

Economic Policy Uncertainty and Bank Credit Growth in Indonesia

*Sahdan Saputra¹, Wira Hendri²

¹Department of Computer Science, Faculty of Engineering, Universitas Bumigora, Mataram, Indonesia

²Department of Management, Faculty of Economics and Business, Universitas Bumigora, Mataram, Indonesia

Correspondence*:

Address: Jl. Ismail Marzuki, Cilinaya, Cakranegara, Kota Mataram, Nusa Tenggara Barat. 83127, Indonesia | e-mail: sahdan@universitasbumigora.ac.id

Abstract

Objective: This study examines the influence of economic policy uncertainty in countries with the largest capital investments in Indonesia, such as Singapore, China, Hong Kong, Japan, the United States, Korea, and the United Kingdom, on the credit growth of commercial banks in Indonesia.

Design/Methods/Approach: The sample of this study is all commercial banks in Indonesia from January 2011 to December 2022. This study uses a quantitative approach, using monthly aggregate data on credit growth of commercial banks in Indonesia and economic policy uncertainty data for each country. Hence, the number of observations in this study amounts to 144. This study uses multiple linear regression with the EViews 12 analysis tool.

Findings: The findings in this study show that the influence of economic policy uncertainty in the country with the largest capital investment in Indonesia has various influences. Of the several countries that were observed in the study, Japan was one of the countries that had a significant negative impact on the growth of commercial bank credit in Indonesia.

Originality/Value: This study complements several previous studies regarding the impact of economic policy uncertainty on Indonesia's micro and macro economy. Studies regarding the impact of economic policy uncertainty on Indonesia's banking credit growth are still limited.

Practical/Policy implication: The findings of this study can be used as a reference for banking managers when making decisions such as credit portfolio diversification. By spreading exposure to various sectors and industries, banks can reduce risks related to economic uncertainty in specific sectors. Banking managers need to design products and services that are more creative and adaptive to help banks remain competitive and attract customer interest amidst an uncertain economic situation.

Keywords: Economic Policy Uncertainty (EPU), Credit Growth, Banking

JEL Classification: D81, E50, G21



DOI: <https://doi.org/10.20473/jmtt.v17i1.51312>

Received: November 6, 2023; Revised: March 12, 2024; Accepted: March 21, 2024; Available online: March 22, 2024

Copyright © 2024, The Author(s)

Published by [Universitas Airlangga](https://www.unair.ac.id/), Department of Management, Faculty of Economics and Business

This article is published under the Creative Commons Attribution 4.0 (CC-BY) International License. The full terms of this license may be seen at: <https://creativecommons.org/licenses/by/4.0/>

1. Introduction

How policies influence corporate investments has recently become a critical issue for the academic community because the uncertainty of economic policies is considered one of the driving forces behind business fluctuations (Binder, 2017). Lately, the world has been facing significant events, such as wars in Europe and the Middle East, with almost half of the companies in the United Kingdom viewing war as a source of uncertainty for their businesses. Conditions like these have been highlighted in economic and financial literature, stating that economic policies hinder corporate performance. Economic Policy Uncertainty (EPU) is policy changes that may lead to potential concerns for business actors (Royhana & Warninda, 2021). This uncertainty in economic policies can affect various aspects of the economy, including investment, consumption, production, and economic growth (Bachmann et al., 2013). Economic players such as companies, consumers, and investors will hesitate to make decisions if government economic policies frequently change or cannot be predicted accurately, leading to the adoption of a 'wait and see' approach to deal with uncertainty (Al-Thaqeb & Algharabali, 2019).

Economic actors must be wary of domestic and abroad uncertainties with the strengthening of economic, financial, and political relations between countries (Biljanovska et al., 2017). Uncertainty in foreign economic policy relates to the economic policies decided upon by nations worldwide. Meanwhile, uncertainty in domestic economic policy relates to the policies adopted by the government or economic authorities within the country. As a country with an open economic system, Indonesia will certainly not escape the impacts of uncertainty from foreign nations. The concept of the impacts caused by external countries, responded to by changes in domestic economics, is referred to as spillover effects (Mwase et al., 2016). Countries with open economic systems have economic connectivity through trade routes and financial channels (Suwito et al., 2020). Understanding why economic policies can influence financial institutions such as banking is crucial as it can explain the behaviour of financial sector agents during periods of growth.

Several previous studies examined the impact of economic policy on banking credit; for example, Danisman et al. (2020) found that banking credit experienced a decline in European countries when there was increasing economic policy uncertainty. Studies conducted by Nguyen et al. (2020) and Bordo et al. (2016) indicated that economic policies have a negative impact on credit growth in developing countries. In addition, Chi & Li (2017) and Li (2023) examined the impact of economic policy uncertainty on banking stability and credit risk in China; these studies show that economic policy uncertainty negatively impacts banking stability and increased credit risk. Yu et al. (2022) found that high EPU reduces corporate bank credit in China. Ashraf (2019), in this study, found that economic policy uncertainty affected the reduction of bank interest rates. Gissler et al. (2016) found a higher loan decline when there was increased economic policy uncertainty. More specifically, Wu & Suardi, (2021) found that higher economic uncertainty negatively influenced the demand and supply of loans, increasing loan spreads and the proportion of guaranteed loans. In Indonesia, studies related to economic policy uncertainty, such as those by Yu et al. (2021) and Sum (2013), show that economic policy uncertainty affects the stock market. Studies conducted by Behera et al. (2023) found that economic policy uncertainty reduces economic growth. Kurniawan et al. (2023) studied the influence of economic policy on investment activity. Saputra et al. (2023) found that geopolitical risk as the impact of economic policy uncertainty affected decreasing investment in the stock market. However, the crucial question remains how economic policy uncertainty affect banking credit in Indonesia. Whether banks will reduce their lending during times of high economic uncertainty is a critical query, given that banking is one of the financial institutions heavily regulated by the government.

This study examines the effect of economic policy uncertainty on banking credit growth in Indonesia. The difference between this study and several previous studies conducted in Indonesia lies in the variables influenced by economic policy uncertainty. Previous studies focused on the influence of economic policy uncertainty on the macro economy in Indonesia; apart from that, several other studies focused on its impact on the stock market. This study will examine the spillover effects of countries with the largest capital investment in Indonesia, which are expected to impact banking credit growth in Indonesia.

This study is expected to contribute significantly to banking companies, policymakers, and other stakeholders in determining appropriate policies in high economic policy uncertainty. First, the growing literature regarding the impact of economic policy on banking credit growth in Indonesia still needs to be expanded so that this study can enrich the literature regarding the relationship between economic and banking policy. Second, by exploring the impact of economic policy on banking credit growth, stakeholders can understand the behaviour of financial sector agents when there is high economic uncertainty. Third, this study is expected to contribute to a new understanding of the impact of countries with the largest investment in Indonesia at times of high infection so that the government can determine policy direction in dealing with these imminent conditions. Fourth, this study can be used as a reference for policymakers or government and banking management as a basis for anticipating changes in economic conditions in other countries.

This study consists of five parts. The background and motivation for the study are presented in the first part. The first part of this study discusses the importance of investigating the impact of economic policy uncertainty (EPU) on banking credit growth in Indonesia. The second section presents the development of hypotheses and a review of the theory used as a reference in conducting this study; apart from that, this section discusses several previous studies that have examined the influence of economic policy uncertainty on macro and micro-economic variables while the research methodology is discussed in the third section where in section this article discusses the methods used in testing

hypotheses. The fourth section contains findings and discussion, and the fifth section contains the conclusions of this study.

2. Literature Review and Hypotheses Development

Literature review

Several studies have examined the relationship between Economic Policy Uncertainty (EPU) and the banking system, for example, Chi & Li (2017), Hammoudeh & McAleer (2015), Hu & Gong (2019), and Lee et al. (2017). Wisniewski and Lambe (2015) have shown that credit default swaps, referred to as "spreads," are highly sensitive to high economic policy uncertainty. Gissler et al. (2016) argue that the decline in bank loans will be more severe if banks face higher regulatory uncertainty. Additionally, other studies conducted by Bordo et al. (2016), Hu & Gong (2019), and Lee et al. (2017) examine the impact of EPU on the lending activities of the banking system with interesting findings. Lee et al. (2017) found that EPU has altered lending behaviour and banking risk-taking activities. Chi & Li, 2017 found a positive relationship between EPU and the nonperforming loan ratio in Chinese commercial banks. Hu & Gong (2019) found that Economic Policy Uncertainty (EPU) has reduced bank credit growth in advanced economies. Moreover, this impact is more dominant in large banks, but its effect is less pronounced in more liquid/well-diversified banks. Bordo et al. (2016) found that economic policy uncertainty adversely affects banking institutions.

Economic policy uncertainty and credit growth

Economic policy uncertainty is related to economic policies such as monetary policy, fiscal policy, regulatory policies, and other factors that affect economic activities (Baker et al., 2015). Several studies have been conducted on the impacts of economic policy uncertainty on both micro and macroeconomics in Indonesia and other countries. First, in a macroeconomic context, economic policy uncertainty affects inflation (Binder, 2017), unemployment (Caggiano et al., 2017), Gross Domestic Product (GDP) (Saleem et al., 2018), and interest rates (Ozili, 2022). Studies conducted by Suwito et al. (2020) found that the economic policy uncertainty in the United States significantly affects the economic growth in Indonesia.

Secondly, in microeconomics, Al-Thaqeb and Algharabali (2019) explain that economic agents such as firms, consumers, and investors engage in a "wait and see" approach in response to high policy uncertainty. Several studies, such as Danisman et al. (2020), found that banks reduce lending during periods of high policy uncertainty. Nguyen et al. (2020) explain that shocks originating from external firms impact credit activity by influencing credit growth through lending channels. Severesia and Juliana (2022) found that firms decrease corporate risk during high-uncertainty periods. Komari and Juliana (2022) found that debt costs are higher during high economic policy uncertainty.

Biljanovska et al. (2017) revealed that economic policy uncertainty could affect various aspects of the economy, such as reducing real output growth, private consumption, and private investment. Such policy uncertainty can originate from both domestic and foreign sources. Foreign economic policy uncertainty often impacts the domestic economy due to spillover effects from developed countries to developing ones Mwase et al., (2016). It demonstrates the significance of policy certainty in domestic and international economic activities. Several previous studies, especially in Indonesia, have yet to examine the influence of economic policy uncertainty on bank credit growth. Thus, the relationship still needs to be clarified. Therefore, the hypotheses proposed in this study are as follows:

H1: Economic Policy Uncertainty impacts the growth of banking credit in Indonesia.

3. Method

By using quantitative analysis, this study uses monthly aggregate banking credit growth (CG) data from January 2011 - December 2022, which is quoted from Indonesian Banking Statistics (SPI) and published on the Financial Services Authority (OJK) website. Meanwhile, Economic Policy Uncertainty (EPU) in this study uses a model developed by Baker et al. (2015), where Economic Policy Uncertainty (EPU) is an index created based on newspaper articles regarding policy uncertainty from leading newspapers. This index counts the number of newspaper articles containing "uncertainty or unpredictability," "economics or economics," and one or more policy-relevant terms. The economic policy uncertainty index referred to in this study is the economic policy uncertainty index of countries with the largest investment in Indonesia, such as Singapore, China, Hong Kong, Japan, the United States, South Korea, and the United Kingdom. Based on the foreign investment realization report issued by the Investment Coordinating Board (BKPM, 2022), Singapore is the country with the largest investment in Indonesia, reaching 10.54 billion U.S dollars, China 5.19 billion U.S dollars, Hong Kong 3.91 billion U.S Dollars, Japan 2.77 Billion U.S Dollars, United States 2.12 Billion U.S Dollars, South Korea, 1.67 Billion U.S Dollars, United Kingdom \$507.65 Million U.S Dollars.

The economic policy uncertainty index was published on the Freed Economic Data (FED) website from January 2011 to December 2022. So, by using monthly data for 12 years, the number of observations in this study was 144. This study uses multiple linear regression using the Eviews 12 analysis tool to determine the influence of economic policy uncertainty on banking credit growth in Indonesia; referring to Gujarati & Porter (2015), the general form of the equation in this study is as follows:

$$CG_t = a + \beta_1 EPU_SGP_t + \beta_2 EPU_CHN_t + \beta_3 EPU_HKG_t + \beta_4 EPU_JPN_t + \beta_5 EPU_US_t + \beta_6 EPU_KRE_t + \beta_7 EPU_UK_t + \beta_8 TPF_t + \beta_9 ROA_t + \beta_{10} BOPO_t + \beta_{11} NIM_t + \beta_{12} SIZE_t + \beta_{13} INF_t + e_t \quad (1)$$

Table 1. Operational Definition of Variables

Variable	Measurement	Source	Code
Dependent Variable			
Credit Growth	(Total Credit T1 - Total credit T0)/Total credit T0*100	OJK	CG
Independent Variable			
EPU Singapore	Ln Index EPU Singapore	FED	EPU_SGP
EPU China	Ln Index EPU China	FED	EPU_CHN
EPU Hongkong	Ln Index EPU Hongkong	FED	EPU_HKG
EPU Japan	Ln Index EPU Japan	FED	EPU_JPN
EPU United States	Ln Index EPU United States	FED	EPU_US
EPU Korea	Ln Index EPU Korea	FED	EPU_KRE
EPU United Kingdom	Ln Index EPU United Kingdom	FED	EPU_UK
Control Variable			
Third-Party Fund	(Total TPF _{t1} - Total TPF _{t0}) / Total TPF _{t0} *100	OJK	BOPO
Return On Asset	Net Profit/Total assets	OJK	ROA
Operating Costs	(Operating Costs/Operating Income)*100	OJK	BOPO
Net Interest Margin	NIM = (Interest Income - Interest Expense) / Average Earning Assets x 100	OJK	NIM
Firm Size	Log-N Total assets	OJK	SIZE
Inflation	(CPI _{t1} -CPI _{t0}) / CPI _{t0}	BI	INF

Table 1 summarizes the measurement of economic policy uncertainty variables for countries used as independent variables, such as Singapore, China, Hong Kong, Japan, the United States, Korea, and the United Kingdom. Referring to Nguyen et al. (2020), economic policy uncertainty in this study is measured using the Log-N EPU Index for each country. Furthermore, this study has control variables such as bank deposit growth, profitability, Capital, firm size, costs, and macroeconomic factors. Bank deposit growth is measured using Third Party Funds (TPF) (Sukmawati & Purbawangsa, 2016), profitability is measured using Return on Assets (ROA) (Utami, 2020), and Net Interest Margin (NIM) (Puspitasari et al., 2021), Capital is measured using the Capital Adequacy Ratio (CAR) (Sudana, 2011), costs are measured using the Operational Costs to Operational Income Ratio (BOPO) (Suastika & Herawati, 2023), and firm size is measured using the natural logarithm of total assets (SIZE) (Setiawan & Pratama, 2019), while macroeconomic variables are measured using Inflation (INF) (Pinto et al., 2023).

4. Result and Discussion

This study uses multiple regression with monthly data from January 2011 to December 2022 to analyze the impact of Economic Policy Uncertainty (EPU) on Commercial Bank credit growth in Indonesia. The subject of this study includes all Commercial Banks in Indonesia; thus, the banking credit growth data is measured using the aggregated monthly credit allocation. The economic policy uncertainty in this study is measured using the EPU index of 10 countries with the largest capital investment in Indonesia. However, 3 countries are excluded as independent variables due to the unavailability of complete Economic Policy Uncertainty (EPU) indices from January 2011 to December 2022, However, 3 countries are excluded as independent variables due to the unavailability of complete Economic Policy Uncertainty (EPU) indices from January 2011 to December 2022, namely Malaysia, the Netherlands and Bermuda.

Referring to Nguyen et al. (2020), the economic policy uncertainty in this study is measured using the Log-N EPU index of each country. One of the reasons for using the top 10 countries with the largest capital investment as variables influencing Indonesia's credit growth is that Indonesia, as a country with an open economic system, is considerate of the effects of economic policy uncertainty in foreign countries on the domestic economy. Suwito et al.

(2020) explain that spillover effects resulting from foreign economic policy uncertainty on the domestic economy can occur through trade and financial channels.

In Table 2 of this study, the descriptive statistical test results provided the mean, median, maximum, and standard deviation values. Based on the findings of the descriptive statistical test, the mean value of the credit growth variable is 0.90%, with a minimum value of -2.23% and a maximum value of 3.24%. The obtained mean value of 0.90% indicates that the average banking sector in Indonesia has relatively small credit growth. According to the descriptive statistical test results on the independent variable, Japan has the lowest average economic policy uncertainty index value, 1.99.

Table 2. Descriptive Statistic

	CG	EPU_SGP	EPU_CHN	EPU_HKG	EPU_JPN	EPU_US	EPU_KRE
Mean	0.90	2.23	2.48	2.17	1.99	2.07	2.14
Median	0.99	2.20	2.49	2.18	2.03	2.16	2.17
Maximum	3.24	2.61	2.99	2.53	2.32	2.52	2.59
Minimum	-2.23	1.93	1.42	0.00	0.00	0.00	0.00
Std.Dev	1.20	0.17	0.35	0.26	0.30	0.45	0.36
Obs	144	144	144	144	144	144	144
	EPU_UK	TPF	ROA	BOPO	NIM	SIZE	INF
Mean	2.14	0.86	2.60	80.39	5.10	6.77	4.23
Median	2.14	0.73	2.52	79.68	5.13	6.80	3.80
Maximum	2.75	3.66	3.70	91.78	6.40	7.02	8.79
Minimum	0.00	-2.10	1.59	73.74	4.06	6.46	1.32
Std. Dev	0.25	1.11	0.40	3.97	0.56	0.15	1.90
Obs	144	144	144	144	144	144	144

Source: Eviews. 12

This study carried out a classical assumption test to ensure that the regression model in this study is not biased. As shown in Table 3, the results of the classical assumption test show that the data in this study have passed the classical assumptions consisting of multicollinearity, normality, heteroscedasticity, and autocorrelation tests. The normality test shows that the centred VIF value of all independent variables is below <10 , meaning there is no multicollinearity problem. The normality test results show a Jarque-Bera value of 0.458; this value is more significant than 0.05, so it can be concluded that the data is usually distributed. The result of the white test shows that the Obs R-squared value is 0.3485; this value is above >0.05 , so it can be concluded that the data in this study does not have heteroscedasticity problems. Lastly, the autocorrelation test, the results of the Breusch-Godfrey test show an Obs R-squared value of 0.8077; this value is above >0.05 , meaning that the data in the study does not have autocorrelation problems.

Table 3. Classical Assumption Test

Multikolinearitas	Centred VIF	<10
Normality	Jarque-Bera Probability	0.458
Heteroskedastisitas	White test	0.3485
Autokorelasi	Breusch-Godfrey Serial correlation LM Test	0.8077

Source: Eviews 12.

This study uses multiple regression analysis with the Ordinary Least Squares (OLS) model. The regression results in Table 4 show the influence of economic policy uncertainty in the 7 countries with the largest capital investment in Indonesia. The findings reveal that Singapore's Economic Policy Uncertainty (EPU) has a coefficient of 0.2921 with a significance value of 0.6494, China with a coefficient of -0.1204 and a significance value of 0.7346, Hong Kong with a coefficient of -0.0888 and a significance value of 0.7589, Japan with a coefficient of -0.6363 and a significance value of 0.0091, the United States with a coefficient of 0.0111 and a significance value of 0.9446, Korea with a coefficient of 0.1277 and a significance value of 0.5368, and finally, the United Kingdom with a coefficient of 0.0367 and a significance value of 0.9095. From the study results, we conclude that the influence of foreign economic policy uncertainty has a different effect on economic activities in Indonesia, particularly in bank credit growth. However, among the seven countries examined in this study, Japan has a significant influence, with a negative effect of -0.6363 and a significance level of 1%. It implies that the higher the economic policy uncertainty in Japan, the more it will impact the bank credit growth in Indonesia. The variables presented in this study have an average influence of above 50% on credit growth based on R^2 and an average of above 47% using Adjusted R^2 .

Table 4. Regression Result: EPU on Credit Growth

Variable	Credit Growth						
	OLS	OLS	OLS	OLS	OLS	OLS	OLS
Independent Variable							
EPU SGP	0.2921 (0.6494)						
EPU CHN		-0.1204 (0.7346)					
EPU HKG			-0.0888 (0.7589)				
EPU JPN				***-0.6363 (0.0091)			
EPU US					0.0111 (0.9446)		
EPU KRE						0.1277 (0.5368)	
EPU UK							0.0367 (0.9095)
Control variable							
TPF	***0.5816 (0.0000)	***0.5870 (0.0000)	***0.5867 (0.0000)	***0.5756 (0.0000)	***0.5858 (0.0000)	***0.5831 (0.0000)	***0.5865 (0.0000)
ROA	-0.4153 (0.2194)	-0.3757 (0.2686)	-0.3589 (0.3115)	-0.4348 (0.1843)	-0.3926 (0.2433)	-0.4043 (0.2277)	-0.3965 (0.2375)
BOPO	**_-0.0562 (0.0193)	**_-0.0528 (0.0258)	**_-0.0526 (0.0278)	***_-0.0663 (0.0048)	**_-0.0538 (0.0226)	**_-0.0557 (0.0185)	**_-0.0542 (0.0216)
NIM	0.0702 (0.6684)	0.0909 (0.5846)	0.0776 (0.6338)	0.136 (0.3964)	0.0796 (0.625)	0.0876 (0.5914)	0.074 (0.6623)
SIZE	***_-2.8988 (0.0033)	**_-2.5447 (0.0151)	***_-2.6677 (0.0039)	***_-2.7807 (0.0017)	***_-2.7175 (0.0028)	***_-2.7466 (0.0024)	***_-2.7303 (0.0026)
INF	0.0540 (0.3671)	0.0326 (0.5956)	0.0412 (0.4495)	0.0353 (0.5051)	0.0426 (0.4328)	0.0448 (0.4092)	0.0437 (0.4293)
R ²	0.5015	0.5012	0.5011	0.5252	0.5008	0.5022	0.5008
Adjusted R ²	0.4759	0.4755	0.4754	0.5008	0.4751	0.4765	0.4751
F-statistic	***0.0000	***0.0000	***0.0000	***0.0000	***0.0000	***0.0000	***0.0000
N	144	144	144	144	144	144	144

Source: Eviews 12

Level of sig ***1%,**5%, *10%

In addition, it tests the effect of economic policy uncertainty using each country's index on banking credit growth. This study also carried out a joint analysis to see the consistency of the results in this study. Based on the test results summarized in Table 5, These findings show the consistency of results from the 7 countries tested; Japan is the only country that has an impact of economic policy uncertainty on banking credit growth in Indonesia. It can be seen from the coefficient value of -0.702967 and the P-value value of 0.0125 or at a significance level of 5%.

Furthermore, this study is equipped with control variables consisting of Third-party fund (TPF), Return on asset (ROA), operational costs to operating income (BOPO), Net Interest Margin (NIM), company size (SIZE), and Inflation (INF). Of the six control variables, 3 significantly impact the credit growth in Indonesian commercial banks, with third-party funds having a positive coefficient of 0.5843 with a significance value of 0.0000. The second is the operational cost to operating income (BOPO), with a negative coefficient of -0.0613 and a significance probability of 0.0125. These results align with the study conducted by Haryanto and Widyarti (2017), which found that operational costs negatively impact the credit growth of banking. Furthermore, this study is also consistent with Ismawanto et al. (2020), who found that the growth of third-party funds affects bank credit growth. This finding is also consistent with the test results in Table 4, where from all tests carried out individually, third-party funds (TPF), operational costs (BOPO), and company size (SIZE) are variables that influence banking credit growth.

Table 5. Regression Result: EPU and Credit Growth

Variable	Coefficient	P-Value
Constanta	19.55820	0.0363
Independent Variable		
EPU_SGP	1.4070	0.2289
EPU_CHN	-0.8348	0.1183
EPU_HKG	-0.1381	0.6610
EPU_JPN	-0.7029	0.0125**
EPU_US	0.1893	0.3475
EPU_KRE	0.0036	0.9885
EPU_UK	0.0686	0.8447
Dependent Variable		
TPF	0.5610	0.0000***
ROA	-0.2683	0.4643
BOPO	-0.0745	0.0036***
NIM	0.1684	0.3470
SIZE	-1.9576	0.0704*
INF	0.0058	0.9266
R ²	0.5077	
Adjusted R ²	0.4584	
F-Statistic	0.0000***	
Observation	144	

Source: Eviews 12

Level of significance: *10%, **5%, ***1%

This study shows that the uncertainty of foreign economic policy has various impacts on economic activities in Indonesia. Among the seven countries tested in the study, Japan is the only country with a negative and significant impact on credit growth in Indonesia. It means that the higher the uncertainty of Japan's economic policy, the more it will affect the decline in credit growth in Indonesian commercial banks. The findings of this study are consistent with studies conducted by Bordo et al. (2016), Hu & Gong (2019), and Lee et al. (2017), which found that economic policy uncertainty has altered lending behaviour and banking risk-taking activities. Chi and Li (2017) found a positive relationship between EPU and the nonperforming loan ratio in commercial banks in China. Hu & Gong (2019) found that Economic Policy Uncertainty (EPU) has reduced bank credit growth in developed countries, while Bordo et al. (2016) found that policy uncertainty has adverse effects on banking institutions. Furthermore, this study is also in line with the study conducted by Nguyen et al. (2020), which states that economic policy uncertainty impacts one country compared to another.

Japan is Indonesia's fourth-largest country in terms of foreign capital ownership, with capital ownership reaching USD 2.8 billion. Japan plays a crucial role in bilateral relations with Indonesia, as well as in the regional and global contexts. Japan's significant role in Indonesia can be seen from various aspects, such as economics, investment, development assistance, culture, and diplomacy. Japan is one of the largest foreign investors in Indonesia. Many Japanese companies have established factories and production facilities in Indonesia, creating jobs and contributing to economic growth.

Moreover, Indonesia and Japan are significant trading partners, with solid exchanges of goods and services. Japan has provided development assistance to Indonesia in various sectors, including infrastructure, education, and health. This aid has helped Indonesia in its efforts for economic and social development. Japan has been involved in crucial infrastructure projects in Indonesia, such as the Jakarta-Bandung high-speed railway project, which is considered one of Indonesia's largest infrastructure projects. This collaboration has helped improve connectivity and mobility in Indonesia. Indonesia and Japan share a close strategic partnership. They collaborate in various fields, including diplomacy, security, and global issues such as peace and stability in Asia. Japan has a significant influence on Indonesia's culture and education. Cultural exchange programs and educational scholarships have strengthened the relationship between the two countries and facilitated exchanges between their citizens. Japan is known as an advanced country in technology and innovation. Technical cooperation and technology transfer between the two countries have assisted Indonesia in developing manufacturing and information technology sectors.

Table 6. Interaction between Japan's EPU and Company Size

Variabel	Coefficient	P-Value
Constanta	3.3977	0.1349
EPU_JPN*SIZE	-0.1021	0.0075***
TPF	0.5992	0.0000***
ROA	0.1729	0.5190
BOPO	-0.0485	0.0309**
NIM	0.2999	0.0582*
INF	0.0654	0.2191
R ²	0.4708	
Adjusted R ²	0.4476	
F-Statistic	0.0000	
Observation	144	

Source: Eviews 12

Level of significance: *10%, **5%, ***1%

Additionally, this study examines how firm size moderates the influence of economic policy uncertainty on banking credit growth in Indonesia. By excluding six countries that do not impact the growth of general bank credit in Indonesia, we interact the Japanese Economic Policy Uncertainty Index with the size of banking firms in Indonesia. The findings summarized in Table 6 show a coefficient of -0.1021 with a significance value of 1% alpha. This result indicates that banks with larger sizes predominantly decrease credit compared to those with smaller sizes. These results align with the studies conducted by Hu & Gong (2019), which found that Economic Policy Uncertainty (EPU) has reduced bank credit growth in advanced countries, and this impact is more dominant in larger banks.

5. Conclusion

This study examines the impact of the economic policy uncertainty of the country with the largest capital investment in Indonesia on the growth of banking credit in Indonesia. Based on this study's findings, foreign countries' economic policy uncertainty has various effects on the behaviour of financial sector agents such as banks in responding to this economic policy uncertainty. Several countries, such as Singapore, China, Korea, the United States, England, and Hong Kong, have yet to be significantly influenced by the credit growth of commercial banks in Indonesia. However, the results indicate that Japan is one of the countries that have a negative and significant impact on credit growth in Indonesia. Other findings also show that large banks are more dominant in reducing their credit volumes during periods of high economic policy uncertainty. Overall, this study proves the influence of foreign economic policy uncertainty on credit growth in Indonesia. This study verifies the theory of spillover effects, which suggests that issues in other countries can impact domestic business activities. With the increasing interconnectedness of economies, finances, and politics between countries, economic agents have reason to be wary of domestic-sourced economic policy uncertainty and uncertainty from foreign countries.

The findings of this study can provide practical implications for policymakers (government) and banking management in determining policies during high economic policy uncertainty. In this case, the government as a policy maker can formulate policies that are profitable for financial institutions, such as changes in interest rates in the face of economic uncertainty originating from abroad, so that banks can carry out their function well as financial intermediary institutions and avoid risks originating from external companies. In addition, uncertainty in economic policy could cause a decline in banking credit growth. Therefore, banking managers need to consider diversifying their credit portfolio. Having credit spread across various industry sectors and product types can reduce the negative impact of unexpected economic changes.

In conducting this study, the author acknowledged the existence of limitations. One of the aims of this study is to examine the influence of economic policy uncertainty in the country with the largest capital investment in Indonesia. However, the data on the Freed Economic Data website must provide the necessary information, especially Economic Policy Uncertainty (EPU) data from January 2011 to December 2022. In addition, this study has limitations in accessing complete credit data from Rural Banks (BPR), where investigating the impact of economic policy uncertainty on banks that incidentally have a small size is an interesting thing to find out the response of these banks when economic policy uncertainty occurs. Further study on the impact of economic policy can focus more on its impact on Rural Banks (BPR), which incidentally have smaller asset sizes.

Acknowledgement

The author thanks Baker, Bloom, and Davis (2016) for constructing the methodology and data to determine the economic policy uncertainty index. Without this data, this study would not have been possible. The author also extends thanks to those who have encouraged the writing of this article, especially friends within the Bumigora University community.

Author Contribution

Author 1: conceptualization, writing original draft, data curation, formal analysis, investigation, methodology. Author 2: Review and editing, supervision, and validation.

Financial Disclosure

The study received no grants or financial assistance from specific institutions or organizations. It was solely funded through self-financing between the first and second authors.

Conflict of Interest

The authors declare that the study was conducted without commercial or financial relationships that could be construed as a potential conflict of interest.

References

- Al-Thaqeb, S. A., & Algharabali, B. G. (2019). Economic policy uncertainty: A literature review. *The Journal of Economic Asymmetries*, 20, e00133.
- Ashraf, B. N. (2019). Economic policy uncertainty and banks' loan pricing. *Journal of Financial Stability*, 44, 100695.
- Bachmann, B. R., Elstner, S., & Sims, E. R. (2013). Uncertainty and Economic Activity: Evidence from Business Survey Data. *American Economic Journal: Macroeconomics*, 5(2), 217–249.
- Baker, S. R., Bloom, N., & Davis, S. J. (2016). Measuring Economic Policy Uncertainty. *The Quarterly Journal of Economics*, 131(4), 1593–1636.
- Behera, H., Gunadi, I., & Rath, B. N. (2023). COVID-19 uncertainty, financial markets and monetary policy effects in case of two emerging Asian countries. *Economic Analysis and Policy*, 78, 173–189.
- Biljanovska, N., Grigoli, F., & Hengge, M. (2017). *Fear Thy Neighbor: Spillovers from Economic Policy Uncertainty*.
- Binder, C. C. (2017). Economic policy uncertainty and household inflation uncertainty. *The BE Journal of Macroeconomics*, 17(2), 20160048.
- BKPM. (2022). *Laporan Realisasi Penanaman Modal dari Kementerian Investasi/BKPM*. Kementerian Investasi/ BKPM.
- Bordo, M. D., Duca, J. V., & Koch, C. (2016). Economic policy uncertainty and the credit channel: Aggregate and bank level U.S. evidence over several decades. *Journal of Financial Stability*, 26, 90–106.
- Caggiano, G., Castelnuovo, E., & Figueres, J. M. (2017). Economic policy uncertainty and unemployment in the United States: A nonlinear approach. *Economics Letters*, 151, 31–34.
- Chi, Q., & Li, W. (2017). Economic policy uncertainty, credit risks and banks' lending decisions: Evidence from Chinese commercial banks. *China Journal of Accounting Research*, 10(1), 33–50.
- Danisman, G. O., Ersan, O., & Demir, E. (2020). Economic policy uncertainty and bank credit growth: Evidence from European banks. *Journal of Multinational Financial Management*, 57, 100653.
- Gissler, S., Oldfather, J., & Ruffino, D. (2016). Lending on hold: Regulatory uncertainty and bank lending standards. *Journal of Monetary Economics*, 81, 89–101.
- Gujarati, D. N., & Porter, D. C. (2015). *Dasar-dasar ekonometrika*. Salemba Empat.
- Hammoudeh, S., & McAleer, M. (2015). Advances in financial risk management and economic policy uncertainty: An overview. *International Review of Economics & Finance*, 40, 1–7.
- Haryanto, S. B., & Widyarti, E. T. (2017). Analisis Pengaruh NIM, NPL, BOPO, Bi Rate dan CAR Terhadap Penyaluran Kredit Bank Umum Go Public Periode Tahun 2012-2016. *Dionegoro Journal of Management*, 6(4), 942–952.
- Hu, S., & Gong, D. (2019). Economic policy uncertainty, prudential regulation and bank lending. *Finance Research Letters*, 29, 373–378.

- Ismawanto, T., Setianegara, G., & Effendi, M. R. (2020). Pengaruh dana pihak ketiga, non performing loan, dan capital adequacy ratio terhadap jumlah penyaluran kredit. *AKUNTABEL: Jurnal Akuntansi Dan Keuangan*, 17(1), 29–37.
- Komari, N., & Juliana, R. (2022). Economic Policy Uncertainty and Cost of Debt Financing in Indonesia. *E-Jurnal Akuntansi*, 32(4), 1020–1031.
- Kurniawan, F., Amanati, H. T., Nugroho, A. H. L., & Pusparini, N. O. (2023). Effects of policy and economic uncertainty on investment activities and corporate financial reporting: a study of developing countries in Asia-Pacific. *Asian Review of Accounting*.
- Lee, C.-C., Lee, C.-C., Zeng, J.-H., & Hsu, Y.-L. (2017). Peer bank behavior, economic policy uncertainty, and leverage decision of financial institutions. *Journal of Financial Stability*, 30, 79–91.
- Li, J. (2023). The Impact of Economic Policy Uncertainty on Bank Stability. *International Conference on Business and Policy Studies*, 1355–1371.
- Mwase, N., N'Diaye, P. M., Oura, H., Ricka, F., Svirydenka, K., & Zhang, Y. S. (2016). *Spillovers from China: Financial Channels (Spillover Notes)*.
- Nguyen, C. P., Le, T.-H., & Su, T. D. (2020). Economic policy uncertainty and credit growth: Evidence from a global sample. *Research in International Business and Finance*, 51, 101118.
- Ozili, P. (2022). Economic policy uncertainty, bank nonperforming loans and loan loss provisions: are they correlated? *Asian Journal of Economics and Banking*, 6(2), 221–235.
- Ozili, P. K. (2021). Economic policy uncertainty in banking: a literature review. *Munich Personal RePEc Archive*, 275–290.
- Pinto, N. G. D. C. G., Bagiada, K., & Parameswara, A. A. G. A. (2023). Pengaruh DPK, NPL dan Inflasi Terhadap Penyaluran Kredit Pada PT. Bank Mandiri Periode Tahun 2014 – 2018. *Warmadewa Economic Development Journal*, 3(2), 73–79.
- Puspitasari, E., Sudiyatno, B., Aini, N., & Anindiansyah, G. (2021). The Relationship Between Net Interest Margin and Return on Asset: Empirical Study of Conventional Banking in Indonesia. *Academic Journal of Interdisciplinary Studies*, 10(3), 362.
- Royhana, M., & Warninda, T. D. (2021). Pengaruh Ketidakpastian Kebijakan Ekonomi Amerika Serikat, Tiongkok, dan Jepang Terhadap Jakarta Islamic Index. *Jurnal Fokus Manajemen Bisnis*, 11(1), 95–110.
- Saleem, H., Jiandong, W., & Khan, M. B. (2018). The impact of economic policy uncertainty on the innovation in China: Empirical evidence from autoregressive distributed lag bounds tests. *Cogent Economics & Finance*, 6(1), 1514929.
- Saputra, S., Marswandi, E. D. P., & Hendri, W. (2023). Geopolitical Risk & Indonesian Stock Market Response. *Jurnal Ecoment Global*, 8(3), 90–99. <https://doi.org/https://doi.org/10.35908/jeg.v8i3.3486>
- Setiawan, R., & Pratama, A. A. P. (2019). Modal, Tingkat Likuiditas Bank, Npl Dan Pertumbuhan Kredit Perbankan Indonesia. *Matrik: Jurnal Manajemen, Strategi Bisnis Dan Kewirausahaan*, 13(1), 96–107.
- Severesia, C., & Juliana, R. (2022). Pengaruh Ketidakpastian Kebijakan Ekonomi Terhadap Pengambilan Risiko Perusahaan di Indonesia. *Jurnal Riset Akuntansi Dan Keuangan*, 10(3), 491–502.
- Suastika, I. K., & Herawati, N. T. (2023). Pengaruh Ldr, Bopo Dan Dpk Terhadap Jumlah Penyaluran Kredit Perbankan (Studi Kasus Pada Bank BumN Di Indonesia Periode 2014-2021). *Jurnal Akuntansi Profesi*, 14(01), 175–185.
- Sudana, I. M. (2011). *Manajemen Keuangan Perusahaan Teori & Praktik*. Erlangga.
- Sukmawati, N. M. E., & Purbawangsa, I. B. A. (2016). Pengaruh Pertumbuhan Dana Pihak Ketiga, Pertumbuhan Kredit, Risiko Kredit, Likuiditas, Dan Kondisi Ekonomi Terhadap Profitabilitas. *E-Jurnal Manajemen Unud*.
- Suwito, Santosa, iswoyo H., & Yunitasari, D. (2020). Pengujian Empiris Pengaruh Ketidakpastian Kebijakan Ekonomi Amerika Serikat Terhadap Dinamika Perekonomian Indonesia. *E-Jurnal Ekonomi Bisnis Dan Akuntansi*, 7(1), 82–85.
- Utami, D. A. (2020). Pengaruh Profitabilitas, Kecukupan Modal, Dana Cadangan Dan Tingkat Suku Bunga Terhadap Kredit Bermasalah Pada Bank Umum Konvensional Yang Terdaftar Di Bursa Efek Indonesia Tahun 2014-2017. *AKUNESA: Jurnal Akuntansi Unesa*, 8(1), 1–10.
- Wisniewski, T. P., & Lambe, B. J. (2015). Does economic policy uncertainty drive CDS spreads? *International Review of Financial Analysis*, 42, 447–458.
- Wu, W. S., & Suardi, S. (2021). Economic Uncertainty and Bank Lending. *Journal of Money, Credit and Banking*, 53(8), 2037–2069.

- Yu, H., Lv, W., Liu, H., & Wang, J. (2022). Economic Policy Uncertainty and Corporate Bank Credits: Evidence from China. *Emerging Markets Finance and Trade*, 55(11), 3023–3033.
- Yu, X., Huang, Y., & Xiao, K. (2021). Global economic policy uncertainty and stock volatility: evidence from emerging economies. *Journal of Applied Economics*, 24(1), 416–440.