Effects of policy and economic uncertainty on investment activities and corporate financial reporting: a study of developing countries in Asia-Pacific

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Abstract

Purpose – This study investigates the impact of government and economic policy uncertainty (EPU) on companies' business operations, especially risk-taking tendencies and corporate financial reporting quality (FRQ).
Design/methodology/approach – The study employs the generalised least squares regression model. The final sample comprised 27,376 company-year observations from eight countries in the Asia-Pacific region.
Findings – EPU has a negative and significant effect on investment activity and FRQ. Higher EPU leads to a decline in investment and FRQ.
Research limitations/implications – There are several limitations in this study. First, the authors used abnormal investments to measure investments, without considering the degree of irreversibility investment objectives. Second, although control variables are included at the company and country levels, they may only partially control for companies' mitigation effects. Third, the sample is limited to developing countries with unique characteristics in Asia-Pacific; therefore, the findings cannot be generalised.
Practical implications – The findings can help investors, analysts and regulators evaluate EPU's impact on companies' business activities by offering an overview regarding the decline in investment efficiency and FRQ. The results can also be used as input for regulators in formulating policies that encourage companies to regulate investment levels without harming other stakeholders and maintain FRQ during periods of uncertainty.
Originality/value – This research provides intriguing insights into EPU's effects on companies' investment activity and FRQ in developing countries, which are sensitive to changes in macroeconomic conditions.

Keywords Policy uncertainty, Economic uncertainty, Corporate investment, Quality of financial reporting, Developing countries, EPU

Paper type Research paper

Introduction

This study investigates the effects of government and economic policy uncertainty (EPU) on risk-taking tendencies and corporate financial reporting quality (FRQ). Government policies

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and economic conditions have wide-ranging consequences on a country's aggregate and business entity decision making (Shams *et al.*, 2022; Zhao *et al.*, 2021). Increasing uncertainty in policies and economic conditions has driven companies to exercise caution while making investment and financial decisions (Matousek *et al.*, 2020). Most studies have examined the effect of EPU on corporate risk-taking tendencies (Cui *et al.*, 2021; Lou *et al.*, 2022; Shams *et al.*, 2022; Zhang *et al.*, 2021). Research conducted in several countries such as the United States (Baker *et al.*, 2016; Gulen and Ion, 2016), Europe (Meinen and Roehe, 2017) and China (Cui *et al.*, 2021; Zhang *et al.*, 2021) provides evidence that policy uncertainty and economic conditions have a negative impact on corporate investment, and in some cases, last for an extended period (Shams *et al.*, 2022). Nevertheless, there is limited research on the impact of government policy uncertainty and a country's economic condition on corporate financial reporting quality (FRQ). This study develops on previous research (Cui *et al.*, 2021; Lou *et al.*, 2022; Shams *et al.*, 2022; Zhang *et al.*, 2021) by considering the influence of policy and economic uncertainty values developed by Baker *et al.* (2016) on a company's investment activities during uncertainty (Bulan, 2005) and FRQ (Bermpei *et al.*, 2021).

This study uses the real options theory to explain the relationship between policy uncertainty, economic conditions and a company's risk-taking tendency (Baker *et al.*, 2016; Cui *et al.*, 2021; Meinen and Roehe, 2017; Shams *et al.*, 2022). This theory states that policy uncertainty and economic conditions encourage delays in corporate investment to the point where uncertainty begins to ease (Borthwick *et al.*, 2020; Gulen and Ion, 2016; Shams *et al.*, 2022). In this case, increased policy uncertainty and economic conditions can increase managerial risk aversion (Panousi and Papanikolaou, 2012) by strengthening financing constraints and expected losses (Bonaime *et al.*, 2018; Nguyen and Phan, 2017), thereby encouraging the management to exercise caution while making investment decisions to avoid the risk of failure. Policy uncertainty and economic conditions also significantly increase the likelihood of adjustment to compliance costs, driving company managements to restrict further investment activities during this period (Bloom *et al.*, 2007; Ryan, 2012). However, this uncertainty creates conditions for company undervaluation, incentivising the management to implement earnings management practices to address investor concerns (Bermpei *et al.*, 2021; Heater *et al.*, 2021). Under uncertain policy and economic conditions, good financial performance can signal to company stakeholders the company's positive prospects in the face of potential increased adjustment costs and high risk of company development (Bermpei *et al.*, 2021).

To measure the levels of policy uncertainty and economic conditions, we use the Economics Policy Uncertainty (EPU) index developed by (Baker *et al.*, 2016) to capture the effects of general economic uncertainty (Phan *et al.*, 2019). The EPU index also captures increasing uncertainty related to economic policies, such as changes in government policies, elections and political debates regarding a country's economic policies (Bermpei *et al.*, 2021). To measure a firm's investment activities and decompose the real options theory, we use a company's risk propensity model during uncertainty developed by Bulan (2005). FRQ was measured using Verdi (2006) model. This study uses a sample of companies listed on stock exchanges of developing countries in the Asia-Pacific region, with the following 10 stock exchanges in eight countries: Singapore (SSE); Malaysia (KLSE); Thailand (SET); Philippines (PSE); Indonesia (IDX); India (NSE); China (SSE, TSEC and HKEX) and Russia (MICEX).

This study provides international evidence on the effect of EPU on risk-taking tendencies and FRQ using a sample of developing countries in the Asia-Pacific region. Transition countries are dominant in the region, with governments controlling major economic resources; and they have a greater ability to participate in the economy (Lou *et al.*, 2022). Most developing countries in the Asia-Pacific region experience high

uncertainty in policies and economic conditions due to frequent system changes and the launch of new policies (Lou *et al.*, 2022). Increasing geopolitical risk in developing countries also affects companies' desire to invest and make cautious decisions (Le and Tran, 2021). In light of EPU in developing countries, the cost of paying corporate debt is higher, resulting in obstacles and delays in investment decisions owing to low rates of return (Le and Tran, 2021). Most developing countries have a high concentration of small and medium-sized enterprises; therefore, investment activities have become more vulnerable to volatility in the business environment owing to macroeconomic changes (Rashid and Saeed, 2017).

This research is structured as follows: Section 2 presents the development of the research hypotheses; Section 3 describes the research design and descriptive statistics; Section 4 presents the empirical results and analysis; Section 5 presents additional analyses and robustness tests; and Section 6 presents the discussion and conclusions of the study.

Theoretical framework and hypotheses development

Economic policy uncertainty (EPU) and investment activities

EPU stemming from changes in fiscal, political, monetary and regulatory policies can have far-reaching consequences, including on the aggregate economic environment of a country and business entities' decision-making (Shams *et al.*, 2022). EPU refers to a situation where business entities can no longer predict precisely what, when and/or how the government will make economic policy changes (Gulen and Ion, 2016). Since the macroeconomic environment is an important factor influencing the operating environment, changes in policies and uncertain economic conditions make the operating environment complex, unstable and difficult to predict (Lou *et al.*, 2022). EPU is an important signal of change in a company's operational environment (Baker *et al.*, 2016; Bermpei *et al.*, 2021; Brogaard and Detzel, 2015; Li, 2017).

This study uses the real options theory to explain how variations in EPU affect a company's operations, especially investment activities. This theory has been widely accepted for elucidating the pattern of corporate investment decisions in an uncertain economic environment (Gulen and Ion, 2016). The theory is based on uncertain future investment returns (Bhattacharya and Wright, 2005). In this case, real assets used as the basis in real options theory carry the risk of changes in value with a lower level of flexibility than financial assets (Bhattacharya and Wright, 2005), thus making real assets more vulnerable to EPU. Higher EPU increases managerial risk aversion (Panousi and Papanikolaou, 2012) by strengthening financing constraints and expected losses (Bonaime *et al.*, 2018; Nguyen and Phan, 2017), thereby causing the company management to be cautious in making investment decisions to avoid the risk of failure. Policy uncertainty and economic conditions also significantly increase the likelihood of adjusting to compliance costs, prompting the company management to restrict further investment activities during this period (Bloom *et al.*, 2007; Ryan, 2012).

Although Azimli (2022) determined an insignificant relationship between political and uncertainty and corporate capital investment in developing countries, previous studies have shown that EPU affects the level of corporate capital investment (Cui *et al.*, 2021; Kang *et al.*, 2014; Wang *et al.*, 2014). Wang *et al.* (2014) found that EPU has a negative effect, moderated by the heterogeneity of firm characteristics, on the investment behaviour of firms in China. Research conducted by Kang *et al.* (2010) found that EPU has a negative effect on company investment decisions through the interaction of stock price volatility due to economic policy shocks. Cui *et al.* (2021) found that EPU has a negative impact on a company's innovation investment through changes in operational risk and financial difficulties. Cui *et al.* (2021)

explained that the impact of EPU on innovation-oriented investment is greater for non-state-owned companies and firms with high profitability, higher R&D levels and lower networking capital adequacy.

Accordingly, this study assumes that companies facing of the negative effects of EPU tend to experience an increase in the value of waiting options, which encourages the management to reduce or delay investment activities. We propose the following hypothesis:

H1. EPU level has a negative effect on a company's investment activity.

Economic policy uncertainty and quality of financial reporting

The adverse effects of EPU also influence the valuation of companies in the stock market (Bermpei *et al.*, 2021; PÁStor and Veronesi, 2012). Political and economic uncertainty pose a risk to companies that cannot diversify, thus undervaluing the company during this period (Bermpei *et al.*, 2021; Brogaard and Detzel, 2015; PÁStor and Veronesi, 2012). Hirshleifer *et al.* (2009) explained that, during a period of market undervaluation, the company management tends to manipulate earnings upward to present a positive signal to investors regarding the company's financial condition. Management behaviour that tends to follow the "lean against the wind" pattern is based on the management's efforts to moderate the company's performance projections amid pressure from EPU by reporting higher income, so that it can meet the expectations of company stakeholders (Bermpei *et al.*, 2021).

Previous research has provided consistent evidence regarding management behaviour that follows a "lean against the wind" pattern (Bermpei *et al.*, 2021; Guo and Jiang, 2011; Kang *et al.*, 2010; Yung and Root, 2019). Kang *et al.* (2010) examined the correlation between discretionary accruals and market rates of return and found that firms' discretionary accruals were negatively correlated with their current market rates of return. Kang *et al.* (2010) also explained that modern corporate compensation schemes that depend on accounting earnings and stock returns create incentives for corporate management to manage earnings and protect themselves from shocks to market conditions. Managers, in this case, use the discretionary accrual approach to manipulate earnings in response to changes in the company's business environment (Guo and Jiang, 2011) driven by EPU. In addition, changes in policies and regulations during times of uncertainty impose significant compliance costs on companies (Bloom, 2009). Yung and Root (2019) used global data to examine the influence of EPU on earnings management practices and found strong evidence of a positive impact on earnings management practices, indicating a decline in FRQ. Therefore, providing information on a better financial position during EPU send strong signals to company stakeholders regarding positive prospects. Firms may potentially face increased adjustment costs due to EPU (Bermpei *et al.*, 2021). Based on this explanation, we propose the following hypothesis:

H2. The level of EPU has a negative effect on the quality of financial reporting.

Methodology and hypothesis testing

Institutional background

This study uses a sample of companies from developing countries in the Asia-Pacific region, given that have a higher level of uncertainty than developed countries (Bloom, 2014). Bloom (2014) explains that most developing countries have high levels of volatility in GDP growth, stock markets, and currency exchange rates. This drives the countries to experience higher levels of macroeconomic uncertainty. Meanwhile, Koren and Tenreyro (2007) indicates that the high level of economic uncertainty in developing countries is influenced by the low level of economic diversification. Consequently, macroeconomic conditions in developing countries

have become increasingly susceptible to fluctuations in the output and prices of certain commodities, which are generally commodities with high price volatility.

Countries in the Asia-Pacific region have faster growth rates than those in other parts of the world, and thus have a substantial impact on regional investment flows (Bremer *et al.*, 2017). Compared with other economic regions, Asia-Pacific countries are also actively involved in creating competitive advantages in developing and adjusting their economic sectors. Stubbs (1995) defines countries in the Asia-Pacific region as having relatively high government intervention characteristics. Governments have the power to determine the direction of economic growth and play a significant role in shaping the economic environment (Stubbs, 1995). Lou *et al.* (2022) explicitly add that, in developing markets, the government has greater authority to control critical economic resources and intervene in the country's economic activities. The effect of EPU on developing countries is also related to strong currency fluctuations (Engel and West, 2005) and trade structures, which are mainly based on volatility in commodity prices (Guesmi and Nguyen, 2011). Finally, developing countries have a higher level of vulnerability to domestic political conflicts and natural disasters, and lower effectiveness of fiscal and monetary policies and political stabilisation.

Research data and sample

This study focuses on the research period 2001–2021 to capture several crisis phenomena that have a global impact. The sample in this study consists of companies listed on the stock exchanges of developing countries in the Asia-Pacific region: Singapore (SSE), Malaysia (KLSE), Thailand (SET), the Philippines (PSE), Indonesia (IDX), India (NSE), China (SSE, HKEX and TSEC) and Russia (MICEX). The sample selection for hypothesis testing is based on the following criteria: EPU data (Baker *et al.*, 2016), a company's abnormal investment data (Richardson, 2006) and FRQ data (Jones, 1991; Kothari *et al.*, 2005). The final sample consisted of 34,406 company–year observations from ten key countries. This study uses the Bureau Van Dijk (OSIRIS) database to obtain company-specific data from 2007 to 2021 and the Economic Policy Uncertainty (EPU) index calculation framework (Baker *et al.*, 2016), which is based on news released by the Bloomberg database from 2001 to 2021.

Hypothesis testing model

This study uses a generalised least squares (GLS) regression model to test the first hypothesis, as shown in Equation (1). The dependent variable in this study is the firm's investment activities (INVUit), measured using the risk propensity model during uncertainty developed by Bulan (2005). The independent variable in this study is the EPU index (EPUit) which is measured using the Baker *et al.* model. This study controls for the characteristics of the sample companies using several variables, including company size (SIZEit), leverage (LEVit), asset growth (GWHit), liquidity ratio (LRit), business risk (BRit), sales ratio (STURNit), ratio properties, plants and equipment (PPERit), and the ratio of intangible assets (INTRit). In addition, this study controls at the country level using several variables including Economic Growth (EGit), Investment Freedom (IFit), Regulatory Quality (RQit) and Government Effectiveness (GEit). Therefore, Eq (1) can be expressed as follows:

$$INVU_{it} = \alpha_0 + \beta_1 EPU_{i,t} + \delta' \, Firm\ control_{i,t} + \eta' \, Country\ Control_{i,t} + Year\ Fixed\ Effects + Industry\ Fixed\ Effect + \varepsilon_{i,t} \quad (1)$$

The second hypothesis testing aims to examine the direct effect of EPU on FRQ. The second hypothesis was tested using the GLS regression model, which is described by the following equation:

$$FRQ_{it} = \alpha_0 + \beta_1 EPU_{i,t} + \delta' Firm\ control_{i,t} + \eta' Country\ Control_{i,t} + Year\ Fixed\ Effects + Industry\ Fixed\ Effect + \varepsilon_{i,t} \quad (2)$$

Calculation of the economic policy uncertainty index

The EPU index calculation in this study is carried out using a model (Baker *et al.*, 2016) based on the frequency of news on the Bloomberg platform, which we consider to provide independent and relevant news coverage. This study seeks to capture information related to the policies implemented and the economic effects arising from them through the following index construction steps (Lou *et al.*, 2022):

(1) Identify articles related to EPU from key countries by searching for articles containing at least one of the following keywords: "country"; "economics" or "economy"; and "uncertainty".

(2) Identify the section of the article that addresses the policy issue.

(3) Calculate the monthly frequency of articles related to economic policy.

(4) Divide the results of the monthly frequency calculation by the number of articles found in the same month; then normalise the resulting series to z values to produce an average value of 100 for the data from January 2007 to December 2021.

(5) Normalise the data to obtain an average value in the range of 100 from the independent variable economic policy uncertainty (EPU).

Calculation of company abnormal investment

To define a company's investment activities, we use the difference between the company's actual investment level and the predicted investment level during uncertainty, obtained using the equation model developed by (Bulan, 2005), with the following model description:

$$\left(\frac{I}{K}\right)_{i,t} = \alpha_0 + \alpha_1 Tobin's\ Q_{i,t} + \alpha_2 \left(\frac{CFO}{K}\right)_{i,t-1} + \alpha_3 MPK_{i,t} + \alpha_4 \widehat{\sigma}_{I,t} + \varepsilon_{i,t} \quad (3)$$

$$\left(\frac{I}{K}\right)_{i,t} = \widehat{\alpha}_0 + \widehat{\alpha}_1 Tobin's\ Qi, t + \widehat{\alpha}_2 \left(\frac{CFO}{K}\right)_{i,t} + \widehat{\alpha}_3 MPK_{i,t} + \widehat{\alpha}_4 \sigma\hat{}_{i,t} \quad (4)$$

$$INVU_{i,t} = \left(\frac{I}{K}\right)_{i,t} - \left(\frac{I}{K}\right)_{i,t} \quad (5)$$

(I/K) is a company's level of investment measured by the value of cash paid for the purchase and construction of fixed, intangible, and other fixed assets, scaled by the total of firm's capital; Tobin's Q represents the company's investment opportunities as measured by the company's capital market scaled by total equities; (CFO/K) is the cash flow from operating activities scaled by the firm's total capital; Marginal returns to capital (MPK) is the return on investment ratio which indicates the rate of investment return of a firm to each addition of the firm's capital; $\widehat{\sigma}$ represents the overall uncertainty of the company, proxied by the annualised volatility of the company's stock returns. Specific parameters based on year and country obtained from Equation (3) are used to estimate each company's predicted normal investment activities using Equation (4): The abnormal investment rate is obtained from the difference between predicted normal investment activities and a company's actual investment activities.

Calculation of financial reporting quality

This study uses the accrual model Jones (1991), which has been modified by Kothari *et al.* (2005) to measure the quality of a company's accruals by considering the effectiveness of a company's performance through the following equation models:

$$\frac{TAi,t}{ASSETSi,t} = \beta_0 + \beta_1\left(1/ASSETS_{i,t-1}\right) + \beta_2\frac{\Delta SALESi,t}{ASSETSi,t} + \beta_3\frac{PPEi,t}{ASSETSi,t} + \beta_4 ROA_{i,t} + \theta_0 \quad (6)$$

$$\frac{\widehat{\mathrm{TAi,t}}}{\mathrm{ASSETSi,t}} = \widehat{\beta}_0 + \widehat{\beta}_1\left(\frac{1}{ASSET}\right)_{i,t} + \widehat{\beta}_2\frac{\Delta\mathrm{SALESi,t}}{\mathrm{ASSETSi,t}} + \widehat{\beta}_3\frac{\mathrm{PPEi,t}}{\mathrm{ASSETSi,t}} + \widehat{\beta}_4 ROA_{i,t} \quad (7)$$

$$EQit = -|\widehat{TA_{i,t}} - TAi,t| \quad (8)$$

TA is the company's total accuracy obtained through the equation (ΔCurrent Assets - Cash - Current Liabilities + Current Portion of Long-Term Debts - Depreciation and Amortisation) divided by the average total assets of the company; Assets are the average total assets of the company; Sales is total net sales divided by the average total assets of the company; PPE is the gross plant, property and equipment value divided by the company's average total assets; ROA is a measure of company performance measured using net income divided by the company's total assets. Specific parameters based on year and country obtained from Equation (1) are used to estimate each company's estimated normal accuracy rate using Equation (2). The value of financial reporting quality is obtained from the absolute value of the difference between the estimated normal total accruals and real total accruals.

This study employs a measurement model developed by Verdi (2006) to measure a company's FRQ. Following Francis *et al.* (2004) and Verdi (2006), we decompose Accruals Quality (AQ) into two components: an inherent component (an accrual component reflecting a company's fundamental economic condition) and discretionary component (an accrual component reflecting managerial decisions). The inherent components of this study were company size, cash flow volatility, sales volatility, operating cycles and company losses. The FRQ calculation model is as follows:

$$\mathrm{AQ_{i,t}} = \beta_0 + \beta_1\,\mathrm{SIZE}^{i,t-1} + \beta_2\,\mathrm{CFL_{i,t}} + \beta_3\,\mathrm{SALV_{i,t}} + \beta_4\mathrm{OCR_{i,t}} + \beta_5\mathrm{NINC_{i,t}}\,\theta_0 \quad (9)$$

$$\widehat{AQ_{i,t}} = \widehat{\beta}_0 + \widehat{\beta}_1 SIZE_{i,t} + \widehat{\beta}_2\,CFL_{i,t} + \widehat{\beta}_3 SALV_{i,t} + \widehat{\beta}_4 OCR_{i,t} + \widehat{\beta}_5 NINC_{i,t} \quad (10)$$

$$\mathrm{FRQit} = \widehat{AQ_{i,t}} - \mathrm{AQi,t} \quad (11)$$

AQ represents the quality of a company's accruals obtained through Equation (8), SIZE is the size of the company calculated using the natural logarithm of total assets; CFL is the standard deviation of the company's operating cash flows from year t-4 to year t; SALV is the standard deviation of sales from year t-4 to year t; OCR is the company's operating cycle ratio, and NINC is a dummy variable for the company's operational losses. FRQ, as the dependent variable in this study, was obtained from the residual value in Equation 9.

Empirical result

Descriptive statistics

Table 1 presents the distribution of samples by country and year. As illustrated in Panel A, China and Taiwan contributed significantly to the number of observations, with 9,851

Table 1.
Sample distribution

Panel A. Sample distribution by country

Country	Obs	FRQ	INVU	EPU	Size	LEV	GWH	LR	MS	STURN	PPER	INTR
China	15,274	−1.239	0.066	0.549	13.527	0.523	0.127	1.675	0.009	0.684	0.307	0.054
Indonesia	1,124	−0.874	0.054	0.537	12.697	0.503	0.126	1.882	0.046	0.840	0.370	0.019
India	4,647	−1.921	0.077	0.578	12.364	0.576	0.049	1.433	0.009	1.031	0.377	0.041
Malaysia	1,961	−1.217	0.062	0.499	12.044	0.425	0.059	2.362	0.017	0.614	0.295	0.045
Philippines	507	−0.417	0.036	0.511	14.049	0.548	0.125	1.588	0.136	0.561	0.329	0.068
Russia	199	−0.270	0.055	0.587	15.810	0.484	0.040	1.434	0.108	0.825	0.615	0.033
Singapore	711	−0.213	0.073	0.545	12.485	0.159	0.159	1.979	0.038	0.818	0.275	0.034
Thailand	2,947	−0.726	0.060	0.637	12.054	0.473	0.108	1.998	0.027	0.892	0.367	0.043

Panel A. Sample distribution by year

Year	N	Year	N	Year	N	Year	N	Year	N	Year	N	Year	N
2002	1	2005	379	2008	657	2011	1,487	2014	1,933	2017	2,641	2020	1,528
2003	4	2006	318	2009	870	2012	1,644	2015	1,928	2018	2,862	2021	2,479
2004	40	2007	445	2010	1,034	2013	1,845	2016	2,302	2019	2,979		

Note(s): The following table shows the sample distribution by country and year
Source(s): The table above was created and processed by the author

and 5,306 firm-year observations, respectively. The two countries with the smallest observational samples are Hong Kong with 123 company-year observations and Russia with 199 company-year observations. India has the lowest FRQ at −1.921 average and the highest investment level during uncertainty, at 0.077 average INVU. Thailand has the highest EPU level, at an average of 0.637. Panel B presents the distribution of the samples by year, with the number of sample observations increasing every year from 2002 to 2021.

Table 2 presents descriptive statistics for the regression variables. The average FRQ for the sample is −1.234, with a standard deviation of 4.034 and maximum value of 5.133, indicating that the average company in the sample has a relatively low level of FRQ. The average level of company investment under uncertainty pressure is 0.066, with a standard deviation of 0.279. The minimum level of company investment is −0.807 with a maximum value of 1.056. This finding suggests that the average investment activity of the sample companies are moderate. Meanwhile, the average value of the EPU index for the entire sample in this study stands at 0.559, with a standard deviation of 0.090, indicating a fairly high level of uncertainty in the sampled countries.

Table 3 presents the pairwise correlations between the variables in this study. The test results show that EPU is negatively correlated with FRQ at 5% significance level. These results indicate a negative relationship between EPU and FRQ, as found in previous studies (AlNajjar and Riahi-Belkaoui, 2001; Chen *et al.*, 2010). However, the pairwise correlation test found that EPU was positively correlated with INVU, but at a 10% significance level. These results indicate that EPU may have a positive relationship with the level of company investment, in a shift from previous studies (Cui *et al.*, 2021; Kang *et al.*, 2014; Wang *et al.*, 2014). Overall, the correlation value between the variables is relatively low, supported by a variance inflation factor (VIF) value of 4.11 (not tabulated) for the main regression, indicating that the model used in this study is free from multicollinearity problems.

EPU and abnormal corporate investment

This study uses several testing steps involving several combinations of control variables. Column (1) is a plain model that contains the calculation results without considering the company and country characteristics as control variables. We perform separate controls for the firm and country characteristics in Columns (2) and (3). Meanwhile, in Column (4), this study controls for overall company- and country-level characteristics. In the goodness-of-fit test, the adjusted R-squared value, which is relatively the same between the test columns,

Variable	Obs	Mean	SD	Min	Median	Max
FRQ	27,376	−1.234	4.034	−209.069	−0.022	5.133
INVU	27,376	0.066	0.279	−0.807	−0.040	1.056
EPU	27,376	0.559	0.090	0.235	0.556	0.756
Size	27,376	13.030	1.715	6.857	12.960	19.832
LEV	27,376	0.519	0.268	0.019	0.522	30.675
GWH	27,376	0.109	0.632	−0.990	0.057	64.843
LR	27,376	1.731	1.559	0.022	1.382	45.832
MS	27,376	0.017	0.065	−0.000	0.002	1
STURN	27,376	0.769	0.639	0.000	0.644	20.750
PPER	27,376	0.329	0.209	0.000	0.304	0.985
INTR	27,376	0.048	0.087	−0.034	0.014	0.925

Note(s): The following table shows the results of descriptive statistics of 27,376 company-year observations from developing countries in the Asia-Pacific Region. The definition of each variable is provided in the Appendix section

Source(s): The table above was created and processed by the author

Table 2.
Summary statistic

Table 3.
Pairwise correlations

	DA	INVU	EPU	Size	LEV	GWH	LR	MS	STURN	PPER	INTR
DA	1.000										
INVU	−0.004	1.000									
	0.468										
EPU	−0.015	0.010	1.000								
	0.011	0.070									
Size	0.003	−0.032	−0.024	1.000							
	0.525	0.000	0.000								
LEV	−0.009	0.015	0.028	0.158	1.000						
	0.122	0.010	0.000	0.000							
GWH	−0.016	0.014	0.026	0.066	0.014	1.000					
	0.007	0.015	0.000	0.000	0.017						
LR	−0.031	−0.010	−0.037	−0.164	−0.367	−0.000	1.000				
	0.000	0.074	0.000	0.000	0.000	0.956					
MS	0.043	−0.025	−0.002	0.330	0.048	0.013	−0.021	1.000			
	0.000	0.000	0.657	0.000	0.000	0.030	0.000				
STURN	0.078	0.002	0.018	−0.205	0.054	−0.022	−0.077	0.049	1.000		
	0.000	0.663	0.002	0.000	0.000	0.000	0.000	0.000			
PPER	0.099	0.002	0.056	−0.033	0.003	−0.039	−0.234	0.020	−0.060	1.000	
	0.000	0.745	0.000	0.000	0.599	0.000	0.000	0.000	0.000		
INTR	−0.024	−0.002	0.027	0.176	−0.004	0.030	−0.062	0.041	−0.134	−0.165	1.000
	0.000	0.742	0.000	0.000	0.454	0.000	0.000	0.000	0.000	0.000	

Note(s): The following table presents the correlation coefficient matrix of the main research variables in this study. The sample tested consisted of 34,406 firm-year observations from developing countries in the Asia-Pacific Region
Source(s): The table above was created and processed by the author

indicates that all the variables used in this research model avoided the risk of heterogeneity. During the testing process, we winsorised the research data at 1% for the upper and lower percentiles. We used a GLS testing model to avoid the risk of heterogeneity in this research model.

The results in Table 4 show that the EPU coefficient values indicate a significant negative relationship with the overall model. These findings support the hypothesis that political uncertainty and economic conditions drive down corporate investment activity in developing Asia-Pacific countries. The constant value for the overall model ranges from −0.145 to 0.025, indicating that when EPU and other variables are 0, most companies in the Asia-Pacific developing countries tend to reduce their investment activities. The coefficient of −0.043 in Model (4) suggests that increased political uncertainty and economic conditions reduce corporate investments. Overall, the results of testing the first hypothesis confirm the findings of previous studies (Cui *et al.*, 2021; Kang *et al.*, 2010), which reveal that policy uncertainty and economic conditions at the country level would affect the pattern of corporate behaviour, especially investment activities. The significant negative relationship in testing the first hypothesis also indicates that investment in real assets in developing countries in the Asia-Pacific region is highly sensitive to economic uncertainty (Bhattacharya and Wright, 2005). Therefore, companies tend to delay their activities. Business environment investments are highly uncertain.

EPU and financials quality reporting

The results in Table 5 show the coefficient of the relationship between EPU and FRQ, indicating a statistically significant negative relationship. These findings support the

	Dependent variable: INVU			
	(1)	(2)	(3)	(4)
EPU	−0.038*	−0.041**	−0.042**	−0.043**
Size		−0.009***		−0.009***
LEV		0.033***		0.044***
GWH		0.010		0.010
LR		−0.000		0.001
MS		−0.006		0.029
STURN		−0.006*		−0.007**
PPER		0.005		0.010
INTR		−0.000		0.006
GE			0.020	0.031*
CC			0.025	0.020
IF			0.016	0.026**
RL			−0.073**	−0.071**
Constant	−0.064	0.025	−0.145	−0.088
	(0.243)	(0.245)	(0.249)	(0.251)
Industrial fixed effect	YES	YES	YES	YES
Year fixed effect	YES	YES	YES	YES
Country fixed effect	YES	YES	YES	YES
Wald χ^2	371.62	−0.142	341.56	400.65
Prob > χ^2	0.000	0.000	0.000	0.000
Observations	27,376	27,376	27,376	27,376

Note(s): This table shows the results of testing the effect of policy uncertainty and economic conditions on the company's abnormal investment level. ABIINV is the dependent variable for all test conditions. Variable definitions are provided in the Appendix section. The test controls for industry and time fixed effects. *, **, and *** indicate the level of statistical significance at 10%, 5%, and 1%, respectively

Source(s): The table above was created and processed by the author

Table 4. EPU and abnormal corporate investment

	Dependent variable: FRQ			
	(1)	(2)	(3)	(4)
EPU	−0.199*	−0.205**	−0.237**	−0.225**
Size		0.006		0.007
LEV		−0.837***		−0.849***
GWH		0.188***		0.199***
LR		−0.191***		−0.193***
MS		3.464***		3.393***
STURN		0.793***		0.795***
PPER		1.457***		1.453***
INTR		0.581***		0.595***
GE			0.135	0.043
CC			−0.229**	−0.278***
VA			0.000	−0.000
RL			−0.498***	−0.419***
Constant	−0.758	−1.388	−1.127	−1.485
	(1.305)	(0.920)	(1.306)	(1.245)
Industrial fixed effect	YES	YES	YES	YES
Year fixed effect	YES	YES	YES	YES
Country fixed effect	YES	YES	YES	YES
Wald χ^2	4798.30	8069.34	4828.13	8112.74
Prob > χ^2	0.000	0.000	0.000	0.000
Observations	27,376	27,376	27,376	27,376

Note(s): This table shows the results of testing the effect of policy uncertainty and economic conditions on the quality level of corporate financial reporting. EQ is the dependent variable for all test conditions. The test controls for industry and time fixed effects. *, **, and *** indicate the level of statistical significance at 10%, 5%, and 1%, respectively

Source(s): The table above was created and processed by the author

Table 5.
EPU and financial reporting quality

argument that political uncertainty and economic conditions reduce FRQ among companies in developing countries in the Asia-Pacific region. After controlling for company and country characteristics, the EPU coefficient value of −0.225 in Model (4) indicates that an increase in political uncertainty and economic conditions downgrade FRQ, which is consistent with the second hypothesis. Overall, the test results in Table 6 strengthen the findings in previous studies (Bermpei *et al.*, 2021; Hirshleifer *et al.*, 2009; PÁStor and Veronesi, 2012), which explain that policy and economic uncertainty affects FRQ quality. The negative and statistically significant coefficient shows that most companies in developing countries in the Asia-Pacific region follow a "lean against the wind" pattern to give investors a good signal regarding the company's financial condition amid uncertainty (Bermpei *et al.*, 2021). In this case, managers use discretionary accruals in response to changes in the business environment (Guo and Jiang, 2011) and as an effort to provide a signal to company stakeholders regarding the company's positive prospects in dealing with uncertain business environment conditions (Bermpei *et al.*, 2021).

Additional analysis

The relationship between the quality of financial reporting and the level of investment

With previous studies documenting the relationship between earnings management and the level of firm investment (DeFond and Park, 2001; Di Meo, 2014; Lenard and Yu, 2012; McNichols and Stubben, 2008; Shen *et al.*, 2015), we conducted additional tests to determine the impact of FRQ influenced by policy uncertainty and economic conditions on the company's abnormal investment level. The 2SLS regression addresses the simultaneity

Table 6. Two stage least square quality of financial reporting and investment efficiency

	2 Stage least Square EQ and INVef							
	Model 1		Model 2		Model 3		Model 4	
	INVU (2)	FRQ (1)	INVU (2)	FRQ (1)	INVU(2)	FRQ (1)	INVU(2)	FRQ (1)
EPU	−0.038*	5.136**	−0.041**		−0.002***	−3.334***	−0.043**	
INVU_pred				3.562				3.918**
Size			−0.009***	0.040**			−0.009***	0.044**
LEV			0.033***	−0.777***			0.044***	−1.0195***
GWH			0.010	0.058			0.010	0.162**
LR			−0.000	−0.103***			0.001	−0.200***
MS			−0.006	1.752***			0.029	3.327***
STURN			−0.006*	0.839***			−0.007**	0.823***
PPER			0.005	1.462***			0.010	1.411***
INTR			−0.000	0.669***			0.006	0.567***
GE					0.020	0.167*	0.031*	−0.102
CC					0.025	−0.156	0.020	−0.344***
VA								0.000
IF					0.016	−0.000	0.026**	
RL					−0.073**	−0.664***	−0.071**	−0.151
Constant	−0.064	−1.172	0.025	−1.479	−0.145	−1.663 (1.305)	−0.088	−1.549
	(0.243)	(1.302)	(0.245)	(1.249)	(0.249)		(0.251)	(1.243)
Industrial fixed effect	YES	YES	YES	YES	YES	YES	YES	YES
Year fixed effect	YES	YES	YES	YES	YES	YES	YES	YES
Country fixed effect	YES	YES	YES	YES	YES	YES	YES	YES
Wald χ^2	371.62	4667.41	−0.142	6913.58	341.56	4703.42	400.65	8114.97
Prob > χ^2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Observations	27,376	27,376	27,376	27,376	27,376	27,376	27,376	27,376

Note(s): This table shows the results of the 2SLS test on the effect of the quality of financial reporting and the level of corporate investment. EQ is the first stage dependent variable that describes the company's financial reporting quality, while INVef is the second stage dependent variable that describes the company's investment efficiency level. Variable definitions are provided in the Appendix section. The test controls for industry and time fixed effects. *, **, and *** indicate the level of statistical significance at 10%, 5%, and 1%, respectively

Source(s): The table above was created and processed by the author

problem in financial research (Liu *et al.*, 2015). First, we tested the effect of EPU on corporate investment activity to obtain predictive values for investment activity influenced by policy uncertainty and economic conditions. The second testing stage was aimed at determining the impact of the predicted values of corporate investment activity, which were affected by EPU, on the quality of a company's financial reports. This study indicates that there is a simultaneous effect caused by EPU on the pattern of company investment activity and FRQ and performs the 2SLS test with the first stage described as follows:

$$\mathrm{INVU}_{it} = \gamma_0 + \gamma_1 \mathrm{EPU}_{it} + \delta' \text{ Firm control}_{i,t} + \eta' \text{ Country Control}_{i,t} + \text{Year Fixed Effects} + \text{Industry Fixed Effect} + \varepsilon_{i,t} \quad (9)$$

The second stage of the 2SLS regression model is described as follows:

$$\mathrm{FRQ}_{it} = \alpha_0 + \alpha_1 \mathrm{predINVU}_{it} + +\delta' \text{ Firm control}_{i,t} + \eta' \text{ Country Control}_{i,t} + \text{Year Fixed Effects} + \text{Industry Fixed Effect} + \varepsilon_{i,t} \quad (10)$$

The second stage of testing in Table 6 shows negative and statistically significant coefficient values for most models used. These results strongly indicate that inefficient investment activities, affected by higher EPU, reduce financial quality. Overall, the test results in Table 6 align with previous research, which states that inefficient decision-making is related to poor FRQ (DeFond and Park, 2001; Di Meo, 2014; Shen *et al.*, 2015). These results also corroborate research by Lenard and Yu (2012), which shows that FRQ is a significant indicator of the inefficiency of a company's investment.

Robustness test

Alternative measures of investment inefficiency

We use alternative proxies to measure abnormal investments in a robustness test. We use the difference between the company's actual investment level and the predicted investment level obtained using the equation model developed by Richardson (2006) and Liu *et al.* (2021). The abnormal investment rate is obtained from the difference between the predicted normal investment level and the company's actual investment level.

Table 7 presents the results of the robustness test for the relationship between EPU and abnormal corporate investments. The coefficient values in the overall model are negative and statistically significant. This indicates that companies in Asia-Pacific developing countries reduce investment levels along with increasing EPU in those countries and shows consistency with the first hypothesis testing.

In Table 8, we perform additional tests to examine the marginal effects of EPU on firms' investment activities. We change the ABINV variable into a dummy variable with a value of 1 representing the presence of excess company investment and 0 describing the opposite. After controlling for company and country characteristics, the test results in Column 4 show that the probability of companies conducting excess investment activities reduces by −0.008, which is significant at the 1% level, along with an increase in the EPU level by one unit. The test results in Table 5 strengthen the results of the first hypothesis testing, which states that EPU negatively affect a company's investment level.

Alternative measures of financial reporting quality

This study also uses alternative proxies to measure FRQ in a robustness test. Employing the accrual model of Jones (1991), modified by Kothari *et al.* (2005) we present the quality of

	Dependent variable: ABINV			
	(1)	(2)	(3)	(4)
EPU	−1.100***	−1.014***	−0.944***	−0.846***
Size		0.585**		0.615**
LEV		−1.113***		−1.127***
GWH		2.173***		2.142***
LR		−1.277***		−1.263***
MS		−11.146		−11.518
STURN		0.997*		1.058*
PPER		20.588***		20.596***
INTR		−7.767*		−7.806*
GE			3.958	5.264**
CC			1.500	1.099
IF			0.007	0.013
RL			8.967***	7.501**
Constant	−10.357	−26.498	10.743	28.299
	(7.092)	(7.818)	(7.349)	(8.051)
Industrial fixed effect	YES	YES	YES	YES
Year fixed effect	YES	YES	YES	YES
Country fixed effect	YES	YES	YES	YES
Wald χ^2	1060.46	1855.77	1081.12	1877.09
Prob > χ^2	0.000	0.000	0.000	0.000
Observations	24,830	24,830	24,830	24,830

Note(s): This table shows the results of testing the effect of policy uncertainty and economic conditions on the company's abnormal investment level. ABIINV is the dependent variable for all test conditions. Variable definitions are provided in the Appendix section. The test controls for industry and time fixed effects. *, **, and *** indicate the level of statistical significance at 10%, 5%, and 1%, respectively
Source(s): The table above was created and processed by the author

Table 7.
EPU and abnormal corporate investment

	Dependent variable: ABINV			
	(1)	(2)	(3)	(4)
EPU	−0.011***	−0.010***	−0.010***	−0.008***
Company characteristics	NO	YES	NO	YES
Country characteristics	NO	NO	YES	YES
Industrial fixed effect	YES	YES	YES	YES
Year fixed effect	YES	YES	YES	YES
Country fixed effect	YES	YES	YES	YES

Note(s): This table shows the results of testing the marginal effect of policy uncertainty and economic conditions on the company's abnormal investment level. ABIINV is the dependent variable for all test conditions. Variable definitions are provided in the Appendix section. The test controls for industry and time fixed effects. *, **, and *** indicate the level of statistical significance at 10%, 5%, and 1%, respectively
Source(s): The table above was created and processed by the author

Table 8.
Marginal effects EPU to abnormal corporate investment

a company's financial reporting by considering the effectiveness of the company's performance in calculating the predicted accrual value. The value of financial reporting quality is obtained from the absolute value of the difference between the estimated normal total accruals and real total accruals.

The results of testing the relationship between FRQ and EPU in Table 9 show a negative constant value for the entire model, consistent with the results of testing the first hypothesis. The coefficient values for the overall model also demonstrate negative and statistically significant results. This indicates that companies in developing countries in the Asia-Pacific region reduce their investments in line with increasing EPU, which is consistent with the first hypothesis.

	Dependent variable: FRQDA			
	(1)	(2)	(3)	(4)
EPU	−0.003***	−0.003***	−0.004***	−0.004***
Size		−0.009***		−0.009***
LEV		−0.002		−0.002
GWH		0.019***		0.019***
LR		0.010***		0.010***
MS		0.168***		0.168 **
STURN		−0.016***		−0.016 ***
PPER		−0.001		−0.001
INTR		0.041*		0.039
GE			0.026**	0.021*
CC			−0.030**	−0.030 **
VA			−0.007	−0.006
RL			−0.015	−0.012
Constant	−2.754	−2.670	−2.779	−2.690
	(0.037)	(0.045)	(0.040)	(0.047)
Industrial fixed effect	YES	YES	YES	YES
Year fixed effect	YES	YES	YES	YES
Country fixed effect	YES	YES	YES	YES
Wald χ^2	130,164.43	135,777.34	130,144.35	135,834.79
Prob > χ^2	0.000	0.000	0.000	0.000
Observations	24,830	24,830	24,830	24,830

Note(s): This table shows the results of testing the effect of policy uncertainty and economic conditions on the quality level of corporate financial reporting. EQ is the dependent variable for all test conditions. The test controls for industry and time fixed effects. *, **, and *** indicate the level of statistical significance at 10%, 5%, and 1%, respectively

Source(s): The table above was created and processed by the author

Table 9.
EPU and financial reporting quality

Alternative measures of policy uncertainty and economic conditions

This study uses alternative proxies to measure policy and economic uncertainty in the resilience test. We use the difference in the political stability index of the sample countries as an alternative to measure EPU (Le and Tran, 2021). The political stability index measures the perception of the possibility of a government experiencing destabilisation. The index reflects the possibility of irregular government power transfers, armed conflicts, social unrest, international tensions, and terrorism, all of which can affect a country's economy.

The results of testing the relationship between EPU and a company's investment level in Table 10 show a negative constant value for the entire model, consistent with the results of the first hypothesis. The coefficient values for the overall model were also negative and statistically significant. This indicates that companies in developing countries reduce their investment levels along with increasing policy and economic uncertainty in these countries, which is consistent with the first hypothesis. The resilience test results also show that larger companies with higher asset growth rates, sales ratios, fixed asset ratios and intangible asset ratios tend to have higher investment levels. In contrast, companies with a larger market share and located in countries with a higher level of regulatory quality tend to have lower investment levels.

The results of testing the relationship between EPU and FRQ also show a negative and statistically significant coefficient value for the entire model, consistent with the results of the second hypothesis. These results confirm that an increase in EPU in developing countries encourages companies to reduce FRQ. The results of the resilience test also show that larger companies in developing countries with higher asset growth rates and sales ratios tend to have lower FRQ levels. Companies with higher debt levels, liquidity ratios and market shares tend to have better FRQ.

Table 10. Robustness Test: Alternative measurement for EPU

	(1)		(2)		(3)		(4)	
	Dependent: INV	Dependent: EQ	Dependent: INV	Dependent: EQ	Dependent: INV	Dependent: EQ	Dependent: INV	Dependent: EQ
EPUAlt	−9.268***	−2.026***	−6.967***	−0.643***	−18.239***	−0.466***	−16.86***	−0.441***
SIZE			3.384***	−0.136***			6.148***	−0.111***
LEV			0.259	0.044***			−2.520***	0.023***
GWH			7.924***	−0.030***			4.866	0.011***
LR			0.646**	0.019***			−0.990***	0.017***
MS			−61.003***	4.596***			−105.9***	3.989***
STURN			1.997**	−0.055***			4.518***	−0.049***
PPER			23.763***	−0.041***			18.3***	−0.037***
INTR			17.422***	−0.246***			13.19**	−0.043
EG					0.846***		0.763***	
IF					0.129***		0.114***	
RQ					−19.672***		−16.44***	
GE					11.425***	−0.015***	9.95***	0.026**
CC						−0.358***		−0.326***
VA						0.510***		0.459***
RL						0.249***		0.287***
Constant	−22.639	0.281	−77.596	1.244	−54.540	−0.033	−135.065	0.987
	(14.879)	(0.112)	(13.901)	(0.087)	(14.454)	(0.068)	(17.776)	(0.079)
Industrial fixed effect	YES	YES	YES	YES	YES	YES	YES	YES
Year fixed effect	YES	YES	YES	YES	YES	YES	YES	YES
Wald χ^2	2830***	36,992***	3393***	10,159***	5239***	18,993***	3770***	23,210***
Observations	34,405	34,405	34,405	34,405	34,405	34,405	34,405	34,405

Note(s): This table shows the results of the endurance test in this study. The test controls for industry and time fixed effects. *, **, and *** indicate the level of statistical significance at 10%, 5%, and 1%, respectively

Source(s): The table above was created and processed by the author

Conclusion

The high growth rates of developing countries in the Asia-Pacific region substantially affect investment flows in the region (Bremer *et al.*, 2017). However, the higher volatility of macroeconomic conditions in developing countries makes companies increasingly vulnerable to EPU that can affect their operational activities (Bloom, 2014). The results indicate that companies in developing countries in the Asia-Pacific region tend to reduce their investment levels when EPU increases. This is in line with the real options theory that explains how companies postpone investment activities during times of uncertainty to obtain an information advantage and a certain rate of return after the uncertainty period ends. The results also demonstrate that companies in developing countries in the Asia-Pacific region experience a decline in FRQ, in line with increasing EPU. Most companies in the region follow a "lean against the wind" pattern, which indicates that companies tend to manipulate earnings upward to provide positive signals to stakeholders amid the pressures of EPU.

The findings of this study can help investors, analysts, and regulators evaluate the impact of EPU on a company's business activities. This study provides an overview to investors and analysts regarding the decline in investment efficiency and FRQ during EPU. The results can also be used as input for regulators in formulating policies that encourage companies to regulate investment levels without harming other stakeholders and maintain FRQ in the wake of uncertainty in the business environment.

This study has several limitations. First, we use abnormal investments to measure a firm's investment level, although it did not consider the degree of irreversibility of investment objectives. Second, although this study includes control variables at the company and country levels, these variables may only partially control for the mitigation effects of companies. Third, the sample in this study is limited to developing countries in the Asia-Pacific region with unique characteristics; therefore, the generalisability of the findings may be reduced.

This study finds strong evidence that EPU affects a company's level of investment in FRQ. Future research should focus on the irreversibility of corporate investments to effectively describe the sensitivity of investment activities to conditions of uncertainty in the business environment. Further research should focus on the mitigation efforts of a company's stakeholders to maintain FRQ amid the ongoing pressure of uncertainty.

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Appendix

Variable	Definition
INVU	Firm's investment activities measured using the company's risk propensity model during uncertainty developed by Bulan (2005)
EPU	Economic policy uncertainty index measured using the model developed by Baker *et al.* (2016)
FRQ	Quality of a company's financial reporting
I/K	Company's level of investment measured by the value of cash paid for the purchase and construction of fixed assets, intangible assets, and other fixed assets, scaled by the total of firm's capital
Tobin's Q	Company's investment opportunities as measured by the company's capital market scaled by the total equities
CFO/K	Cash flow from operating activities scaled by total of firm's capital
MPK	Return on investment ratio which indicates the rate of investment return of a firm to each addition of the firm's capital
σ	Total uncertainty of the company, proxied by the annualized volatility of the company's stock returns
TA	Company's total accuracy obtained through the equation (ΔCurrent Assets - Cash – Current Liabilities + Current Portion of Long-Term Debts – Depreciation and Amortization) divided by the average total assets of the company
Assets	Average total assets of the company
Sales	Total net sales divided by the average total assets of the company
PPE	The gross plant, property, and equipment value divided by the company's average total assets
ROA	Company performance measured using net income divided by the company's total assets
AQ	The quality of a company's accruals
SIZE	Company size
CFL	Standard deviation of the company's operating cash flows from year t-4 to year t
SALV	Standard deviation of sales from year t-4 to year t
OCR	Company's operating cycle ratio
NINC	Company's operational losses
LEV	Total debt divided by total asset
GWH	Assets growth
LR	Liquidity ratio
BR	Business risk
STURN	Sales ratio
PPER	Ratio properties, plants, and equipment
INTR	Ratio of intangible assets
EG	Economic Growth
IF	Investment Freedom
RQ	Regulatory Quality
GE	Government Effectiveness

Table A1.
Variable definition

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