



Identification and Ranking of Indicators Affected by Political Shocks in Iran's Capital Market: An Exploratory Approach with CVR and CVI Validation

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ABSTRACT

Political risk is a complex and multidimensional phenomenon that significantly affects capital markets, especially in emerging economies such as Iran. Political shocks can rapidly reshape economic expectations and investor behavior, creating serious challenges for risk assessment and management. This study aims to identify and rank the indicators affected by political shocks in companies listed on the Tehran Stock Exchange and Iran Fara Bourse.

Using an exploratory design, relevant theoretical foundations and empirical literature were reviewed to extract initial indicators. Expert consultation and standardized CVI (Content Validity Index) and CVR (Content Validity Ratio) questionnaires were used to validate and prioritize these indicators. The final ranked indicators provide a foundation for future development of models sensitive to political shocks in capital markets. This research follows an exploratory-simulation approach.

Keywords: Political Shock, Iran's Capital Market, Indicator Ranking, Exploratory Approach, CVR and CVI Validation.

1. Introduction

With scientific and technological advancement, human societies have continuously sought to improve living standards. Rising income levels lead to greater consumption, increased demand, and ultimately economic growth through higher production. Capital is a core factor of production, but if misallocated or drawn to more profitable speculative markets such as gold or real estate, it can shift away from productive sectors. In this context, financial markets play a critical role as channels for collecting, saving, and investing private-sector liquidity to finance medium- and long-term projects. Participants—both individuals and legal entities—can invest in these projects and receive returns proportional to their contributions. However, a key challenge is the uncertainty of profitability across various sectors within financial markets (Rezaei Lova et al., 2022).

Efficient capital accumulation, resource allocation, and risk distribution are essential for the stable and healthy functioning of the financial system, directly influencing economic growth and societal development. Concepts such as sustainable economy and active finance highlight the importance of maintaining an efficient, stable, and resilient financial system. In markets prone to political shocks—sudden, disruptive events that reshape investor expectations—this need for resilience becomes even more urgent (Howell, 2014). For a financial market to effectively execute its core functions, including resource allocation and capital accumulation, the participation of investors is essential. Only when a large number of investors can efficiently engage can the primary functions of the capital market be fully realized. Since investors primarily aim for profitability, financial markets have become increasingly complex. Under these conditions, investors must consider risk diversification when seeking returns, which becomes a strong motivating factor. Investors can secure both profit and risk diversification through asset allocation. Therefore, studying the optimization of securities portfolio selection models is deemed necessary.

Due to the importance of portfolio selection models and the risk–return criterion, the mean–variance model introduced by Markowitz marks the foundation of modern portfolio theory (MPT) (Markowitz, 1952; Zhang, Li, and Gu, 2018). As a result, many researchers have studied portfolio theory using intertemporal selection and dynamic positioning

approaches, leading to refinements of the MPT framework and advances in modern financial theory. Furthermore, subsequent scholars have systematically combined earlier results to investigate stochastic programming models and deterministic multi-objective models for portfolio selection (Temple, 2014; Abdulaziz, 2018).

Therefore, accurate measurement of asset returns and risks is essential for the effectiveness of portfolio selection models. Markowitz pioneered the mathematical analysis of asset returns and risks and introduced the mean-variance portfolio model, which measures returns and risks using the mean and variance (Markowitz, 1952). However, some researchers have criticized the use of variance as a risk measure and proposed alternative metrics such as semi-variance and mean absolute deviation to overcome its limitations (Mao, 2017; Yamazaki, 2018).

Analyzing stock market movements is often a challenging task for both investors and researchers. This is primarily because the stock market is a dynamic, nonlinear, nonstationary, nonparametric, noisy system characterized by numerous and complex anomalies (Dai et al., 2020).

Investors consider factors such as risk and return when making decisions. Unlike major investors who have access to extensive tools and resources to balance these variables, individual investors often lack such capabilities. A combination of factors—including high economic and political volatility, instability of laws and regulations—leads to increased secondary risk arising from individualism and the unpredictability of investor behavior in the stock market.

The investment process relates to how investors decide which types of tradable securities to invest in, as well as the amount and timing of their investments. Various methods have been proposed for the investment process. One approach includes stages such as setting investment policies, conducting securities analysis, portfolio formation, portfolio revision, and portfolio performance evaluation. Another approach focuses on two main areas: securities analysis and portfolio management. Securities analysis involves estimating the benefits of individual investments, whereas portfolio management encompasses analyzing the investment mix and managing and maintaining a collection of investments (Raei & Alibeigi, 2010).

The approach of securities analysis and selection can be applied after identifying the target investment market and the relevant investment sectors. Given that the focus of this study is the Tehran Stock Exchange and the capital market, this approach is suitable for investors who choose the Tehran Stock Exchange for their investments. The main questions and concerns are which stock to buy, when, and at what price; whether to hold, buy more, or sell the stock; and additionally, which stocks and how many shares to sell, at what time, and at what price (Raei et al., 2015).

Many factors influence the level of financial development (financial market development) in countries. These factors include historical elements such as legal, political, cultural, ethical, and geographical components, as well as policy-related factors such as the political and macroeconomic environment, institutional, legal, and informational infrastructures, regulations and supervision, competition and efficiency, financial liberalization, and improved access to financial services, among others (Jahangard & Ali Asgari, 2011). One of the most significant features of any country's capital market is its sensitivity to political issues. Political changes within the governance structure, as they entail shifts in economic perspectives, have a tangible and immediate impact on the stock market. In any country where investors perceive risk to be unacceptably high, no financial strategy will succeed in attracting investment. Today, the global economy and society, much like in the past, are facing substantial levels of political risk. However, it is evident that the nature of these risks has evolved, making political risk a highly complex and multidimensional phenomenon (Gogordchian et al., 2015).

Various studies in the field of finance and capital markets have consistently sought to identify the variables that influence stock returns, with the aim of monitoring, analyzing, and managing these indicators to maximize returns and minimize undesirable risk. The present study aims to identify and determine the indicators affected by political shocks, and subsequently the parameters influencing the capital market and stock returns, in order to facilitate and enhance investors' decision-making. Given the significant impact of political shocks on financial markets and stock performance, it is essential to identify the relevant parameters so that, through their analysis, optimal decisions can be made to achieve favorable returns in the capital market. The findings of this study can be beneficial and applicable to

professionals and experts, capital market participants, investors, and financial managers.

Theoretical Foundations of the Study Shock in Economics

In economics, a shock refers to sudden and unexpected events that impact the economy and may manifest in either positive or negative forms. These shocks typically occur beyond the control of economic policymakers and decision-makers and are often associated with factors such as technological changes, financial crises, global commodity price fluctuations, natural disasters, wars, or political changes. Shocks can significantly influence key macroeconomic variables such as Gross Domestic Product (GDP), unemployment rate, inflation, and international trade. In certain cases, shocks may cause economic harm; however, under specific circumstances, they may also present opportunities for reform and innovation (Olivier Blanchard & David Johnson, 2012).

Economic Shock

An economic shock refers to any change in fundamental macroeconomic variables or relationships that significantly affects macroeconomic outcomes and performance indicators such as unemployment, consumption, and inflation. Shocks are often unpredictable and typically result from events perceived to be beyond the scope of normal economic equations. Economic shocks have broad and lasting effects on the economy and, according to Real Business Cycle (RBC) theory, are considered the primary causes of recessions and economic cycles. These shocks are random, unforeseen events originating outside standard economic models. Economic shocks can be classified based on the sector from which they originate or whether they primarily affect supply or demand. Precise definition: An economic shock is any sudden change in key economic variables that leads to unexpected and significant impacts on economic trends—such as changes in Gross Domestic Product (GDP), unemployment rate, inflation, interest rates, and more (Olivier Blanchard & David Johnson, 2012).

Risk (in Economics and Finance)

Risk refers to the probability of an unexpected and undesirable event or outcome that can negatively

impact the return or value of an investment. It is typically associated with uncertainty and may relate to fluctuations in prices, interest rates, exchange rates, financial crises, or natural disasters. At its core, risk involves the divergence between actual outcomes and expected outcomes. Generally, risk denotes the likelihood of unexpected changes in economic or financial variables that may adversely affect the return or performance of an investment or economic decision. These changes can stem from various causes, including external factors, market volatility, shifts in economic conditions, or even managerial decisions (Burton G., 2019).

Systematic Risk

Systematic risk refers to the type of risk that affects the entire market or a broad segment of markets and arises from factors such as changes in economic conditions, political events, or other general changes. This kind of risk impacts all assets and markets simultaneously and cannot be eliminated through diversification of a portfolio. Systematic risk is the risk arising from changes in macroeconomic factors like interest rates, inflation, economic crises, wars, and other global events that influence all sectors of the economy and financial markets (Burton, 2019).

Unsystematic risk

refers to the risk specific to a particular company or industry, arising from internal factors such as management decisions, strategic choices, changes in financial performance, or other company-specific issues. This type of risk can be reduced or eliminated through diversification in an investment portfolio because the risks unique to a single company can be offset by including other assets in the portfolio. The standard definition of unsystematic risk describes it as risk related to a specific asset or market segment, which may stem from factors like management practices, business strategies, or a company's financial performance. This risk is easily mitigated through portfolio diversification (Berton, 2019).

The risk of a security, regardless of its type, can be attributed to two categories of factors. The first category relates to the company itself and affects only that specific company. The second category involves market-related factors that relatively affect all companies. The first category of factors is avoidable,

meaning it can be reduced or eliminated by selecting an appropriate company. These factors are referred to as avoidable, controllable, or unsystematic risks, and the risk arising from these factors is called avoidable risk or unsystematic risk. The second category of factors is unavoidable, and the risk resulting from these factors is called systematic risk (Haghani Far et al., 2015).

Since one of the most influential economic shocks currently is the shock resulting from political decisions affecting investment, capital market management, exchange rates, and political decisions such as the imposition of economic sanctions, this study, while considering other factors, focuses on political shock as one of the variables that has the greatest impact on the economy and is also the main source of political risk.

Political Risk: A type of risk faced by investors, large corporations, and governments. Political risk refers to the reduction in the value of investments caused by changes in the policies and political systems of a country. When politically weaker groups attempt to transfer benefits to stronger groups as a way to consolidate their own position, such efforts generally lead to changes that affect asset values. When these changes originate from legal, judicial, or administrative authorities of the government, regardless of whether political or economic interests are involved behind the scenes, the resulting risk is termed political risk. Changes in laws, including tax laws and regulations related to imports and exports, also contribute to political risk.

Political risk depends on investors' expectations about the political future of a country. Therefore, changes in stock prices caused by political risk are beyond the control of the issuing company. Sudden events such as the outbreak or end of a war, the election of a new president or their unexpected death, a surge in speculation, sudden large withdrawals of gold from the market, and similar occurrences have significant psychological impacts on the stock market. Overall, this risk creates major changes in a country's economic-political environment. Political risk refers to change—most often driven by government actions—that leads to a restructuring of the business environment in a country. The political risk index includes 12 variables: external conflicts, investment profile, government stability, internal conflicts, socioeconomic conditions, corruption, democratic accountability, ethnic tensions, rule of law,

militarization, religious tensions, and bureaucratic quality (Jalali et al., 2017).

Precise Definition of Political Risk:

Political risk refers to the likelihood of changes in a country's political environment that may have either negative or positive impacts on businesses, investments, and economic activities. These changes may include shifts in laws, economic policies, government decisions, political unrest, wars, revolutions, or other political developments that influence the economic environment of a country. Political risk involves unexpected and unpredictable transformations in domestic or international policies that can have direct or indirect effects on economic operations, investment, and trade (Paolo Mauro, 1995).

Research Background

Financial markets, by providing liquidity and reducing transaction costs through lower search and information expenses, serve as a suitable channel for directing idle household savings toward production and capital provision for companies and economic institutions. They are considered fundamental tools for capital financing. Among the most important and popular financial markets in most countries are stock markets, although their volatile behavior has always been a subject of discussion and investigation. Due to the significant role of stock markets in attracting both small and large-scale savings, identifying the factors influencing stock market fluctuations has always been of interest, as these fluctuations can lead to major changes in key economic variables. In the stock market, extensive volatility typically results in capital inflows and outflows, and the economic consequences of such movements can be highly risky for countries. Therefore, examining the interrelations between capital market volatility and key macroeconomic variables is of particular importance (Ebrahimi, 2019).

In this study, the macroeconomic variable of political shock is considered as a factor in optimizing stock portfolios in the capital market.

Based on previous studies, there are numerous factors (indicators) that have a direct impact on portfolio optimization. According to the conducted analyses, variables such as earnings volatility, return on investment, firm value, market risk premium, stock profitability, financial structure, liquidity, and survival

index (Zamanpour et al., 2021); risk (Beikjani & Didehkani, 2022; Shiri Ghehi et al., 2017); and the generalized capital asset pricing model (Esmaili et al., 2021) can all influence the optimization of investment portfolios.

Lustrupis (2001), using the Fama model, investigated the relationship between stock returns and macroeconomic variables for OECD countries on a monthly basis over the period 1962–1966. The results indicated that in all sampled countries, the stock index reacts positively to changes in the volume of liquidity.

Hilde et al. (2010), in a study titled "Identifying the Dependence between U.S. Monetary Policy and the Stock Market", examined the short-term and long-term dependence between the U.S. stock market and U.S. monetary policies using a VAR model. They utilized monthly data for the Consumer Price Index, the Dollar Price Index, Industrial Production Index, Stock Price Index, and Interest Rates over the period 1983–2002. Their findings revealed a strong dependence between interest rates and stock prices, such that in response to monetary policy shocks (a one-percent increase in interest rates), real stock prices immediately decline by approximately 7 to 9 percent. Therefore, the stock market is considered a significant channel for guiding monetary policy in the United States.

Mehrabian (2004), in a study titled "Stock Market Sensitivity to Monetary and Financial Fluctuations", empirically examined the impact of financial shocks and macroeconomic variables on the stock market using quarterly time series data from 1990 to 2000 and employing a VAR model. The variables used in the study include the stock price index, the free-market exchange rate of the U.S. dollar, the retail price index, gross domestic product (GDP), total investment at current prices, and imports and exports of goods and services. The impulse response results indicated that, except for imports of goods and services—which had a negative effect on the stock price index—all other variables had a positive effect. Moreover, variance decomposition results revealed that in the short term, the exchange rate of the dollar in the free market, after imports and exports, accounted for the largest share in explaining the stock price index. In the short term, monetary variables had the most significant impact, whereas in the long term, GDP followed by inflation played the most prominent roles in explaining stock price fluctuations. Overall, the study concluded that in

the long run, financial variables had the greatest influence on the stock price index.

Makhtari (2005), using a Vector Autoregression (VAR) model and quarterly data from March 1997 to March 2003, examined the relationship between the overall stock price index and the cash return index with variables such as the consumer price index, money supply, exchange rate, and gold coin price. The findings indicated that monetary policies have a positive effect on stock prices and contribute to reducing the cost of capital.

Mosaee et al. (2010), in the article titled "The Relationship Between the Stock Market and Macroeconomic Variables," examined the relationship between money supply, gross domestic product (GDP), exchange rate, and stock price index using data from 1991 to 2006. They employed Engle-Granger, ARDL, Johansen, Phillips-Hansen, and error correction models to explain short-term and long-term relationships. Their model showed a long-term relationship between the variables and the stock price index. Results indicate that while money supply has the greatest impact on stock price changes, the effects of exchange rate and GDP on the stock market involve significant uncertainty.

As observed, previous studies have examined the effects of macroeconomic variables or shocks resulting from fiscal and monetary policies on the capital market. However, no research has been conducted to investigate the impact of political shocks and identify the components affected by them. In this regard, this study is innovative.

Research Methodology

This study is applied in terms of purpose and a mixed-methods research combining qualitative and quantitative approaches. Initially, based on the research problem, a literature review was conducted to identify variables that directly affect the factors of political shock in the capital market. Following this, through the exploration of new concepts, the overall framework of the research, including the main objective and specific goals, was developed based on an exploratory approach. Then, by analyzing key terms and reviewing empirical studies in the field, and consulting experts, influential indicators affecting political shock factors in the capital market were extracted. Finally, using a standardized questionnaire

with CVI and CVR measures, the final impactful indicators were identified and ranked.

Population and Sample

The population under study consists of data obtained from companies listed on the Tehran Stock Exchange and Iran's Over-the-Counter (OTC) market. To assess the model's optimality, financial data of the selected companies from the years 1388 to 1401 (2009 to 2022) were used in the programming model.

Conceptual Model of the Research

To examine the presence of economic shocks in the stock market, various parameters can be used that indicate sudden fluctuations and changes in the market. These parameters include stock return volatility, trading volume, macroeconomic indicators, interest rates, and financial ratios, which are defined as follows:

- 1) Stock Return Volatility: A sudden increase in the volatility of stock returns may indicate an economic shock.
- 2) Trading Volume: A sharp increase or decrease in trading volume can also signal the occurrence of an economic shock.
- 3) Macroeconomic Indicators: Unexpected changes in indicators such as GDP, unemployment rate, and inflation rate.
- 4) Interest Rate: Sudden changes in interest rates that can affect stock valuation.
- 5) Financial Ratios: Unusual changes in company financial ratios, such as the price-to-earnings (P/E) ratio.

In this study, first, through a literature review of books and articles related to the research problem, shocks influenced by political shocks were identified. Then, the impact of these shocks on various indicators was also obtained through library studies. To validate and complete these indicators, Questionnaire No. 1 was designed. By presenting the identified indicators, experts' opinions were sought to introduce any indicators not recognized in the literature review. After collecting expert feedback and incorporating their suggestions, the final list was compiled as follows.

Table(1) – Final Indicators Affected by Political Shocks Based on Experts' Opinions

Economic Shock	Social Shock	Cultural Shock Indicators
Gross Domestic Product (GDP)	Unemployment Rate	Cultural Diversity Index
Unemployment Rate	Inflation Rate	Social Cohesion Index
Inflation Rate	Consumer Price Index (CPI)	Cultural Freedom Index
Interest Rate	Poverty Index	Cultural Participation Index
Debt-to-GDP Ratio	Inequality Index	Trust in Cultural Institutions Index
Stock Price Index	Public Trust Index	Individual Participation in Family
Gini Coefficient	Unjust Tax Collection	
Interbank Interest Rate	Unequal Wealth Distribution	
Exchange Rate Index	Wage Growth Rate Gap	
Long-term Risk-free Return Rate	Inflation Growth Rate Gap	
Long-term Risk-free Rate of Return	Cost Growth Inconsistency	
Bank Deposit Rate	Household Income	
Misery Index		
Technology Growth Index		

In the second questionnaire, the above indicators were evaluated based on expert opinions using the CVI (Content Validity Index) and CVR (Content Validity Ratio) questionnaires. The reasoning method for the questionnaire is explained as follows.

A total of 11 financial experts, including university professors and stock market specialists, responded to the second questionnaire. The results of their responses are as follows.

Table (2) – Analysis of Questionnaire Results Using CVI and CVR Methods

Row	Index	Number of Essential Experts	Total Number of Experts	CVR	CVI	Status CVR	Status CVI
1	Gross Domestic Product (GDP)	10	11	818/0	909/0	Essential	Acceptable
2	Inflation Rate	11	11	1	1	Essential	Acceptable
3	Interest Rate	11	11	1	1	Essential	Acceptable
4	Debt-to-GDP Ratio	7	11	273/0	636/0	Not Essential	Needs Revision
5	Stock Prices	11	11	1	1	Essential	Acceptable
6	Gini Coefficient	6	11	091/0	545/0	Not Essential	Rejected
7	Interbank Interest Rate	10	11	818/0	909/0	Essential	Acceptable
8	Long-Term Risk-Free Return Rate	10	11	818/0	909/0	Essential	Acceptable
9	Bank Deposits	9	11	636/0	818/0	Essential	Acceptable
10	Misery Index	6	11	091/0	545/0	Not Essential	Rejected
11	Consumer and Producer Uncertainty	7	11	273/0	636/0	Not Essential	Needs Revision
12	Investment Uncertainty	10	11	818/0	909/0	Essential	Acceptable
13	Life Expectancy	3	11	454/0	273/0	Not Essential	Rejected
14	Technological Growth	8	11	454/0	727/0	Not Essential	Needs Revision
15	Unfair Tax Collection	2	11	636/0	182/0	Not Essential	Rejected
16	Wage Growth Gap	6	11	091/0	545/0	Not Essential	Rejected
17	Inflation Growth Gap	7	11	273/0	636/0	Not Essential	Needs Revision
18	Cost Growth Mismatch	6	11	091/0	545/0	Not Essential	Rejected
19	Household Income	7	11	273/0	636/0	Essential	Rejected
20	Unemployment Rate	9	11	818/0	818/0	Not Essential	Acceptable
21	Consumer Price Index (CPI)	8	11	454/0	727/0	Not Essential	Needs Revision
22	Poverty	6	11	091/0	545/0	Not Essential	Rejected

Row	Index	Number of Essential Experts	Total Number of Experts	CVR	CVI	Status CVR	Status CVI
23	Income Inequality	6	11	091/0	545/0	Essential	Rejected
24	Public Trust	10	11	818/0	909/0	Not Essential	Acceptable
25	Cultural Diversity	4	11	273/0	364/0	Not Essential	Rejected
26	Social Cohesion	5	11	091/0	455/0	Not Essential	Rejected
27	Cultural Freedom	5	11	091/0	455/0	Not Essential	Rejected
28	Trust in Cultural Institutions	5	11	091/0	455/0	Not Essential	Rejected
29	Distrust in National Media	5	11	091/0	455/0	Not Essential	Rejected
30	Individual Participation in Family	3	11	454/0	273/0	Not Essential	Rejected
31	Level of Social Participation	5	11	091/0	455/0	Essential	Rejected

Content Validity Assessment Method – CVI and CVR Calculation

Content validity is assessed based on experts' opinions regarding the degree of alignment between the content of the measurement tool and the research objective. For this purpose, both qualitative and quantitative methods are considered. In the qualitative assessment, the researcher asks the experts to provide feedback on the tool, based on which the necessary revisions are made.

To assess content validity quantitatively, two indices are used: the Content Validity Ratio (CVR) and the Content Validity Index (CVI). The CVI is calculated by aggregating the number of experts who rated an item as "relevant but needs revision" or "highly relevant," divided by the total number of experts. To calculate the CVR, experts are asked to rate each item using a three-point scale: "essential," "useful but not essential," and "not essential." The responses are then calculated using the following formula.

$$CVR = \frac{n_e - \frac{N}{2}}{\frac{N}{2}}$$

In this formula, n_e is the number of experts who answered "essential," and N is the total number of experts. If the calculated value is greater than the table value, the content validity of that item is accepted.

Using this method, the CVI is calculated for all items, and their average is defined as the overall CVI. (If the CVI score is above 0.79, the content validity of the scale is confirmed. If the CVI score is between 0.79 and 0.70, revision is needed, and if $CVI < 0.70$, it is rejected.)

Table (3) – Decision-Making Regarding CVR

Number of panel experts	Minimum validity value
5	99/0
6	99/0
7	99/0
8	85/0
9	78/0
10	62/0
15	49/0
20	42/0
25	37/0
30	33/0
40	29/0

Content Validity Ratio (CVR) Formula

The CVR for each item was calculated using the following formula:

$$CVR = \frac{n_e - \left(\frac{N}{2}\right)}{\frac{N}{2}}$$

n_e :Number of experts who rated the item as essential.
 N: Total number of experts

Content Validity Index (CVI)

This index is calculated based on the number of experts who rated the item as 3 or 4.

$$CVI = \frac{n_e + n_i}{N}$$

n_e : Number of experts who rated the item as essential.

n_i :Number of experts who rated the item as useful but not essential.
 N :Total number of experts

After reviewing and compiling expert opinions, the essential indicators were determined as shown in the table below.

Table (4): Final Indicators for Developing the Optimization Model

Row	Index	CVR	CVI	Description
1	Gross Domestic Product (GDP)	0.818	0.909	Indicates the overall level of a country's economic production, directly affecting economic stability and capital market behavior.
2	Inflation Rate	1	1	As one of the main macroeconomic indicators, it deeply influences purchasing power, spending, and investment decisions.
3	Interest Rate	1	1	Determines the cost of borrowing and investing, affecting asset return rates and capital market volatility.
4	Stock Price	1	1	A key measure for evaluating investment returns and assessing the state of capital markets.
5	Interbank Interest Rate	0.818	0.909	The short-term financing rate between banks, influencing liquidity and investment conditions in the market.
6	Long-term Risk-free Rate of Return	0.818	0.909	A benchmark for evaluating returns on secure investments and used to compare with returns on riskier assets.
7	Bank Deposit	0.636	0.818	As a low-risk investment tool, it helps maintain balance in an investment portfolio.
8	Investment Uncertainty	0.818	0.909	Reflects fluctuations caused by economic and political shocks and directly influences investor decisions.

Discussion and Conclusion

In this study, given the significance of political shocks on financial markets and their impact on stock returns, the most influential quantitative and qualitative variables were initially identified through a comprehensive literature review and expert consultations, which can be utilized for optimal financial modeling. It should be noted that variables with measurable quantitative data possess higher applicability in modeling. For variables with qualitative data, statistical methods such as DEMATEL should be employed first to convert them into quantitative forms for integration into modeling frameworks. Overall, identifying variables affected by political shocks greatly aids in developing optimal models during periods of market turbulence. According to the analyses conducted, these influential parameters include stock return volatility, trading volume, macroeconomic indicators, interest rates, and financial indices.

By screening the indicators using CVR and CVI, the essential variables were more precisely identified. As a result, nine key variables affected by political shocks were determined through two questionnaires and evaluation of their validity and content. It is

recommended that, given the qualitative nature of some variables, quantitative variables be prioritized for accurate model estimation. When qualitative variables are incorporated into model development, their weighting should be assigned using rigorous and standardized criteria.

Additional Recommendations

Future research should consider integrating the identified indicators into dynamic portfolio optimization and risk assessment models to evaluate their predictive power in volatile market conditions.

Incorporation of machine learning techniques and agent-based modeling can provide a more robust framework for capturing nonlinear effects and complex interactions among variables affected by political shocks.

It is advisable to expand the expert panel to include international perspectives to increase the generalizability of the findings across different emerging markets facing political risks.

Longitudinal studies could examine the temporal stability of these indicators' effects and assess how changes in political environments alter their significance over time.

Lastly, further empirical validation using real market data will strengthen the practical applicability of the proposed indicators in financial decision-making.

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