A Study of Hong Kong Stock Market Anomalies: Characteristics, Causes, and Strategic Applications

Yifei Yang

Nanjing University of Finance & Economics, Nanjing, China 2713262852@qq.com

Abstract. As a major global offshore financial hub, the Hong Kong stock market exhibits volatility anomalies that are significantly different from mature markets due to its dual pricing mechanism and the interweaving of international capital flows. This divergence is no accident; its core root lies first in the "dual pricing mechanism" unique to the Hong Kong stock market. Under this mechanism, locally listed securities denominated in Hong Kong dollars and cross-border trading securities affected by fluctuations in foreign exchange rates have formed parallel yet interacting pricing logics. This paper aims to examine the volatility anomalies exhibited by the Hong Kong stock market in recent years, analyze the underlying drivers, and explore their impact on market participants. Through an in-depth analysis of the Hang Seng Index, trading volume, investor behavior, global economic conditions, monetary policies, mainland economic policies, and industry characteristics, this paper reveals the multiple causes of volatility in the Hong Kong stock market and puts forward targeted investment strategies and recommendations.

Keywords: Hong Kong stock market, anomalies, quantitative finance, overreaction

1. Introduction

As a major global offshore financial center, the Hong Kong stock market, with its dual attributes of China's growth momentum and international capital flows, has long faced challenges to market efficiency. Between 2020 and 2024, the Hang Seng Index experienced a volatility rate of 32% (higher than the S&P 500's 24%) and frequently exhibited anomalies that cannot be explained by traditional financial theory. Through an in-depth analysis of the Hang Seng Index, trading volume, investor behavior, global economic conditions, monetary policy, mainland economic policies, and industry characteristics, this paper systematically analyzes the core anomalies of the Hong Kong stock market, explores their formation mechanisms, and provides empirical support for quantitative strategies.

2. Drivers of the Hong Kong stock market's volatility

Anomalies refer to market phenomena that deviate from normal market behavior or expectations. These anomalies may manifest as unusual stock price fluctuations, surges or decreases in trading volume, and abnormal returns within a specific time period. Based on their causes and

manifestations, these anomalies can be categorized into the following types: the reversal effect, the momentum effect, calendar anomalies (the January effect, the weekend effect, the reverse weekend effect), the book-to-market effect, the size effect, the disposition effect, the equity premium puzzle, the herd effect and the ostrich effect, and bubbles [1].

The Hong Kong stock market is renowned for its remarkable volatility. This "anomaly" is not accidental; instead, it arises from the interplay between the Hong Kong stock market's unique offshore nature and a complex set of drivers.

2.1. Liquidity factors: the inherent fragility of offshore markets

Liquidity is a fundamental amplifier of volatility. As an offshore market, Hong Kong stocks are inherently vulnerable. First, their denomination in Hong Kong dollars and peg to the US dollar make them highly sensitive to global US dollar liquidity, particularly Federal Reserve policy and the US dollar cycle. During periods of US interest rate hikes, the outflow of foreign capital has led to a sudden tightening of market liquidity, significantly amplifying selling pressure. Furthermore, the structure of market participants has shaped the constant competition between domestic and foreign capital [2]: domestic investors tend to focus on medium- and long-term investments, while foreign investors dominate short-term trading. Diverging capital flows between the two can easily exacerbate market volatility. Furthermore, compared to A-shares or US stocks, the Hong Kong stock market has a relatively shallow market depth and lower daily trading volume. This makes it more likely that large inflows and outflows of funds will trigger significant price fluctuations.

2.2. Investor structure: diverging risk preferences

The unique investor structure directly shapes risk appetite and pricing logic. A key characteristic of the Hong Kong stock market is that foreign institutions hold dominant pricing power, making the market extremely sensitive to geopolitical risks and shifts in global risk sentiment. Furthermore, there are significant differences in risk appetite between domestic and foreign investors. Foreign investors tend to focus more on macro-level risks (such as Sino-US relations and regulatory policy shifts), while domestic investors are more focused on specific industries and company fundamentals. This mismatch in expectations often leads to dramatic market fluctuations. Furthermore, the Hong Kong stock market's diverse range of derivative instruments has attracted numerous hedge funds, whose use of leverage can significantly amplify upward or downward price movements when market trends emerge.

2.3. Policy and regulatory factors

The policy and regulatory environment exhibits a complex "double-edged" nature. Hong Kong stocks are not only directly affected by local policies, but these policy changes can significantly impact market sentiment in the short term. More importantly, as an offshore financing center for Chinese companies, Hong Kong reacts quickly and dramatically to mainland policies, especially regulatory changes targeting specific industries, which can have a more rapid and severe impact on the Hong Kong stock market than on A-shares. Furthermore, frequent international regulatory conflicts have forced Chinese concept stocks to return to the Hong Kong stock market, increasing supply pressures in the market.

2.4. Geopolitics and global macroeconomic shocks

Geopolitics and global macroeconomic shocks are significant external sources of disruption. Hong Kong stocks often act as an amplifier of Sino-US tensions. Geopolitical events such as trade frictions and sanctions lists can easily trigger a systematic divestment by foreign investors from Chinese assets. Furthermore, fluctuations in the RMB exchange rate pose a unique challenge. Although the Hong Kong dollar is pegged to the US dollar, listed companies primarily earn profits in RMB, and a depreciating exchange rate directly erodes their USD/HKD-denominated book earnings. During periods of heightened global risk aversion, Hong Kong stocks, as a typical "offshore risk asset," are often the first to be hit by indiscriminate global sell-offs.

2.5. Market microstructure issues

The market microstructure itself suffers from inherent flaws. The persistent A/H stock valuation discount reflects not only differences in liquidity but also the need for a risk premium to compensate for the inherent risks of offshore markets. An unbalanced constituent structure is another major issue. Financials, real estate, and a few tech giants are overrepresented in major indices, making it possible for major policy shocks in a single sector to "hijack" the entire index. Furthermore, the historically low financial transparency of some small-cap companies—a problem that undermines market credibility—has long suppressed the overall valuation of Hong Kong stocks.

2.6. Shifting correlations between economic fundamentals

The unique correlation pattern between economic fundamentals also exacerbates volatility. Hong Kong stocks exhibit a "weak correlation paradox" with the Chinese economy [3]: while listed companies' earnings are highly dependent on mainland China's economic fundamentals, short-term capital flows are primarily driven by overseas sentiment, resulting in frequent short-term disconnects or even divergences between market performance and fundamentals. Furthermore, Hong Kong stocks encompass both traditional and new economy companies, and during periods of transition, the industry cycles and performance expectations of these two groups are prone to divergence, further exacerbating structural market volatility.

In summary, the dramatic volatility of the Hong Kong stock market is the inevitable result of a combination of factors: its offshore nature and sensitivity to liquidity, its unique investor structure, overlapping policy and regulatory influences, frequent geopolitical shocks, market microstructural flaws, and a unique correlation pattern with economic fundamentals.

3. Impact of the Hong Kong stock market's volatility anomalies

The long-standing volatility anomalies in the Hong Kong stock market not only distort short-term price formation mechanisms but also have systemic impacts on market efficiency, investor behavior, corporate financing capabilities, and regional financial stability, creating a multi-layered negative transmission chain.

3.1. Erosion of market quality and pricing efficiency

Solidified Liquidity Discount: The A-H share premium has remained high for nearly five years, reflecting the unique risk compensation needs of the offshore market. This structural discount

weakens the valuation appeal of Hong Kong stocks, creating a vicious cycle of "low valuations \rightarrow capital outflows \rightarrow deteriorating liquidity \rightarrow deepening discounts."

Weakened Price Discovery: Driven by foreign investor sentiment, stock prices often deviate significantly from fundamentals in the short term. A typical example is that the price-to-earnings (P/E) ratio of the technology sector fluctuated by $\pm 40\%$ in 2022 alone (CITIC Securities Research Department) [4]. This distorts resource allocation signals, significantly increases cross-market arbitrage costs, and undermines market efficiency.

3.2. Distortion of investor behavior

Short-term Institutional Investment: The average holding period for foreign investors is only 3-6 months, far shorter than the over 2-year allocation period of A-share mutual funds. This high-frequency trading tendency encourages the behavior of chasing rising prices and selling on declines, which self-reinforces market volatility.

Accumulation of Leverage Risk Among Retail Investors: Derivatives account for 25% of average daily trading volume, with high-leverage turbo/CBBCs accounting for a significant portion. In extreme market conditions, cascading forced liquidations can easily trigger a liquidity spiral, amplifying market declines.

3.3. Suppressing corporate financing

Impaired IPO Pricing: New share valuations are systematically lower than those of A-shares. This financing cost disadvantage weakens the attractiveness of Hong Kong stocks for technology-innovative companies.

Shrinking Refinancing Channels: The scale of additional issuances of Hang Seng Index constituents has plummeted from HK\$280 billion in 2021 to HK\$90 billion in 2023. Asset-heavy industries, in particular, face capital expenditure constraints, hindering corporate strategic transformation [5].

3.4. Threats to regional financial stability

Cross-market Risk Contagion: BIS empirical research shows that for every 1% increase in Hong Kong stock volatility, A-share volatility will increase by an average of 0.4% over the next three days through the Stock Connect mechanism, creating a cross-border risk resonance.

Pressure on the Linked Exchange Rate System: Stock market crashes often trigger tight Hong Kong dollar liquidity, with the overnight HIBOR surging by over 5% on multiple occasions. The Hong Kong Monetary Authority (HKMA) noted that such interest rate fluctuations significantly increase intervention costs and jeopardize the stability of the Hong Kong dollar against the US dollar.

3.5. Long-term structural concerns

Sustained volatility is triggering more profound structural issues, potentially leading to the following: a blurred market positioning—which exacerbates the tension between its role as "China's offshore financing hub" and its nature as a "global risk asset"; an outflow of high-quality assets, as leading companies prefer secondary listings amid persistent low valuations; and a deterioration in investor structure, where the outflow of long-term capital is accelerating market retailization and speculative activity. These structural changes could plunge Hong Kong stocks into a self-reinforcing

cycle of low liquidity, high volatility, and a decline in financing capabilities, ultimately weakening its status as an international financial center.

4. Response strategies and recommendations

Investors should strengthen their risk management capabilities and adopt strategies such as asset diversification and stop-loss orders to mitigate investment risks. They should also closely track market dynamics and policy shifts, and adjust their investment strategies in a timely manner. Listed companies should enhance the transparency of their information disclosure to ensure it is truthful, accurate, and timely. Regulators, for their part, should strengthen supervision over information disclosure and impose penalties for violations. Delisting rules should be revised (introducing dual indicators of sustained trading volume and market capitalization) to accelerate the elimination of "penny stocks" and "zombie stocks." Furthermore, the abnormal trading monitoring system should be upgraded, and dynamic circuit breakers should be implemented for policy-sensitive stocks.

Regulators should improve market mechanisms, strengthen market oversight, and combat illegal activities such as market manipulation and insider trading. Furthermore, they should promote the optimization and upgrading of market structure to enhance overall market competitiveness.

Stakeholders should improve investor literacy and market awareness through seminars, training programs, and other initiatives. This will help investors understand market mechanisms, master analytical tools, and avoid blindly following market trends .

Regulators should require privatized companies to disclose liquidity assessment reports to prevent downward price pressure and arbitrage activities by major shareholders; they should also establish a "policy emergency whitelist" for cross-border enterprises and provide liquidity support through market makers to mitigate the impact of geopolitical volatility.

5. Conclusion

The volatility anomalies in the Hong Kong stock market are essentially manifestations of a market transformation phase: liquidity stratification and institutional constraints are driving divergence in the primary market, while retail-oriented trading and technological transformation are intensifying structural competition. Meanwhile, global capital flow pressures are amplifying exchange rate and asset price fluctuations. Influenced by multiple factors, including global economic growth uncertainty, monetary policy adjustments, changes in mainland China's economic policies, investor behavior, and market structure, the Hong Kong stock market has exhibited frequent fluctuations. To address these fluctuations, investors should strengthen risk management awareness, enhance information disclosure transparency, improve market mechanisms, and strengthen investor education. These measures can effectively reduce investment risks and enhance market stability and competitiveness. However, future research will require breakthroughs in three areas:

- 1. Data and model upgrades: Integrate transaction-by-transaction data with alternative data sources (such as social media sentiment) and leverage machine learning to construct dynamic factor models:
- 2. Exploring emerging anomalies: Focusing on the valuation discount mechanism of Chinese concept stocks returning to the market, pricing biases caused by the divergence between international and domestic ESG ratings, and the contagion effect of Web 3.0 policies on the blockchain sector;
- 3. Deepening cross-market research: Quantifying the "A-shares-Hong Kong-US stocks" arbitrage path, revealing the amplification effect of offshore RMB exchange rate fluctuations on anomalies,

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and developing a regulatory impact index to assess the anomaly mitigation efficiency of policy interventions, providing a new paradigm for pricing "Chinese elements" in offshore markets.

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