Determinants of Asset Return Co-movements: Empirical Evidence from US Dollar and Global Stock Markets

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Introduction

Understanding the factors that drive asset return co-movements is crucial for investors, policymakers, and financial analysts. The relationship between different asset classes, particularly the US dollar and global stock markets, has significant implications for portfolio diversification, risk management, and economic stability. Asset return co-movements refer to the tendency of financial assets to move together over time due to shared economic influences, investor sentiment, or macroeconomic shocks. Over the past two decades (2000–2023), global financial markets have experienced periods of high volatility, driven by events such as the 2008 financial crisis, the European debt crisis, geopolitical tensions, and the COVID-19 pandemic. These events have contributed to significant shifts in investor behaviour and capital flows, influencing the degree of correlation between asset returns. The US dollar, as the world's primary reserve currency, plays a critical role in global financial markets, often exhibiting an inverse relationship with global equity returns. During periods of market distress, investors tend to seek safe-haven assets such as the US dollar, leading to depreciation in stock market returns. Conversely, periods of economic expansion often see capital flowing into equities, weakening the dollar. This study aims to examine the determinants of asset return co-movements by analyzing the interplay between the US dollar and global stock markets. By exploring macroeconomic indicators, investor sentiment, and market shocks, this research seeks to provide empirical insights into the factors that drive return correlations and their implications for financial stability and investment strategies [1].

Description

The co-movements of asset returns are influenced by a complex interplay of macroeconomic, financial, and behavioral factors. One of the key determinants of co-movements is global economic conditions, including interest rates, inflation, and economic growth. Central bank policies, particularly those of the US Federal Reserve, have a profound impact on asset prices, influencing both currency valuations and stock market performance. Interest rate decisions affect capital flows, with rising rates often strengthening the US dollar while putting downward pressure on equity prices due to higher borrowing costs and reduced corporate earnings expectations. Inflation, another critical factor, affects investor confidence and asset pricing, with higher inflationary pressures often leading to increased volatility in both currency and stock markets. Another major driver of asset return co-movements is financial market sentiment. Investor perception of risk, as measured by indicators such as the VIX (volatility index), plays a significant role in shaping asset correlations. In times of market uncertainty, investors tend to shift towards safe-haven assets, such as the US dollar and gold, while pulling capital out of riskier assets like equities. This flight-to-safety phenomenon was evident during the 2008 financial crisis and the COVID-19 pandemic, where global stock markets experienced sharp

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declines while the US dollar appreciated against major currencies [2].

On the other hand, during periods of economic optimism and rising corporate earnings, investors tend to allocate capital toward equities, reducing demand for the US dollar and causing it to depreciate. Additionally, globalization and capital market integration have contributed to increasing asset return co-movements. The expansion of cross-border investments, the rise of exchange-traded funds (ETFs), and the growth of algorithmic trading have led to higher market interconnectivity, making financial shocks more contagious across asset classes. While globalization has provided investors with more diversification opportunities, it has also increased systemic risk, as market events in one region can quickly affect global asset prices. The role of emerging markets in this dynamic has also been significant, as fluctuations in major economies, such as China and the European Union, influence global capital flows and asset price correlations [3].

This study employs empirical analysis to quantify the degree of co-movement between the US dollar and global stock returns, using econometric models such as Vector Autoregression (VAR) and cointegration analysis. By examining historical data from 2000 to 2023, the study identifies patterns in asset return correlations and assesses the impact of macroeconomic variables on these relationships. The co-movement of asset returns, particularly between the US dollar and global stock markets, is influenced by a complex set of economic and financial factors that reflect both domestic and international dynamics. Empirical studies highlight that interest rate differentials, monetary policy shifts, and investor risk appetite are key determinants. For example, when the US Federal Reserve raises interest rates, the US dollar often strengthens due to higher yields, while global equities especially in emerging markets may decline due to capital outflows, creating a negative co-movement. The findings provide insights into how asset correlations evolve over time and offer practical implications for portfolio diversification and risk management strategies. Understanding these determinants is essential for investors aiming to mitigate risks associated with correlated market movements and for policymakers seeking to enhance financial stability in an increasingly interconnected world [4].

The determinants of asset return co-movements refer to the factors that cause different financial assets such as currencies and stocks to move together in the market. Empirical evidence from the US dollar and global stock markets shows that macroeconomic variables, investor sentiment, monetary policy changes, and global risk factors significantly influence these co-movements. For instance, during periods of global uncertainty or financial crises, investors tend to shift towards safe-haven assets like the US dollar, causing a negative correlation with global stock markets. Conversely, in times of economic growth and optimism, both the US dollar and global stocks may move positively as capital flows increase. Factors like interest rate differentials, inflation expectations, and trade dynamics also play key roles in shaping the relationship between currency returns and stock performance. Understanding these determinants helps investors and policymakers assess market linkages, manage risks, and make more informed financial decisions in an interconnected global economy [5].

Conclusion

The analysis of asset return co-movements between the US dollar and global stock markets highlights the intricate relationships that shape financial market dynamics. The findings suggest that macroeconomic variables, such as interest rates, inflation, and monetary policy decisions, play a fundamental role in driving return correlations. Global economic indicators such as GDP

growth, inflation, and trade balances affect investor expectations and cross-border investment flows, thereby influencing how these asset classes move in relation to each other. During periods of financial stress or heightened volatility, assets often exhibit stronger correlations as markets react to common global shocks. Conversely, in stable times, asset returns may decouple as investors focus on local fundamentals. These co-movement patterns are crucial for portfolio diversification, hedging strategies, and understanding how systemic risk transmits across international markets. Market sentiment, particularly during periods of uncertainty, also significantly affects asset price movements, with investors shifting between risk assets and safe-haven assets based on prevailing economic conditions. The increased integration of global financial markets has further intensified these co-movements, making financial shocks more contagious across asset classes.

Acknowledgement

Conflict of Interest

None.

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