

Investment Suggestions for Individual Investors: A Case Study of Bill Hwang

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Abstract: On March 26, 2021, Archegos, the family fund office managed by hedge fund manager Bill Hwang, exploded, and the heavily held stocks under his management were sold, with a total amount of \$20 billion, and the market value of the related stocks was wiped out by about \$33 billion. This huge event has aroused widespread attention in the financial world, but also sounded the alarm for individual investors. This paper analyzes the process of Archegos' implosion, and analyzes the reasons for the implosion: the extensive use of financial derivatives, the concentration of investment strategies and the abuse of leverage. Then it provides relevant suggestions for individual investors to better participate in the financial market: establishing effective investment portfolio, be cautious to leverage, robust risk management and continuous monitoring. Based on the analysis of Bill Hwang event, this article provides reference for individual investors to identify investment risks, choose better investment strategies and more effective risk management.

Keywords: Bill Hwang, Individual Investor, Leverage, Risk Management.

1. Introduction

Many individual investors have actively participated in the financial markets, aspiring to emulate Warren Buffett, who boasts exceptional ability in forecasting financial markets and generating substantial profits with their capital. Nevertheless, within the expansive financial sector, only a narrow fraction of investors achieve success. Most investors failed because they indulge in the zealous desire of profits, which consequently causes them to overlook the evaluation and management of risk. Indeed, there is a typical correlation between risk and return, and any logical investor must not overlook the evaluation and control of risk while predicting future anticipated gains.

However, history always seems to repeat itself. Those who forget history repeat it, and too much greed may lead to a loss of capital. 1998 was a wake-up call for investors when Long-Term Capital Management (LTCM) suffered a major loss. LTCM used sophisticated computerized calculations to identify abnormal market price differentials, leveraged funds to magnify them, and entered the market to make a profit. "The investment strategy. From 1994 to 1997, LTCM had been maintaining a good momentum of net asset appreciation, but due to the occurrence of small probability events in the market, Russian debt defaults caused LTCM to start losing money. As losses from the fixed investment model continued to mount, LTCM had become increasingly difficult to meet margin requirements and needed more collateral to ensure that it would be able to service all of its debt, but lacked high-value assets to use as collateral. Not only that, LTCM was in the difficult position of

having difficulty liquidating its assets. Most of its assets are still illiquid and difficult to sell in normal market times. This shows that high risk in the capital market may not necessarily come with high profit. High leverage is a double-edged sword. When the market moves in an unfavorable direction, highly leveraged transactions require LTCM to have sufficient cash to support margin requirements. Ultimately, the LTCM crisis not only led to significant losses for this fund company, but also affected the global financial market[1].

The impact of LTCM was felt throughout the financial world, but similar incidents still occur. In 2008, as one of the once Big Four investment banks in the United States, Lehman Brothers went from being a leading and respected major investment bank to a company struggling to find external financing and ultimately a company on the verge of bankruptcy in a matter of months. This was due precisely to Lehman Brothers' concentrated investment in high-risk and illiquid subprime loans on real estate at 30 times leverage [2].

The above case did not seem to make investors pay enough attention to risk management, and a similar event occurred again in 2021, when the collapse of the family management office founded by Bill Hwang hit the financial markets again. This article will analyze this event and provide advice on risk management for individual investors.

2. Literature Review

In the context of risk management for individual investors, many studies have examined how to effectively identify, assess and respond to potential investment risks. Risk management for investors involves not only forecasting market developments, but is also closely related to the behavioral characteristics and decision-making processes of individual investors. Klement suggests that risk profiling for investors is necessary because knowing the risk profile of investors contributes to suitability of the investment decisions [3]. By examining the metrics that have an impact on individual investor decision-making, it is noted that market returns are usually an important metric of interest to investors. In this context, risk management in the pursuit of high returns is also more important [4]. Miller identifies the benefits of leverage in improving the efficiency of the company[5]. However, Ge and Qiu point out that leverage have negative relationship with investment level, and limit the firms with weak growth opportunities [6]. Markowitz imply that modern portfolio theory emphasizes the importance of asset diversification, which can reduce the overall risk of a portfolio [7]. Individual investors should adopt an asset allocation strategy to diversify their funds among different assets, such as stocks, bonds and real estate, in order to reduce the impact of fluctuations in individual assets on the overall investment. Besides, Lekovic suggests that Portfolios should consider the optimal number of securities to reduce management costs [8]. Nikolaou points out that the liquidity is important for investors which help investors restore balances when they encounter crisis [9]. Hon expresses that financial derivatives is a good tool to hedge risks. But financial derivatives amplify the risk to some extent for the investors and if not utilized properly, it can have a huge impact [10].

Based on the above research, this essay analyzes how individual investors can effectively manage risks, through the explosion of Bill Hwang and Archegos Capital. Through this research, it can theoretically integrate and expand the risk of individual investors in the investment process, and at the same time can give specific investment advice and reminders for individual investment in practice.

3. Overview of the Implosion Event

3.1. Background of Bill Hwang and Archegos

Bill Hwang is the founder of Archegos Capital Management. After working at various financial institutions, including Deutsche Bank and Goldman Sachs, Hwang is known for his quantitative investment strategies and large-scale leveraged investments. He has been investigated by the U.S.

Securities and Exchange Commission (SEC) for insider trading and has been banned by the Hong Kong Securities and Futures Commission (SFC) from participating in trading activities in Hong Kong. It can be inferred that Bill Hwang is a relatively aggressive investor with a low reputation.

Archegos Capital Management was a private investment firm founded in 2013 and operated as a family office, managing wealth accumulated by Hwang from his previous ventures. Under the management of Bill Hwang, Archegos employed high leverage to amplify returns, heavily investing in technology and media stocks [11]. Table 1 shows Archegos's concentrated equity strategy, which is Bill Hwang's top seven holdings.

Table 1: Bill Hwang's Top Seven Holdings.

Rank	Stock	Ticker	Archegos Ownership Stake
1	GSX Techedu	GSX	70%
2	Discovery Class A	DISCA	Over 60%
3	IQIYI	IQ	Over 50%
4	Paramount (formerly ViacomCBS)	PARA	Over 50%
5	Tencent Music Entertainment	TME	Over 45%
6	Vipshop Holdings	VIPS	25%
7	Shopify	SHOP	1.3%

3.2. The Whole Process of the Event

The crisis commenced on March 22, 2021, when the American media company ViacomCBS declared a \$3 billion stock offering, a decision that instigated a sell-off resulting in a persistent and significant decrease in ViacomCBS's shares [12]. It prompted an emergency margin call from banks that had borrowed from Archegos to cover his significant exposure to ViacomCBS. Nevertheless, Bill Hwang lacked the liquidity to satisfy the demand.

Credit Suisse indicated that on March 24, as the ViacomCBS stock price persisted in its slide, another significant long position of Archegos, Tencent Music Entertainment Group, diminished by 20% [13].

On March 26, the extensive compulsory liquidation began. Goldman and Morgan initially liquidated Archegos-related equities to generate liquidity and mitigate exposures. By the time Nomura and Credit Suisse choose to start selling, their share prices had declined to such an extent that substantial losses were inevitable.

Consequently, Bill Hwang incurred losses of more than ten billion dollars in one day, creating the greatest single-day loss in history. On March 31, the formerly illustrious corporation filed for bankruptcy, and Bill Hwang faced legal repercussions. Besides, statistics reveal that Credit Suisse incurred losses amounting to 4.7 billion dollars, while Nomura Securities experienced losses of approximately 2.9 billion dollars. Across Wall Street, losses reached \$10 billion.

4. Reasons Analysis

4.1. The Use of Financial Derivatives

The evolution of the financial market has compelled investors to seek more than mere investing in fundamental financial assets like equities and bonds. To mitigate risk and achieve superior returns, an increasing number of individuals are investing in financial derivatives.

As an aggressive investor, Bill Hwang used Total Return Swaps (TRS) and Contracts for Difference. This lets him trade securities and generate income without owning them. TRS refers to the total return of the reference asset from the payer to the recipient throughout the contract. Principal,

interest, prepaid expenses, and capital gains from asset price movements comprise the overall return. The TRS recipient agrees to compensate the other party with a preset share of the asset's appreciation, typically LIBOR plus any deviations, and the capital loss from unfavorable price movements. Baidu and other stocks underpin Archegos' total return swap (TRS) with numerous investment banks.

A contract for difference is a financial derivative that involves investors and traders agreeing on the pricing of stocks, commodities, foreign exchange, and other financial instruments. It combines several TRS contracts and standardized financial derivatives. Archegos predicts Baidu and other equity changes, while Nomura Securities associates use leverage to trade CFDs. To profit from the asset differential, they liquidate the position when the stock price rises or falls to the expected objective.

In essence, both total income swaps and CFDs do not involve Archegos owning the apparent shares; rather, they are held by the investment banks with which he collaborates. Both of Archegos' instruments are traded over-the-counter, making it difficult for investment banks to estimate its holdings in other equities without transaction data and comparative research. As the price fell, the investment bank was uninformed of Archegos' trading at other institutions until several investment banks issued simultaneous margin calls. After Archegos defaulted, major investment banks liquidated contract assets progressively, liquidating stakes.

4.2. Concentrated Investment Without Diversification of Risk

Another important reason for Archegos's collapse is Bill Hwang's concentrated holdings in several stocks, which maximizes the leverage of the trades, thereby increasing the total amount of the Archegos positions.

Bill Hwang Mainly investing in several large technology stocks and other growth companies, this stone portfolio is relatively concentrated, and it is difficult to diversify the risks. On March 22, ViacomCBS declared a public offering of 20 million shares at a price of \$85 each. This announcement precipitated a substantial decrease in its stock price, which plummeted to 48.23 yuan per share by the market close on March 26, representing a total reduction of 50.6% over the course of a week. A study by Earl indicates that Bill Hwang and Archegos clandestinely amassed more than 50% of the common stock of ViacomCBS. The precipitous drop of ViacomCBS stock resulted in substantial losses for Archegos [14]. On March 26, GSX Techedu, an online education firm significantly backed by Archegos, saw a 41.6% decrease in its stock price due to speculations of the Chinese Ministry of Education's crackdown on extracurricular education, culminating in an overall fall. On the same day, China's Ministry of Industry and Information Technology unveiled the draft of the "New Regulations on the Implementation of the Tobacco Monopoly Law," which aims to regulate new tobacco products, including electronic cigarettes, in accordance with existing cigarette provisions. Concurrently, the shares of Wucore Technology, an electronic cigarette manufacturer owned by Archegos, experienced a continuous decline, totaling 53% over the course of a week.

Meanwhile, Archegos's major holdings declined, resulting in a decrease in the price of the contracts for difference. Nomura Securities and more investors jointly issued a margin recovery notification. Archegos, propelled by significant leverage, is exposed to between \$60 billion and \$100 billion, complicating short-term margin recovery. The investment strategy aimed at minimizing losses initiated the liquidation of contracts for difference, concurrently leading to the sale of a substantial quantity of underlying equities, which precipitated the collapse of Archegos.

4.3. Highly leveraged Investment Strategy

The key characteristics of Bill Hwang's investment strategy is high leverage, which means that it get margin financing from major brokers to increase their returns, or reduce their losses. Usually, the greater the leverage, the higher the cost to provide a fund manager.

Bill Hwang is an experienced user of leverage. He possesses an extensive quantity of shares in enterprises like Baidu, which is a Chinese multinational corporation specializing in artificial intelligence and internet-related products, with its stock price escalating from \$97.20 a year ago to \$339.91 in February of this year. Additionally, ViacomCBS is an American mass media conglomerate whose stock price has increased by approximately 700% over the past year. Bill Hwang employed substantial leverage to greatly enhance these returns, enabling him to gain considerable wealth in a short period [15].

High leverage is usually favorable when the underlying asset moves in a favorable direction, but when things are unfavorable, high leverage means extremely high losses. Based on the analysis of the above two points, Bill Hwang not only uses financial derivatives to expand leverage in his portfolio, but also increases returns through concentrated investment. Such an investment strategy expands leverage multiple from multiple angles, allowing him to accumulate huge wealth in a very short period of time. As reported by hedgeweek, Archegos's total assets were only \$10 billion, while the stock exposure was nearly \$50 billion. That was almost five times its total assets, and they essentially lost \$30 billion on eight stocks.

5. Thinking and Enlightenment

The collapse of Bill Hwang's Archegos Capital Management has sounded the alarm for individual investors regarding risk management when investing in derivatives.

5.1. Establishing Effective Portfolio

Individual investors need to establish efficient portfolios to reduce their investment risk. Hwang's investments are mainly in technology equities and both domestic and international media companies, which typically experience similar external influences, resulting in comparable fluctuations. This is often disadvantageous when facing risks, as it causes the risks to accumulate rather than to be dispersed and offset. Hwang's concentrated portfolio underscored the dangers of concentrating on a limited number of investments. Therefore, individual investors ought to strive for diversification of their portfolios across various sectors and asset classes to reduce risk. The failure of a single investment should not undermine an entire portfolio.

5.2. Be Cautious to Leverage

While pursuing high returns, individual investors should recognize that this typically means high risk. The utilization of leverage can magnify both gains and losses. Archegos heavily depends on leverage and engages in billions of dollars in margin trading, resulting in considerable portfolio volatility, where minor market fluctuations can precipitate substantial losses. Hwang's excessive leverage ratio serves as a cautionary tale for personal investors regarding margin trading or leveraged products. Therefore, it is imperative for individual investors to comprehend the associated risks, as significant downturns can result in considerable financial losses.

5.3. Robust Risk Management

When Hwang's portfolio went wrong and related stocks fell sharply, liquidity quickly dried up, making it unable to effectively reduce its asset holdings to reduce its losses. Archegos's lack of

adequate risk management practices, such as stop-loss orders or limits on position sizes, contributed to its downfall. Personal investors should implement stricter risk management strategies, such as setting clear limits on how much of their total capital they are willing to risk on a single investment, which could control the total amount of losses and ensure the losses is within the affordability of investors.

5.4. Continuous Monitor

The necessity of ongoing monitoring of investments became evident during this crisis. If Bill Hwang and Archegos effectively monitor their portfolios, they can timely adjust their positions to make relatively small losses, rather than passively accepting all losses. Investors should stay informed about market conditions and actively manage their portfolios, adjusting positions as needed in response to market changes.

6. Conclusion

The fall of Bill Hwang's Archegos Capital Management highlights the significance of risk management for individual investors. Hwang's strategy of excessive leverage, concentrated investments, and inadequate risk management may result in devastating losses, which is similar to the history events the LTCM crisis and the collapse of Lehman Brothers.

The case of Bill Hwang suggests that individual investors should establishing well-diversified portfolios across multiple industries and asset classes, which can reduce market volatility. Besides, a prudent strategy for leveraging is crucial, because it may poses a risk of considerable losses. Moreover, effective risk management strategies, such as establishing explicit investment thresholds and employing stop-loss orders, can substantially alleviate the impact of unfavorable market fluctuations. Finally, continuous monitoring of investments actions could facilitate modifications in reaction to market fluctuations, empowering investors to manage risks proactively rather than passively. The lessons learned from the Archegos catastrophe highlight the imperative of intelligent investment strategies, based on risk awareness, for effectively traversing the complex financial terrain. By complying to these regulations, individual investors can improve their chances of success while safeguarding their capital from unforeseen market volatility.

However, this article has specific limitations. Although it analyses some objective reasons that leading to the collapse of Archegos, it may ignore the psychological variables affecting investors' judgments, including behavioral biases and the influence of market mood.

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