GO Green Research and Education
Journal of Business and Management Research
ISSN:2958-5074 pISSN:2958-5066
Volume No:2 Issue No:2(2023)

Impact of Economic Policy Uncertainty on Bank Liquidity Creation in Chinese Banks

Muhammad Ejaz Majeed
PhD Scholar, Faculty of Management Sciences, International Islamic University Islamabad at-Muhammad.phdfin87@student.iiu.edu.pk
Syed Zulfiqar Ali Shah
Department of Accounting and Finance, International Islamic University Islamabad at-Zulfiqar.shah@iiu.edu.pk>Professor

Abstract
Banks perform vital role for economic development of countries through creating liquidity. The negative effect of economic policy uncertainty on liquidity creation ultimately harms economic growth. This study attempts to investigate the impact of economic policy uncertainty on bank liquidity creation in China during 2011 to 2020. The results show significant adverse impact of economic policy uncertainty on bank liquidity creation. The results are robust to different proxies of policy uncertainty and GMM settings. It suggests government must take steps to ensure certainty in policy implementation in order to promote stable banking system. The study offers a few recommendations for future research.

Key Words: Liquidity Creation, Economic Policy Uncertainty

Introduction

The epidemic of Great Financial Crisis of 2008 has provoked the need to re-thinking of financial system to make it deterrent against any external shock. In response to GFC, several economies have introduced various policies in order to tackle the issue of economic deterioration. These policies, a part from their positive results, have generated uncertainty. Dodd-Frank Act, 2010 is one of the examples that caused uncertainty due to delay in its implementation. The uncertainty generated as a result has found to affect almost all the economic activities including baking activities. It is evidenced that reduced bank lending after Great Recession has slowdown the economic recovery (Bordo et al., 2016). The role of banks in any economy is well recognized long before.

It provides bridge between savers and investors in the economy. The past studies have described that banks contribute positively to the overall economy (McGrattan and Prescott, 2005). However, several regulations introduced by authorities in face of GFC that intended to stabilize and protect financial system have adverse effects on banking activities (Bordo et al., 2016). These policies have caused uncertainty in the economy and have negative effects on bank lending as well as liquidity creation (Baker, Bloom & Davis, 2016; Berger et al., 2017). Not only banks activities but whole economic environment has been suffered by uncertainty (Lee & Wang, 2021). Gulen and Ion (2016), provides evidence of reduced consumption levels in the economy and also investment is found to be decreased due to high uncertainty. The declined credit growth by bank (Bordo et al., 2016) and reduced accounts receivables by firms (Jory et al., 2020) are results of economic policy uncertainty. As a result, the overall economic performance is affected adversely. Most of the studies

Journal of Business and Management Research
ISSN:2958-5074 pISSN:2958-5066
Volume No:2 Issue No:2(2023)

have focussed developed countries like study of Berger et al. (2018). However, very few studies are found that analyse the influence of economic policy uncertainty on banking industry in emerging economies. Among the most recent studies, Wang et al. (2022) inspect the effect of EPU liquidity creation (both asset and liability). Whereas the study of Dang (2022) uses micro-uncertainty measured through bank specific variables to investigate the impact of EPU on bank liquidity creation of Vietnamese banks. However, what would be the impact of EPU on total liquidity creation of banks in China, one of the major emerging countries, has not been investigated. Hence, to fill this gap in existing literature, this study attempts to investigate the impact of economic policy uncertainty on bank liquidity creation in Chines banks. The study focuses on a sample data from 2012 to 2020 of all commercial banks in China. The liquidity creation of banks is measured, in this study, following Berger and Bouwman (2009) methodology. Economic policy uncertainty is estimated by EPU index introduced by Baker et al. (2016).

The study contributes by analysing impact of EPU on bank liquidity creation in banking industry of a major emerging economy of China whereas past studies addressed US banks and multiple countries but no study examines the emerging economies like China. The results of this study envisage that economic policy uncertainty adversely affect liquidity creation in emerging markets. The generalized method of moment (GMM) technique is used to mitigate possible issue of endogeneity. The results are robust to other proxies of uncertainty and estimation methods. The results of the study are of important concern for policy makers and regulators. In order to attain steady economic growth through banks' contribution towards economy, a certain set of policies is mandatory. Thus, measures should be taken by regulators to eliminate uncertainty caused by delay, ambiguity or clarity of the policy made. Further, there is a need to make arrangements for emergency money for banks to secure them from adverse effects of uncertainty.

Literature Review

To promote liquidity and reduce the risk-taking tendencies of businesses, banks play a crucial monitoring function for the whole economy. Financial institutions, such as banks, facilitate transactions by accepting deposits and disbursing payments, and they provide financial derivative contracts to assist counterparties mitigate financial risk. Another way banks generate liquidity is by swapping out high-risk and low-liquidity assets for safer and more liquid liabilities (Diamond & Dybvig, 1983; Bryant, 1980). Banks also generate liquidity through off-balance-sheet operations, as discovered by Holmstrom and Tirole (1998). The availability of funds in banks can be increased in several ways. An increase in the number of researchers focusing on bank liquidity may be attributed to the work of Deep and Schaefer (2004), who, using short term loans, build a measure of bank liquidity formation. In addition, Berger and Bouwman (2009) build a metric for measuring liquidity with various sub-categories and is used in this study to examine the effect of EPU on bank liquidity. Past research has examined a variety of issues connected to the origination of bank liquidity because of the crucial role it plays in the overall economy. Hugonnier and Morellec (2017) examine the workings of banks and conclude that in order to minimise default and

Journal of Business and Management Research
ISSN:2958-5074 pISSN:2958-5066
Volume No:2 Issue No:2(2023)

default losses, financial institutions need to take liquidity and debt factors into account. The expansion of banks' ability to create liquid assets has a strong positive relationship with economic growth (Berger & Sedunov, 2017).
The growth of economy of a nation is directly tied to its government's economic and political policies. Uncertainty caused by policies that are difficult to interpret or change frequently can be detrimental to businesses and cause them to waste resources. Gulen and Ion (2016) point out the reduction in investment due to uncertainty of policy because businesses are hesitant to seize chances due to the irreversibility of investments. According to research by Bonaime et al. (2018), M & A deals are adversely affected by policy uncertainty. Recent research by Jory et al. (2020) envisage that when uncertainty is high, businesses prefer to shorten the number of days they go without receiving payment which indicates that policy uncertainty also deteriorate firm credit. Additionally, EPU has a significant impact on financial institutions in addition to its effects on business operations. Because of the need to limit bad debts, banks have reduced the amount of money available for lending to businesses and individuals. There is empirical evidence from recent research that evidence the negative impact of EPU on credit including Berger et al. (2017); Francis et al. (2014); and Berger et al. (2020). Liquidity constraint theorists argue that as income drops, consumers are compelled to cut back on discretionary spending and instead put that money into savings as a hedge against the future.

Similarly, investors cut their investment allocation and increase their bank deposits when macroeconomic risk is high (Gatev & Strahan, 2006). The introduction of deposit insurance schemes has sped up this trend. The origins of deposit insurance may be traced back to the Great Depression and other global economic downturns of the 1930s. There are less likelihood of bank runs because of deposit insurance, which protects bank customers' money. In order to cushion banks against the effects of a financial crisis, several nations have established deposit insurance regimes. Both Pennacchi (2006) and Gatev and Strahan (2006) indicate that these protective measures of the state in high uncertainty have significantly altered investors' perceptions of bank deposits, resulting in higher deposits from the general public. The increase in deposit led to further deterioration of the economy (Berger et al., 2020). A financial crisis is a corollary of plentiful liquidity production because asset bubbles are fuelled by it and banks loosen their lending rules (Acharya & Naqvi, 2012).

In addition, Gatev et al. (2009) demonstrate that transaction deposits may be used to mitigate liquidity risk associated with unutilized loan promises, a situation that is exacerbated when the market is volatile. Using data collected from banks in times of crisis, Acharya and Mora (2015) discover a raised in interest rates in an effort to attract new deposits. Banks' willingness to take risks is shown to be positively related to the interest rate on uninsured deposits, according to research by Hannan and Hanweck (1988). Based on the foregoing, it appears that banks may actively want to increase deposits during times of heightened unpredictability. Deyoung and Roland (2001) argue that the loan activities of diversified banks are more volatile during unfavourable shocks because non-interest activities presumably exert less solid links between banks and clients, known as lower switching costs. The "search for

Journal of Business and Management Research
ISSN:2958-5074 pISSN:2958-5066
Volume No:2 Issue No:2(2023)

return" motivations may be magnified by the fact that banks with greater levels of diversity are typically more complicated, difficult to manage, and hence more likely to engage in riskier operations (Hou et al., 2018). Liquidity generation by banks, both on and off-balance sheets, may be aided by uncertainty, according to the research. It has been found that in times of high uncertainty, banks are reluctant to make loans. On account of future uncertainty banks may also keep more liquid assets on hand to compensate for any funding and liquidity problems (Diamond & Rajan, 2011). As the cost of borrowing money from other institutions rises, banks may find it difficult to meet their short-term liquidity needs if the economy continues to show signs of instability (Valencia, 2017). Reduced investment and spending by businesses and consumers may lead to lower demand for credit, which might lead to a drop in the generation of new liquidity (Bloom et al., 2013). Loan obligations may be affected by the same factors that reduce bank lending during times of increased uncertainty. Furthermore, due to a lack of available loanable capital, banks are unable to give additional guarantees.

However, a rise in uncertainty may also generate countervailing repercussions. Uncertainty drives banks to take on greater risk to counterbalance their eroding earnings, as suggested by Dell'Ariccia et al. (2014). Customers who are able to obtain more credit in the spot market may reduce their requests for credit commitments, which might lead to a decrease in off-balance sheet operations and hence a reduction in the volume of hazardous loans (Thakor, 2005). On the other hand, the deposits may increase during times of uncertainty as banks are considered to be safe havens (Gatev & Strahan, 2006). A massive literature has addressed the consequences of policy uncertainty on economy activities, business and bank activities. However, no study is found examining the influence of EPU on liquidity creation until Berger et al. (2018) who analysed US banking industry with data spanning from 1984 to 2014 and document significant negative impact of EPU on liquidity. A recent study of Wang et al. (2022) analysed banks of 21 countries and provide similar results as Berger et al. (2018). With only a few studies focusing the relationship between EPU and bank liquidity creation, there is a need to explore more evidence in this regard, particularly in emerging economies where the issue of inconsistency of polices and economic environments are of more concern. This study, therefore, attempts to fill this gap by analysing the impact of EPU on bank liquidity creation in emerging economy of China. As a result, we hypothesise that EPU significantly reduces liquidity creation.

Methodology

Data Description

The aim of the study is to inspect the influence of economic policy uncertainty on liquidity creation in Chines banking sector with a data sample that consists of ten years annual data (from 2011 to 2020) for commercial banks of China. The data for all bank specific variables is obtained from Bankscope database. The data for macroeconomic variables is obtained from World Bank database. And data for economic policy certainty (EPU) is extracted from website (https: //www.policyuncertainty.com). Furthermore, data for World Uncertainty Index

Journal of Business and Management Research
ISSN:2958-5074 pISSN:2958-5066
Volume No:2 Issue No:2(2023)

(WUI), the other proxy of policy uncertainty is obtained from World Bank database. We winsorize all the selected variables at 1% and 99% levels to exclude outliers.

Econometric Model Specification

In order to achieve our objective, we adopt Berger et al. (2018) model with slight amendments which is shown in equation (1).

$$LCN_{i,t} = \beta_0 + \beta_1 LCN_{i,t-1} + \beta_2 EPU_{i,t} + \beta_3 X_{i,t} + \beta_4 M_{i,t} + \varepsilon_{i,t} \quad \ldots\ldots\ldots\ldots\ldots\ldots (1)$$

Where subscripts i and t represent bank and time, respectively. LCN is bank liquidity creation, our dependent variable that is normalized by bank total assets and EPU is economic policy uncertainty. The other control variables are shown by X and M denotes macroeconomic variables included in our model. The model also incorporates bank fixed effect and year effect. ε is error term of the model. Since panel data regression may suffer from endogeneity issue, and there are several techniques to resolve this issue. For avoiding endogeneity, we use one step and two step generalized method of moments (GMM) approaches. Moreover, the robust analysis is carried out by replacing EPU by WUI (World Uncertainty Index) to gauge economic policy uncertainty.

Measuring Variables

Liquidity creation is measured by following Berger and Bouwman (2009) that introduced two measures based on category and maturity of bank assets and liabilities. Furthermore, balance sheet and off-balance sheet liquidity creation are two sub-sets of total liquidity creation. Since information about maturity-based items is not available, we use category-based measure for this study. Moreover, off-balance sheet liquidity is not used in the study due to unavailability of information. According to Berger and Bouwman (2009) assets and liabilities are divided into three categories with specific weights and balance sheet liquidity creation is calculated as follows: LC = ½ (Illiquid Assets + Liquid Liabilities) - ½ (Liquid Assets + Illiquid Liabilities) Two proxies of economic policy uncertainty are used in this study. Composite measure of EPU is based on three components including government spending, inflation and tax codes used in textual frequency of newspaper articles. Following Gulen and Ion (2016), the natural log of EPU is used in this study. The second proxy of policy uncertainty used in this study is World Uncertainty Index (WUI) developed by Ahir et al. (2018). The measure is based on frequency of "uncertainty" reported in Economist Intelligence Unit County reports.

A few control variables are added in the model following Berger et al. (2018) including bank specific (X) and macroeconomic (M) variables. The bank size is measure by logarithm of total assets and capital is the ratio of equity to total assets. Bank size and bank capital have positive/negative relationship, respectively, with liquidity creation (Fungacoa, Pessaross & Weill, 2013). Bank competition has negative influence on liquidity creation (Toh et al., 2019) and Lerner Index is used as proxy of bank competition. In addition, profit after tax to total assets gauges the bank profitability and it is negatively related to liquidity creation (Berger et al., 2016). The stable banks are expected to create lower liquidity as documented by Horvath et al., 2026) and this study uses Z-score to measure bank stability. Credit risk is measured by non-performing loans of banks which is positively associated with liquidity

Journal of Business and Management Research
ISSN:2958-5074 pISSN:2958-5066
Volume No:2 Issue No:2(2023)

creation. The macroeconomic variables include growth rate of gross domestic product and interest rate.

Results and Analysis

Descriptive and Correlation Analysis

Table 1 presents summary statistics of all variables included in the study. The average of normalized liquidity creation for all the banks in China is 0.261 that indicates banks, on average have liquidity creation of 26% of total assets. However, the 0.404 standard deviation indicates the variation in liquidity creation by banks. Lower value of LCN median than mean (in absolute terms) is evidence of negative skewed distribution of normalized liquidity creation. These outcomes are in line with Umer and Son (2016) who studies emerging economies (BRICS). The average EPU during the sample period indicates 5.13 value with standard deviation of 4.83. The other proxy of uncertainty WUI has average of 0.040 and SD of 0.044. The overall banks show equity capital of 36% of total assets during study period.

Table 1: Descriptive Analysis

	Mean	Median	SD	Min	Max
LCN	0.261	0.243	0.404	0.156	0.489
EPU	5.130	4.493	4.834	4.523	5.895
WUI	0.040	0.013	0.044	0.020	0.066
Capital	0.364	0.221	0.383	0.022	0.715
Lerner	0.458	0.107	0.456	0.098	0.648
Size	8.869	2.210	8.614	1.533	12.165
ROA	0.048	0.057	0.025	-0.146	0.178
C_Risk	0.165	0.181	0.256	0.011	0.198
Z-Score	1.590	1.540	1.023	0.373	6.854
GDP	0.073	0.008	0.070	0.061	0.091
Interest Rate	0.012	0.009	0.008	0.005	0.028

Correlation statistics in Table 2 depicts negative association of LCN with EPU and WUI which confirms adverse influence of uncertainty on liquidity creation. Bank capital and bank competition also indicate negative associations with liquidity creation. Bank size, on the other hand has positive correlation with bank liquidity. The magnitudes of correlation among other independent variables are not large enough to signal the presence of multicollinearity in the regression model.

Table 2: Correlation Analysis

	1	2	3	4	5	6	7	8	9	10	11
LCN	1.000										
EPU	-0.064	1.000									
WUI	-0.079	0.387	1.000								
Lerner	-0.410	0.062	0.064	1.000							
Capital	-0.572	0.173	-0.049	0.439	1.000						
Size	0.411	-0.082	-0.093	-0.165	-0.384	1.000					
ROA	0.413	-0.107	-0.148	0.152	0.425	0.043	1.000				
Z-Score	-0.053	-0.099	-0.120	0.048	0.054	0.217	0.061	1.000			
C_Risk	0.152	0.537	0.442	0.071	-0.125	-0.151	-0.275	-0.202	1.000		
GDP	0.214	-0.417	-0.346	0.183	0.193	0.312	0.355	0.228	-0.376	1.000	
Interest Rate	0.317	0.125	0.145	-0.227	-0.286	-0.237	-0.381	-0.105	0.365	-0.359	1.000

Journal of Business and Management Research
ISSN:2958-5074 pISSN:2958-5066
Volume No:2 Issue No:2(2023)

Regression Analysis

Table 3 presents outcomes of GMM models. We perform one step and two step GMM techniques in order to confirm our results. Columns 1 and 2 are results of 1 step GMM estimations by excluding and including macroeconomic variables respectively. And Column 3 and 4 are results of two step GMM by excluding and including macroeconomic variables, respectively. The Arellano-Bond (1991) test confirms the acceptance/rejection of null hypothesis for first/second order residual auto-correlation. Also, the over-identification restriction is found to be valid according to Hansen test of over-identification restrictions. A significant positive coefficient of lag of LCN in all the models confirms the persistence of liquidity creation by banks in China which is endorsed by Toh et al. (2019) and Grover and Sinha (2021). All the four models (column 1 to 4) confirm that EPU has significant negative impact on liquidity with significance of 1% levels. Thus, our null hypothesis is rejected that economic policy uncertainty has significant adverse impact on bank liquidity creation supporting "Uncertainty Credit Crunch" view which advocates the deteriorating influence of policy uncertainty on liquidity creation.

In face of policy uncertainty, banking institutions take cautious stance and may suspend loan advances (Gilchrist Sim & Zakrajˇsek, 2014). In addition, on account of policy uncertainty, banks have restricted funding due to increase costs of financing and so loan proceedings are declined (Brogaard & Detzel, 2015). Moreover, banks become more risk averse during times of policy uncertainty (Panousi & Papanikolaou, 2012). All these leads to reduction in liquidity creation by banks. The results are in line with Berger et al. (2018) who studies US banks with a comprehensive set of data from 1984 to 2014. Also, Ashraf (2020) analysed 21 countries with 20 year of data and argues that banks are inclined to hoard liquid assets due to policy uncertainty and thus liquidity creation is reduced. Moreover, Dang (2022) also advocates the undesirable effect of uncertainty on liquidity in case of emerging economy of Vietnamese banks.

In addition, equity capital reports negative and significant impact on bank liquidity creation. Thus reinforcing "Financial Fragility Crowding-Out" hypothesis that bank with higher level of capital tends to reduce liquidity creation. As Diamond and Rajan (2001) argue higher capital improves the bargaining power of banks that hampers deposits and consequently the liquidity creation. The study of Ilyas and Sarwar (2017) and Grover and Sinha (2021) support these results. The bank size envisages positive relationship with liquidity creation which implies that larger banks on account of their ability to advance loans to borrowers with commitments (Berger & Black, 2011) create more liquidity as compare to small banks. The positive and significant coefficient of bank power measured by Lerner Index reveals that bank competition has significant negative impact on liquidity creation which is in line with Toh et al. (2019). A more competitive bank market forces banks to be competitive by squeezing profit margin that results in increased cost to retain and motivate new customers (Petersen & Rajan, 1995). Consequently, liquidity creation is reduced. The negative relationship of profitability with liquidity creation signals that banks in these countries are more reliance on activities other than liquidity creation and thus less

Journal of Business and Management Research
ISSN:2958-5074 pISSN:2958-5066
Volume No:2 Issue No:2(2023)

concentrated on creating liquidity (Grover & Sinha, 2021). Bank stability indicates negative influence on banks liquidity creation which implies that banks with higher stability are reluctant to create liquidity in the economy. The credit risk posits significant positive relationship with liquidity creation. Banks, in surge of profits tends to relax credit terms in order to increase provision of loans to their customers that leads to higher probability of unrecoverable loans and credit risk. Thus, increased credit risk results in higher liquidity creation of banks as evidenced by this study and endorsed by Shah et al. (2019). According to Berger et al. (2018), macroeconomic variables (GDP and interest rate) are included in the model. However, their effects are found to be insignificant in our study for a sample of Chines banks.

Table 3 Regression Analysis

	1	2	3	4
LCN_{t-1}	0.556***	0.344***	0.618***	0.381***
	(-0.078)	(-0.108)	(-0.152)	(-0.103)
EPU	-0.0381***	-0.0301***	-0.0212***	-0.0191***
	(-0.012)	(-0.01)	(-0.004)	(-0.006)
Capital	-0.359***	-0.316***	-0.601**	-0.611**
	(-0.102)	(-0.101)	(-0.281)	(-0.258)
Size	0.049**	0.041*	0.035	0.031
	(-0.021)	(-0.021)	(-0.024)	(-0.02)
ROA	-2.568***	-2.418***	-2.911**	-2.541**
	(-0.871)	(-0.825)	(-1.199)	(-1.157)
Lerner	0.525**	0.514**	0.589**	0.501**
	(-0.245)	(-0.237)	(-0.281)	(-0.218)
Z-Score	-0.017**	-0.019**	-0.006	-0.012
	(-0.007)	(-0.009)	(-0.008)	(-0.022)
C_Risk	0.087**	0.121**	0.087**	0.161**
	(-0.043)	(-0.0512)	(-0.041)	(-0.073)
GDP		2.182		2.011
		(-2.174)		(-2.123)
Interest Rate		-1.246		-1.431
		(-2.023)		(-1.964)
C	-0.095	-0.098	-0.117	-0.215
	(-0.144)	(-0.506)	(-0.182)	(-0.387)
Observations	760	760	760	760
AR(1)	0.005	0.007	0.016	0.027
AR(2)	0.911	0.193	0.879	0.845
Hansen	0.187	0.134	0.155	0.132

Column 1 and 2 are 1 step GMM estimations without/with macroeconomic variables. Whereas columns 3 and 4 are 2 stage GMM estimations without/with macroeconomic variables. *, **, *** denote significance at 10%, 5% and 1% levels, respectively.

Robustness Summary

We perform one stage and two stage GMM techniques to assess the influence of EPU on liquidity creation. For the purpose of robust checks we use additional proxy of economic policy uncertainty that is World Uncertainty Index (WUI). Moreover, the analyses are executed on models by excluding and including macroeconomic variables. The results of GMM methods with WUI are presented in Table 4. In all of the models the coefficient of WUI (economic policy uncertainty) is negative and significant. In addition, the results for other coefficients are also similar to our

Journal of Business and Management Research
ISSN:2958-5074 pISSN:2958-5066
Volume No:2 Issue No:2(2023)

previous results (not presented in here) using EPU as measure of policy uncertainty. This confirms our results to be robust with varied proxies of economic policy uncertainty and GMM methods.

Table 4 GMM Results with WUI

	1	3	2	4
WUI	-1.096***	-1.704***	-1.687***	-1.305**
	(-0.351)	(-0.566)	(-0.561)	(-0.498)
Bank Specific	Yes	Yes	Yes	Yes
Macroeconomic	No	Yes	No	Yes
Observations	760	760	760	760
AR(1)	0.003	0.001	0.02	0.004
AR(2)	0.343	0.118	0.424	0.315
Hansen	0.122	0.237	0.111	0.216

Column 1 and 2 are 1 step GMM estimations without/with macroeconomic variables. Whereas columns 3 and 4 are 2 stage GMM estimations without/with macroeconomic variables. *, **, *** denote significance at 10%, 5% and 1% levels, respectively.

Conclusion

The study investigates the impact of economic policy uncertainty on bank liquidity creation in China. A panel data from 2011 to 2020 is utilized with one step and two step GMM approaches used for analysis. The results in all the estimations depict significant adverse impact of EPU on bank liquidity. The "Uncertainty Credit Crunch" hypothesis is supported by the results which advocates the deteriorating effect of policy uncertainty on lending that reduces liquidity creation. In addition, large banks tend to create more liquidity as compare to small banks in China. On contrary, equity capital, bank competition, profitability and stability have inverse impact on liquidity creation of these banks. However, the macroeconomic factors posit insignificant determinants of liquidity creation during the period of study. The results are robust to variation of proxies of economic policy uncertainty and GMM approaches used. The outcomes of study have crucial policy implications. Since banks perform vital role for economic development of country through creating liquidity. The undesirable impact of economic policy uncertainty on liquidity creation ultimately harms economic growth. Thus, regulators must execute policies in such a way to promote predictable and stable banking system by reducing uncertainty and delay in promulgation of new regulations. The study offers a few recommendations for future research by investigating the relationship of economic policy uncertainty with liquidity creation with the influence of stock liquidity, funding liquidity, competition and bank capital that would provide interesting results.

References

Acharya, V.V. & Mora, N. (2012) Are banks passive liquidity backstops? Deposit rates and flows during the 2007-2009 crisis. Unpublished working paper. New York University and Federal Reserve Bank of Kansas, New York, NY, and Kansas City, MO.

Acharya, V.V. & Mora, N. (2015) A crisis of Banks as Liquidity Providers. The Journal of Finance, 70 (1), 1-43.

Acharya, V., & Naqvi, H. (2012). The seeds of a crisis: A theory of bank liquidity and risk taking over the business cycle. Journal of Financial Economics, 106(2), 349-366.

Journal of Business and Management Research
ISSN:2958-5074 pISSN:2958-5066
Volume No:2 Issue No:2(2023)

Ahir, H., Bloom, N., & Furceri, D. (2018). The World Uncertainty Index (October 29, 2018). Available at SSRN 3275033.
Ashraf, B. N. (2020). Policy uncertainty and bank liquidity hoarding: International evidence. Available at SSRN 3574193.
Arellano, M., & Bond, S., (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. Rev. Econ. Stud. 58 (2), 277–297.
Arellano, & M., Bover, O. (1995). Another look at the instrumental variable estimation of error-components models. J. Econom. 68 (1), 29–51.
Baker, S.R., Bloom, N., & Davis, S.J. (2016). Measuring economic policy uncertainty. Q. J. Econ. 131 (4), 1593–1636.
Berger, A. N., Guedhami, O., Kim, H. H., & Li, X. (2018). Economic policy uncertainty and bank liquidity creation. *Available at SSRN*.
Berger, A.N., Boubakri, N., Guedhami, O., & Li, X. (2019). Liquidity creation performance and financial stability consequences of Islamic banking: evidence from a multinational study. J. Finance. Stabil. 44.
Berger, A.N., Bouwman, & C.H.S. (2009). Bank liquidity creation. Rev. Finance. Stud. 22 (9), 3779–3837.
Berger, A.N., Bouwman, & C.H.S. (2017). Bank liquidity creation, monetary policy, and financial crises. J. Finance. Stabil. 30, 139–155.
Berger, A. N., & Black, & L. K. (2011). Bank size, lending technologies, and small business finance. *Journal of Banking & Finance*, *35*(3), 724-735.
Berger, A.N., Guedhami, O., Kim, H.H., & Li, X. (2018). Economic Policy Uncertainty and Bank Liquidity Creation. SSRN Scholarly Paper, Social Science Research Network, Rochester, NY.
Berger, A.N., & Sedunov, J. (2017). Bank liquidity creation and real economic output. J. Bank. Finance 81, 1–19.
Bloom, N., Kose, M.A., & Terrones, M.E. (2013). Held back by uncertainty. Finance Dev. 50 (1), 38–41.
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. J. Finance. Stabil. 26, 90–106.
Bonaime, A. A., Gulen, H., & Ion, M. (2018). Does policy uncertainty affect mergers and acquisitions? Journal of Financial Economics, 129(3), 531-558.
Brogaard J. & Detzel A. (2014). The asset pricing implications of government economic policy uncertainty". University of Washington mimeo.
Bryant, J. (1980). A model of reserves, bank runs, and deposit insurance. Journal of banking & finance, 4(4), 335-344.
Dell'Ariccia, G., Laeven, L., & Marquez, R. (2014). Real interest rates, leverage, and bank risk taking. J. Econ. Theor. 149 (1), 65–99.
Deyoung, R., & Roland, K.P. (2001). Product mix and earnings volatility at commercial banks: evidence from a degree of total leverage model. J. Financ. Intermediation 10 (1), 54–84.
Diamond, D. W., & Dybvig, P. H. (1983). Bank runs, deposit insurance, and liquidity. Journal of Political Economy, 91(3), 401-419.
Dang, V. D. (2022). Bank liquidity creation under micro uncertainty: The conditioning role of income structure. *Economic Modelling*, *112*, 105852.
Francis, B.B., Hasan, I., & Zhu, Y. (2014). Political uncertainty and bank loan contracting. J. Empir. Finance. 29, 281–286.

Journal of Business and Management Research
ISSN:2958-5074 pISSN:2958-5066
Volume No:2 Issue No:2(2023)

Galati, G., & Moessner, R. (2018). What do we know about the effects of macroprudential policy? Economica 85 (340), 735–770. Gatev, E., Strahan, P.E., 2006. Banks' advantage in hedging liquidity risk: theory and evidence from the commercial paper market.
Gatev, E., & Strahan, P.E. (2006). Banks' advantage in hedging liquidity risk: theory and evidence from the commercial paper market. J. Finance 61 (2), 867–892.
Gilchrist, Simon, Jae W. Sim, & Egon Zakraj˘sek (2014). Uncertainty, Financial Frictions, and Investment Dynamics. Working Paper, National Bureau of Economic Research.
Grover, N., & Sinha, P. (2021). Determinants, Persistence and value implications of liquidity creation: An evidence from Indian Banks. Journal of Asia Business Studies.
Gulen, H., & Ion, M. (2016). Policy uncertainty and corporate investment. Review of Financial Studies, 29(3), 523-564.
Hannan, T.H., & Hanweck, G.A. (1988). Bank insolvency risk and the market for large certificates of deposit. J. Money Credit Bank. 20 (2), 203–211.
Holmstrom, B., & Tirole, J. (1998). Private and public supply of liquidity. Journal of Political Economy, 106(1), 1-40.
Hou, X., Li, S., Li, W., & Wang, Q. (2018). Bank diversification and liquidity creation: panel Granger-causality evidence from China. Econ. Modell. 71, 87–98.
Hugonnier, J., & Morellec, E. (2017). Bank capital, liquid reserves, and insolvency risk. Journal of Financial Economics, 125(2), 266e285.
Ilyas, H., & Sarwar, S. (2017). Relationship between Bank Capital and Liquidity Creation: A Disaggregated Analysis of Banking Industry of Pakistan.
Jory, S.R., Khieu, H.D., Ngo, T.N., & Phan, H.V. (2020). The influence of economic policy uncertainty on corporate trade credit and firm value. J. Corp. Finan. 64, 101671.
Lee, C.C., & Wang, C.W. (2021). Firms' cash reserve, financial constraint, and geopolitical risk. Pac. Basin Financ. J. 65, 101480.
McGrattan, E.R., & Prescott, E.C. (2005). Taxes, regulations, and the value of US and UK corporations. Rev. Econ. Stud. 72 (3), 767–796.
Panousi, V., & Papanikolaou, D. (2012). Investment, idiosyncratic risk, and ownership. The Journal of finance, 67(3), 1113-1148.
Pennacchi, G. (2006). Deposit insurance, bank regulation, and financial system risks. J. Monet. Econ. 53 (1), 1–30.
Petersen, M. A., & Rajan, R. G. (1995). The effect of credit market competition on lending relationships. The Quarterly Journal of Economics, 110(2), 407-443.
Thakor, A.V. (2005). Do loan commitments cause overlending? J. Money Credit Bank. 37 (6), 1067–1099.
Tran, D.V., Hassan, M.K., & Houston, R. (2019). Activity strategies, information asymmetry, and bank opacity. Econ. Modell. 83, 160–172.
Toh, M. Y., Gan, C., & Li, Z. (2019). Bank diversification, competition and liquidity creation: Evidence from Malaysian banks. The Singapore Economic Review, 1-30.
Toh, M. Y., Gan, C., & Li, Z. (2019). Revisiting the Impact of Stock Market Liquidity on Bank Liquidity Creation: Evidence from Malaysia. Emerging Markets Finance and Trade, 55(8), 1776-1802.
Umar, M., & Sun, G. (2016). Interaction among funding liquidity, liquidity creation and stock liquidity of banks: Evidence from BRICS countries. *Journal of Financial Regulation and Compliance*.
Valencia, F. (2017). Aggregate uncertainty and the supply of credit. J. Bank. Finance 81, 150–165.
Wang, C. W., Lee, C. C., & Chen, M. C. (2022). The effects of economic policy uncertainty and country governance on banks' liquidity creation: International evidence. *Pacific-Basin Finance Journal*, *71*, 101708.
Wang, Y., Wang, K., & Chang, C.P. (2019). The impacts of economic sanctions on exchange rate volatility. Econ. Modell. 82, 58–65.