



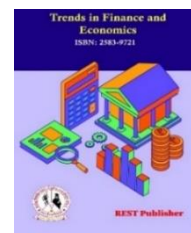
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Capital Markets and Economic Fluctuations in Capitalist Economies Using ARAS Methodology

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Abstract: Capital markets play a pivotal role in the economic development of nations by facilitating the efficient allocation of resources, promoting investment, and fostering innovation. This paper explores the structure, functions, and significance of capital markets in both developed and emerging economies. It examines the key components of capital markets, including equity, debt, and derivatives markets, and highlights the role of regulatory frameworks in ensuring market stability and investor protection. The paper also discusses recent trends and challenges facing capital markets, such as digital transformation, regulatory changes, and the impact of global economic shifts. Through a comprehensive analysis, this study aims to provide insights into how capital markets contribute to economic growth and the strategies needed to enhance their effectiveness in a rapidly evolving financial landscape. The significance of capital markets in research is multifaceted, reflecting their critical role in the functioning of modern economies. Here are some key aspects: Capital Allocation: Capital markets efficiently allocate resources by directing savings into productive investments, fueling economic growth. Corporate Financing: They provide a platform for corporations to raise long-term funds, supporting expansion, innovation, and job creation. Wealth Creation: By enabling investors to diversify their portfolios and manage risks, capital markets contribute to wealth generation and economic stability. Market Liquidity: Liquid capital markets allow investors to buy and sell securities quickly, reducing the cost of transactions and enhancing market confidence. Price Discovery, Return on Investment (%), Liquidity (Scale 1-10), Volatility (Scale 1-10), Regulatory Risk (Scale 1-10). Stock Market, Bond Market, Real Estate Investment Trusts (REITs), Commodities Market, Crypto currency Market. The results indicate that Stock Market achieved the highest rank, while Crypto currency Market had the lowest rank being attained The value of the dataset for Corporate capital markets according to the ARAS Method, Integrated Pest Management achieves the highest ranking.

Key words; Equity Markets, Debt Markets, Securities, Stock Exchanges, Bonds, Initial Public Offering (IPO).

1. INTRODUCTION

Capital markets are financial markets where long-term debt or equity-backed securities are bought and sold. These markets are essential for economic growth as they facilitate the raising of capital for companies, governments, and other entities, enabling them to fund their operations and expansion projects. Primary Market: This is where New securities are introduced and sold for the first time when companies or governments seek to raise capital by offering stocks (equity) or bonds (debt) directly to investors. A typical example of this process is an Initial Public Offering (IPO). primary market transaction. Secondary Market: Once securities have been issued in the primary market, they can be traded between investors in the secondary market. Prices of securities fluctuate based on supply and demand. Equity Markets: These involve the buying and selling of stocks. Investors purchase shares in companies, essentially becoming part-owners. Equity markets are vital for companies looking to raise capital without taking on debt. Debt Markets: Also known as bond markets, these involve the issuance and trading of debt securities. Entities issue bonds to raise capital, agreeing to repay the principal amount along with interest at a specified future date. Debt markets are essential for addressing long-term financing requirements. Derivatives markets consist of financial contracts that gain their value from underlying assets like stocks or bonds and are used for both risk hedging and speculative

purposes. Foreign Exchange Markets (Forex) are often considered separate from capital markets, but they intersect with them when companies or governments engage in currency-related transactions. Forex trading involves the exchange of different currencies and is vital for international trade and investment. Before the 19th century, international finance had a relatively limited scope compared to its later expansion. During the Renaissance, Italian banks were instrumental in financing trade and governments throughout the Mediterranean region. As European trade grew, financial innovations like letters of credit, first developed at the Champagne Fairs, spread northward, impacting financial systems in North Sea ports such as Bruges and Antwerp. Eventually, London and Amsterdam rose to prominence as major financial centers, with their currencies and financial instruments becoming central to market activities. The industrial revolution, which began in Great Britain, underscored the increasing importance of international financial markets in both public and private sectors. Over time, these markets expanded to other regions with the necessary institutions and supportive governments. In the eastern United States, cities such as Boston, Philadelphia, and Baltimore were eventually surpassed by New York, which emerged as the leading hub for both national and international finance. By the late 19th century, France and Germany had also established advanced international markets well-integrated into the global financial network. Similar markets began to appear across Europe and the Americas, extending even to distant locations like Melbourne and Buenos Aires. These advancements, alongside the adoption of the gold standard and technological progress in shipping and communications (like the telegraph and transoceanic cables), helped shape the first global marketplace for capital, goods, and labor during an era of liberalism and near laissez-faire economics.[2]. Secondly, the development of money and bond markets enhances the effectiveness of monetary policy. These markets offer the necessary tools for implementing monetary policy and improve its transmission mechanism. Long-term bonds, in particular, aid central banks in conducting sterilization operations, as relying solely on short-term instruments can lead to higher short-term interest rates and attract further inflows into those instruments. Additionally, long-term bond markets provide valuable insights into macroeconomic expectations and reactions to monetary policy, thereby supporting the overall operation of monetary policy. Thirdly, the growth of local capital markets increases the availability of long-term financing, enabling households and firms to better manage interest rate and maturity risks associated with long-term investments, such as equipment, machinery, land, and buildings. This is particularly relevant for the development of local bond markets and their supporting derivatives markets, but the expansion of equity markets also enhances firms' access to long-term capital. Fourthly, local capital markets improve access to financing in local currency. Local currency bond markets provide investors, both retail and institutional, with opportunities Governments benefit significantly from local currency bond markets, as they allow for financing fiscal deficits through domestic borrowing without incurring exchange rate risk. Fifthly, the development of local capital markets contributes to financial deepening alongside the growth of banking markets, thereby enhancing the efficiency of capital allocation within the economy. Bond financing introduces healthy competition to bank loans and offers relatively inexpensive financing options to large, reputable firms capable of accessing long-term capital markets. The market discipline resulting from this competition also leads to improved financial practices and standards. [9]. Capital markets play a crucial role in the functioning of free-market economies by serving as mechanisms for processing information and coordinating economic activities. They are responsible for mobilizing savings, facilitating risk management across different sectors and over time, monitoring managerial behavior, and efficiently processing information. Research, notably surveyed by Levine, extensively supports the positive impact of capital markets on economic growth. This literature highlights that in environments where governmental protection of property rights, especially those of investors, is robust, equity prices exhibit significant variability based on firm-specific factors. Conversely, in weaker institutional settings where property rights are less secure, equity returns tend to be more synchronized and lack informational content. Studies also suggest that economies with greater variability in firm-specific stock returns demonstrate more efficient investment decisions, possibly due to enhanced risk arbitrage driven by well-informed asset pricing. While much of the empirical focus has been on equity markets, the broader implication is that strong institutional integrity—ensuring robust property rights and legal protections for outside shareholders—promotes better corporate governance and informed investment choices. This environment not only enhances stock market dynamism but also positively impacts overall financial system performance. Conversely, weak institutional environments can hinder both stock markets and broader financial intermediation, including banking. Empirical findings, supported by cross-country panel data regressions, indicate that economies with lower stock return synchronicity tend to experience higher total and productivity growth. This association underscores the role of capital market development and the rule of law in fostering economic dynamism through better resource allocation and informed decision-making processes.”[10]. The argument for capital market liberalization primarily relies on standard efficiency theories, using a traditional neoclassical model. This approach tends to overlook the unique characteristics that differentiate capital markets from markets for regular goods and services, such as steel. Advocates emphasize efficiency gains while disregarding the distributional impacts, likely assuming that if the

benefits are substantial enough, they will either trickle down to the poor or the government will implement measures to redistribute the gains. This reasoning was particularly applied to capital market liberalization in East Asia. Governments in the region had worked diligently to foster an environment where the economy, especially the private sector, thrived, achieving extraordinary growth rates for over three decades. Savings rates were already impressively high, and it was notable that these countries could absorb and invest such high savings productively. Other nations with similarly high savings rates had not experienced the same success. Given these high savings rates, it was difficult to argue that opening capital markets was necessary to secure additional funds.[14]. The rationale for allowing unrestricted capital flows is clear. Allowing capital to move freely ensures that only projects creating value are accepted, while those destroying value are rejected. This promotes economic growth globally and enhances social welfare, as value creation typically leads to higher returns and more efficient use of capital. Countries exporting capital benefit from higher returns, while importers can invest in projects that might otherwise lack funding. Unlike the widespread support for free trade, opinions on unrestricted capital flows vary. Economists such as Merton Miller argue for removing existing controls to open up capital markets, citing benefits for both developed and developing nations. For emerging economies particularly, opening capital markets presents opportunities to attract needed foreign investment and develop equity markets, which are linked to long-term economic growth and reduced external finance costs. Foreign investment also promotes transparency, improved disclosure rules, and stronger shareholder protections, all of which enhance capital allocation efficiency and reduce investment risks.[18].

2. MATERIALS AND METHODS

It seems like you're referencing ARAS (Additive Ratio Assessment System) in the context of capital markets. ARAS is a multi-criteria decision-making (MCDM) method used to evaluate and rank alternatives based on multiple criteria. In the context of capital markets, ARAS can be used to assess various financial instruments, investment options, or portfolios. Here's a detailed "Materials and Methods" section for applying ARAS (Additive Ratio Assessment System) in general decision-making contexts. This structure can be adapted to various fields, including capital markets, technology selection, or any multi-criteria decision-making scenario.

Criteria Data: Quantitative and qualitative data relevant to the decision-making criteria. For example, if evaluating investment options, data might include financial metrics, market conditions, or company performance indicators.

Benchmark Data: Reference data or historical benchmarks to provide context for evaluating the alternatives.

Spreadsheets: Excel for basic calculations, data organization, and preliminary analysis.

Statistical Software: R or Python for advanced data analysis, normalization, and MCDM calculations.

Custom Models: ARAS models can be implemented using custom scripts or formulas in Python, MATLAB, or Excel.

Specialized Tools: Software like Expert Choice or Super Decisions for multi-criteria analysis, though ARAS is often implemented with custom tools.

Criteria Identification: Define relevant criteria for the decision-making process. These might include factors like cost, quality, risk, return, and feasibility, depending on the context.

Normalization Methods: Min-Max Normalization: Scaling data to a range. Z-score Normalization: Standardizing data based on mean and standard deviation.

Weight Assignment: Methods for assigning weights to criteria, such as expert judgment, Analytic Hierarchy Process (AHP), or pair wise comparisons.

Gather Data: Collect quantitative and qualitative data related to each criterion for all alternatives being evaluated. Ensure data accuracy and consistency.

Criteria Selection: Identify and define the criteria that are relevant to the decision-making process. Assign weights to each criterion based on its importance. This can be done using expert input, stakeholder surveys, or established methodologies like AHP.

Normalize Values: Apply normalization techniques to transform data into a comparable scale. For ARAS, this typically involves converting raw data into a range between 0 and 1 or another standardized scale.

Rank Alternatives: Rank the alternatives based on their utility scores, with higher scores indicating better performance according to the criteria.

Validation: Verify the results by comparing with other decision-making methods or historical outcomes.

Sensitivity Analysis: Assess how changes in the weights or criteria affect the rankings. This helps to understand the robustness of the results and the impact of different assumptions.

Analyze Results: Interpret the rankings and utility scores in the context of the decision-making problem. Make Recommendations: Based on the ARAS results, provide recommendations or make decisions regarding the best alternative.

Prepare Report: Document the ARAS methodology, data sources, criteria, weights, normalization process, and final rankings.

Present Findings: Present the results to stakeholders, including any insights, recommendations, and justifications for the chosen alternatives. This structured approach ensures that the ARAS method is applied systematically and transparently, leading to well-supported decision-making outcomes.

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options, or portfolios. Normalize the data to make it comparable across different criteria. For ARAS, this often involves scaling the criteria values between 0 and 1. Compute the utility function for each alternative by aggregating the normalized criteria values weighted by their importance. Rank the alternatives based on the computed utility scores. Validate the results by comparing them with other decision-making methods or historical data. Conduct a sensitivity analysis to assess how changes in criteria weights affect the rankings. Analyze the final rankings to make informed decisions regarding capital market investments. Provide insights and recommendations based on the ARAS analysis. This method allows for a structured and quantitative approach to evaluating multiple investment options, taking into account various risk and return factors, and is particularly useful in complex decision-making environments like capital markets. Analyze the ranked list of investment alternatives and interpret the results in the context of the market environment. Provide recommendations based on the ARAS rankings, considering the investor's risk tolerance, return expectations, and other relevant factors. Rank the investment options based on their utility scores, with higher scores indicating more attractive investments. Validation: Compare the ARAS results with historical performance data or other MCDM methods like TOPSIS or AHP to ensure consistency. Sensitivity Analysis: Analyze how changes in the weights of criteria affect the rankings. This helps assess the robustness of the decision-making process.

3. ANALYSIS AND DISSECTION

TABLE 1. Capital Markets

native	Return on Investment (%)	Liquidity (Scale 1-10)	Volatility (Scale 1-10)	Regulatory Risk (Scale 1-10)
Stock Market	8.50	9.00	7.00	6.00
Bond Market	4.00	7.00	4.00	5.00
Real Estate Investment Trusts (REITs)	6.00	6.00	5.00	7.00
Commodities Market	7.00	5.00	8.00	8.00
Crypto currency Market	12.00	8.00	9.00	9.00

The dataset provides a comparative analysis of five capital market alternatives based on key evaluation parameters: Return on Investment (ROI), Liquidity, Volatility, and Regulatory Risk. Stock Market offers a robust ROI of 8.5%, reflecting its potential for high returns. It also scores well on Liquidity with a 9, indicating that stocks can be bought or sold with relative ease. However, it has moderate Volatility (7), meaning prices can fluctuate significantly, and a moderate Regulatory Risk (6), suggesting some exposure to regulatory changes. Bond Market presents a lower ROI of 4%, but it compensates with higher stability, showing lower Volatility (4) and moderate Regulatory Risk (5). Liquidity is relatively strong (7), though not as high as the stock market, making bonds a more stable investment option. Real Estate Investment Trusts (REITs) offer a mid-range ROI of 6% and have a Liquidity score of 6, which is lower compared to stocks and bonds. REITs have moderate Volatility (5) and a higher Regulatory Risk (7), reflecting potential concerns over regulatory changes. Commodities Market provides a competitive ROI of 7% but exhibits high Volatility (8) and Regulatory Risk (8), indicating significant price swings and regulatory uncertainties. Its Liquidity score is the lowest (5), making it less liquid compared to the other markets. Crypto currency Market stands out with the highest ROI of 12%, driven by its high growth potential. Despite its high Liquidity (8), it faces the greatest challenges with extreme Volatility (9) and Regulatory Risk (9), highlighting its riskier nature. Overall, each market alternative offers different benefits and risks, making them suitable for varying investment strategies and risk appetites.

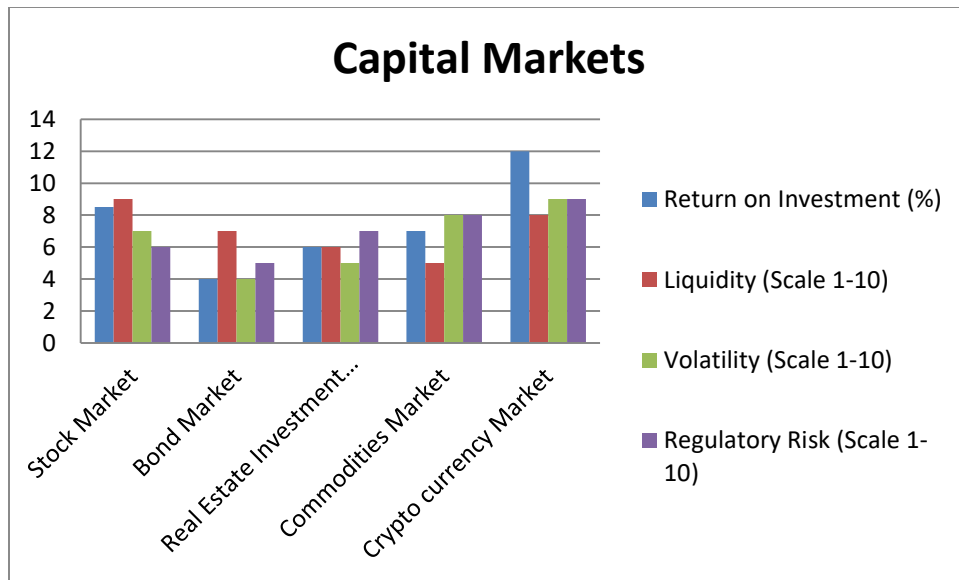


FIGURE 1. Capital Markets

Figure 1 capital markets" refers to a visual representation comparing various capital markets across different performance indicators. Return on Investment (%): Represents the potential financial gain from investments in each market. Liquidity (Scale 1-10): Indicates how easily assets in each market can be bought or sold without affecting their price. Volatility (Scale 1-10): Reflects the stability or risk associated with price changes in each market. Regulatory Risk (Scale 1-10): Assesses the potential impact of government regulations on each market. Return on Investment is highest in the Crypto currency Market, showing its potential for high returns. Liquidity is strongest in the Stock Market, making it easier to trade assets. Volatility is most pronounced in the Crypto currency Market, indicating higher risk. Regulatory Risk is also highest in the Crypto currency Market, reflecting uncertainty due to evolving regulations. This figure provides a comparative analysis, helping investors understand the trade-offs between potential returns and associated risks in different capital markets.

TABLE 2. Normalized Data

Normalized Data			
0.1914	0.2057	0.1652	0.2087
0.1785	0.1540	0.2891	0.2504
0.1673	0.1578	0.2313	0.1789
0.1383	0.1353	0.1446	0.1565
0.1331	0.1416	0.1285	0.1391

The normalized data provides a standardized comparison of five capital market alternatives across four evaluation parameters: Return on Investment (ROI), Liquidity, Volatility, and Regulatory Risk. Normalization scales each parameter to a common range, allowing for easier comparison. The Stock Market shows strong performance in ROI (0.1914) and Liquidity (0.2057), reflecting its high return potential and ease of trading. However, it has a moderate Volatility (0.1652) and Regulatory Risk (0.2087), indicating some price fluctuations and regulatory concerns compared to other markets. The Bond Market has a relatively lower ROI (0.1785) but maintains a solid position in Liquidity (0.1540), reflecting moderate ease of trading. It has the highest Volatility (0.2891) and Regulatory Risk (0.2504) among the alternatives, suggesting higher exposure to regulatory changes and price fluctuations. Real Estate Investment Trusts (REITs) exhibit a balanced ROI (0.1673) and moderate Liquidity (0.1578). They have a mid-level Volatility (0.2313) and a moderate Regulatory Risk (0.1789), making them a middle-ground option in terms of risk and return. The Commodities Market has the lowest ROI (0.1383) and Liquidity (0.1353) but shows a high Volatility (0.1446) and a relatively lower Regulatory Risk (0.1565). This suggests it is less liquid but less impacted by regulatory issues. The Crypto currency Market offers the lowest ROI (0.1331) and moderate Liquidity (0.1416). It faces the highest Volatility (0.1285) and the lowest Regulatory Risk (0.1391), indicating high volatility and regulatory uncertainty but relatively low regulatory concerns compared to other markets. This normalized data

helps to illustrate how each market alternative performs relative to the others, providing a clearer picture of their strengths and weaknesses across different investment parameters.

TABLE 3. Weighted Normalized Data

Weighted Normalized Data			
0.0479	0.0514	0.0413	0.0522
0.0446	0.0385	0.0723	0.0626
0.0418	0.0394	0.0578	0.0447
0.0346	0.0338	0.0361	0.0391
0.0333	0.0354	0.0321	0.0348

The weighted normalized data provides an adjusted view of the capital markets based on the relative importance of each evaluation parameter. This weighting takes into account the significance of Return on Investment (ROI), Liquidity, Volatility, and Regulatory Risk, offering a more nuanced comparison of each market alternative. For the Stock Market, the weighted scores are relatively high across the parameters, particularly in ROI (0.0479) and Liquidity (0.0514). This suggests that, when considering the weighted importance of these factors, the Stock Market is highly favorable due to its strong returns and liquidity. Its Volatility (0.0413) and Regulatory Risk (0.0522) scores are moderate, reflecting a balanced risk-return profile. The Bond Market shows higher weights in Volatility (0.0723) and Regulatory Risk (0.0626), indicating that, despite its stable ROI (0.0446) and moderate Liquidity (0.0385), it is less favorable due to higher exposure to price fluctuations and regulatory concerns. Real Estate Investment Trusts (REITs) have a balanced performance with ROI (0.0418) and Volatility (0.0578), but slightly lower Liquidity (0.0394) and Regulatory Risk (0.0447). This suggests a moderate overall performance with a slightly higher risk profile. The Commodities Market has the lowest weighted scores in ROI (0.0346) and Liquidity (0.0338), and higher Volatility (0.0361) and Regulatory Risk (0.0391). This indicates it is less attractive in terms of returns and liquidity, despite having lower regulatory risk. The Crypto currency Market has the lowest weighted scores across all parameters, including ROI (0.0333) and Liquidity (0.0354), with higher Volatility (0.0321) and Regulatory Risk (0.0348). This reflects its high volatility and regulatory uncertainties, making it the least favorable option in this weighted analysis. This weighted analysis helps identify which markets are most favorable overall, given the relative importance of each evaluation criterion.

TABLE 4. optimality function Si

	optimality function Si
Stock Market	0.1928
Bond Market	0.2180
Real Estate Investment Trusts (REITs)	0.1838
Commodities Market	0.1437
Crypto currency Market	0.1356

The optimality function Sissies values provide a final assessment of the overall attractiveness of each capital market alternative by aggregating the weighted normalized data into a single score for each option. These values represent the combined performance of each market across all evaluation parameters, reflecting both their benefits and drawbacks. The Bond Market emerges as the most optimal choice with the highest Sissies value of 0.2180. This suggests that, despite its lower return on investment, the bond market's stability and lower volatility make it the most favorable option overall. It appeals to investors who prioritize safety and consistency over high returns. The Stock Market follows closely with an Sissies value of 0.1928. This indicates a strong performance across the board, with its high return on investment and liquidity making it an attractive choice. However, it is slightly less optimal than bonds, likely due to higher volatility and regulatory risks. Real Estate Investment Trusts (REITs) have an Sissies value of 0.1838, placing them in the middle of the pack. This score reflects a balanced investment option with moderate risk and return characteristics, appealing to investors seeking a middle-ground approach. The Commodities Market and Crypto currency Market have the lowest Sissies values of 0.1437 and 0.1356, respectively. These scores indicate that, while they may offer potential for high returns, their high volatility and regulatory risks significantly detract from their overall attractiveness. They are suitable for risk-tolerant investors but are less optimal compared to the other options. Overall, the Sissies values help to clarify which capital markets are most optimal based on a comprehensive evaluation of key factors, guiding investors in their decision-making process.

TABLE 5. utility degree Ki

utility degree Ki	
Stock Market	0.884194
Bond Market	1
Real Estate Investment Trusts (REITs)	0.843082
Commodities Market	0.658982
Crypto currency Market	0.621839

The utility degrees assigned to various investment markets reflect the relative value or usefulness perceived by investors, based on factors like stability, risk, and potential returns. The Bond Market, with a utility degree of 1, is considered the most reliable and valuable for investors. Its stability and predictable income make it a cornerstone for those seeking lower-risk investments and consistent returns, particularly in uncertain economic times. The Stock Market follows closely with a utility degree of 0.884194. While offering higher potential returns compared to bonds, it carries greater volatility and risk, making it less universally valuable but still highly attractive to many investors looking for growth opportunities. Real Estate Investment Trusts (REITs) have a utility degree of 0.843082, indicating their appeal as a diversified investment option. REITs offer a blend of income and capital appreciation, making them a valuable addition to portfolios, particularly for those interested in real estate without direct ownership. The Commodities Market, with a utility degree of 0.658982, is seen as less valuable due to its speculative nature and reliance on market conditions. Similarly, the Crypto currency Market, with the lowest utility degree of 0.621839, reflects its high risk and volatility, which, while offering potential for rapid gains, makes it less attractive to most investors seeking stable and reliable returns.

TABLE 6. Rank

Rank	
Stock Market	1
Bond Market	2
Real Estate Investment Trusts (REITs)	3
Commodities Market	4
Crypto currency Market	5

The ranking presented reflects a prioritization of different investment markets based on perceived stability, risk, and potential returns. The Stock Market, ranked first, is often considered the most accessible and dynamic, offering investors opportunities for significant returns through equity investments. Its volatility, however, requires careful analysis and strategy. The Bond Market, placed second, is typically viewed as a safer alternative to stocks, providing more stable and predictable returns, especially for risk-averse investors. Bonds are a crucial component of a balanced portfolio, offering steady income through interest payments. Real Estate Investment Trusts (REITs), ranking third, provide a way to invest in real estate without directly purchasing property. REITs offer potential for both income and capital appreciation, appealing to investors seeking diversification and long-term growth. The Commodities Market, at fourth, includes assets like gold, oil, and agricultural products. While commodities can serve as a hedge against inflation and market volatility, they tend to be more speculative and less predictable, making them riskier investments. Finally, the Crypto currency Market, ranked fifth, is known for its high volatility and speculative nature. Although it presents opportunities for rapid gains, it also carries significant risks, making it suitable primarily for experienced and risk-tolerant investors.

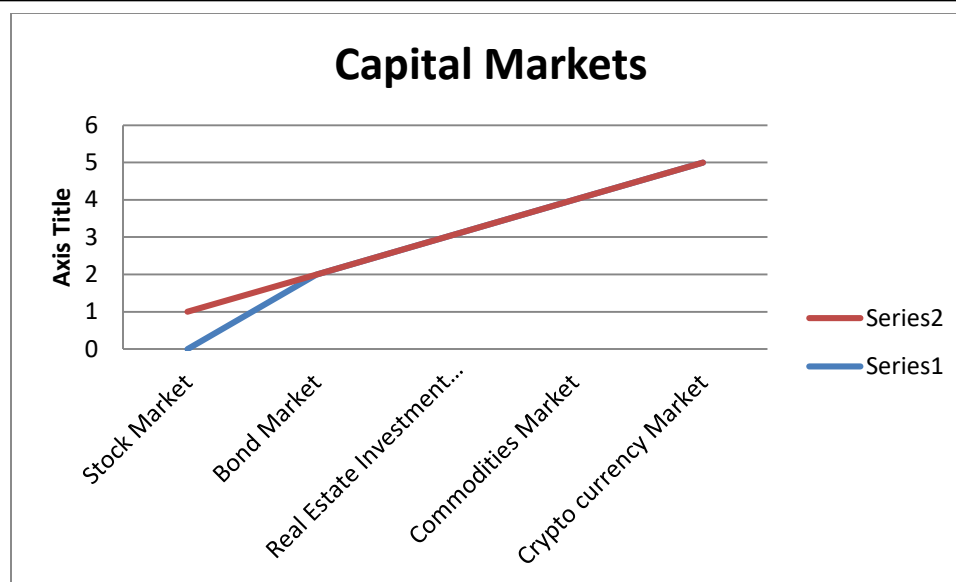


FIGURE 2. Capital Markets

figure .2 Series3 (Green Line): Appears to show a steady increase in rank across the markets, peaking at the Crypto currency Market. Series1 (Blue Line): Starts at the Bond Market and also shows a gradual increase in rank but is only plotted through the Bond Market. Series2 (Red Line): There is no visible data or line associated with this series in the chart. The green line (Series3) might represent an overall ranking across different metrics or a composite index, showing that the Crypto currency Market ranks highest in this context. The blue line (Series1) suggests a ranking starting from the Bond Market, potentially representing another metric or a specific subset of the data. This figure seems to illustrate how different capital markets are ranked relative to each other, possibly based on various criteria like investment performance, risk, or other key indicators.

4. CONCLUSION

The core concept of efficient capital market theory is that the prices of securities are shaped by the actions of self-interested, rational agents. Essentially, claiming that capital markets are efficient is akin to asserting that economic theory, rather than any other field, is the most suitable framework for analyzing securities pricing. The initial, intuitive explanation of efficient capital market theory was meant to highlight its close connection to economic theory. However, in practical terms, empirical tests of market efficiency often involve testing the martingale model. This review should now make it evident that the shift from the intuitive understanding of market efficiency to the martingale model is not straightforward. In this review, I present a straightforward framework to categorize empirical methods for identifying supply effects. These effects result from a mix of three key factors: investor preferences, limited intermediation, and corporate opportunism. When investor preferences defined as preferences and expectations that change independently of a company's fundamentals interact with intermediaries in imperfectly competitive markets, prices can diverge from their fundamental values. Companies tend to raise and invest capital when prices are high and interest rates are low, and conversely, they repurchase equity, reduce debt, and cut investment when prices are low and interest rates are high. The combination of these three factors leads to the emergence of supply effects.

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