Journal of Emerging Technologies in Accounting, Auditing and Finance
ETAAF
Vol.3, No.1, Spring 2025

Investigating the Relationship between the Uncertainty of Economic Policies and the Fulfillment of Social Responsibilities, Considering the Role of Government Ownership

Mehdi Rezaee
Assistant Professor, Faculty of Business and Economics, Persian Gulf University, Bushehr, Iran.
(corresponding author)
Email: m.rezaeimehdi@gmail.com

Hanieh Hasani
Department of Accounting, Boushehr Branch, Islamic Azad University, Boushehr, Iran.
Email: 6868hani.hasani@gmail.com

Mohammad Hosein Hemati
Department of Accounting, Boushehr Branch, Islamic Azad University, Boushehr, Iran.
Email: Mhossin091@yahoo.com

Submit: 2025/01/31 Accept: 2025/10/03

Abstract

Objectives: This study aims to investigate the relationship between economic policy uncertainty and corporate social responsibility (CSR) practices, considering the moderating role of government ownership among firms listed on the Tehran Stock Exchange (TSE).

Methodology/Design/Approach: The research is applied in nature, covering the period 2017–2022. A sample of 100 firms was selected using the stratified random sampling method. The hypotheses were tested using multiple regression analysis to examine the impact of both direct and indirect indicators of economic uncertainty on CSR activities.

Findings: The results reveal that the inflation rate (a direct indicator of economic uncertainty) has a positive and significant relationship with CSR participation, while GDP (an indirect indicator) shows a negative and significant relationship. These findings suggest that as economic uncertainty increases, firms tend to engage more in CSR activities. However, in government-owned firms, greater economic uncertainty leads to reduced CSR participation.

Innovation: This study contributes to the literature by highlighting how economic uncertainty shapes CSR practices and demonstrating the contrasting effects in private versus government-owned firms. The findings offer practical implications for policymakers and corporate managers seeking to balance economic conditions with social responsibility commitments.

Keywords: Economic Policy Uncertainty, GDP, Inflation, CSR.

1. Introduction

Corporate social responsibility (CSR) has become a central component of contemporary business strategy, significantly influencing corporate decision-making and organizational outcomes (Li et al., 2024). As societal expectations evolve, stakeholders increasingly demand ethical and sustainable business practices, compelling firms to integrate CSR into their operations to ensure long-term sustainability and competitiveness (Zho et al., 2024). By actively engaging in CSR activities, firms not only fulfill their ethical obligations but also gain tangible benefits, such as enhanced brand trust, reputation, and customer loyalty. Additionally, CSR initiatives can function as strategic tools for risk management, helping firms navigate complex regulatory environments, mitigate reputational risks, and prevent potential crises (Wang et al., 2024).

Contemporary finance and economics literature also emphasizes the critical role of policy uncertainty in shaping firm performance and strategic decision-making. Variations in government regulations, fiscal policies, trade agreements, and geopolitical conditions introduce unpredictability and risk into business operations, affecting investment decisions, capital allocation, and market behavior (Joe & Lee, 2024). Empirical studies have highlighted correlations between policy uncertainty and firm policies, including innovation, capital expenditure, and risk management strategies. Consequently, understanding the impact of policy uncertainty on corporate and investment behavior has become a key research focus.

Environmental and economic instability, driven by macroeconomic trends, globalization, technological advances, and increased competition, further heightens uncertainty. Managers often exercise discretion and flexibility to adapt to such environmental changes, influencing investment policies and strategic decisions (Huang, Sun, & Zha, 2017; Drobetz et al., 2018; Bloom et al., 2012). Research indicates that high environmental economic uncertainty negatively affects capital market returns (Baker & Bloom, 2013), and investment decisions—being long-term and resource-intensive—are particularly sensitive to economic instability, potentially impacting the firm's capital stability (Jori, Khieu & Ngo, 2020).

In recent years, organizational objectives have shifted from solely maximizing shareholder wealth to protecting broader stakeholder interests, including societal welfare (Rezaee, Dou, & Zhang, 2017). CSR has thus become a key area of focus in financial and accounting research, examining its interplay with financial functions such as earnings quality (Hung, Wong & Zhang, 2015). CSR entails actions that extend beyond contractual and legal obligations to minimize negative social and environmental impacts while maximizing positive contributions. This can include activities aimed at serving communities, society, and the environment beyond what is legally required (Joe & Harjoto, 2012). Moreover, CSR can create competitive advantages by aligning financial and non-financial values, enhancing reputation, shareholder reciprocity, risk management, and innovation (Levno & Srivastava, 2019; Viswanathan et al., 2020).

Economic policy uncertainty may reduce the willingness of both individual and institutional investors to invest, including in CSR initiatives. Investments in social responsibility can positively affect firm performance by promoting ethical practices, increasing sales, enhancing customer loyalty, and supporting sustainable profits. At the societal level, CSR activities help address social needs and reinforce stakeholder awareness of a firm's ethical and societal obligations, thereby encouraging responsible investment decisions (Fazilat et al., 2021).

Despite widespread privatization, governments continue to hold stakes in strategic industries such as water, electricity, mining, and defense, making state-owned enterprises (SOEs) a significant part of the economy. Research suggests that SOEs may pursue more diverse social objectives compared to private firms. Therefore, examining the role of state ownership in moderating the relationship between economic policy uncertainty and CSR performance is critical for advancing the literature.

2. Theoretical Foundations and Research Background

The impact of economic uncertainty on corporate credit policies remains inconclusive, as empirical findings and theoretical perspectives have yet to reach a consensus. During periods of economic downturn or instability, demand for products may decline or fluctuate (Jury et al., 2020). According to Emery (1984), firms can respond to such demand fluctuations by adjusting prices, modifying production, or extending trade credit. In particular, increasing the provision of business credit is often employed as a strategy during recessions to sustain operations and support customers.

Economic uncertainty—defined as the risk arising from unpredictable changes in fiscal, regulatory, and monetary policies at the macroeconomic level—has more profound implications than a temporary recession. It can exacerbate financial constraints by reducing returns on assets and increasing the cost of debt (Pastor & Veronesi, 2013). Firms often respond to heightened uncertainty by increasing cash reserves (Phan, Sharma, & Tran, 2018). Baker, Bloom, and Davis (2016) note that economic uncertainty can amplify the adverse effects of a recession, hindering recovery. In such environments, both buyers and sellers face liquidity risks, and access to business credit may be restricted, with creditors shortening repayment periods and raising interest costs (Jury et al., 2020).

The real options theory provides a useful framework for understanding how economic uncertainty influences corporate investment decisions, including social responsibility. Real options theory emphasizes the importance of flexibility when investment decisions are partially irreversible and managerial discretion is exercised (Kogut & Kulati, 2001). Irreversible investments, such as long-term projects or social responsibility initiatives, cannot be fully recovered without significant cost. Uncertainty can lead to deviations between projected and actual future cash flows, skewing net present value calculations and leading firms to postpone or reduce investments (Yuan et al., 2022).

Empirical studies support the notion that firms adopt more cautious investment behavior under uncertainty. Rodrik (1991) and Jeong (2002) show that policy uncertainty leads firms to delay investments, while Julio and Yook (2012) demonstrate that political uncertainty, such as during presidential election years, can reduce corporate capital expenditures. Similarly, Gulen and Lon (2016) found that higher economic uncertainty correlates with lower levels of capital investment. Social responsibility initiatives, being long-term and often non-recoverable (e.g., charitable donations), fall into the category of high-risk investments (Cruz & Wakolbinger, 2008; McWilliams & Siegel, 2000).

Economic uncertainty increases the risk associated with CSR investments. According to real options theory, firms may delay CSR activities until uncertainty declines, treating the postponement as a valuable "option to wait" (Yuan et al., 2022). However, CSR can also serve as a strategic tool for achieving long-term competitive advantages, building stakeholder trust, and enhancing customer loyalty. In some cases, firms may increase CSR investment during periods of high uncertainty to signal resilience and commitment to stakeholders (Baker et al., 2016). Consequently, prior research has not reached definitive conclusions regarding the effect of economic uncertainty on CSR investment.

Ownership structure further moderates these dynamics. State-owned enterprises (SOEs) often exhibit less sensitivity to economic uncertainty due to government support, which stabilizes their investment policies (Li & Zhang, 2010). At the same time, partial state ownership may incentivize firms to engage more actively in CSR, aligning with government policies and societal expectations. Therefore, the impact of economic uncertainty on corporate investment decisions, including CSR, can vary depending on the level of state ownership (Yuan et al., 2022).

3. Empirical Background

Several recent studies have examined the relationship between economic policy uncertainty, corporate governance, ownership structure, and corporate social responsibility (CSR) in both emerging and developed markets.

Hong et al. (2024) investigated the effect of economic policy uncertainty on CSR performance in six emerging Southeast Asian countries using panel data from 2004 to 2021. Their findings indicate a negative relationship between national-level economic policy uncertainty and CSR performance, particularly concerning environmental and social dimensions.

Shahzad et al. (2024) explored the moderating role of CSR disclosure in the relationship between corporate governance and corporate risk behavior. Using panel data from 73 non-financial firms listed on the Pakistan Stock Exchange between 2014 and 2018, they found that stronger corporate governance measures, in contexts with weak regulations, can increase corporate risk. However, CSR disclosure enhances stakeholder information, reduces information asymmetry, and mitigates operational risk.

Yuan et al. (2022) examined the effect of economic uncertainty on firms' participation in social activities in China during 2008–2015, considering the role of state ownership. Their results demonstrate that economic uncertainty increases firms' CSR engagement, and this relationship is amplified for state-owned enterprises.

Mamori (2021) studied the link between CSR and firm performance across 23 developed countries from 2002 to 2013, considering exploration and growth strategies. The study revealed a positive and significant relationship between CSR participation and firm performance, with growth and exploration strategies strengthening this relationship.

Dalkhi (2021) investigated the effect of ownership structure on CSR in French firms listed on the Paris Stock Exchange between 2010 and 2018. The findings indicate that higher institutional ownership is positively associated with greater CSR engagement, highlighting the role of institutional shareholders in promoting social activities within firms.

Ebrahimi et al. (2023) analyzed ownership structure, political uncertainty, and asymmetric cost behavior using a sample of 325 firms listed on the Tehran Stock Exchange and Iran Fara Bourse. The study found that state-owned firms exhibit sticky cost behavior during election years, while private firms display more linear cost behavior. These results underline the moderating effect of ownership type on firm responses to political uncertainty.

Ghorbani et al. (2022) examined auditor conservatism, economic policy uncertainty, and earnings quality in 150 firms listed on the Tehran Stock Exchange during 2013–2019. Results show that auditor conservatism positively affects earnings quality, whereas economic policy uncertainty negatively impacts it.

Yazdi et al. (2022) investigated the moderating role of stakeholder influence on the relationship between CEO power and CSR for 172 Tehran Stock Exchange-listed firms during 2015–2019. They found a positive relationship between CEO power and CSR, which is further strengthened by stakeholder influence.

Fakhr Hosseini (2022) studied the impact of CSR, credibility, and competitive advantage on business performance across 109 firms from 19 industries between 2015 and 2020. The findings reveal that CSR negatively affects corporate credit, whereas competitive advantage positively influences return on equity and return on assets.

Finally, Dadashi et al. (2022) analyzed the effect of CSR and risk-taking on firm performance under the moderating influence of financial constraints, using data from 455 firm-years listed on the Tehran Stock Exchange during 2014–2018. Their results indicate that CSR and risk-taking negatively affect performance, while financial constraints positively moderate the relationship between CSR and firm performance, but not between risk-taking and performance.

Collectively, these studies highlight the complex interplay between economic policy uncertainty,

ownership structure, corporate governance, and CSR. While economic uncertainty generally poses challenges for CSR investment, factors such as state ownership, stakeholder influence, and strategic governance mechanisms can mitigate or even reverse its impact, promoting sustainable firm performance and social engagement.

4. Research Hypotheses

H1: Economic uncertainty has a significant relationship with participation in social activities.

H2: State ownership has a significant effect on the relationship between economic uncertainty and participation in social activities.

Research Methodology

The present study is descriptive and a type of correlational (post-event) research. Descriptive research is defined as a research method that describes the characteristics of the population or phenomenon under study. Post-event research intends to investigate the relationships between independent and dependent variables after the occurrence of an action or event. Come. Applied research is conducted to investigate the possibility of applying knowledge in a society or organization. The research period was between 2015 and 2021. The research hypotheses were tested using multiple regression methods.

Research hypothesis test models

To test the research hypotheses, following Yuan et al. (2020), models (1) and (2) are developed as follows:

$$CSR = \beta 0 + \beta 1\, EPU_{it} + \beta 2\, \gamma * Controls_{it} + \varepsilon \quad \text{Model (1)}$$

$$CSR = \beta 0 + \beta 1\, EPU_{it} + \beta 2\, SOE_{it} + \beta 3\, (SOE_{it} * EPU) + \beta 2\, \gamma * Controls_{it} + \varepsilon \quad \text{Model (2)}$$

In the above models

CSR: Participation in Social Activities

Following the action of et al. (2020), the following 19 indicators are used as a criterion for measuring participation in the firm's social responsibilities, so that if any of the following indicators are disclosed, the number 1, and otherwise the number zero, will be assigned to this variable. Finally, the sum of the scores shows the firm's social participation score.

Table (1) Indicators of Social Responsibility

Environment	Production	Social Participation	Employee Relations
• Air pollution control • Prevention and Compensation Program • Protection and use of products resulting from recycling • Environmentalism	• Product Safety • Product quality • Product Development • After-sales service	• Cash donation program • Khyariyeh Program • Yeli Scholarship Program • Sponsor or sponsor for sports activities • Public Projects	• Employee Environmental Health • Staff training • Employee Benefits • Staff Profile • Ownership of employee shares • Employee safety and health

EPU: Economic Uncertainty

Following Shokarkhah et al. (2016), two indices of inflation rate and GDP growth are used as indicators to measure economic uncertainty.

EPU1: This variable is equal to the inflation rate

EPU2: This variable is equal to the GDP growth rate announced by the Central Bank

Moderating Variable:

SOE: Following Yuan et al. (2020), if the ownership of the government and government entities in the

firm's shares exceeds 20% (significant influence), this variable is assigned a number, and otherwise the number is zero.

Control Variables

Following Yuan et al. (2020), the control variables are as follows:

Size: The size of the firm, which is equal to the natural logarithm of the total assets of the firm

Lev: Financial leverage is equal to the ratio of total debt to total assets of the firm

ROA: Return on assets, which is equal to the ratio of operating profit to total assets of the firm.

Capex: Capital expenditure that is equal to the ratio of the purchase of fixed assets to the total assets of the firm

5. Research Findings

Descriptive Research Statistics

The descriptive statistics of the research are presented in Table 2. Descriptive statistics include the mean, median, minimum, maximum, and standard deviation of each variable. The mean is the main central index that indicates the equilibrium point and center of gravity of the distribution, and it is a good indicator to show the centrality of the data. The median is the value that 50% of the sample data is below and 50% above. Those whose shape is asymmetrical are used. The standard deviation is the most important scattering parameter that is obtained from the root of variance, and this index indicates the average fluctuation of the observations from their mean.

Table 2 presents the descriptive statistics of the key research variables. The corporate governance index exhibits a mean value of 37%, indicating that, on average, the sample firms achieved 37% of the total possible score on the corporate governance scale. The level of participation in social activities varies substantially among the firms, with a maximum score of 63% and a minimum of 5%, reflecting considerable heterogeneity in CSR engagement.

Economic indicators reveal notable uncertainty within the operating environment of the firms. The inflation rate averages 48%, ranging from 8% to 48%, where higher inflation is indicative of increased economic uncertainty. Similarly, the average GDP growth rate across the sample period is approximately zero, with a maximum of 0.04 and a minimum of -0.065, suggesting periods of economic stagnation or contraction, which further amplify uncertainty.

Firm-specific characteristics indicate a diverse sample. The average firm size is 14.82 (units in logarithmic scale if applicable), suggesting a predominance of medium-to-large firms. Leverage is relatively high, with an average of 54%, implying that firms rely more heavily on debt financing relative to equity. Profitability, as measured by return on assets (ROA), averages 15%, indicating that, on average, managers can generate 15% profit for each unit of assets employed. Capital expenditure averages 4%, reflecting the proportion of asset investments allocated to the acquisition of fixed assets within the sample firms.

Table 2: Descriptive Statistics

Persian Name	Symbol	Average	Middle	Most	Lowest	Standard deviation
Participation in social activities	Csr	0.379	0.421	0.632	0.053	0.174
Economic Inflation Rate	EPU1	0.254	0.269	0.480	0.082	0.151
GDP growth rate	EPU2	0.006	0.033	0.046	-0.065	0.040
Firm Size	SIZE	14.823	14.624	18.105	12.640	1.390
Financial Leverage	LEV	0.549	0.549	0.869	0.210	0.184
Return on Assets	ROA	0.154	0.125	0.447	-0.030	0.130
Capital expenditures	CAPEX	0.042	0.024	0.183	0.001	0.049
Participation in social activities	Csr	0.379	0.421	0.632	0.053	0.174

These descriptive statistics provide an overview of both firm-level and macroeconomic characteristics, offering a foundational understanding of the conditions under which corporate governance, CSR, and economic policy uncertainty interact in the context of the Tehran Stock Exchange. Additional descriptive measures, including standard deviations, minimums, and maximums for all variables, are presented in Table 2.

In Table 3, the frequency of the two-sided variable is presented.

The frequency distribution table for virtual variables shows that in about 76% of the observations, government ownership in the sample firms was more than 20%.

Table 3: Frequency Distribution for Virtual Variables

Variable	Zero		A	
	Abundance	Frequency Percentage	Abundance	Frequency Percentage
State Ownership	176	0.24	559	0.76

Results of Testing Research Hypotheses

Before addressing the results of the research hypotheses, it is necessary to examine the classical assumptions of regression models. The results of these assumptions, including residual normality, variance heterogeneity, and serial autocorrelation, are presented in Tables 4 to 7. Based on these results, the residuals of models (1) and (2) are not normally distributed; however, this issue is not critical due to the sample size and the Central Limit Theorem. Additionally, these models exhibit variance heterogeneity, and therefore, they were tested using generalized least squares regression. According to the Durbin–Watson statistic, the research variables do not suffer from serial autocorrelation. The collinearity test also indicates that no multicollinearity exists among the research variables. Finally, based on the Chow and Hausman tests, these models were estimated using panel data with fixed effects for both economic uncertainty indices.

5.1. Results of the first hypothesis test

The results of testing the first hypothesis of the research with the inflation rate index are presented in Table 4.

Table 4: Results of the test of the first model of the research with the inflation rate index

Persian Name	Symbol	Coefficient	Standard Error	T statistic	Significance	Inflation Factor
Inflation Rate	EPU1	0.134	0.036	3.690	0.010	1.175
Firm Size	SIZE	-0.007	0.001	-5.728	0.001	1.146
Financial Leverage	LEV	-0.005	0.010	-0.459	0.662	1.479
Return on Assets	ROA	-0.034	0.035	-0.959	0.375	1.743
Capital expenditures	CAPEX	-0.060	0.048	-1.264	0.253	1.096
Width from Origin	C	0.460	0.019	24.344	0.000	-
Watson Camera		1.51	Adjusted coefficient of determination			0.60
Statistic F		68.82	Probability of F Statistic			0.00
Jarco-Berra Test Statistic - Normality of Model Residues		24.39	The probability of the Jarko-Berra statistic			0.00

Persian Name	Symbol	Coefficient	Standard Error	T statistic	Significance	Inflation Factor
Statistics of Pagan Godfrey's Method of Heterogeneity Test		3.27	Probability of Heterogeneity Test Probability			0.00
Chao Test Statistics		64.90	The probability of the statistics of the Chow test			0.00
Hausman Test Statistics		20.71	The probability of the Hausman test statistic			0.00

According to the results of Table 4, there is a positive and significant relationship between the inflation rate and participation in social activities. Therefore, it can be said that the first hypothesis of the research is not rejected at the 95% confidence level. These findings indicate that with the increase in economic uncertainty, participation in social activities also increases. Also, among the control variables, the size of the firm has a negative and significant relationship with the social responsibility index. The adjusted coefficient of determination also shows that the independent variables have been able to explain about 60% of the changes in the dependent variable.

5.2. Results of the first hypothesis test

The results of testing the first hypothesis of the research with the economic uncertainty index are presented in Table 5.

According to the results of Table 5, there is a negative and significant relationship between GDP growth rate and participation in social activities. Therefore, it can be said that the first hypothesis of the research is not rejected at the 95% confidence level. Considering that economic uncertainty is the inverse criterion for measuring economic uncertainty, it can be said that by decreasing GDP (increasing economic uncertainty), participation in social activities increases. Also, among the control variables, the size of the firm has a negative and significant relationship with the social responsibility index. The adjusted coefficient of determination also shows that the independent variables have been able to explain about 58% of the changes in the dependent variable.

Table 5: Results of the test of the first model of the research with the economic uncertainty index

Persian Name	Symbol	Coefficient	Standard Error	T statistic	Significance	Inflation Factor
Gdp	EPU2	-0.183	0.050	-3.687	0.000	1.014
Firm Size	SIZE	-0.035	0.009	-4.028	0.000	1.110
Financial Leverage	LEV	0.077	0.075	1.029	0.306	1.477
Return on Assets	ROA	0.098	0.095	1.038	0.302	1.632
Capital expenditures	CAPEX	-0.063	0.179	-0.349	0.728	1.098
Width from Origin	C	-0.202	0.149	-1.356	0.178	-
Watson Camera		1.53	Adjusted coefficient of determination			0.58
Statistic F		15.12	Probability of F Statistic			0.00
Jarco-Berra Test Statistic - Normality of Model Residues		24.12	The probability of the Jarko-Berra statistic			0.00
Statistics of Pagan Godfrey's Method of Heterogeneity Test		2.77	Probability of Heterogeneity Test Probability			0.00
Chao Test Statistics		57.87	The probability of the statistics of the Chow test			0.00
Hausman Test Statistics		22.72	The probability of the Hausman test statistic			0.00

5.3. Results of the second hypothesis test

The results of testing the second hypothesis of the research with the inflation rate index are presented in Table 6.

According to the results of Table 6, the simultaneous ratio of inflation rate and government ownership has a negative and significant relationship with the index of participation in social activities. Therefore, the second hypothesis of the research is not rejected using the inflation rate at the 95% confidence level. These findings indicate that in firms whose shares are partially owned by the government, an increase in the inflation rate leads to a decrease in participation in the activities of the firm. It is social. Also, firm size and financial leverage have a negative and significant relationship with the index of participation in social activities. The adjusted coefficient of determination also shows that the independent variables have been able to explain about 69% of the changes in the dependent variable.

Table 6: Results of Testing the Second Research Hypothesis with the Inflation Rate Index

Persian Name	Symbol	Coefficient	Standard Error	T statistic	Significance	Inflation Factor
Inflation Rate	EPU1	0.090	0.012	7.315	0.000	3.766
State Ownership	SOE	-0.006	0.001	-4.415	0.005	3.231
Simultaneous Ratio of Inflation Rate and State Ownership	SOE*EPU1	-0.033	0.007	-4.615	0.004	5.179
Firm Size	SIZE	-0.004	0.001	-4.418	0.005	1.221
Financial Leverage	LEV	-0.013	0.005	-2.678	0.037	1.490
Return on Assets	ROA	-0.011	0.006	-1.816	0.119	1.753
Capital expenditures	CAPEX	-0.004	0.005	-0.765	0.474	1.107
Width from Origin	C	0.442	0.016	27.138	0.000	-
Watson Camera		1.51	Adjusted coefficient of determination			0.69
Statistic F		658.08	Probability of F Statistic			0.00
Jarco-Berra Test Statistic - Normality of Model Residues		23.77	The probability of the Jarko-Berra statistic			0.00
Statistics of Pagan Godfrey's Method of Heterogeneity Test		3.78	Probability of Heterogeneity Test Probability			0.00
Chao Test Statistics		67.20	The probability of the statistics of the Chow test			0.00
Hausman Test Statistics		28.01	The probability of the Hausman test statistic			0.00

5.4. Results of the second hypothesis test

The results of testing the second hypothesis of the research with the economic uncertainty index are presented in Table 7.

According to the results presented in Table 7, the interaction between economic uncertainty and government ownership has a positive and significant relationship with the index of participation in social activities. Therefore, the second hypothesis of the research is not rejected at the 95% confidence level. Economic uncertainty leads to a decrease in participation in social activities. Additionally, return on assets shows a positive and significant relationship with the participation index. The adjusted coefficient of determination indicates that the independent variables explain approximately 68% of the variation in the dependent variable.

Table 7: Results of testing the second hypothesis of the research with the economic uncertainty index

Persian Name	Symbol	Coefficient	Standard Error	T statistic	Significance	Inflation Factor
Economic Uncertainty	EPU2	-0.277	0.078	-3.558	0.000	4.790
State Ownership	SOE	-0.010	0.005	-2.142	0.033	1.353
Simultaneous Relationship of Economic Uncertainty and State Ownership	SOE*EPU2	0.188	0.094	1.998	0.046	3.629
Firm Size	SIZE	0.002	0.003	0.747	0.455	1.201
Financial Leverage	LEV	0.004	0.018	0.197	0.844	1.494
Return on Assets	ROA	0.048	0.023	2.055	0.040	1.651
Capital expenditures	CAPEX	-0.012	0.067	-0.178	0.858	1.110
Width from Origin	C	0.343	0.048	7.072	0.000	-
Watson Camera		1.91	Adjusted coefficient of determination			0.68
Statistic F		60.93	Probability of F Statistic			0.00
Jarco-Berra Test Statistic - Normality of Model Residues		23.41	The probability of the Jarko-Berra statistic			0.00
Statistics of Pagan Godfrey's Method of Heterogeneity Test		3.06	Probability of Heterogeneity Test Probability			0.00
Chao Test Statistics		57.89	The probability of the statistics of the Chow test			0.00
Hausman Test Statistics		19.97	The probability of the Hausman test statistic			0.00

6. Conclusions and Suggestions

The effect of economic uncertainty on corporate credit policies has not been fully determined. In other words, empirical findings and theoretical literature have not reached a consensus on this issue. During periods of economic uncertainty, such as recessions, product demand tends to decrease or fluctuate. Economic uncertainty exacerbates financial constraints for firms by reducing returns on assets and increasing the cost of debt. Fan et al. (2018) note that firms tend to increase their cash reserves during periods of economic uncertainty. Similarly, Baker et al. (2016) emphasize that economic uncertainty intensifies the effects of economic recessions and can hinder recovery.

During such periods, both buyers and sellers face liquidity risks. Buyers who require business credit may fail to obtain it, as creditors are likely to shorten repayment periods and increase borrowing costs. One type of firm investment with a high potential return is participation in social activities. However, investing in social activities is generally considered risky and largely irreversible; under conditions of economic uncertainty, these risks are further magnified.

This study examines the relationship between economic policy uncertainty and corporate social responsibility (CSR) performance, considering the role of state ownership in firms listed on the Tehran Stock Exchange during 2017–2022, with a total of 600 firm-year observations.

The findings indicate a positive and significant relationship between inflation rates and participation in social activities, and a negative and significant relationship between GDP growth and social activity participation. Since GDP serves as an inverse indicator of economic uncertainty, these results suggest that, under conditions of increasing economic uncertainty, the studied firms tend to increase their engagement in social activities. Motivations for this behavior may include achieving competitive advantage, increasing market share and sales, enhancing sales sustainability through customer loyalty, and promoting ethics within the firm through effective CSR strategies. These findings are consistent with Yuan et al. (2020) and Baker et al. (2016).

Moreover, the study finds that for firms partially owned by the government, rising economic uncertainty leads to a decrease in participation in social activities.

This suggests that state-owned enterprises are less affected by economic uncertainty, likely due to their more secure future outlook stemming from their relationship with the government. These findings align with the results of Yuan et al. (2020).

Based on these findings, it is recommended that the government and state-owned enterprises increase investment in social activities to fulfill their social responsibilities during periods of economic uncertainty. Additionally, to further expand the theoretical literature, researchers are encouraged to investigate the role of corporate governance indicators in moderating the relationship between economic uncertainty and participation in social activities.

References

Aghdami, Esmaeil, Meshki Miavaghi, Mehdi, Kord Rostami, Sohrab, Khordiar, Sina. Investigating the Relationship between Social Responsibility and Cash Holdings with an Emphasis on the Mediating Role of Systematic Risk Factors and Corporate Governance. Journal of Management Accounting and Auditing Knowledge, 9(34), 35-45.

Anh Hoang, Dat Thanh Nguyen & Phuong Uyen Le (2024) Economic policy uncertainty and corporate social responsibility: evidence from emerging countries, Cogent Business & Management, 11:1, 2375625,

Baker, S.R., Bloom, N. (2013). Does uncertainty reduce growth? Using disasters as natural experiments. NBER Working Paper No. 19475

Baker, S.R., Bloom, N., Davis, S.J., 2016. Measuring economic policy uncertainty. Q. J. Econ. 131 (4).

Bloom, N., Floetotto, M., Jaimovich, N., Saporta-Eksten, I., Terry, S.J. (2012). Really uncertain business cycles. NBER Working Paper No. 18245

Cruz, J.M., Wakolbinger, T. (2008). Multiperiod effects of corporate social responsibility on supply chain networks, transaction costs, emissions, and risk. Int. J. Prod. Econ. 116 (1), 61–74.

DADASHI, NASRIN & Pourali, Mohammadreza. The Effect of Social Responsibility and Risk Taking on Firms' Performance with Regard to the Moderating Variable of Financial Constraint. Journal of Management Accounting and Auditing Knowledge, 11(41), 145-158.

Dakhli, A. (2021), "The impact of ownership structure on corporate social responsibility: the moderating role of financial performance", Society and Business Review, Vol. 16 No. 4, pp. 562-591

Drobetz W, El Ghoul S, Guedhami O, Janzen M (2018), Policy Uncertainty, Investment, and the Cost of Capital, Journal of Financial Stability. https://doi.org/10.1016/j.jfs.2018.08.005

Ebrahimi, Saeed, Faraji, Omid, Arabzadeh, Meysam, Izadpour, Mostafa, and Mohammad Rezaei, Fakhreddin, 2023, Ownership Structure, Political Uncertainty, and Asymmetric Behavior of Costs, Financial Accounting and Auditing Research.

Emery, G. W. (1984). A pure financial explanation for trade credit. Journal of Financial and Gulen, H., and Ion, M. (2016). Policy uncertainty and corporate investment. The Review of Financial Studies 29 (3), 523-564.

Fakhr Hosseini, Seyed Fakhreddin. Investigating the Effect of Social Responsibility, Credibility, and Competitive Advantage on the Financial Performance of Firms Listed on the Tehran Stock Exchange. Journal of Entrepreneurship Knowledge, 2(3).

Fazilat, F., Shahverdiani, S., & Valipour, H. (2021). The Moderating Effect of Social Responsibility on the Relationship between Investment and Performance in State-Owned Firms. Government Accounting.

Ghorbani, Behzad, Pourtaher Aghdam, Farzaneh, and Rahnama Roodposhti, Fereydoon (2022), The

Effect of Auditor Conservatism and the Uncertainty of Economic Policies on Earnings Quality. Judgment and decision-making in accounting.

Gulen, H., Ion, M. (2016). Policy uncertainty and corporate investment. Rev. Financ. Stud. 29 (3), 523–564.

Huang, H., Sun, L., & Zhang, J. (2017). "Environmental Uncertainty and Tax Avoidance" in Advances in Taxation. Published online. 83-124.

Hung, M., Wong, T. J., & Zhang, F. (2015). The value of political ties versus market credibility: Evidence from corporate scandals in China. Contemporary Accounting Research, 32(4), 1641–1675.

Investigating the Relationship between the Uncertainty of Economic Policy and Corporate Social Responsibility, Considering the Role of Government Ownership

Jeong, B., 2002. Policy uncertainty and long-run investment and output across countries. Int. Econ. Rev. 43 (2), 363–392.

Jo, E. H., & Lee, J. W. (2024). Economic policy uncertainty and managerial short-termism. International Review of Financial Analysis, 93, 103216. https://doi.org/10.1016/j.irfa.2024.103216

Jo, H., & Harjoto, M. A. (2012). The causal effect of corporate governance on corporate social responsibility. Journal of Business Ethics, 106, 53–72

Jory, H.D. Khieu, T.N. Ngo, et al. (2020). The influence of economic policy uncertainty on corporate trade credit and firm value, Journal of Corporate Finance (2020), https://doi.org/10.1016/j.jcorpfin.2020.101671

Julio, B., Yook, Y. (2012). Political uncertainty and corporate investment cycles. J. Finance 67 (1), 45–84.

Kogut, B., Kulatilaka, N. (2001). Capabilities as real options. Organ. Sci. 12 (6), 744–758.

Levno, B., & Srivastava, A. (2019). Explaining the recent failure of value investing. Working paper (October 25, 2019). Available at SSRN: https://ssrn.com/abstract=3442539).

Li, M., & Kong, L. (2024). Executives with financial backgrounds and corporate social responsibility: Evidence from China. Finance Research Letters, 61, 105054. https://doi.org/10.1016/j.frl.2024.105054

Li, W., Zhang, R. (2010). Corporate social responsibility, ownership structure, and political interference: evidence from China. J. Bus. Ethics 96 (4), 631–645.

Maury, Benjamin (2021). Strategic CSR and firm performance: The role of prospector and growth strategies, Journal of Economics and Business, 6(2):1012-1032.

McWilliams, A., Siegel, D. (2000). Corporate social responsibility and financial performance: correlation or misspecification? Strat. Manag. J. 21 (5), 603–609, 10.1002/.

Pastor, L., and Veronesi, P. (2013). Political uncertainty and risk premia," Journal of Financial Economics 110 (3), 520-545.

Phan, D.H.B., Sharma, S.S., and Tran, V.T. (2018). Can economic policy uncertainty predict stock returns? Global evidence. Journal of International Financial Markets, Institutions and Quantitative Analysis, 19(3), 271-285.

Rezaee, Z. H., Dou, and H. Zhang (2019). Corporate social responsibility and earnings quality: Evidence from China, Global Finance Journal, https://doi.org/10.1016/j.gfj.2019.05.002

Rodrik, D., 1991. Policy uncertainty and private investment in developing countries. J. Dev. Econ. 36 (2), 229–242.

Roozbeh Yazdi, Seyed Mohammad Reza Khalilzadeh, and Hossein Eslami Mofidabadi. (1401). "The Role of Stakeholder Influence on the Relationship between CEO Power and Corporate Social Responsibility. Judgment and Decision Making in Accounting "

Shahzad, K., Ali, R., and Rehman, R.U. (2024), "Corporate governance and firm's risk behavior: the moderating role of corporate social responsibility", Managerial Finance, Vol. 50 No. 7, pp. 1324-1343. https://doi.org/10.1108/MF-04-2023-0265.

Shokrkhah, Javad and Keyvan Ghasedi Dizaji (2016), "The Impact of Macroeconomic Variables on Managers' Financing Decisions", Empirical Studies in Financial Accounting, Vol. 13, No. 51, pp. 79-111.

Vishwanathan, P., van Oosterhout, H., Heugens, P. P. M. A. R., Duran, P., & van Essen, M. (2020). Strategic CSR: A concept-building meta-analysis. Journal of Management Studies, 57, 314–350.

Wang, Z., Kong, D., & Liu, S. (2024). Corporate social responsibility and firm-level systematic risk: The moderating effect of economic policy uncertainty. International Review of Financial Analysis, 94, 103226. https://doi.org/10.1016/j.irfa.2024.103226.

Yuan, Tiezhen, Ji (George) Wu, Ni Qin, and Jian Xu (2022). Being nice to stakeholders: The effect of economic policy uncertainty on corporate social responsibility, Economic Modelling, 5(1):20-32.

Zhu, H., & Wagner, E. (2024). Is corporate social responsibility a matter of trust? A cross-country investigation. International Review of Financial Analysis, 93, 103127. https://doi.org/10.1016/j.irfa.2024.103127