



INTEREST RATES AND STOCK MARKET RETURNS: A CROSS-COUNTRY LITERATURE REVIEW

¹Shreyashi Purkayastha, ²Joydeep Goswami

¹Research Scholar, ²Joydeep Goswami,

¹Faculty of Commerce and Management,

¹Assam down town University, Guwahati, Assam, India

Abstract: The relationship between interest rates and stock returns is a basic problem in financial economics, as it captures the interaction between monetary policy and stock market performance. This paper offers a cross-country analysis of the theoretical basis and empirical evidence for the relationship between interest rates and stock returns. Based on asset pricing theory and monetary transmission mechanisms, the analysis describes how interest rate changes affect stock prices through changes in discount rates, corporate cash flows, portfolio rebalancing, and capital flow channels. The analysis contrasts the empirical evidence for developed and emerging markets, emphasizing the similarities in the negative relationship between interest rates and stock returns, while focusing on the differences in magnitude, volatility, and transmission mechanisms. The evidence indicates that developed markets exhibit more stable and predictable responses to interest rate changes due to their more developed financial structures and sounder institutional frameworks, whereas emerging markets exhibit greater responsiveness to both domestic and international interest rate shocks. The paper concludes that while the theoretical frameworks offer a consistent basis, cross-country differences are primarily explained by financial development, market integration, and macroeconomic stability.

Index Terms - Interest Rates; Stock Market Returns; Monetary Policy; Cross-Country Analysis; Asset Pricing; Financial Markets; Monetary Transmission Mechanism; Capital Flows.

1. INTRODUCTION

The connection between interest rates and stock market returns has long attracted attention in financial economics as scholars sought to understand how monetary conditions shape asset valuation. Early valuation theory established that stock prices reflect the present value of expected future cash flows discounted at a required rate of return, where the interest rate forms a key component of the discount factor (Gordon & Shapiro, 1956). This framework naturally implied that movements in interest rates would alter equity prices through changes in discounting and expected returns.

As financial theory advanced, asset pricing models began incorporating macroeconomic risks and time-varying expectations. Intertemporal models emphasized that expected stock returns fluctuate with economic conditions, including shifts in interest rates and investment opportunities (Campbell, 1991). Within this evolving framework, interest rate changes were viewed not only as mechanical adjustments to discount rates but also as signals of broader economic prospects and risk conditions.

At the same time, developments in monetary economics deepened understanding of how policy rate changes transmit through financial markets. Interest rate adjustments influence credit conditions, firm balance sheets, and borrowing capacity, thereby affecting corporate investment and profitability (Bernanke & Gertler, 1999). Monetary policy also operates through asset price channels, where changes in rates shape

expectations, wealth effects, and aggregate demand (Mishkin, 2001). These transmission mechanisms reinforced the idea that stock markets respond dynamically to interest rate movements.

With increasing globalization and financial integration, attention expanded beyond single-country analysis to cross-country comparisons. Evidence accumulated shows that stock markets in advanced economies often respond in systematic and relatively stable ways to policy adjustments, while emerging markets tend to experience stronger and more volatile reactions due to capital flow sensitivity and structural characteristics. The growing interconnectedness of financial systems has further amplified the international transmission of interest rate shocks, making the interest rate–stock return nexus a global phenomenon rather than a purely domestic one.

Against this background, examining how interest rates influence stock returns across different economic environments provides valuable insight into monetary policy effectiveness, financial market behaviour, and the structural differences that shape market responses worldwide.

2. Literature Review

The stock market has been among the most widely researched areas in financial economics, and studies have covered diverse areas such as market efficiency, asset pricing, behavioural finance, volatility studies, and macroeconomic relationships. This section will highlight the major theoretical frameworks and findings that have influenced the current understanding of stock market behaviour.

2.1 Theoretical Foundations

The relationship between interest rates and stock market returns is central to asset pricing and macro-finance. In the discounted cash flow (DCF) framework, stock prices equal the present value of expected future cash flows discounted at a rate that reflects the risk-free rate plus a risk premium. Therefore, an increase in interest rates—particularly policy or long-term rates—raises the discount rate and reduces equity valuations, *ceteris paribus*. This logic is embedded in the Capital Asset Pricing Model (CAPM) developed by William F. Sharpe (1964) and the broader asset pricing literature initiated by Eugene F. Fama (1970).

Beyond valuation effects, interest rates influence corporate profitability, investment decisions, and economic growth. According to the Arbitrage Pricing Theory (APT) proposed by Stephen A. Ross (1976), macroeconomic variables—including interest rates—serve as systematic risk factors affecting asset returns. Changes in monetary policy alter borrowing costs, consumption, and capital allocation, thereby influencing expected earnings and stock returns.

From a monetary transmission perspective, central bank policy rates shape financial conditions and investor expectations. When interest rates rise, equity markets may react negatively due to higher financing costs and lower expected growth. Conversely, expansionary monetary policy often stimulates stock markets by reducing discount rates and encouraging risk-taking.

2.2 Empirical Evidence from Developed Markets

Empirical research in developed economies generally finds an inverse relationship between interest rates and stock returns, though the magnitude and persistence vary. Early evidence from the United States indicates that unexpected changes in monetary policy significantly affect equity prices. Bernanke and Kuttner (2005) show that an unanticipated Federal Reserve rate cut leads to immediate positive stock market reactions, supporting the discount rate channel.

Fama and Schwert (1977) demonstrate that stock returns are negatively related to inflation and nominal interest rates in the U.S., particularly during periods of macroeconomic instability. Similarly, Campbell (1987) finds that changes in long-term interest rates predict excess stock returns, highlighting the importance of term structure dynamics.

In the United Kingdom and other European markets, research reports comparable findings. Studies indicate that increases in bond yields often coincide with declining equity valuations, reflecting substitution effects between fixed-income and equity investments. However, the strength of this relationship depends on economic conditions—during strong growth phases, rising rates may reflect improved economic prospects rather than restrictive policy, weakening the negative relationship.

Japan presents a unique case. Given prolonged periods of near-zero interest rates, the sensitivity of stock returns to rate changes appears asymmetric. Research suggests that monetary policy shocks have weaker immediate effects in low-rate environments, illustrating the importance of institutional and macroeconomic context.

Japan presents a unique case. Given prolonged periods of near-zero interest rates, the sensitivity of stock returns to rate changes appears asymmetric. Research suggests that monetary policy shocks have weaker immediate effects in low-rate environments, illustrating the importance of institutional and macroeconomic context.

2.3 Evidence from Emerging and Developing Markets

The relationship between interest rates and stock returns in emerging markets tends to be stronger and more volatile. According to Campbell R. Harvey (1995), emerging markets exhibit higher expected returns and risk, partly due to macroeconomic instability and financial liberalization. Interest rate shocks in these economies often trigger substantial capital flows, affecting exchange rates and equity markets simultaneously.

Studies across Asian and Latin American markets show that policy rate increases frequently lead to significant stock market declines, reflecting greater dependence on external financing and heightened sensitivity to global monetary conditions. Financial market depth, institutional quality, and investor composition play critical roles in moderating these effects.

Cross-country panel studies indicate that emerging markets experience stronger spillover effects from U.S. interest rate changes compared to developed economies. For instance, when the Federal Reserve tightens policy, capital outflows from emerging markets can depress stock prices and increase volatility. This underscores the global dimension of interest rate transmission.

In general, the literature reveals a predominantly negative relationship between interest rates and stock market returns, although the strength and direction differ across countries and regimes. Developed markets display stable and predictable patterns, while emerging markets are more sensitive to interest rates due to structural weaknesses.

3. Objectives

The main aim of this review paper is to critically assess the existing literature on the relationship between interest rates and stock returns across countries. The study seeks to:

- Analyze the theoretical underpinnings of the interest rate-stock return relationship based on asset pricing theories and monetary transmission channels.
- Compare the empirical results of developed and emerging economies to identify similarities and differences.

4. Methodology

The structured literature review method is employed in this study to analyze the theoretical underpinnings and cross-country empirical evidence on the relationship between interest rates and stock market returns. The relevant peer-reviewed articles were gathered from academic databases like Scopus, Web of Science, JSTOR, ScienceDirect, and Google Scholar using keywords such as “interest rates and stock returns,” “monetary policy transmission,” and “cross-country equity markets.”

The literature review is based on prominent asset pricing models such as the Capital Asset Pricing Model proposed by William F. Sharpe in 1964, the Efficient Market Hypothesis put forward by Eugene F. Fama in 1970, and the Arbitrage Pricing Theory proposed by Stephen A. Ross in 1976. The empirical literature is comparatively analyzed by categorizing the studies into developed markets and emerging markets to identify the similarities, differences, and structural aspects of the interest rate-stock return relationship.

5. Analysis

This section will analyze the relationship between interest rates and stock market returns by integrating evidence from developed and emerging markets. It will assess how the theoretical channels work in reality and compare the degree and type of market reactions in various financial environments.

5.1 Theoretical Framework of Interest Rate-Stock Return Linkage

The theoretical framework of the interest rate-stock return linkage is mainly based on asset pricing theory. In the Capital Asset Pricing Model formulated by William F. Sharpe in 1964, the risk-free interest rate is a basic element of the return function, which affects the equilibrium rate of return on stocks. A higher interest rate increases the discount factor used to discount the future cash flows, thus lowering the present value of stocks. This pricing model is further reinforced by the Efficient Market Hypothesis formulated by Eugene F. Fama in 1970, which implies that stock prices react quickly to publicly available information, including changes in monetary policy. Moreover, the Arbitrage Pricing Theory formulated by Stephen A. Ross in 1976 recognizes interest rates as macroeconomic factors that affect asset returns. These theories collectively create a conceptual linkage between interest rates and stock prices, which is inverse in nature.

5.2 Monetary Transmission Channels

The relationship between interest rates and stock returns is facilitated by various monetary transmission channels. The discount rate transmission channel has a direct impact on equity prices by changing the rate of return. The cash flow channel is facilitated by the profitability of companies, as increased interest rates lower investment and earnings. The portfolio rebalancing transmission channel describes how an increase in bond yields causes investors to move their money from the stock market to the bond market. In the case

of open economies, the exchange rate transmission channel is applicable, where the differential between interest rates affects capital movements, thereby having an indirect effect on stock performance.

5.3 Evidence from Developed Markets

Empirical studies in developed economies generally confirm the theoretical expectation of a negative relationship between interest rates and stock returns. In markets such as the United States, United Kingdom, and other advanced European economies, unexpected monetary policy tightening often leads to immediate stock price declines. However, because financial markets in these economies are relatively efficient and transparent, anticipated rate changes are frequently priced in before official announcements. Long-run analyses often reveal stable equilibrium relationships between interest rates and stock prices, suggesting well-integrated financial systems and mature institutional frameworks. Moreover, the impact of interest rate changes tends to be more predictable and less volatile compared to emerging markets.

5.4 Evidence from Emerging Markets

In contrast, emerging markets exhibit stronger and more volatile responses to interest rate movements. Stock returns in these economies are highly sensitive not only to domestic policy rate adjustments but also to external interest rate shocks, particularly from major global economies. The greater vulnerability stems from structural characteristics such as lower market liquidity, higher dependence on foreign capital, and weaker institutional frameworks. Capital flow volatility plays a crucial role; increases in global interest rates often trigger capital outflows, currency depreciation, and sharp declines in equity markets. Consequently, while the direction of the relationship remains largely negative, the magnitude and speed of adjustment are significantly higher in emerging markets.

5.5 Structural Differences and Similarities

Notwithstanding the differences in the degree of magnitude and volatility, the developed and emerging markets show a similar inverse relationship between interest rates and stock returns. The main structural differences are in the areas of financial market development, regulatory environment, investor base, and capital mobility. The developed markets have the advantage of a diversified investor base and an efficient financial system, which insulates them from the impact of interest rate shocks. The emerging markets, on the other hand, are more vulnerable to external shocks and macroeconomic disturbances, leading to nonlinear and, at times, asymmetric relationships. Thus, although the asset pricing theory represents a universal framework, the structural form of the interest rate-stock return relationship differs depending on the country-specific structural characteristics.

6. Findings

The results discussed in this section are based on a comparative analysis of the empirical literature that investigates the relationship between interest rates and stock market returns. Through this analysis, the major trends and similarities in the behavior of stock markets in response to changes in interest rates are identified.

- **Predominantly Negative Relationship:** The empirical evidence largely supports a negative relationship between interest rates and stock market returns. An increase in interest rates tends to cause a decrease in stock prices because of the higher discount rates and borrowing costs.
- **Stronger Short-Run Effects:** Stock markets respond immediately and strongly to unexpected announcements of monetary policies. The short-run effects are stronger than the long-run effects.
- **Stable and Predictable Response in Developed Markets:** The stock market response in developed countries is more systematic and predictable in relation to interest rate changes. Expected changes in monetary policies tend to be partially reflected in the stock market, leading to lower volatility.
- **Higher Sensitivity in Emerging Markets:** The emerging markets tend to be more sensitive and volatile in response to interest rate changes. Both domestic and international interest rate shocks tend to have a strong impact on stock returns.
- **Effects of Global Interest Rate Spillovers:** The interest rate changes in developed countries, especially the United States, have strong spillover effects on emerging stock markets due to capital flows and exchange rate effects.
- **Existence of Long-Run Relationships:** Some studies have reported the existence of long-run equilibrium relationships between interest rates and stock prices, especially in financially developed markets.

Conclusion

This review emphasizes that interest rates are a key determinant of stock market returns in both developed and emerging countries. Based on asset pricing models and monetary transmission channels, the literature confirms a predominantly negative relationship between interest rate changes and stock market prices. An increase in interest rates increases the discount rate, increasing the cost of borrowing and inducing portfolio reallocations towards fixed-income assets, thus putting downward pressure on stock prices. On the other hand, expansionary monetary policies generally boost stock markets by reducing borrowing costs and improving market liquidity.

However, the evidence across countries also shows significant structural variations. Developed countries generally display more stable, transparent, and predictable interest rate effects due to the maturity and efficiency of their financial systems and regulatory structures. In contrast, emerging markets display higher volatility and increased sensitivity to both domestic and international interest rate shocks. Their vulnerability to foreign capital inflows and exchange rate risks increases the transmission effects of monetary policy tightening, particularly in times of global uncertainty.

Moreover, the relationship between interest rates and stock returns is not linear. The strength of market responses differs depending on the monetary policy regimes, business cycles, and crisis periods. The periods of tightening have stronger negative effects compared to the positive effects during easing periods. The increasing globalization of financial markets has also increased the spillover effects, and domestic stock markets have become more sensitive to international monetary developments.

In conclusion, although theoretical models have a universal explanation of the relationship between interest rates and stock returns, empirical results are influenced by country-specific factors. These results emphasize the significance of contextual analysis in evaluating the effects of monetary policies on stock markets and the need for future studies to consider nonlinear models, regime changes, and globalization to address the complexity of the relationship.

References

1. Bernanke, B. S., & Kuttner, K. N. (2005). What explains the stock market's reaction to Federal Reserve policy?. *The Journal of finance*, 60(3), 1221-1257.
2. Campbell, J. Y. (1987). Stock returns and the term structure. *Journal of financial economics*, 18(2), 373-399.
3. Campbell, J. Y. (1991). A variance decomposition for stock returns. *The economic journal*, 101(405), 157-179.
4. Gordon, M. J., & Shapiro, E. (1956). Capital equipment analysis: the required rate of profit. *Management science*, 3(1), 102-110.
5. Mishkin, F. S. (2007). The transmission mechanism and the role of asset prices in monetary policy.
6. Bernanke, B. S., & Gertler, M. (2000). Monetary policy and asset price volatility.
7. Fama, E. F. (1970). Efficient capital markets: A review of theory and empirical work. *The journal of Finance*, 25(2), 383-417.
8. Fama, E. F., & Schwert, G. W. (1977). Asset returns and inflation. *Journal of financial economics*, 5(2), 115-146.
9. Harvey, C. R. (1995). Predictable risk and returns in emerging markets. *The review of financial studies*, 8(3), 773-816.
10. Ross, S. A. (2013). The arbitrage theory of capital asset pricing. In *Handbook of the fundamentals of financial decision making: Part I* (pp. 11-30).
11. Sharpe, W. F. (1964). Capital asset prices: A theory of market equilibrium under conditions of risk. *The journal of finance*, 19(3), 425-442.
12. Chen, N. F., Roll, R., & Ross, S. A. (1986). Economic forces and the stock market. *Journal of business*, 383-403.
13. Harvey, C. R. (1995). Predictable risk and returns in emerging markets. *The review of financial studies*, 8(3), 773-816.
14. Ioannidis, C., & Kontonikas, A. (2008). The impact of monetary policy on stock prices. *Journal of policy modeling*, 30(1), 33-53.
15. Rapach, D. E., Wohar, M. E., & Rangvid, J. (2005). Macro variables and international stock return predictability. *International journal of forecasting*, 21(1), 137-166.