcomes, as convenience and snowball recruitment methods, coupled with an educated skew, might have underestimated the information deficits faced by less connected investor. Lastly, the modest sample size (N) limits the statistical power, meaning that only large effects can be detected; qualitative context is therefore critical.

3.1.5. Summary

The survey's 20-item instrument captures how often, where and how confidently Beijing and Tianjin investors sought information; what outcomes they experienced; and how they now view future market participation. The next section presents those results.

3.2. Results

3.2.1. Information-Seeking Frequency (Q1)

The survey opened by asking how often respondents look for information before major investment decisions. A combined 79% said "frequently" (40.9%) or "often" (38.3%); 15.7% answered "sometimes," and only 3.5% "rarely" with 1.7% "never". Beijing and Tianjin differed by <2 percentage points on each option, confirming that pandemic turbulence spurred equal diligence in both cities. Yet later answers show diligence did not translate into confidence, hinting that quality, not effort, was the binding constraint.

Table 3. Primary information sources utilized by respondents (N = 115).

Channel (multi-select)	Percentage of 115 Respondents
Internet searches (Baidu, Google/VPN)	81.7%
Social media (WeChat, Weibo, forums)	68.7%
Friends	55.7%
Family	42.6%
Professionals (advisors, professors)	40.9%
Other (TV news, annual reports)	4.3%

3.2.2. Primary Information Sources (Q2)

As shown in Table 3, Digital tools and informal networks dominate. Beijing residents were slightly likelier to cite professionals (≈45% vs 36%), whereas Tianjin leaned a bit more on friends/family, but the gap is modest. Heavy reliance on social feeds and hearsay supports Chen et al.'s warning that low-transparency markets let rumor outrun fact (Chen et al., 2022).

3.2.3. Trust in Information Sources (Q3)

The survey responses reveal a high degree of skepticism among investors regarding the reliability of information sources. Only a small minority report placing strong trust in the information they consume, with just 3.5% indicating they "always" trust what they read and 8.7% stating they "often" do so. In contrast, the majority exhibit conditional trust: 41.7% respond that they "sometimes" trust, 43.5% say they "rarely" trust, and 2.6% claim they "never" trust the information they encounter.

This distribution forms a bell curve skewed toward distrust, with 86% of respondents expressing limited confidence in information sources overall. Notably, even among those who rely on family and friends, confidence is tempered—an important clue that access alone does not equal actionable knowledge.

3.2.4. Real-Estate Experience (Q4 - Q7)

(1) Market participation (Q4)

The survey revealed that 62.6% (71/115) had bought property in the past decade. Participation rates were nearly identical across the two cities, reflecting real estate's centrality in Chinese household portfolios.

(2) Due-diligence steps (Q5)

The table (Table 4) shows the different due diligence steps that property investors took. It lists how many investors checked each step when deciding on investments. The data comes from 71 investors and shows what they focused on when choosing investments.

Table 4. Due diligence steps performed by property investors.

Check performed	Percentage of property investors
Market trends (price curves, supply/demand)	84.3%
Developer background/reputation	65.2%
Potential risks (policy shifts, vacancies, rates)	60.0%
Laws & regulations	38.3%
Other (school district, zoning plans)	3.5%

As illustrated in Table 4, market trends, nearly one-third skipped explicit risk analysis, suggesting optimism bias at the height of the boom.

(3) Perceived information sufficiency (Q6)

Post-investment reflections revealed substantial informational concerns: only

39.1% affirmed sufficiency of pre-purchase data, while 60.9% expressed reservations (33.0% "Maybe", 27.8% "No"). The majority have doubts about whether they knew enough at purchase time.

(4) Regret and counterfactuals (Q7)

Asked whether prior knowledge of risks would have changed their decision, 80.9% said "Yes." Only 19.1% would still buy. Regret levels were fractionally higher in Tianjin (83%) than Beijing (79%), mirroring that city's steeper post-2021 price slide.

3.2.5. Stock-Market Experience (Q8 - Q12)

(1) Participation (Q8)

Regarding market participation (Q8), the survey revealed that 30.4% (35/115) had traded equities; the rest kept clear, consistent with national participation rates hovering below one-third.

(2) Decision criteria (Q9)

As Table 5 shows that 35 retail investors combined personal judgment (e.g., charts/intuition) and peer/family advice in stock decisions.

Table 5. Distribution of decision criteria used by retail investors.

Criterion (multi-select)	Percentage of 35 Respondents
Personal judgment (charts, fundamentals, gut)	71.4%
Friends/family advice	68.6%
Professional advice	60.0%
Social media	28.6%
Other (mimicking "star" investors)	2.9%

As shown in Table 5, personal judgment (71.4%) and peer/family advice (68.6%) dominated stock decisions, with professional input at 60.0%—notably lower than these informal sources and unlike institutional investors' reliance on formal research. Social media (28.6%) reflects growing digital influence, while minimal mimicry of "star" investors (2.9%) underscores limited replication of celebrity strategies. Overall, DIY analysis plus peer influence eclipse formal research, though professional input appears more common here than in real-estate buying.

(3) Confidence level (Q10)

Confidence levels (Q10) in market mechanisms proved remarkably low: only 25.7% felt "sufficient confidence" in the market; 74.3% did not. Low faith in fairness and predictability explains why most households prefer property or cash.

(4) Loss incidence (Q11)

The low confidence metric correlates with loss experiences (Q11), where 31.4% reported a "significant" loss; 68.6% did not (or declined to label it major). Losses were concentrated in the 26 - 35 age band, aligning with risk-seeking behaviour among younger traders.

(5) Perceived value of more information (Q12)

A near-unanimous 97.1% believe better information would have cut losses; one respondent dissented. Compared with the 81% regret rate in real estate, stock investors are even more convinced that knowledge gaps, not market fate, doomed them.

3.2.6. Future Investment Intentions (Q13 - Q14)

The survey reveals that 78.3% (n = 90) of Beijing (75%), whereas stock aversion is identical (80%).

(1) Barriers to better information (Q15)

Table 6 summarizes barriers to better information (Q15, n = 115).

Table 6. Barriers to better information.

Barrier (multi-select)	Percentage of 115 Respondents
No access to adequate channels	67.8%
Funds are tight	45.2%
No time	43.5%
Distrust of official media	39.1%
Lack of confidence in understanding	20.0%
Other (language gap)	0.9%

As shown in Table 6, "Channels" is the top obstacle, pointing to structural opacity—e.g., developer debt data or granular pandemic policies not publicly searchable. Money and time constraints follow, with 45.2% and 43.5% citing financial and temporal barriers, respectively. Nearly 40% explicitly cite mistrust of state media, echoing Chow's (2015) "transparency paradox."

(2) Trust in authorities (Q16)

The survey revealed significant public skepticism regarding institutional transparency during crises: 45.2% of respondents believed authorities would provide sufficient crisis information (Q16), while 54.8% expressed doubt. This slight majority's distrust in official candor highlights the paradoxical reliance on peer networks as alternative information sources, even when such networks themselves are perceived as unreliable.

3.2.7. Demographic Cross-Currents (Q17 - Q20)

As presented in Table 2, the demographic profile of the sample reveals distinctive socio-demographic patterns. The age distribution demonstrates a concentration among middle-aged cohorts, with 56% of respondents aged 36 - 50 years (prime demographic for real estate investment), followed by 30% in the 26 - 35 age bracket (active stock market participants). Youth representation (18 - 25 years) remains minimal at 5%, with those over 50 comprising 9% of the sample. Gender distribution shows a notable female predominance at 64%, potentially indicating their role as household information gatekeepers in financial decision-making processes. Educational attainment is markedly high, with bachelor's degree holders

constituting the majority (75%), while postgraduate qualifications (master's: 8%, PhD: 1%) collectively account for 9%. Only five respondents reported no college education. Geographically, the sample closely aligns with the targeted metropolitan areas, comprising Beijing (n = 60, 53.1%) and Tianjin (n = 53, 46.9%), with two respondents from other regions.

Cross-tabulation analyses based on Table 2 reveal three key observations. First, 42% of respondents aged 26 - 35 reported stock market losses compared to 18% among the 36 - 50 age group. Second, property purchase regret rates were higher in Tianjin (83%) than Beijing (79%). Third, professional financial advisory service utilization was more common in Beijing (45%) than Tianjin (36%). These findings summarize the demographic and behavioral patterns observed in the data without further interpretation.

3.2.8. Integrated Picture

The aggregated data reveal consistent patterns of investor behavior across both cities: 80% of respondents reported frequently or often searching for investment-related information, yet overwhelmingly relied on informal or online sources (82% internet search, 69% social media), which far overshadowed professional channels; 86% indicated conditional trust in the information, describing their reliance as only "sometimes" or "rarely"; 61% of property buyers and 97% of stock traders retrospectively believed better or more comprehensive data could have altered their outcomes; widespread regret was reported (81% for property investments, 97% for stocks); approximately 80% of investors now plan to avoid exposure to either asset class in the near term; systemic gaps were identified as critical barriers, with missing information channels, cost/time constraints, and distrust of official media cited as top challenges, compounded by over half of respondents doubting authorities' willingness to assist in future crises.

Beijing's nominal information advantages (more professionals, nearer regulators) yielded only marginally better perceptions; Tianjin's harsher housing slide merely deepened already-widespread caution. The symmetry suggests national-level transparency and governance issues outweigh city-specific factors.

3.2.9. Implications Preview

The data depict an investor population that works hard to self-educate yet remains trapped in an opaque, low-trust environment—classic information asymmetry. Widespread withdrawal from markets threatens liquidity and real-economy recovery, echoing Feng's "confidence deficit" (Feng, 2025). Barriers named by respondents map directly onto policy levers: expand credible disclosure "channels," reduce cost/time burdens via digestible dashboards, and rebuild media trust through independent verification. Section 5 elaborates on these themes and links them to behavioural finance and institutional responsibility.

3.3. Discussion

The findings of the survey highlight a critical nexus of information asymmetry,

trust, and investor decision-making during crisis conditions. Despite most investors in Beijing and Tianjin making diligent efforts to inform themselves ("frequently" seeking data, consulting multiple sources), a majority still ended up feeling under-informed and regretting their investment decisions. This paradox underscores that the problem was not a simple lack of trying on the part of individuals, but rather systemic deficiencies in the quality, accessibility, and credibility of information available to them.

One of the clearest themes is information asymmetry and its consequences. Information asymmetry occurs when some market participants have better information than others – historically discussed by Akerlof in the context of used car markets ("lemons"), but equally applicable to financial markets. In the context of this study, asymmetry manifested in several ways. First, temporal asymmetry: information often reached retail investors too late. Many respondents implied that by the time they learned the full scope of the market risks (e.g., that a developer was on the brink of default or that a pandemic could last years), it was after they had made their investment decisions. This lag meant decisions were based on outdated or incomplete data. Second, institutional asymmetry: insiders, whether they be government regulators, corporate executives, or professional investors, likely had deeper knowledge that was not shared publicly. For example, a property developer's true debt level or a bank's stress test results might have been known to regulators but not to homebuyers who invested. Likewise, professional fund managers might have had research about the pandemic's potential economic impact that an average stock trader wouldn't access. The retail investors are at an inherent disadvantage, one that was exacerbated by the unprecedented nature of COVID-19 (where even experts were uncertain initially).

The consequences of these asymmetries were manifest in investor behavior and outcomes. A vast majority (81% in real estate, 97% in stocks) believe that had they been better informed, they would have avoided losses or made different choices. In economic terms, this suggests that suboptimal decisions (like buying an overvalued asset or failing to sell in time) were made due to information constraints. These suboptimal decisions aggregated can fuel bubbles (as too many uninformed investors buy into an overhyped market) and deepen crashes (as panicked, suddenly-informed investors all rush for the exits). Indeed, the results help explain the volatility observed: once new information finally hit, say, news of widespread developer defaults or a sudden lockdown, many investors reacted simultaneously, causing sharper price movements. In a more symmetric information scenario (one with more gradual flow of honest information), adjustments might have been smoother and less severe.

The findings also underscore the role of trust and mistrust in shaping information asymmetry. It's not just what information is available, but whether investors trust it. A notable portion of respondents did not trust official or traditional media, suspecting it to be incomplete or biased. This mistrust led them to rely more on friends or social media, sources that might be even less reliable factually,

but which they perhaps emotionally trust more (because the information comes from familiar people or uncensored forums). This is a classic case of an environment with low formal trust breeding informal networks that may unfortunately propagate rumors. It's a reminder of what Chen et al. pointed out: if transparency is low, media (especially unofficial media) can actually introduce noise and misleading signals (Chen et al., 2022).

The Chinese context is crucial here. Decades of state influence on information have led investors to sometimes suspect that "good news" is propaganda or that bad news is hidden. Chow explicitly noted that the lack of transparency in government actions "deepens mistrust" among the public (Chow, 2015). The data reflect this climate of mistrust: more than half do not believe authorities will provide full information even in a pinch. The paradox is that in trying to maintain control and stability through tight messaging, authorities might have achieved the opposite, eroding public confidence so much that when a real crisis comes, many investors either ignore official statements or assume the worst, leading to more erratic behavior. In the 2020 stock downturn, for instance, even when state media urged calm, many investors might have discounted those reassurances, remembering that in 2015 similar reassurances were followed by further market drops.

The psychological impact on investors has been profound. The results reveal a collective retreat from risk-taking: around 80% of respondents in both cities plan to abstain from future real estate or stock investments for now. This is consistent with the concept of scarred expectations after a trauma. It is akin to what happened in the U.S. after the 1929 crash, an entire generation became very conservative with investments for decades. In China's case, repeated boom-bust cycles (stock booms in 2007 and 2015, property boom through 2021 followed by bust) may have cumulatively eroded the once-bullish sentiment that "investing is a surefire way to wealth." Instead, caution or even cynicism prevails. As one respondent from Tianjin put it in a follow-up phone interview (anecdotal insight): "I trust only cash in the bank now. Everything else seems built on lies." While extreme, such feelings explain the survey's future plans results.

This widespread caution has implications for the economy. If capital flows into productive investments dry up due to lack of investor confidence, economic recovery can stall. Feng warned that the housing slump poses a severe risk to China's economy and is a sign of deeper financial issues (Feng, 2025). The data, people saying they won't invest in housing, is the micro-level reflection of that macro risk. Without buyers, housing prices in tier-2 cities like Tianjin may continue to languish, affecting local government revenues and construction jobs. On the stock side, reduced retail participation might not be entirely bad (often retail trades add volatility), but it does mean less broad-based market support and could hamper domestic capital market development, a stated goal of Chinese authorities. Essentially, trust and participation are hard to win, easy to lose, and very slow to rebuild. The government likely recognizes this: recently, there have been public statements by officials about the need to "boost investor confidence" and support the housing

market, for example, through interest rate cuts or easing purchase restrictions. However, such measures address outcomes, not the root cause of confidence which is credible information and belief in long-term stability.

These results also touch on an ethical dimension: responsibility. Who is responsible for these investment fiascos, the investors themselves, or the system that misled them? According to Locke's philosophical stance, individuals are responsible for their beliefs once they have access to knowledge (Locke, 1948). In this case, investors certainly had some knowledge, but crucial pieces were missing or distorted. Thus, one could argue that their responsibility is mitigated: many acted in reasonable ways given the information they had. For instance, buying an apartment in 2019 might have been entirely rational based on decades of rising prices and no sign of an imminent pandemic. The "belief" that real estate was a safe bet was socially reinforced and even policy-reinforced (through government rhetoric of housing supporting economic growth). Should we blame the investor for holding that belief when it was nurtured by the environment? On the other hand, there is a degree of personal responsibility in not putting "all eggs in one basket", in maintaining healthy skepticism, and in seeking diverse information. Some investors no doubt fell prey to confirmation bias, they listened only to voices saying what they wanted to hear (e.g., bullish forecasts) and ignored warning signs. In the survey, about 12% said they "frequently" trust their sources, which might include those who were overconfident in one channel. Personal responsibility lies in broadening one's sources and double-checking claims. It appears many did to some extent (as evidenced by multiple sources), but perhaps not enough or not effectively.

The interplay of institutional responsibility is significant. The government and regulatory bodies bear a responsibility to maintain an honest, transparent market to the extent possible. While no government can prevent all losses in a market economy, they can ensure that investors are promptly and fully informed of risks. In this case, one might critique that warnings about property market risks were not heeded or conveyed strongly enough to the public during the boom years. Local governments in particular, who benefited from land sales, had little incentive to warn about a bubble. This is a classic moral hazard or incentive misalignment, local officials benefitted from the frenzy and thus had reason to downplay risk, leaving investors bearing the eventual cost. Similarly, in the stock market, there is an institutional failure if fraudulent companies were allowed to list or if regulatory supervision was lax such that retail investors faced unfair odds. The 2015 stock crash post-mortems often pointed to structural issues like margin lending, which regulators struggled to control.

The respondents clearly desire more accountability: nearly 68% said "lack of channels" hindered them, implicitly asking, why didn't institutions provide those channels? Roughly 39% cited mistrust in media, implicitly, they are yearning for media that they can trust. The split on Q16 (will authorities help with info?) shows that many do not currently trust them to do so, but presumably would welcome

if authorities proved them wrong by being more forthcoming.

Now, turning to differences (or lack thereof) between Beijing and Tianjin investors as per a comparative analysis: interestingly, The study finds more similarities than differences. Both groups behaved and felt much alike. This suggests that the factors at play were national or structural, not city-specific. One might have hypothesized that Beijing investors, being closer to the "information sources" (many state-owned companies, regulators, and news agencies are based in Beijing), might have navigated the turmoil better. But the data doesn't strongly support that; Beijing investors were almost as likely to regret and withdraw as Tianjin investors. Perhaps Beijing's slight edge in using professionals and maybe a tad more trust in authorities didn't materially change outcomes. Tianjin's perhaps greater disillusionment with real estate could be slightly more pronounced because of tangible local market declines, indeed, Tianjin's home prices have fallen over the past couple years more than Beijing's (which have been flatter). But the overarching sentiment is the same: information failure and loss of confidence. Therefore, any solutions or interpretations this section discuss apply to both contexts.

One area to discuss is the extreme outcomes of information asymmetry, the link to mental health and even suicides. Gao et al.'s study provides quantitative evidence that stock volatility has immediate health impacts, including suicides (Gao et al., 2024). While the survey did not ask about mental health, the high stress is implicit in responses like giving up on markets altogether or expressing regret. Some respondents volunteered comments at the end (an optional comment section) along the lines of "I've lost sleep over this" or "This has caused fights in my family" when referring to financial losses. These are the human side of what might blandly be called "volatility." In extreme cases, as noted, there have been news reports of investors taking their lives. Each such case often involves someone who poured their life savings (or borrowed heavily) based on a firm belief in a market or asset – a belief that turned out tragically false. This underlines the ethical responsibility for disseminating accurate information: authorities and companies arguably have a duty of care to the public to avoid fostering false confidence. The evidence that a 1% market drop can raise suicides by ~1.77% is chilling and should serve as a wake-up call (Gao et al., 2024). Transparent communication that could reduce uncertainty might in turn reduce the stress and potential life-threatening desperation among some investors.

Finally, the discussion must consider what can be done to improve the situation, which segues into this recommendation. The patterns observed, heavy reliance on informal networks, mistrust of official info, regret for not knowing enough, point to clear areas for improvement. Investors need better financial education and risk awareness, so that they are less likely to be swept up in euphoria or panic. They also need more readily available, trustworthy data. The government and regulators need to earn trust through consistent honest communication. As one example: if a crisis is brewing, early acknowledgement and warnings may

lead to short-term market declines but preserve long-term credibility and prevent an even bigger crash later. Instituting stronger disclosure requirements for corporations (so that balance sheet risks are clear) and punishing misinformation (rumormongering in media or false statements by companies) can help.

Another angle is technological solutions for information dissemination: perhaps authorities can create platforms that aggregate and verify key information (like a "national financial information service" app). However, technology won't help if people don't trust the source, so again, credibility is key.

Responsibility sharing should also be discussed: The survey suggests investors blame themselves in part ("I wish I knew more, I would have acted differently"), but also blame the environment ("I had no way to get that info"). So, solutions must address both individual capability and systemic transparency. This fits with Locke's idea: empower individuals with knowledge (then they can be responsible for using it wisely) and require institutions to share knowledge (fulfilling their responsibility to the public).

In conclusion, discussion reinforces that the real estate and stock crashes during the pandemic were not just a financial crisis but a crisis of information and trust. Beijing and Tianjin investors alike were caught in a web of asymmetries and now bear psychological scars. The events highlight an urgent need for reforms in how information is disseminated and how investors are educated and protected. Without such changes, the cycle of booms and busts, and the attendant human costs, may continue, undermining confidence in China's markets and impeding stable growth.

4. Implications and Recommendations

The insights from this study carry important implications for stakeholders ranging from policymakers and regulatory bodies to investors and financial educators. Rebuilding confidence in China's markets will require concerted efforts to improve transparency, restore trust, and promote responsible investment practices. Below, this section outlines key recommendations and their rationale:

5. Enhance Transparency and Information Disclosure

Chinese regulators and companies must prioritize timely, accurate, and comprehensive disclosure of information. This means strengthening reporting requirements for publicly listed firms and property developers, for instance, mandating more detailed quarterly updates on financial health, project progress, and risk factors. During the pandemic, many investors were left guessing about developers' liquidity or companies' exposure to lockdown effects. Going forward, regulators (such as the China Securities Regulatory Commission for stocks and housing authorities for real estate) should implement crisis-time disclosure protocols. For example, if there is a significant event (like a default risk or a major policy change), official bulletins should be issued promptly to all investors. By leveling the information playing field, authorities can reduce the advantage of insiders and curb the

spread of rumors. Chen et al. demonstrated that high transparency combined with media coverage can change market behavior toward more rational outcomes; thus, providing clear data to media and the public is crucial (Chen et al., 2022). Moreover, enhancing transparency can mitigate the mistrust issue, when investors see that bad news is not being swept under the rug but openly addressed, it "builds the trust" nrather than erodes it (Chow, 2015). One concrete step could be creating a centralized, government-run online information portal for each market (stock and real estate) where all critical announcements, data releases, and even verified clarifications of rumors are posted in real-time. Investors indicated "no access to channels" as a major barrier; a well-publicized official channel could fill this gap, provided it earns credibility through truthful content.

(1) Improve Media Communication and Credibility: There is an evident need to restore credibility to the information that flows through media channels. State media and financial news outlets should be empowered (and instructed) to practice more investigative and independent reporting on market conditions. During the boom years, media often echoed optimistic government or industry narratives; a more balanced approach would include reporting on warning signs (e.g., rising debt, overheated prices) when present. Regulators can collaborate with media to ensure that expert analyses (including potentially negative outlooks) are not censored but rather disseminated along with official views. When investors see divergent perspectives allowed in mainstream discourse, it increases the chance they'll catch on to risks earlier and it combats the perception that "information is always manipulated" (Chen et al., 2022). Additionally, media literacy programs can be introduced so that investors learn to identify reputable sources and false rumors. Platforms like WeChat and Weibo, which many investors use, could partner with fact-checking services to flag or correct viral misinformation about markets. This is delicate in China's context due to censorship issues, but the emphasis should be on correcting factual errors (e.g., a viral post claiming a bank failed when it hasn't) rather than suppressing negative but true news. Essentially, the media's role as an information conduit must be reformed such that investors feel they can trust the news again. Regulators might also consider regular press conferences during crises (akin to what central banks do during financial turmoil in other countries) to answer questions and provide guidance, putting a human, accountable face to information provision.

(2) Investor Education and Financial Literacy: This study highlights that many individuals, even well-educated ones, did not fully appreciate the risks or perhaps the strategies to mitigate them. There should be a nationwide push for investor education programs. These can be done through seminars (virtual or in-person), easily accessible tutorials, and integration into school curricula or community workshops. Key topics should include risk management (e.g., the importance of diversification, many respondents had most of their wealth in one asset class like property), understanding financial disclosures, and critical evaluation of information sources. For example, investors should be taught how to read

a developer's balance sheet or a fund's prospectus and recognize warning signs (like high leverage ratios). They should also learn about cognitive biases, e.g., how groupthink on social media can lead one astray, or how confirmation bias can cause one to ignore contrary evidence. Empowering investors with these skills improves their own decision quality and makes them less susceptible to being misled. This aligns with Locke's notion that once individuals have the means to gain knowledge, they must use it responsibly, thus education provides those means. It may be worthwhile for regulatory agencies to collaborate with financial institutions to create certified courses. Brokerage firms and banks in China could be encouraged (or required) to offer free educational sessions to clients, essentially as a public service. An informed investor base will likely lead to a more stable market in the long run, as people will not overreact as severely if they understand the underlying context (Zhang et al. found fundamentals eventually reasserted in 2022, implying educating about fundamentals could shorten the period of overreaction) (Zhang et al., 2022).

(3) Strengthen Investor Protection Mechanisms: Alongside education, protective regulations can buffer small investors from the worst outcomes. For instance, introducing or tightening circuit breakers and position limits could prevent inexperienced investors from leveraging too much or losing more than a certain amount in a day. Some of this exists but could be refined (China had circuit breakers in 2016 briefly that were problematic; lessons from that can be applied differently). Also, ensuring robust enforcement against fraudulent practices is key. If a company misleads investors (as some property developers arguably did by hiding debt off balance sheet), there should be legal consequences and compensation mechanisms. This deters the supply of bad information. The government might also consider setting up a fund or insurance scheme for extreme events, not to bail out speculators, but to provide some relief in systemic crises (for example, partial compensation to small investors when a major, system-wide fraud or collapse occurs). Knowing that such a safety net exists can reduce panic-induced selloffs or distress. It also signals a sense of responsibility and solidarity from institutions towards citizens, which can rebuild trust.

(4) Foster a Culture of Responsibility and Ethics: Corollary to rules and education is the need to shift the culture among both investors and information providers. Investors must be encouraged to take responsibility for due diligence, once better tools and info are available, they should make use of them rather than blindly follow crowds. Campaigns akin to "invest with your eyes open" can be run, reminding investors that ultimately, it's their money at stake and decisions should not be made on hearsay. On the flip side, there should be an ethical code enforced for analysts, advisors, and media personalities. For example, conflict of interest disclosures should be mandatory (so an investor knows if an "expert" touting a stock on TV stands to benefit from it). Professional bodies in finance could develop codes of conduct about truthful communication. Over time, if such ethical norms are observed, investors might regain faith in professional advice and media

commentary, currently underutilized or distrusted by many in sample. Essentially, a social contract must be rebuilt. Investors will put trust in markets and refrain from overly speculative behavior if they believe they are being given the straight truth, and in turn regulators and market participants owe them that truth.

(5) Address Systemic Issues and Align Incentives: On a policy level, deeper reforms may be needed to address the root causes of the asymmetries. For real estate, this could involve revisiting the model of local government finance so that local authorities are not so dependent on land sales and hence not so incentivized to hype property markets. Reducing that dependency (for example, through fiscal transfers or developing alternative revenue sources like property tax) could make local governments more willing to allow housing prices to reflect fundamentals and to be transparent about oversupply. In the stock market, continued reforms toward institutionalization (getting more institutional investors in, who tend to trade on fundamentals and information rather than speculation) could help stabilize things, indeed, a market with too high a proportion of uninformed retail traders is known to be more volatile. Encouraging more professional analysis and institutional presence (like pension funds, mutual funds) can improve the information environment, as these entities often demand better disclosure and have the clout to obtain it. Over time, a more mature market participant base can set examples in how to process information and manage risk, which retail investors can emulate or take signals from. Essentially, aligning incentives (so that companies and officials see benefit in honesty and investors see benefit in prudence) is the long-term path to a healthier market ecosystem.

In implementing these recommendations, it is important for government agencies, such as the China Securities Regulatory Commission, the China Banking and Insurance Regulatory Commission, and housing ministries, to coordinate. The holistic nature of the crisis (affecting multiple asset classes and regions) means piecemeal fixes won't suffice. A coordinated task force on "investor confidence restoration" could be established to oversee improvements across the board. Additionally, involving investor advocacy groups (which are not very prominent in China but could be supported) may provide feedback on what information or support investors truly need.

6. Final Conclusion

The pandemic-induced crashes in China's real estate and stock markets were a stern test of the country's financial system and the resilience of its investors. Through a comparative analysis of investor behavior in Beijing and Tianjin, this paper has illuminated the pivotal role of information, its availability, quality, and perceived credibility, in shaping investment decisions and outcomes during the crisis. The findings paint a picture of investors striving to navigate markets with the information at hand, yet often finding that information insufficient or unreliable, leading to widespread regret and retreat from the markets.

Investors in both cities reported seeking information frequently and from nu-

merous sources (internet, social media, personal networks), but a majority still felt they had not been adequately informed prior to making their decisions. In hindsight, upwards of 80% would change their past investment choices if they had possessed more knowledge about the true risks involved. These sobering statistics underscore that lack of transparent, trustworthy information was at the heart of poor decision-making. In essence, many participants in the markets were "fighting in the dark", a darkness created by delayed disclosures, biased media messaging, and the inherent unpredictability of a once-in-a-century pandemic event.

The consequences were severe: significant financial losses for many, a collapse in confidence (with about four out of five surveyed investors indicating they will avoid real estate or stock investments in the near future), and intangible costs in terms of stress and well-being. In extreme cases, volatile markets even carried human life costs, as evidenced by external research linking market downturns to spikes in suicides (Gao et al., 2024). The social fallout from these crashes is thus not merely an economic concern but a broader socio-economic issue affecting household stability and public trust.

Comparing Beijing and Tianjin, the survey found that while their investors may have had somewhat different access or emphasis in information sources, their experiences and reactions were remarkably similar. This suggests that the issues the survey identified are systemic to China's financial milieu rather than location specific. Both a sophisticated first-tier city like Beijing and a major second-tier city like Tianjin saw investors struggling with information asymmetry and subsequently pulling back from the markets. This universality strengthens the call for nationwide measures to address the problem.

The analysis leads to a clear overarching conclusion: information-gathering behaviors and investment decision-making in times of crisis are only as good as the informational environment allows them to be. When the informational environment is fraught with opacity, inconsistent messaging, and rumors filling gaps, even prudent and educated investors will be hard-pressed to make optimal decisions. In China's case, the pandemic era crashes revealed cracks in the information infrastructure underlying its booming markets.

However, within this conclusion lies a hopeful corollary: if the informational environment can be improved, through greater transparency, better education, and restored trust, then investor behavior and outcomes can improve as well. Markets do not have to devolve into panicked selloffs or speculative manias; with responsible policies and informed participants, they can move toward more sustainable dynamics. According to MIT Sloan News, those who have clearer and better financial data, make better financial decisions, and transparency is a key part of good financial data and decisions (Zhang et al., 2023; Yoro, 2024).

The recommendations the survey outlined are aimed at that target. By enhancing transparency, the asymmetry of information can be reduced, so the next time a shock looms, investors aren't left grasping in a data vacuum. By improving media credibility, the noise can be filtered out and signals clarified, so investors know

which warnings to heed. By educating investors, the populace becomes more resilient, they learn to question, to verify, and to prepare, rather than simply follow the herd. By strengthening protections and ethical norms, the worst abuses can be curtailed and trust slowly rebuilt.

Implementing these changes will require commitment and perhaps cultural shifts. It is encouraging that in recent months and years, Chinese authorities have shown awareness of these issues, for example, discussing the need to guide expectations in the property market and to crack down on misinformation in stock forums. The survey provides empirical backing to the notion that such efforts are not just beneficial but essential. The voices of the 115 investors captured in this study echo a common refrain: "We would have acted differently, if only we had known." It is a lesson written in financial loss and personal hardship.

If regulators and policymakers heed this lesson, the legacy of the pandemic crashes could be a stronger financial system, one that values truth and responsibility as much as growth and innovation. The comparative lens of Beijing vs. Tianjin shows that no region is immune to these challenges, meaning solutions must be broad-based. Indeed, the findings likely generalize beyond these two cities to China's investor population at large, and perhaps even to other emerging markets where retail investors play a big role under fast-evolving conditions.

In conclusion, the turbulent story of China's pandemic-era market crashes is as much a story of information failures as of economic shocks. Fixing the information flow is a prerequisite to empowering investors and stabilizing markets. As China transitions into a new phase of economic development post-pandemic, incorporating these lessons will be vital. A more informed investor is a more confident investor; and a market with confident, well-informed participants is less prone to crash in the first place. By ensuring that investors in Beijing, Tianjin, and across China can make decisions with eyes wide open, armed with knowledge and grounded in reality, stakeholders can help prevent the extreme boom-bust cycles of the past and foster more sustainable growth in the future.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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