

Research on Diversification of Asset Allocation and Risk Management in the Context of Globalization

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Abstract: In the context of the multi-polarization of the global economic landscape and heightened uncertainty in financial markets, this study focuses on strategies for diversification of asset allocation and risk management in globalization. By deeply analyzing the impact of changes in the global economic landscape, financial market volatility, and monetary policy adjustments on asset allocation, the study emphasizes the crucial role of geographical and asset class diversification in reducing portfolio risk and enhancing returns. The research not only introduces the application of diversified asset allocation tools such as Exchange Traded Funds (ETFs), global index funds, and financial derivatives but also further validates the effectiveness of diversified investment by analyzing the response of global capital markets and investor strategy adjustments following interest rate cuts by the Federal Reserve. The study systematically examines market, credit, exchange rate, and political risks in global asset allocation and proposes targeted management strategies, including setting stop-loss points, dynamically adjusting portfolios, and using financial derivatives. Finally, taking Goldman Sachs as an example, the study demonstrates its risk control practices in global asset allocation, providing valuable lessons for global investors.

1. Introduction

Against the backdrop of the multi-polarization of the global economic landscape and heightened uncertainty in financial markets, particularly the profound impact of the Federal Reserve's interest rate cuts on global markets, capital flow volatility and asset price instability have significantly increased (see Figure 1). In this context, diversification of asset allocation has highlighted its value as an important means of reducing portfolio risk. By diversifying investments across regions, industries, and asset classes, investors can effectively hedge against risks associated with individual markets, achieving a balance between risk and return.^[1]

As the world's second-largest economy, China's sustained economic growth, increasingly open market and improving financial system have opened up a wide range of investment space and rich opportunities for global investors. This study explores the strategies of asset allocation diversification and risk management, with a special focus on the unique position and strategic choices of Chinese investors in global asset allocation. By comprehensively analysing the impact on asset allocation of the evolving global economic landscape, financial market volatility and monetary policy adjustments, the study aims to provide investors with both forward-looking and practical recommendations to help them achieve optimal asset allocation and effective risk management. Further, by analysing specific

cases, such as the reaction of the global capital market and the adjustment of investor strategies after the Federal Reserve's interest rate cuts, this study validates the effectiveness of diversified investment strategies, and provides important references and insights for investors around the world to make scientific and rational decisions in the complex and volatile financial markets.

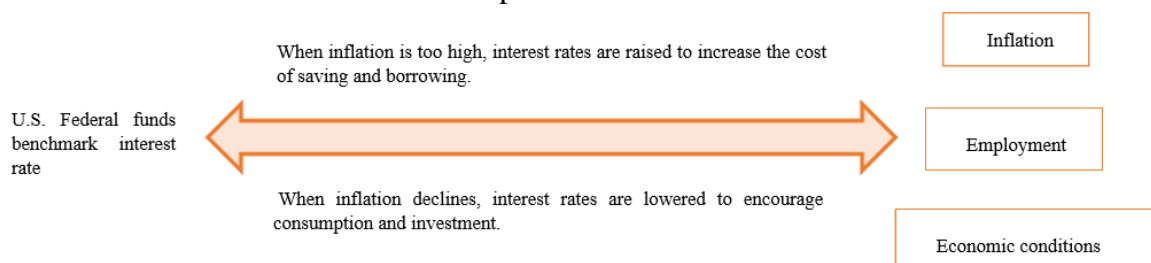


Figure 1 The impact of Federal Reserve interest rate adjustments

2. Theoretical foundations of asset allocation in the context of globalization

2.1 Basic concepts of global asset allocation

Asset allocation, as the core of portfolio management, scientifically distributes funds across different asset classes, regions, and industries, aiming to achieve an optimal balance between risk and return (see Figure 2).^[2] Global asset allocation further expands the investment boundaries on this basis, leveraging the diversity of global markets to seek risk diversification and return enhancement. It not only focuses on the economic cycles and market fluctuations of a single country or region but also has a broader perspective on global investment opportunities, leveraging differences in market correlations to diversify investment portfolios.^[3] In the context of global economic integration, with accelerated capital flows and enhanced market interconnectedness, the importance of global asset allocation has become increasingly prominent. By investing in countries and regions at different stages of development, investors can not only share in the dividends of global economic growth but also reduce risks associated with individual markets. Global asset allocation also allows for capturing valuation differences among markets, generating excess returns through buy-low-sell-high strategies^[4]. Due to its distinctive benefits, global asset allocation has emerged as a crucial component of contemporary portfolio management. However, investors need to comprehensively consider factors such as the global economic landscape, financial market uncertainty, and monetary policy adjustments in practice, formulating flexible and diverse investment strategies to achieve optimal asset allocation and risk management.

In the field of asset allocation, modern portfolio theory, capital asset pricing model and risk diversification theory together build a diversified framework for asset allocation, providing investors with a wealth of strategy options. The effectiveness of these strategies in practical application faces significant challenges. Modern portfolio theory emphasizes diversification to reduce risk, but the rapid rise or fall of asset classes or industries in a rapidly changing market limits its adaptability, requiring investors to pay attention to market dynamics and flexibly adjust their portfolios^[5]. The capital asset pricing model is based on the assumptions of market effectiveness and investor rationality, but under the influence of information asymmetry, investor sentiment and other irrational factors, especially under extreme conditions such as financial crisis or geopolitical conflict, its effectiveness is questioned, requiring investors to prudently assess the market environment and avoid blind reliance^[6]. The risk diversification theory emphasizes investment across geographies, industries and markets to achieve risk diversification. However, in the context of globalization, the enhanced market interconnectedness has weakened the effect of geographical diversification. Meanwhile, the

integration of the global capital market has led to the convergence of the risk characteristics of certain asset classes or industries, which further limits the potential of risk diversification. Therefore, investors need to comprehensively consider the dynamics of the global market and the characteristics of assets for overall consideration^[7]. The diversity and limitations of asset allocation strategies coexist, requiring investors to develop flexible strategies that fully consider the market environment, asset characteristics, and personal risk preferences. Additionally, future research should explore new methods to enhance the effectiveness and accuracy of asset allocation, providing investors with more scientific and reasonable guidance.

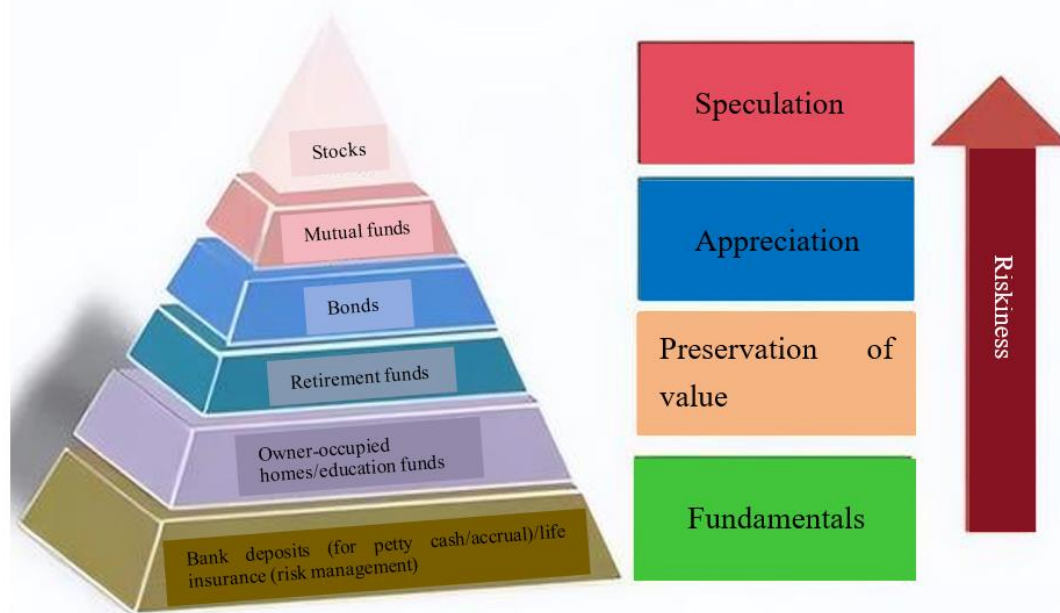


Figure 2 Asset allocation diagram

2.2 Theoretical basis of asset allocation

The theoretical basis of asset allocation is rooted in three foundational pillars: Modern Portfolio Theory (MPT), the Capital Asset Pricing Model (CAPM), and the theory of risk diversification^[8]. MPT provides an in-depth analysis of the differences in risk and return characteristics among various assets (Figure 3), revealing the core principle that diversified investment can effectively reduce the overall portfolio risk level. This theory suggests that diversifying a portfolio by including assets with varying risk-return profiles—such as technology stocks, traditional industry stocks, and bonds—can reduce the adverse effects of price volatility in any one asset. This approach aims to enhance overall returns while maintaining a balanced risk-return ratio.^[9] The CAPM further elucidates the intrinsic link between asset prices and the risks they bear, providing investors with a scientific framework for quantitatively assessing the risk and return of various assets. Through this model, investors can gain a deeper understanding of asset pricing mechanisms, thereby providing robust theoretical support for asset allocation decisions. The theory of risk diversification emphasizes effective risk diversification through investments in assets across various regions, industries, and markets, enhancing portfolio robustness^[10]. This theory advocates that investor should fully consider the diversity and correlation of assets when constructing a portfolio to withstand risks potentially posed by fluctuations in a single market or asset. In practice, investors should comprehensively apply these theories, closely integrating them with actual market conditions, to develop asset allocation strategies that align with their risk appetites while effectively achieving investment objectives^[11].

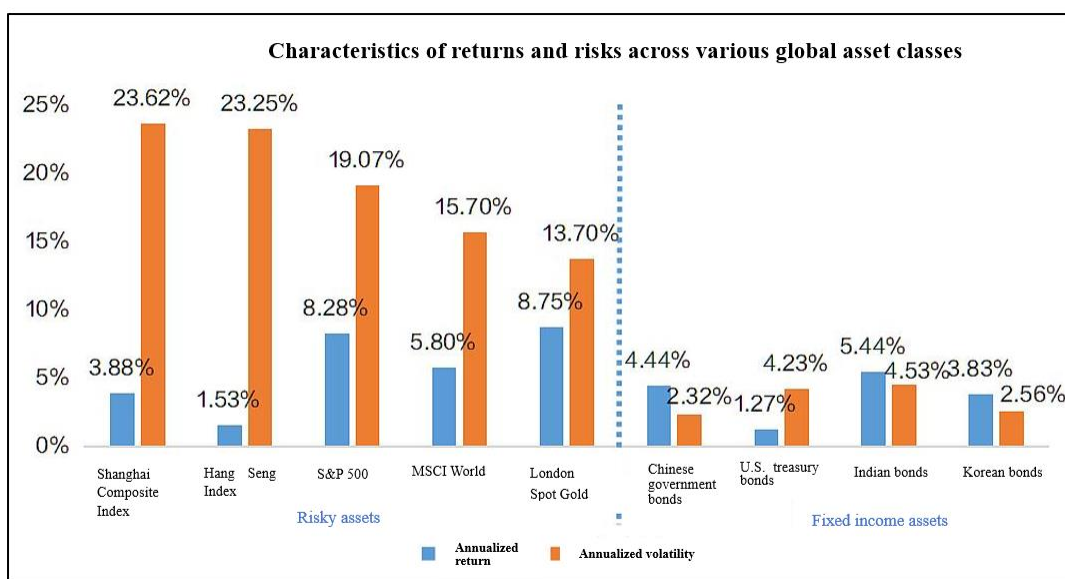


Figure 3 Risks and returns among various asset classes from September 5, 2004, to September 4, 2024

3. Practice of diversified asset allocation in the context of globalization

3.1 Diversified strategies for asset allocation

	Year over Year					
	2022	2023	Projections		Difference from April 2024 WEO Projections 1/	
			2024	2025	2024	2025
World Output	3.5	3.3	3.2	3.3	0.0	0.1
Advanced Economies	2.6	1.7	1.7	1.8	0.0	0.0
United States	1.9	2.5	2.6	1.9	-0.1	0.0
Euro Area	3.4	0.5	0.9	1.5	0.1	0.0
Germany	1.8	-0.2	0.2	1.3	0.0	0.0
France	2.6	1.1	0.9	1.3	0.2	-0.1
Italy	4.0	0.9	0.7	0.9	0.0	0.2
Spain	5.8	2.5	2.4	2.1	0.5	0.0
Japan	1.0	1.9	0.7	1.0	-0.2	0.0
United Kingdom	4.3	0.1	0.7	1.5	0.2	0.0
Canada	3.8	1.2	1.3	2.4	0.1	0.1
Other Advanced Economies 3/	2.7	1.8	2.0	2.2	0.0	-0.2
Emerging Market and Developing Economies	4.1	4.4	4.3	4.3	0.1	0.1
Emerging and Developing Asia	4.4	5.7	5.4	5.1	0.2	0.2
China	3.0	5.2	5.0	4.5	0.4	0.4
India 4/	7.0	8.2	7.0	6.5	0.2	0.0
Emerging and Developing Europe	1.2	3.2	3.2	2.6	0.1	-0.2
Russia	-1.2	3.6	3.2	1.5	0.0	-0.3
Latin America and the Caribbean	4.2	2.3	1.9	2.7	-0.1	0.2
Brazil	3.0	2.9	2.1	2.4	-0.1	0.3
Mexico	3.7	3.2	2.2	1.6	-0.2	0.2
Middle East and Central Asia	5.4	2.0	2.4	4.0	-0.4	-0.2
Saudi Arabia	7.5	-0.8	1.7	4.7	-0.9	-1.3
Sub-Saharan Africa	4.0	3.4	3.7	4.1	-0.1	0.1
Nigeria	3.3	2.9	3.1	3.0	-0.2	0.0
South Africa	1.9	0.7	0.9	1.2	0.0	0.0

Figure 4 Global economic growth rates in 2024

In the field of asset allocation, geographical diversification strategy holds a central position, prompting investors to expand their horizons beyond developed markets and delve into emerging markets^[12]. Developed markets, with their mature economic structures and stable political environments, provide investors with a relatively solid foundation for investment returns. While

emerging markets entail higher risks, they also exhibit more attractive growth potential and investment return prospects. When implementing geographical diversification strategies, investors need to strive to find a balance between developed and emerging markets to optimize the ratio of risk and return^[13]. Notably, the rapid rise of Asian emerging markets in the global economic landscape in recent years (see Figure 4) provides investors with a compelling rationale to increase investments in this region, aiming to capture the substantial returns generated by its economic growth.

Furthermore, diversification across asset classes is also an indispensable aspect of asset allocation. By allocating capital across multiple asset classes such as stocks, bonds, real estate, and commodities, investors can effectively mitigate the risk exposure resulting from price fluctuations in a single asset^[14]. Stocks, with their high yield potential accompanied by greater volatility, appeal to risk-tolerant investors; bonds, with their relatively stable income characteristics, are preferred by risk-averse investors; and physical assets such as real estate and commodities add additional dimensions of return and risk diversification to the portfolio^[15]. In practical operations, investors should adjust the allocation of various assets based on their risk appetites and investment objectives to achieve a balance between risk and return. For investors with lower risk tolerance, they may appropriately increase the allocation proportion of stable income assets such as bonds; whereas for investors with higher risk tolerance, they may moderately increase the allocation of high-risk, high-yield assets such as stocks, aiming to maximize the overall benefits of the portfolio while keeping risks under control.

3.2 Tools and platforms for diversified asset allocation

In the practice of diversified asset allocation, Exchange Traded Funds (ETFs) and global index funds have significantly captured investors' attention. Huatai-PineBridge CSI 300 ETF, as a market-leading stock ETF with a management scale exceeding RMB 430 billion, offers investors an effective way to directly participate in the overall trend of the China A-share market. This ETF closely tracks the CSI 300 Index, which covers the 300 largest stocks by market capitalization in the A-share market, demonstrating high representativeness and risk diversification capabilities. Global index funds tracking the S&P 500 invest in large-cap blue-chip stocks, allowing investors to diversify their assets internationally and minimize risks associated with relying on a single market. Financial derivatives, including options and futures, also play an important role in asset allocation. Options serve as risk management tools, providing investors with the right to trade assets at an agreed-upon price in the future, while the futures market offers investors opportunities for risk hedging and arbitrage through price expectations^[16]. With advancements in financial technology, numerous asset allocation platforms and tools have emerged, leveraging big data, artificial intelligence, and other technological means to monitor and analyze global markets in real-time^[17]. These platforms provide investors with precise asset allocation recommendations and a rich selection of financial products, thereby meeting investors' diversified investment needs and enhancing the convenience and efficiency of asset allocation. ETFs, global index funds, and financial derivatives, among other tools and platforms, collectively constitute a strong support for investors to achieve diversified asset allocation.

4. Risk management in asset allocation in the context of globalization

4.1 Types of risks in globalized asset allocation

Globalized asset allocation is an important way for investors to pursue asset appreciation and risk diversification, and the implementation of this strategy involves the complexity and challenge of multiple risks. A comprehensive understanding and effective response to these risks is the key to investor success in the global financial market.

4.1.1 Market risk

Market risk holds a pivotal position in globalized asset allocation, primarily stemming from the inherent volatility and unpredictability observed in global financial markets. These phenomena of volatility and uncertainty can be induced by a multitude of factors, including shifts in economic cycles, alterations in monetary policies, or the unforeseen impacts of abrupt events^[18]. For example, the uneven recovery of the global economy and the differentiation of monetary policies in early 2023 led to sharp shocks in the stock and bond markets^[19], requiring investors to possess a high degree of market sensitivity and resilience, and to quickly adjust their asset allocation strategies in order to avoid potential risks. The impact of market risk was further emphasized by market turmoil triggered by global events such as the New Crown epidemic and volatility in energy and commodity prices due to geopolitical conflicts. Investors need to keep an eye on market dynamics and utilize advanced risk management tools to accurately control market risks and ensure the effectiveness and robustness of their asset allocation strategies^[20].

4.1.2 Credit risk

Credit risk should also not be ignored in globalized asset allocation, which is directly related to the debtor's performance ability and credit status^[21]. As the scale of global corporate debt continues to expand, the problem of credit risk exposure becomes more and more prominent. When making asset allocations, investors must conduct in-depth analyses of debtors' financial status, credit ratings and historical performance records to avoid potential credit risks, and the 2008 global financial crisis, in which many financial institutions fell into trouble due to credit risk exposure, was a wake-up call for investors. In globalized asset allocation, investors need to establish a rigorous credit risk assessment system to ensure the safety of their investment portfolios.

4.1.3 Exchange rate risk

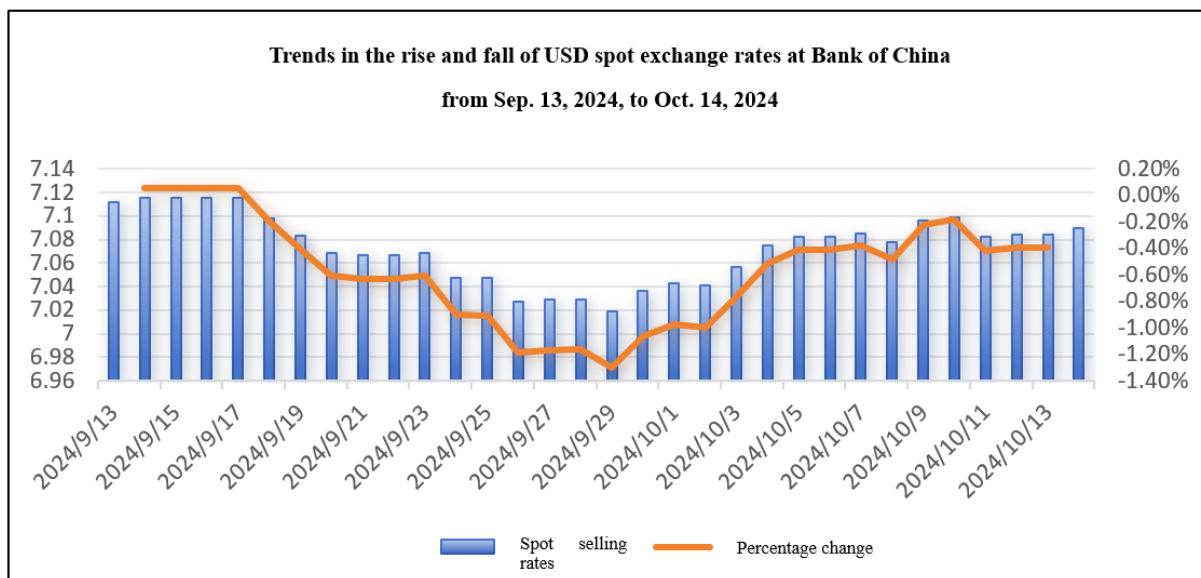


Figure 5 Trends in the rise and fall of USD spot exchange rates at Bank of China

Exchange rate risk is another important risk consideration in globalized asset allocation. Against the backdrop of a volatile global economic environment, uncertainties in currency exchange intensify exchange rate volatility^[22]. Investors need to pay close attention to the international political and

economic situation, especially changes in the monetary and exchange rate policies of major economies, and make a reasonable exchange rate risk management strategy. For example, the Federal Reserve's interest rate cut policy may have a significant impact on the U.S. dollar exchange rate (see Figure 5), which in turn affects investors holding U.S. dollar assets. Investors may utilize financial instruments such as forward contracts and options to hedge their risks in order to mitigate the adverse impact of exchange rate fluctuations on their investment portfolios.

4.1.4 Political risk

Political risk plays an equally important role in globalized asset allocation. Geopolitical tensions, policy changes and the rise of trade protectionism can have a profound impact on investments^[23]. Investors need to have a global perspective and analyze the political and economic situation of each country in depth in order to fully consider political risk when formulating investment strategies. During the U.S.-China trade war, tariff measures and trade policy adjustments between the two countries have had a significant impact on global supply chains and capital markets. Investors need to pay close attention to international political developments, assess the potential impact of policy changes on their investment portfolios and formulate corresponding risk response measures.

The risk management of globalized asset allocation requires investors to have comprehensive risk identification and response capabilities. Investors need to build a comprehensive risk management framework, and make comprehensive use of market dynamics analysis, debtor situation assessment, exchange rate forecast and international political situation judgment to realize accurate identification and effective monitoring of various types of risks. Investors also need to flexibly utilize various financial instruments and strategies, such as setting up stop-loss points, dynamically adjusting investment portfolios, and applying financial derivatives, in order to achieve risk diversification and hedging. Through the implementation of comprehensive risk management strategies, investors can maintain a steady growth of their asset portfolios in the complex and volatile global financial markets and ensure the long-term realization of their investment objectives^[24].

4.2 Risk management strategies and methods

In scenarios where financial market volatility increases, risk management strategies are crucial for ensuring the stability of investor returns^[25]. Setting a stop-loss point, which is a preset maximum loss limit, can effectively curb the expansion of investment losses. For example, when an investor purchases stocks, if they set a 10% stop-loss point, the system will automatically execute a sell order once the stock price falls to that level, to avoid more severe losses. Dynamic portfolio adjustment is also a key strategy, requiring investors to flexibly adjust the asset allocation ratios based on market conditions and asset performance. This necessitates both acute market insight and the application of modern portfolio theories, such as the Markowitz Model, to optimize asset allocation and achieve a balance between risk and return. Financial derivatives, including futures, options, and swap contracts, provide investors with ways to hedge against specific market risks^[26]. For instance, a trader holding a large quantity of crude oil can lock in future sales prices by selling crude oil futures contracts, thereby mitigating price fluctuation risks. When implementing risk management strategies, investors should comprehensively consider market dynamics and personal risk appetites, flexibly utilizing tools such as stop-loss points, dynamic portfolio adjustments, and financial derivatives, to achieve effective risk control.

4.2.1 Setting stop-loss points: precise risk control

Setting up a stop-loss point is a simple but effective risk management strategy, the core of which lies in setting a clear loss limit so that investors can limit their losses in a timely manner in the event

of unfavorable changes in the market, thus effectively avoiding the further expansion of losses. For example, in stock investment, investors can set a reasonable stop-loss point, such as 10%, based on their own risk tolerance and market conditions. Once the stock price falls to this preset level, the system will automatically execute the sell operation, so as to avoid more serious losses. Setting a stop loss point not only tests an investor's market insight and judgment, but also requires good psychological quality and execution. By accurately setting up stop-loss points, investors can maximize their returns under the premise of controllable risk.

4.2.2 Dynamic portfolio adjustment: flexibility to respond to market changes

Dynamic portfolio adjustment is another key risk management strategy. It requires investors to flexibly adjust the ratios of various types of assets according to real-time changes in the market environment and asset performance in order to achieve a balance between risk and return^[27]. The implementation of this strategy requires investors to have keen market insight and rich investment experience, and to be able to accurately judge market trends and make adjustments accordingly. Modern portfolio theories, such as the Markowitz model, provide investors with a scientific approach to asset allocation. By applying these theories, investors can more accurately assess the risk-return relationship between different assets and thus formulate a more reasonable portfolio adjustment program. This dynamic adjustment strategy helps investors to maintain the robustness of their investment portfolios in a complex and volatile market environment.

4.2.3 Risk diversification and modern portfolio theory: optimizing risk and return structure

Risk diversification is an effective means of reducing the overall risk of an investment portfolio. By investing funds in assets from different fields, industries and even regions, investors can achieve risk diversification and balance, thereby reducing the impact of fluctuations in a single asset or industry on the overall return of the portfolio. Modern portfolio theories, such as the Capital Asset Pricing Model (CAPM)^[28], provide investors with a framework for evaluating the relationship between asset risk and return. According to the CAPM, investors can optimize the risk-return structure of their portfolios by selecting assets with lower systematic risk and higher expected returns. Risk diversification also requires investors to focus on the correlations between assets and further reduce the overall risk level of the portfolio by rationally allocating assets with different correlations. This risk diversification strategy based on modern portfolio theory helps investors to effectively control risks while pursuing high returns.

4.2.4 Application of financial derivatives: precise hedging of specific risks

Financial derivatives, such as futures, options and swaps, provide investors with precise tools to hedge specific market risks^[29]. Traders holding large quantities of crude oil can sell crude oil futures contracts to lock in future sales prices and avoid the risk of price fluctuations. The application of financial derivatives requires investors to have professional financial knowledge and risk management experience, and to closely monitor market dynamics and changes in risk factors in order to make timely adjustments to their strategies. Without changing the original portfolio structure, the rational use of financial derivatives can realize precise hedging of specific risks and help the portfolio maintain stability and profitability in a complex market environment. When implementing risk management strategies, investors should take into account market dynamics, personal risk preferences and the actual situation of their investment portfolios, and flexibly utilize tools and methods such as stop-loss points, dynamic adjustments, risk diversification, and financial derivatives to effectively control risks and achieve sound value-addedness.

5. Risk control strategies and practices in Goldman Sachs' global asset allocation

With its prominent characteristics of global operations, Goldman Sachs has demonstrated robust diversification capabilities in asset allocation, with overseas business revenue consistently accounting for around 40% of its total^[30]. Its business structure encompasses four major segments: Institutional Services, Investment Banking, Investment Management, and Asset Management, with balanced revenue streams dominated by fee income. Through the acquisition of J. Aron, Goldman Sachs successfully ventured into commodity trading, further broadening its asset allocation scope. In terms of risk management, Goldman Sachs employs scientific methods such as Value at Risk (VaR) and stress testing to dynamically adjust its risk limit framework. Combining strategies like diversification, position control, and hedging instruments, the firm achieves refined management of market risks. Its global asset allocation strategies have performed exceptionally well in navigating market volatility, effectively reducing dependence on fluctuations in any single market through cross-market and cross-asset diversification, thereby ensuring the stability of returns and the dispersion of risks. As a globally leading core market-making business, the FICC (Fixed Income, Currencies, and Commodities) segment provides Goldman Sachs with a stable revenue stream and risk management support. In response to global financial events such as interest rate cuts by the Federal Reserve and domestic stock market fluctuations, Goldman Sachs swiftly adjusts its asset allocation and seizes market opportunities through its global asset allocation, professional market analysis capabilities, and flexible investment strategies in emerging markets^[31]. Goldman Sachs actively applies financial technologies such as blockchain and artificial intelligence to enhance transaction efficiency and risk management capabilities, further consolidating its leading position in the global market. These strategies and practices not only reflect Goldman Sachs' strength and foresight as a top-tier investment bank but also offer valuable insights and inspiration for global investors in asset allocation and risk management. Goldman Sachs' risk governance structure, which ensures that risks are measured independently and disaggregated appropriately, is often attributed to Goldman Sachs' own culture of risk control and is considered to be difficult to replicate. The introduction of a robust risk control culture and enhanced authority for risk management is essential due to rising loss levels and the increased likelihood of tail risks in securities markets. First, the risk management of trading accounts should not be carried out mainly by the business units, but by an independent trading account risk management department that collects information and measures it independently, with no associated management objectives between the risk management department and the business unit in which the trading account is located, except for the exchange of information. Second, the risk management department of the trading account should be directly accountable to the board of directors of the financial institution or its corporate-level risk management body, report risk information of the trading account on a regular basis, and not be subject to checks and balances by specific business units of the financial institution. Third, risk limit authorization from the board of directors downwards needs to be based on risk management's analysis, and in the event that risk management's measurement of a business unit's trading account risk exceeds the authorization, the business unit must provide timely feedback and a plan for dealing with the situation.

6. Conclusion

In the context of a multipolar global economic landscape and increasing uncertainty in financial markets, this study delves into the importance of diversified asset allocation and risk management, empirically validating the effectiveness of related strategies. Global asset allocation, through diversification across regions, industries, and asset classes, effectively hedges against single-market risks and balances risk and return. The rise of emerging markets in Asia is particularly notable, providing investors with abundant investment opportunities and potential high returns while reducing

the overall portfolio risk. Goldman Sachs has achieved refined management of market risks by employing scientific methods such as Value at Risk (VaR) and stress testing, combined with diversification, position control, and hedging instruments, successfully navigating global financial events such as interest rate cuts by the Federal Reserve. Based on these findings, this study recommends strengthening global financial regulatory cooperation, enhancing market transparency, promoting financial market openness, and facilitating international capital flows. For investors, it is crucial to have a deep understanding of global market dynamics, implement diversified asset allocation strategies, and leverage modern financial tools to enhance risk management capabilities, ensuring the safety and stability of their investment portfolios.

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