

Systematic Review of Investment Risks and Stock Returns: Evidence on ESG, Policy Uncertainty, and Institutional Behavior

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ABSTRACT

Investment in capital markets is inherently exposed to various forms of risks, which directly impact stock returns. Understanding the relationship between risk and return is crucial for investors aiming to make informed decisions. This study aims to explore how investment risks—particularly those related to climate policy uncertainty, macroeconomic instability, and environmental conditions—affect stock returns, and to assess whether institutional investors can mitigate such impacts. To address these objectives, this research adopts a Systematic Literature Review (SLR) methodology, synthesizing findings from high-impact journals indexed in Scopus. The analysis reveals that economic policy uncertainty and environmental degradation significantly increase market volatility, especially in sectors sensitive to regulation such as energy, finance, and real estate. Additionally, institutional investors—due to their analytical capacity, access to information, and diversification strategies—are shown to reduce the adverse effects of investment risk on portfolio performance. Furthermore, ESG factors and investor behavior, including herding and sentiment dynamics, play an increasingly critical role in shaping risk-return profiles. The study highlights the importance of integrating risk indicators such as macroeconomic variables, ESG metrics, and policy uncertainty into predictive return models. These findings offer actionable insights for investors and policymakers seeking to optimize investment strategies under uncertainty. By clarifying the link between investment risk and stock returns, this research contributes to a deeper understanding of risk management in emerging and developed markets alike.

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1. Introduction

The relationship between systemic risk and stock return volatility has garnered increasing scholarly attention, particularly in light of macroeconomic shocks and global regulatory transformations. Policy uncertainty and environmental risk have emerged as key determinants of stock return behavior, particularly in capital markets with developing institutional frameworks. Research consistently shows that these factors intensify information asymmetries and increase capital market fragility, which is especially problematic in emerging economies (Adam & Yacob, 2022; Gavriilidis et al., 2024). Simultaneously, investor sentiment, macroeconomic variables, and

environmental transition policies play a pivotal role in shaping return expectations and investor behavior across sectors (Andleeb & Hassan, 2023; Atilgan et al., 2021). These evolving dynamics highlight the need for a structured analysis of how institutional investors can act as a buffer against these emerging risks.

From a conceptual standpoint, the research draws on the framework of financial intermediation theory and the informational efficiency of capital markets. Institutional investors are hypothesized to reduce noise in asset prices by disseminating private and public information more effectively and providing market liquidity (Borochin et al., 2024; El Ouadghiri et al., 2022). Furthermore, environmental, social, and governance (ESG) considerations have reshaped investor priorities (Akbar, 2025), with ESG transparency increasingly affecting capital flows and portfolio diversification strategies (D'Amato et al., 2022; Fang & Yang, 2025). The integration of ESG metrics into investment analysis introduces a new dimension to systemic risk, particularly in the context of environmental degradation and regulatory uncertainty. As institutions adapt, the bifurcation between long-term strategic behavior and short-term herding becomes more pronounced, influencing asset volatility and market stability (Eliwa & Elmaghrabi, 2025; Koutmos, 2024).

This study aims to address two core research questions. First, it explores how policy uncertainty and environmental risks influence stock return volatility in the capital market. This includes evaluating both direct effects, such as energy transition shocks, and indirect impacts arising from ESG rating disagreements and macroeconomic variables like inflation and interest rates (Cepni et al., 2023; Brandon et al., 2021). Second, the study investigates whether institutional investors can mitigate the negative effects of these risks on stock returns. This involves analyzing their roles as informed traders, liquidity providers, and long-term market participants, while also accounting for variations in investor behavior during periods of market distress and regulatory shifts (Khan, 2024; Batra et al., 2024). By integrating these dimensions, the research contributes to the broader discourse on financial stability, sustainable investing, and institutional resilience in the face of systemic shocks.

Investment Risk

The conceptual foundation of investment risk theory emphasizes that asset returns are inherently tied to exposure to systematic uncertainties, which cannot be diversified away and thus command a risk premium. In alignment with this framework, the relationship between systemic risk and stock return volatility has become a central focus in financial research, particularly in the wake of significant macroeconomic shocks—such as the COVID-19 pandemic and dramatic shifts in global energy prices—as well as sweeping regulatory transformations aimed at reinforcing financial stability (Agosin & Díaz, 2023; Gavriilidis et al., 2024). From a theoretical standpoint, such systemic risks are considered non-diversifiable and are directly embedded in market-wide volatility that affects all asset classes. Policy uncertainty, which includes fluctuations in fiscal and monetary measures, exemplifies a form of systemic risk that directly impacts investor expectations and market efficiency (Kuswati et al., 2022). Research shows that abrupt policy changes often trigger sharp spikes in volatility, reduce overall market liquidity, and diminish investor confidence, which aligns with core investment theories regarding risk-return trade-offs (Endri et al., 2021; Sekandary & Bask, 2023). Likewise, environmental risks, especially those related to climate regulation and carbon pricing, have emerged as structural sources of systematic risk that influence asset prices and increase volatility—particularly within environmentally sensitive sectors such as energy and manufacturing (Bouri et al., 2023; Cepni et al., 2023). These exogenous factors complicate price discovery, especially in markets where institutional mechanisms for information dissemination and enforcement are still developing. Consequently, both policy and environmental risks contribute to heightened information asymmetries, expanding bid-ask spreads and weakening market resilience—dynamics that are particularly acute in emerging markets where governance infrastructure remains less robust (Adam & Yacob, 2022). In essence, these developments reflect the theoretical foundation that systemic risks elevate required returns while simultaneously increasing return volatility—key tenets of modern portfolio theory and the capital asset pricing model (CAPM).

Investor sentiment, as shaped by macro-financial indicators and sentiment-based surveys, functions as a fundamental determinant in the theory of investment risk—serving as a key behavioral input that affects expected returns and market volatility. This sentiment, particularly in emerging markets, has been shown to strongly correlate with higher-order statistical moments of return distributions, such as skewness and kurtosis, thereby illustrating its central role in shaping perceived risk and return profiles (Andleeb & Hassan, 2023; Frugier, 2016). Consistent with core investment risk theory, macroeconomic variables—including inflation, GDP growth, and exchange rate volatility—interact with investor sentiment to influence pricing efficiency and return dispersion. These interactions are especially impactful in underdeveloped financial systems where the absorption of systemic shocks remains limited and integration with global markets is shallow (Atilgan et al., 2021; Soegoto et al., 2024).

Building on this theoretical foundation, the role of energy transition policies—such as green subsidies, carbon tariffs, and climate-aligned financial instruments—adds an additional layer of systemic uncertainty. These instruments tend to produce asset-specific volatility patterns that not only elevate sectoral investment risks but also intensify cross-market contagion, underscoring the need to refine asset pricing models in line with evolving transition risks (Bouri et al., 2023; Igeland et al., 2024). Such developments reinforce the classical view of risk as multifactorial and contingent on both policy regime shifts and investor interpretations of those shifts. Given these complexities, it becomes essential to assess the role of institutional investors within the framework of risk theory as potential mitigators of systemic exposure.

Investment Return

The primary objective of investors in allocating capital is to achieve stock returns that exceed the amount initially invested. In investment theory, stock return refers to the gain or loss experienced by shareholders over a specific period, which serves as a fundamental performance metric for evaluating portfolio outcomes (Dehning & Richardson, 2002; Rounaghi, 2019). From a theoretical standpoint, investment returns are considered a form of compensation for bearing risk. According to the risk–return trade-off principle, the higher the level of risk assumed, the greater the expected return. However, this relationship is not always linear, as actual returns may be influenced by various unpredictable factors including macroeconomic shocks, regulatory uncertainty, and investor sentiment (Andleeb & Hassan, 2023; Sekandary & Bask, 2023).

In this context, return forecasting becomes a critical component of financial decision-making, particularly for portfolio managers tasked with capital allocation under uncertainty. Accurate return prediction supports optimal investment decisions and enhances responses to market risks and inefficiencies (Atilgan et al., 2021). As such, understanding return dynamics is essential for forming robust investment strategies, especially in developing markets where asset prices often reflect incomplete information and behavioral biases (Soegoto et al., 2024). Time series modeling of return data—such as the use of ARMA or GARCH models—plays a vital role in estimating future returns and managing risk exposure, aligning with core principles of financial econometrics and modern portfolio theory (Rounaghi & Zadeh, 2016).

Furthermore, the integration of macroeconomic and environmental risk variables into return models reflects a more nuanced interpretation of return determinants. For instance, studies show that climate policy uncertainty and volatility in energy markets significantly influence return patterns across various sectors, particularly energy-intensive industries (Bouri et al., 2023; Cepni et al., 2023). This highlights that investors must not only consider traditional financial indicators but also incorporate ESG-related risks into their return expectations. Therefore, while the theory of expected return emphasizes risk compensation, practical investment decisions require a broader analytical framework that incorporates sentiment, volatility, liquidity, and systemic macro-financial variables.

2. Method

This study adopts a Systematic Literature Review (SLR) methodology, which provides substantial advantages in synthesizing findings from a broad spectrum of relevant research, thereby enabling a more comprehensive and balanced presentation of the topic (Agazu et al., 2025; Rehman et al.,

2025). The primary aim of an SLR is to conduct a rigorous and transparent investigation by systematically collecting all published sources related to a specific research question and evaluating the quality of evidence presented in those sources (Naik et al., 2025). In this section, we describe the eligibility criteria and sources of knowledge used in the review, wherein the selection of studies is based on extracting specific data items from a larger dataset for further analysis.

The data collection process was conducted systematically through the identification of relevant variables, the selection of appropriate data-gathering methods, and the implementation of these methods to obtain the necessary information, with the objective of producing a valid and in-depth analysis (Rehman et al., 2025). The literature search involved extensive database exploration, including Google Scholar, Scopus, and ScienceDirect. The screening process prioritized publications that were fully accessible and provided complete documentation, ensuring that only articles meeting these criteria were included for further analysis (Agazu et al., 2025). This approach ensured that the gathered data met high standards of quality and accessibility, and that the selected sources were reputable and scientifically grounded.

The article selection process began with a comprehensive search of academic databases using various keywords such as “investment risk,” “stock returns,” and “the relationship between investment risk and stock returns.” Boolean operators (AND, OR) were utilized to refine the search, applying combinations such as “investment AND risk” and “stock AND returns” (Naik et al., 2025). For each selected study, we extracted critical information including the title, year of publication, authorship, research objectives, employed methods, and key findings. The extracted data primarily focused on the relationship between investment risk and stock returns, as well as the key factors that influence both variables.

3. Results

RQ1: How do policy uncertainty and environmental risks affect stock returns in the capital market?

a. Policy Uncertainty and Environmental Risks on Stock Return Volatility

Several studies emphasize that economic policy uncertainty, including changes in taxation, interest rates, and monetary policy, has a negative impact on stock returns by increasing market volatility and reducing investor confidence (Joseph et al., 2024). Environmental risks, particularly those related to climate change and energy transition policies, have also been identified as critical factors influencing stock return volatility and expectations, especially in highly exposed sectors such as energy and heavy manufacturing (Valenti et al., 2023). Portfolios with high exposure to environmental risks tend to exhibit greater volatility and higher potential losses compared to portfolios with low environmental risk exposure, even though the former may occasionally deliver higher raw returns. Additional evidence indicates that declining environmental quality and increased exposure to ESG-related risks can contribute to a long-term decrease in stock valuation, as environmental incidents become more frequent and financially damaging. Furthermore, global systemic events such as the COVID-19 pandemic serve as systemic risk catalysts that affect all sectors of the capital market, resulting in sharp fluctuations in stock returns (Hafidzi & Qomariah, 2022). Expanding on this, several studies suggest that policy uncertainty related to climate regulation and carbon emissions imposes long-term risk burdens on investors, particularly through valuation declines associated with rising compliance costs and the economic impact of energy transitions (Pindyck, 2014). Additionally, disagreements among ESG rating agencies can create a distinct risk premium in financial markets, as investors demand compensation for informational uncertainty (Brandon et al., 2021).

From a domestic perspective, stock returns are significantly influenced by macroeconomic variables, including inflation rates, exchange rates, and economic growth (Soegoto et al., 2024). Supporting this, further studies demonstrate that exchange rate fluctuations and global financial conditions have a substantial effect on stock performance—particularly in emerging markets dominated by foreign investors (Endri et al., 2021). These risks are especially pronounced in sectors such as property and real estate, which are highly sensitive to interest rate volatility and domestic demand.

b. Systemic Risks from Energy Transition and Monetary Instability on Stock Returns

Research indicates that uncertainty—particularly related to energy transition—significantly increases volatility in energy markets and associated sectors, driven by rising concerns over policy

continuity and its long-term implications for profitability (Bouri et al., 2023; Kocaarslan & Soytaş, 2021). This uncertainty exacerbates the inherent risks of investing in clean energy and triggers more sensitive market reactions to fluctuations in currency values and global monetary policy (Iceland et al., 2024). In highly regulated sectors such as finance and utilities, sudden changes in monetary policy can cause sharp valuation adjustments. Although not all studies explicitly document short-term declines in stock returns, there is compelling evidence that monetary policy shocks have a greater impact on equity returns during periods of elevated policy uncertainty (Sekandary & Bask, 2023). Moreover, economic and political policy uncertainty broadens the dispersion of investor expectations, which in turn heightens global market volatility. In such uncertain environments, investors tend to delay capital allocation decisions, preferring to wait until conditions stabilize (Christensen et al., 2022).

Empirical studies further reveal that political and geopolitical uncertainties exert a disproportionately stronger effect on stock market volatility in emerging markets than in developed economies. This is primarily because emerging markets are more vulnerable to capital flight and external shocks (Adam & Yacob, 2022). Exchange rate volatility also serves as a major source of instability for stock returns in countries like Indonesia, where foreign investors hold a significant share of equity ownership. Currency appreciation is often followed by capital outflows, leading to immediate declines in domestic stock prices (Hajilee & Al Nasser, 2014; Krol, 2014). Additionally, sharp fluctuations in exchange rates and global interest rates exacerbate stock return volatility and introduce further uncertainty into both short-term and long-term investment decisions. Finally, average stock returns in developed markets such as the United States tend to be higher than those in emerging markets, while risk levels are generally lower. This reflects the more stable institutional frameworks and mature market structures found in advanced economies (Gavriilidis et al., 2024; López et al., 2023). In conclusion, a confluence of factors—including policy uncertainty, energy transition risks, exchange rate volatility, and structural differences across markets—plays a critical role in shaping the global dynamics of stock return volatility.

c. Investor Sentiment, Energy Transition Risk, and Macroeconomic Variables in Driving Stock Returns in Emerging Markets

The scarcity of scholarly literature investigating the relationship between investor sentiment and stock returns in emerging markets has been consistently highlighted, particularly due to the structural and behavioral distinctions these markets exhibit in comparison to developed economies (Andleeb & Hassan, 2023; Srinivasa Suresh & George, 2016). In emerging economies, sentiment-driven dynamics often lead to elevated levels of volatility and unpredictability in returns, especially within small- and mid-cap portfolios where investor irrationality plays a more significant role (Umar et al., 2023). Moreover, the renewable energy sector and associated financial instruments are notably affected by climate transition risks, as shifts in environmental regulations and investor perceptions regarding sustainability contribute to return fluctuations and heightened volatility across both green and conventional energy assets (Bouri et al., 2023; Iceland et al., 2024). In this context, empirical evidence indicates that under conditions of policy uncertainty, investors tend to require higher risk premiums for renewable energy equities, thereby reinforcing the sector's pronounced sensitivity to regulatory changes. Reserve currency and the volatility of clean energy stocks: The role of uncertainty (Kocaarslan & Soytaş, 2021).

Expanding beyond sector-specific effects, stock returns across countries are shaped by a multitude of variables, including macroeconomic indicators and industry-specific characteristics that collectively define the underlying return dynamics (Atilgan et al., 2021). For example, indicators such as inflation, interest rates, and exchange rate movements have demonstrated significant explanatory power in modeling equity performance across varying national contexts (Frugier, 2016). Notably, average stock returns in the United States consistently surpass those in Indonesia, while the overall level of investment risk remains comparatively lower in the U.S. market. This disparity reflects the presence of a more robust and integrated financial infrastructure supported by effective institutional frameworks (Maharaj et al., 2011). Furthermore, macroeconomic risk factors are instrumental in shaping return expectations within specific sectors, such as property and real estate, where fluctuations in asset prices and firm-level financial performance serve as key determinants of equity outcomes (Endri et al., 2021; Soegoto et al., 2024). Collectively, these insights highlight the complex interplay between macroeconomic variables, market sentiment, and structural market differences, reinforcing the necessity of incorporating these elements into predictive models of stock return behavior in emerging economies.

d. Policy Uncertainty and Energy Transition Risk in Shaping Stock Returns in the Financial and Energy Sectors

Changes in monetary policy and related announcements exert a direct and measurable impact on stock returns, particularly within the banking sector, where financial institutions are acutely sensitive to fluctuations in interest rates and liquidity expectations. Empirical studies indicate that monetary policy surprises—such as unexpected adjustments to the federal funds rate—tend to significantly reduce stock returns, with this effect being especially pronounced during periods of elevated monetary policy uncertainty (Sekandary & Bask, 2023). Similarly, evidence from emerging economies, including India, demonstrates that both scheduled and unscheduled monetary policy announcements influence stock returns, particularly within banking and financial services. This reflects the sector's heightened responsiveness to monetary signals and the informational value embedded in central bank communications (Khuntia & Hiremath, 2019). Moreover, monetary tightening measures introduced during periods of macroeconomic distress—such as the global financial crisis—have been associated with increased return volatility in banking stocks, emphasizing the systemic importance of the sector and its vulnerability to broader macroeconomic shocks.

Concurrently, uncertainty surrounding the global energy transition has become a significant source of volatility in energy markets, especially for renewable energy assets that are highly sensitive to evolving environmental regulations, climate policy commitments, and supply chain constraints. Recent studies confirm that economic policy uncertainty positively influences the returns of renewable energy stocks, suggesting that investors interpret increased attention to sustainability as a signal of both opportunity and risk (Igeland et al., 2024). However, uncertainty in climate policy also contributes to greater interconnectedness and volatility spillovers between conventional and renewable energy sectors. In particular, energy stocks and carbon futures frequently act as conduits for systemic shocks, amplifying risks across financial markets (Hoque et al., 2022). These developments underscore the rising relevance of transition risk in asset pricing frameworks and highlight the urgent need for strategic, forward-looking risk management practices among investors and institutions with exposure to clean energy portfolios.

e. ESG, CSR, and Institutional Investor Behavior in Responding to Systemic Environmental Risks

Recent literature underscores the growing significance of Environmental, Social, and Governance (ESG) factors in investment decision-making, with particular emphasis on how climate-related risks, as a core component of ESG, affect asset valuation and portfolio performance. As ESG investing becomes increasingly mainstream, scholars note that asset managers are placing greater reliance on ESG scores to identify latent risks—particularly those concerning environmental sustainability and governance practices—that are frequently mispriced by conventional financial models (D'Amato et al., 2022). Empirical research has demonstrated that ESG ratings influence capital allocation decisions; firms with higher ESG scores tend to attract greater investment and experience lower return volatility (Fang & Yang, 2025). Moreover, climate change and energy transition risks are now widely acknowledged as systemic financial threats, prompting shifts in risk assessment frameworks across asset classes and driving changes in investor behavior (Cepni et al., 2023).

Building on this, additional studies explore how corporate social responsibility (CSR)—a key subset of ESG—affects stock market performance. The evidence suggests that firms engaging in robust CSR practices are positively rewarded by financial markets, particularly when such practices are accompanied by transparent and standardized ESG reporting (D'Amato et al., 2022). Alongside these developments, investor behavior has also evolved; institutional herding has become increasingly responsive to both political and ESG-related uncertainties. For instance, research reveals that institutional investors often mimic each other's trades during periods of heightened political uncertainty, especially in politically sensitive sectors, resulting in concentrated capital flows into companies perceived as ESG-compliant (Gavriilidis et al., 2024; Koutmos, 2024). In addition, foreign institutional investors exhibit a tendency to herd toward firms with high ESG ratings, reinforcing a positive feedback loop between ESG transparency and institutional investment activity (Fang & Yang, 2025).

RQ2: Can institutional investors mitigate the negative impact of those risks on stock returns?

Based on the reviewed literature, several findings are particularly relevant to the research question concerning the role of institutional investors in mitigating the negative effects of risk on stock returns. (Khan, 2024) emphasizes that a thorough understanding of market dynamics—especially structural constraints such as short selling—is essential for analyzing how these limitations influence stock price behavior. Constraints on short selling have been shown to distort price discovery and exacerbate volatility, particularly when institutional investors are unable to arbitrage overvalued stocks effectively (Barroso et al., 2025). Given that market volatility is an inherent feature of financial systems, institutional investors, equipped with greater resources and deeper market insight, are expected to manage such risks more efficiently. Their presence has been linked to greater market stability in some contexts, especially when their trades are informed and based on profitability signals (Batra et al., 2024).

However, not all institutional behaviors are stabilizing. Research in emerging markets suggests that pressure-insensitive institutional investors may contribute to greater volatility, especially during periods of market distress or regulatory laxity (Batra et al., 2024). Conversely, long-term institutional investors tend to stabilize prices, while short-term ones may increase fluctuations due to momentum or opportunistic trading (Eliwa & Elmaghrabi, 2025; Kim et al., 2019). The ability of institutional investors to act as liquidity providers and suppress excess volatility hinges significantly on market conditions, regulation, and the classification of these investors (El Ouadghiri et al., 2022). Moreover, research on short selling emphasizes its dual role. On one hand, it supports efficient pricing and enhances liquidity; on the other, it can increase short-term volatility, especially when executed without adequate collateral or during market downturns (Yang et al., 2024). In this context, institutional investors serve a stabilizing role by providing the inventory for securities lending and participating in strategies that reduce mispricing. In fact, when well-capitalized institutional investors engage in short selling, they often do so in a value-driven, information-sensitive manner that promotes market discipline (Gu et al., 2021).

Overall, institutional investors can either stabilize or destabilize markets depending on their investment horizon, constraints, and regulatory environment. The literature indicates that these investors play a pivotal role in transferring firm-level information to the market, thereby reducing asymmetries and improving pricing accuracy (Borochin et al., 2024). Therefore, understanding and supporting their function in capital markets is vital for mitigating risk and enhancing return predictability.

4. Discussion

The findings of this study underscore the multidimensional nature of investment risk and return dynamics in the context of increasing policy uncertainty, environmental transitions, and evolving institutional investor behavior. The systematic literature review reveals that systemic risks, particularly those stemming from regulatory shifts and environmental degradation, have become central determinants of stock return volatility. These risks are especially salient in emerging markets, where structural vulnerabilities—such as weak institutional frameworks and limited financial market depth—amplify the adverse effects of macroeconomic shocks and information asymmetries (Adam & Yacob, 2022; Andleeb & Hassan, 2023).

A key contribution of this research lies in highlighting the differentiated impact of environmental and policy risks across sectors. Industries such as energy, finance, and manufacturing demonstrate heightened sensitivity to regulatory uncertainty, carbon pricing, and monetary policy changes. These findings suggest the necessity of sector-specific risk assessments and asset pricing models that account for ESG-related factors. For instance, the volatility observed in clean energy assets due to climate transition policies signals the growing relevance of environmental risk integration into traditional financial models. Moreover, ESG disagreements among rating agencies have been shown to introduce additional uncertainty premiums, complicating investor decision-making and undermining market efficiency (Cepni et al., 2023; D'Amato et al., 2022).

The role of institutional investors is critically examined as a potential moderating force in this high-risk environment. Empirical evidence suggests that long-term institutional investors—such as pension funds and sovereign wealth funds—tend to act as stabilizers, especially during episodes of

elevated uncertainty. Their ability to absorb shocks, provide liquidity, and allocate capital based on fundamentals rather than sentiment positions them as crucial actors in promoting market resilience (Khan, 2024; Borochin et al., 2024). However, this stabilizing effect is not uniform. Short-term and momentum-driven institutional investors may exacerbate volatility through herding behavior or speculative trading, particularly in underregulated markets. Thus, the investment horizon and strategic orientation of institutional investors are critical variables in determining their impact on market stability.

Additionally, the results emphasize the significance of integrating ESG and CSR dimensions into investor strategy. Firms with higher ESG scores not only experience lower return volatility but are also more likely to attract institutional capital, suggesting a feedback mechanism where responsible corporate behavior aligns with investor preference for risk-adjusted performance (Fang & Yang, 2025; Eliwa & Elmaghrabi, 2025). This interaction between ESG transparency and institutional investment creates opportunities for enhanced capital allocation efficiency and long-term financial sustainability.

From a theoretical perspective, the results align with the Capital Asset Pricing Model (CAPM) and modern portfolio theory, which recognize the impact of systematic risk on expected returns. Yet, this study expands the scope by incorporating environmental and policy risks as endogenous elements of systemic volatility. The findings also support the financial intermediation theory, which posits that informed and well-capitalized institutional investors play a key role in mitigating market inefficiencies through information diffusion and liquidity provision.

These findings reinforce the imperative to strengthen institutional capacity, regulatory oversight, and ESG integration within capital markets, particularly in emerging economies. Future research should further disaggregate institutional investor typologies and explore how digital technologies and real-time data analytics may enhance their role in managing systemic risk and stabilizing return expectations amid global uncertainty.

5. Conclusion

This study provides a comprehensive synthesis of the relationship between systemic risks—particularly policy uncertainty and environmental transitions—and stock return volatility, with a specific focus on the role of institutional investors in mitigating these adverse effects. The findings underscore that macroeconomic shocks, environmental risks, and regulatory uncertainty significantly shape asset valuation and return behavior, especially in emerging markets where institutional infrastructures remain underdeveloped. Environmental degradation, climate policies, and ESG-related controversies further compound market volatility, influencing both investor sentiment and pricing mechanisms across capital markets.

Institutional investors emerge as critical actors within this landscape, possessing the capacity to either stabilize or destabilize financial markets depending on their investment horizons, regulatory constraints, and response to market signals. Their ability to disseminate information, provide liquidity, and engage in strategic trading positions them as key intermediaries in mitigating systemic risk. However, the dual nature of institutional behavior—ranging from informed trading that promotes efficiency to herding behavior that amplifies volatility—requires nuanced regulatory oversight and a deeper understanding of investor classification and behavior.

The integration of ESG criteria into investment strategies adds a new dimension to risk-return analysis, reinforcing the imperative to revise conventional financial models. Institutional investors who prioritize ESG transparency and long-term sustainability objectives are more likely to enhance market resilience in the face of environmental and policy shocks. This reinforces their role not only as capital allocators but also as stewards of financial stability in a transitioning global economy. This study contributes to the evolving discourse on sustainable investing, systemic risk management, and capital market efficiency. Policymakers and regulators must enhance institutional investor governance frameworks to optimize their stabilizing role. Future research should explore heterogeneity among institutional investors, assess ESG integration impacts across different asset classes, and apply high-frequency data to analyze real-time responses to systemic shocks. Cross-country comparative studies would further enrich the understanding of institutional dynamics across diverse financial ecosystems.

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