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Impact of Political Risk and Competition on Bank Stability: Case of South Asia and China

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Abstract
This study examines the relationship between the competition, political risk and bank stability. The relationship among these variables is of deep context on country level. The banking stability is of great attention in the current political and turmoil in the region. This study uses the 5 countries including China, Pakistan, India, Bangladesh, and Sri Lanka. The time span of the data is of 7 years from 2011 to 2017 collected from the world bank indicators. The findings of the study suggest that competition and political risk have significant effect on banking stability. The economic growth moderates the relationship between competition and banking stability. Also, the relationship between political risk and banking stability is moderated by economic growth. This study will help the banking sectors to consider the competition and political risk in their risk management policies regarding market. This study will help the researchers to add more diverse variables in future research.
Keywords: Political Risk, Bank Stability, South Asia

1. Introduction

Banking serves as a central hub in the global financial system, which mainly deals with short-term funding and deposits from investment activities and other individuals. Its role is not confined to mere exchanges, it goes much beyond that, and it tremendously affects the future of the country at the macro level (Fapetu & Obalade, 2015). Recognizing its pivotal role, the banking sector is focused on precise oversight, both domestically in Nigeria and across the globe, underscoring its interpretation nature (Adaramola et al., 2018). The difficulty faced by this sector being an entity made up of many financial linkages in which banking risks are responsible for most of the systemic risks, is the problem that can multiply whenever any weak chain occurs. Hence, it must be investigated what influences within the political domain and in the banking sector's risk-taking behavior. Bitar, Hassan and Walker (2017) contributed that understanding of Islamic banks among different legal frameworks, both in the cases when the banking would be part of the hybrid- or Sharia-system, and when we would be in a democratic political context, where the performance will be relatively lower than those in the first cases. A research article such as that of Mourouzidou-Damtsa, Milidonis and Stathopoulos (2019) examined the complicating factor of risk and national cultural values in banking operations in Europe where cultural traits were found to directly relate to the risk preferences of banks. The issue of how bank competition affects financial stability in the context of the banking system has been covered by the academic community as well as regulators who have been debating on it greatly especially following the bank meltdowns that took place in 2007 to 2008 and those that happened worldwide (Beck, 2008; Carletti, 2008) 201 Contrary to the traditional ones that emphasize on competitiveness and fragility, competitive markets stop banks to earn monopoly prices, then leading in reducing on profitability, capital reserves and charter values. Decreases banks' vulnerability to any shocks, be it an excess or a deficiency of supply or demand, potentially resulting in excessive risk-taking behavior among low-interest rates (Marcus, 1984: Keeley, 1990). However, those who have a goal which is ruminate the necessity of rivalry and peace who talk about increased competition that leads to more stability. In the financial markets where competition is less severe, these institutions can be too big to fail, thus this could lead to high risk-taking since they eventually can benefit from the safety nets given by the government that could be in the form of subsidies (Mishkin, 1999). As a result, financial institutions that have gained significant market power often set higher lending rates which is putting borrowers in the risk of taking on risks that are unreasonable, and thus increasing the chance of default.

In contrast, competitive banking markets tend to offer lower loan rates, fewer worries connected to "too-big-to-fail" issues, and reduced safety net subsidies, indicating a positive relationship between bank competitiveness and stability (Boyd and De Nicoló, 2005). It's noteworthy that Martinez-Miera and Repullo (2010) suggest a non-linear correlation between bank competition and stability, while Berger et al. (2009) argue that competition and concentration can coexist and concurrently impact stability or fragility. Within the realm of the banking sector, the convergence of political risk, competition, GDP growth, and banking stability constitutes a crucial and intricate area of exploration for stakeholders such as policymakers, regulators, and financial entities. While existing studies have delved into each of these factors individually, a notable gap remains in comprehending their collective impact on banking stability, particularly in relation to the moderating role of GDP growth. This study aims to fill this gap by thoroughly investigating the interactions between political risk, competition, GDP growth, and banking stability. Its significance lies in its capacity to furnish a holistic understanding of the multifaceted connection between these variables. By addressing the gap in current literature and examining

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these elements in tandem, this research offers invaluable insights for policymakers, regulators, and financial institutions. The exploration of how political risk and competition interact, moderated by GDP growth, holds the potential to anticipate and address systemic vulnerabilities within the banking sector. Such insights not only strengthen financial stability but also inform the development of resilient policies and strategies, thereby promoting economic growth and safeguarding the interests of stakeholders amidst an evolving global landscape.

2. Literature Review

The frequency of assessing country risk usually discounts the scores given by the credit risk agencies such as ICRG (2017). Scores are evident of running markets by various countries of the world. The ICRG (2017) defines risk as having three major components: political, fiscal and economic. People around the world have become more interdependent, and therefore, some factors can't be avoided to domestic investments. In other words, these factors influence the feasibility of such investments (Perry, 2017). Political risk can vary across many factors such as government stability, social class polarizations, investment facility, internal and external analogies (including nation against nation and mercenaries), corruption, military coups, religion, law enforcement mechanisms, socio-ethnic tensions, democracy system activities, and bureaucracy. The financial aspect considers such risk factors as: level of foreign debt, exchange-rate stability, debt service capacity, current account balance and liquidity. Economic risk factors are, on the other hand, inflation, GDP per capita and growth, budget balance and the current account of GDP (ICRG, 2017; Muzindutsi & Obalade, 2020). Research, among which Kirikkaleli (2020), defines political risk as a major factor influencing the social and economic programs on individual and country levels. To shed light on this issue, it is possible to come up with the situation where shortened terms of policymakers and government bring about adoption of uncoordinated and incomplete economic policies and, as a result, the overall macro area becomes unstable and poses a risk for financial stability. Thus, the present study focuses on a substitute for political risk since it was highly impactful on economic and financial robustness.

In recent days, a few studies revealed that country risk factors were used to identify their impacts on bank performance indicators. Mokatsanyane (2016) conducted an ARDL panel analysis to probe how credit risks and political risks influence South African bank's performance. This study found that only in a short-term horizon political-risk measures insignificantly influence key metrics such as the return on equity (ROE), return on assets (ROA), earnings per share (EPS), and net interest margin (NIM).

However, in long-term, there were positive manifestations of political risks as those indicators showed. In China, Chi-Chuan Lee and Chien-Chiang Lee (2019) performed the statistical test named Generalized Method of Moments (GMM) for dynamic panels to examine whether or not oil price fluctuations as a proxy for political, economic, and financial risks can offset the unfavorable impacts on the performance of banking industry and economic stability of the nation. Moreover, empirical evidence suggests that the economic policy uncertainty risks in the country are associated with reduced bank loan sizes and increased probability of defaults. While Şanlısoy and Aydin's (2017) Panel model research found that political risk negatively effects banks' profitability with a bigger impact on the TSB than the private banks. The study of Yahya et al. (2017) established this fact that political risk, inflation, and GDP contributed positively and significantly to the performance of Yemeni religious banks. They prove on the side of developing country risk the intricate link with the banking performance that in its turn impacts basically looks like whatever sector bank field of banking system.

Mr. and Mrs. Smith (2018) have research about 51 states with developing market searching the problem of state-owned banks during political transition. They realized that the foreign banks were subjected to more political pressure, an increase in the need of loan request and fear of less earnings particularly at the leasing countries with inefficient political institutions. Brůha and Kočenda (2017) employed Bayesian panel estimates in their research to investigate sovereign risk mechanisms that are active within the European Union. The results show that the loans, which are not performing, exercise noticeable influence on the sovereign risk, and the level and solvency of banks are the factors that can dampen it. Tamadonnejad et al. (2013) has chosen the method of Stochastic Frontier Analysis in the context of ten East Asian countries where it was demonstrated how bank efficiency depends on country risk and political factors. The investigation produced this conclusion: higher country risk and political instability as opposed to bank performance in the region of Asia. Unfortunately for the financial institution, the findings do not fully pave the way for its assessment of the impact of country risk on bank performance, which is still in its start.

In contrast, Balkan (1992) pointed out that political instability is a key factor to consider while examining a independent borrower's exposure to risk, and the foreign debt renegotiation case is just one of the examples. Its pioneering study, which covered the period between 1971 to 1984 by looking at 33 developing nations, offered empirical evidence to show that political instability not only make but also a variant of debt restructuring. Additionally, Hoti and McAleer (2004) were responsible for documenting the usefulness of empirical research in that country risk literature through construction of the appraising, valuing, and predicting statistical and econometric ways. The results of their research were aspect transmission of risk factor, volatility index and 12 developing countries of 6 regions in entirety. Time series data also exposes a trend of international country risk

rating and makes evident that other important factors including economic, financial, and political risk ratings rules in short, the risk assessment.

During numerous disturbances caused by political system instability, societal policies and, in turn, socio-economic outcomes are affected by Carmignani (2003). This research taken the intersection of political instability and uncertainty with macroeconomic performance indicators like, output growth, fiscal policy, and monetary policy. It put the tail on the research in the economic methods but only on the common econometric problems. Taking care of the likely joint endogeneity of macroeconomic and political factors means that it is necessary to use an econometric model with a strictly defined structure, which allows us to evidence the causal relationships. The initiative is needed to have appropriate measures to clench the loopholes of endogeneity. The study of Tabasam et al. (2017) has presented that departure of political order has led to fuel the economy volatility and instability using the data of 22 years of annual time series data. Their research concluded that the absence of political stability adversely and effectively intervenes with the functioning and maintenance of a healthy market, thus a government should respond with adequate measures to stabilize the political situation. Uddin and colleagues (2017) specifically focused on determining the influence of economic growth on political stability across a sample of developing countries covering the period from 1996 to 2014.

Applying relatively sophisticated methods like two-step system-GMM and quantile regression has shown us that political stability is one of the main factors which encourages economic growth and development. Based on that, the research showed that political uncertainties in the developing world have a negative impact on the economy, either directly or indirectly, through its consequences on the major components of economic growth.

The assumption of this theory is the banks that operate under the framework of these two systems with the higher levels of competition and lower levels of concentration on the other being subject to greater probability of instability. The concept is based on accordance with two suggestions proposed by Marcus (1984) and Keeley (1990) who broaden their discussions about the ‘charter/franchise value’ banking. These models suppose that simpler competition push banks to take riskier strategies, this may negatively influence the banking franchise structures in the long term. On the other hand, the increase in the franchise value is a consequence of having a monopoly position in the market, the banking industry will be more careful in taking risks in the sense that the bank's management and shareholders will be inclined towards that direction. This principle is because the franchise with a higher value appears to be more of a risk when compared to the franchise with a lower value. Bankruptcy is an opportunity cost for both higher value and lower value. Consequently, the investors are unlikely to accept ridiculous risk-taking activities and leads to improvement of bank asset quality. The fluctuating nature of these factors illustrates a risky outcome that generates conflicting interests, exerted power, aggressive behavior, and economic stability. The way competition widens stability may be traced by the transmission process, i.e. contagion dynamics. Allen and Gale (2000) have a financial contagion model in which due to the boards of perfectly competitive banks being price-takers the banks are discouraged from extending a helping hand to distressed counterparts. Consequently, the chance of the banks that are in a troubled condition to be folded goes up thus, the whole banking industry is affected by these outcomes. However, the Saez and Shi (2004) suggest that in poorly competitive markets, where banks can choose coordination among peers, they can strategically loosen up tight liquidity periods and provide aid.

According to Boot and Thakor (2000), the bigger banks need to walkie-talkie about credit computation and rating, so they might give some crop of few quality credit claims and possibly earn more profit and arrive at financial stability. Furthermore, bigger banks have a possible advantage in credit monitoring services. Critical founders Allen and Gale (2004) argue that banking crises are horizontal to happen in concentrated banking systems. When there is not dominance in this sector, the lower returns associated with weak intellectual discipline can shrink not only the income but also the loan quality as well. Unlike that, Boyd et al (2004) states that selling huge banks in areas where no much competition can increase profits. "Higher capital buffer" that was maintained by these larger organization may have reduced financial fragility as well as prevented the economy from getting affected by the external shocks. On the other side of the study, insurance contests also have a dual impact on fragility, according to the competition-fragility theory. Whilst they prevent instabilities such as bank runs, these safety nets have counter side risk in that they tend to incentivize banks to take part in risk-mongering operations. Specifically, the functioning of competition determines whether the more generous deposit insurance may not negatively affect bank stability (Diamond and Dybvig, 1983; Matutes and Vives, 1996, respectively). Besides that, Hellmann & colleagues (2000) stated that the interest rates maximum still play a vital role of preventing banks from undue risks, though the minimum capital requirements can increase the charter value due to the positive stimulation of the banking market. However, the Kim and Ong (2011) competition stability hypothesis that highly competitive and/or already concentrated banking systems are fundamentally more stable might be true. From the "too-big-to-fail" standpoint, the macro-practical policy is characterized by increased attention sentiment of the authorities to the bank failures in the concentrated banking systems where the number of institutions/banks is few in numbers (Mishkin, 1999; Mishkin, 2006; Barth et al., 2012b). Banks have the freedom to use a variety of ways to balance growing risk exposure and protect their charter principles. These measures may include increasing equity capital, managing interest rate risk, and selling

credit derivatives. Furthermore, in previous studies market structure measures may not accurately reflect the level of competition. This observation is reinforced by research undertaken by Berger et al. (2004) and Beck (2008), which shows that banking industry concentration can affect stability through processes other than competition.

The focus of this research lies in the empirical basis and the tests of the relationship between concentration, competition and banking stability, and the different countries taken for this purpose. Thus, for instance, Yeyati and Micco (2007) conducted a study on typical banks in commercial sectors of eight Latin American countries during the period from 1993 to 2002. The series of multiple regression results across the whole sample shows a positive association (using Z-score as a risk indicator) between the level of competition (guided by the Panzar and Ross (1987) H-statistic) and the risk of banks. On the other hand, the concentration of banks has a non-significant impact on risk. This offers more evidence that supports the strengthened competition-fragility paradigm. A comparable study by Schaeck and Cihak (2008) investigates the relationship between banking sector competition and reliability with an aim to find out which factor has greater value-addition. Using financial data from over 3600 commercial banks in European countries and over 8900 US banks, the study was carried out over a period of 1995 up to 2000. It represents that competition, defined as ranked by Boone index, boosts banks sustainability making them more efficient and on the other enhanced lending in the more concentrated sector improves financial stability. On top of that, with 31 systemic banking crises between 1980 and 2005 in 45 countries. Schaeck et al. in (2009) demonstrated the existence of competition (confirmed by Panzar-Rosse H-statistic) as gaining ground to a crisis and lengthening time before a crisis, controlling at the same time for competitive conditions in the banking system (measured by manufacturers' concentration ratio) which are found having a negative association with financial fragility. In the same lines, Bedge et al. (2009) employed a large sample of 8325 banks from 23 industrialized nations from 1999 to 2005. Researchers mentioned that banks which are bigger (measured by Lerner index) with high market power carry lower total risk exposure studied using Z-scores. Interesting enough, it is built on essence of competition-fragility model. Furthermore, the bank that has a high concentration of market is likely to expose itself to riskier loans since the study shows that higher non-performing loan ratio has been recorded among these banks. As Berger et al. (2009) founded that no matter high increase in loan risk would arise, banks are likely to be well equipped with the high capital equity ratio.

3. Methodology

The study uses the Asian (Pakistan, India, Bangladesh, and Sri Lanka) and China countries for the analysis and the data span of 7 years ranging from 2011-2017. The variable descriptions and their proxies are displayed below in Table 1. The primary aim of the study is to check political risk and competition on banking stability with moderation of economic growth. The data is taken from the world bank indicators. The data is analyzed through STATA-17.

Table 1: Variable Description

Variable	Short Name	Definition / Measure	Source
Dependent variable			
Bank Stability (Bank Z-Score)	BS	BS is ratio of capital-asset ratio plus return on asset to standard deviation of return on asset ratio aggregated at country level.	Authors Calculations
Independent and moderating variables			
Political risk	PR	"This index measures the political stability of the countries based on twelve risk components that cover both political and social attributes. Political attributes are measured by the components related to external conflict and religious tension, while proxies for social attributes concern government stability. The index varies from 0 to 100, where a higher value indicates a lower degree of political risk or higher political stability and vice versa."	WDI
Competition	CM	A measure of market power in the banking market. It compares output pricing and marginal costs (that is, markup). An increase in the Lerner index indicates a deterioration of the competitive conduct of financial istitutions.	WDI
GDP growth rate	GDP	GDP is the annual GDP growth rate annual percentage	WDI

Theoretical Framework

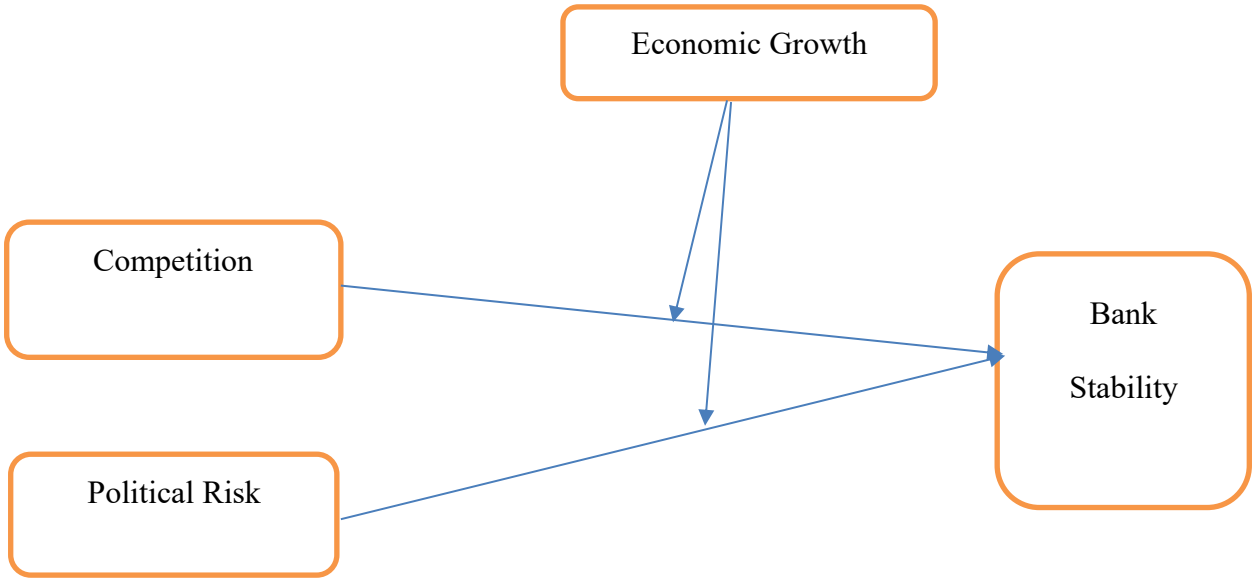

Figure 1: Research Model

4. Analysis

Table 2: Descriptive Statistics

Variables	*Obs*	*Mean*	*Std.dev*	*Min*	*Max*
Z-score	35	2.93	0.395	2.221	3.653
Competition	35	0.87	0.356	0.0005	1.326
Political risk	35	3.99	0.095	3.805	4.141
GDP	35	1.77	0.2989	1.0111	2.256

The bank Z-score, which serves as an indicator of a bank's financial robustness, has an average of 2.93 and a standard deviation of 0.395. Higher bank Z-scores signify stronger stability, with values ranging from 2.221 to 3. 653. In terms of competition within the banking sector, the average level stands at 0.87 with a standard deviation of 0.356. This metric, ranging from 0.0005 to 1.326, reflects the intensity of competition, with higher values indicating greater competition. Political risk, gauged by its average level of 3.99 and a standard deviation of 0.095, captures the potential impact of political factors on economic activities. The observed values range from 3.805 to 4.141, with higher scores indicating elevated political risk. Regarding Gross Domestic Product (GDP), the average value is 1.77 with a standard deviation of 0.2989. GDP reflects the monetary value of goods and services produced within a country's borders. Values range from 1.0111 to 2.256, with higher figures indicating stronger economic performance.

4.1. Correlation

To begin with table-2 of correlation, a moderate positive correlation of 0.479 has been identified between Bank Z-score, a metric assessing bank stability, and political risk. This implies that elevated levels of political risk might marginally coincide with greater bank stability. Conversely, a negative correlation of -0.260 exists between Bank Z-score and the competition, which measures market power within the banking sector. This suggests that heightened market power among banks could potentially lead to reduced bank stability. Additionally, a positive correlation of 0.548 has been observed between GDP and political risk, indicating that heightened political risk may coincide with stronger economic output. Lastly, a positive correlation of 0.195 is noted between GDP and the competition, suggesting a weak relationship between market power in the banking sector and economic output. These correlations provide valuable insights into the dynamics among financial stability, market competition, political risk, and economic performance, offering pertinent considerations for policymakers, regulators, and financial institutions.

Table 3: Correlation

Variables	(1)	(2)	(3)	(4)
(1) Bank Z-score	1.000			
(2) Competition	-0.260	1.000		
(3) political risk	0.479	-0.085	1.000	
(4) GDP	0.139	0.195	0.548	1.000

Table 4: Cross Sectional Dependency

Variables	*CD*	*P value*	*Average joint T*	*Mean ρ*	*mean abs(ρ)*
Bank Z-score	-1.588	0.112	7	-0.19	0.41
Competition	0.504	0.614	7	0.06	0.48
Political risk	0.697	0.486	7	0.08	0.72
GDP	-1.034	0.301	7	-0.12	0.57

For the Z-score variable, a CD value of -1.588 suggests a negative cross-sectional dependency, albeit with a non-significant p-value of 0.112, indicating no statistical significance. The average joint T statistic stands at 7, indicating moderate joint significance. The mean correlation coefficient (ρ) of -0.19 implies a weak negative correlation among observations, while the mean absolute correlation coefficient (|ρ|) is 0.41. Similarly, the Competition variable exhibits a CD value of 0.504, indicating positive cross-sectional dependency, but with a non-significant p-value of 0.614, suggesting no statistical significance. The average joint T statistic remains at 7, indicating moderate joint significance. The mean correlation coefficient (ρ) of 0.06 indicates a very weak positive correlation among observations, while the mean absolute correlation coefficient (|ρ|) is 0.48. Political risk demonstrates a CD value of 0.697, implying positive cross-sectional dependency, though with a non-significant p-value of 0.486, suggesting no statistical significance. The average joint T statistic remains at 7, indicating moderate joint significance. The mean correlation coefficient (ρ) of 0.08 suggests a weak positive correlation among observations, while the mean absolute correlation coefficient (|ρ|) is 0.72. Lastly, the GDP variable presents a CD value of -1.034, indicating negative cross-sectional dependency, but with a non-significant p-value of 0.301, suggesting no statistical significance. The average joint T statistic remains at 7, indicating moderate joint significance. The mean correlation coefficient (ρ) of -0.12 indicates a weak negative correlation among observations, while the mean absolute correlation coefficient (|ρ|) is 0.57.

4.2. First Generation Unit Root Test

Panel root tests play a crucial role in evaluating the stationarity of variables in panel data analysis, which is essential for many econometric techniques. Stationarity is a fundamental assumption for accurate econometric modeling. However, in panel data where individual time series may exhibit stochastic trends, the presence of a unit root can lead to erroneous regression results. Two main types of panel root tests are commonly employed: first-generation and second-generation panel unit root tests.

Table 5: Unit root tests

Variables	ADF	IPS
Bank Z-score	16.982**	-3.4276 **
Competition	85.817***	-8.0982**
Political risk	40.578**	-1.7697*
GDP	47.146***	-2.4199**

For the bank Z-score variable, both the Augmented Dickey-Fuller (ADF) and Im, Pesaran, and Shin (IPS) tests show statistically significant results. The ADF test statistic of 16.982 and the IPS test statistic of -3.4276 provide strong evidence against the null hypothesis of a unit root, indicating stationarity in the data. Similarly, for the Competition variable, both tests yield highly significant results. The ADF test statistic of 85.817 and the IPS test statistic of -8.0982 strongly reject the null hypothesis of a unit root, suggesting stationarity in the data. In the case of Political risk, the ADF test produces a statistically significant result with a test statistic of 40.578, indicating stationarity. However, the IPS test yields a less significant result with a test statistic of -1.7697, although it still rejects the null hypothesis. Lastly, for GDP, both tests show statistically significant results. The ADF test statistic of 47.146 and the IPS test statistic of -2.4199 indicate rejection of the null hypothesis, suggesting stationarity in the data.

4.3. Fixed effect Model

Table 6: Fixed Effect Results

Bank Z-score	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Competition	.14	.06	2.35	.026	.018	.262	**
Political risk	-.498	.366	-1.36	.184	-1.247	.251	
Constant	4.807	1.469	3.27	.003	1.798	7.815	***

Mean dependent var	2.936	SD dependent var	0.393
R-squared	0.223	Number of obs	35
F-test	4.011	Prob > F	0.005
Akaike crit. (AIC)	-78.103	Bayesian crit. (BIC)	-73.437

*** p<.01, ** p<.05, * p<.1

In the fixed effect model shown in table 5, competition shows a significant positive effect on Bank Z-score (coefficient = 0.14, $p < 0.05$), indicating that increased competition correlates with higher Z-scores, reflecting improved banking stability. However, political risk doesn't significantly affect Bank Z-score (coefficient = -0.498, $p > 0.1$). The constant term is significant ($p < 0.01$), implying that Bank Z-score remains different from zero even without competition or political risk. The model explains 22.3% of Z-score variance (R-squared = 0.223), and the F-test is significant ($p < 0.01$), affirming the model's overall relevance.

4.4. Random Effect Model

In the random effect model, the Competition shows a significant positive impact on Bank Z-score (coefficient = 0.136, $p < 0.05$), indicating that increased competition correlates with higher Z-scores, reflecting improved banking stability. However, Political risk doesn't significantly affect Bank Z-score (coefficient = -0.426, $p > 0.1$). The constant term is significant ($p < 0.01$), suggesting that Bank Z-score remains different from zero even without competition or political risk.

Table 7: Random Effect Results

Bank Z-score	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Competition	.136	.06	2.27	.023	.019	.254	**
Political risk	-.426	.364	-1.17	.243	-1.14	.288	
Constant	4.52	1.476	3.06	.002	1.627	7.414	***
Mean dependent var		2.936	SD dependent var			0.393	
Overall r-squared		0.237	Number of obs			35	
Chi-square		7.067	Prob > chi2			0.029	
R-squared within		0.222	R-squared between			0.455	

*** p<.01, ** p<.05, * p<.1*

The model explains 23.7% of Z-score variance (R-squared = 0.237), and the Chi-square test is significant ($p < 0.05$), indicating the model's overall significance. Additionally, the R-squared within (0.222) and between (0.455) groups highlight the proportion of variance explained within and between groups, respectively, providing insights into the model's explanatory power across different scenarios.

4.5. Hausman Test

Summary of the Hausman test results is clear and accurate. It effectively communicates that while there is a potential difference between the estimates from the random effects and fixed effects models, the p-value exceeds the significance level of 0.05. Therefore, we fail to reject the null hypothesis, indicating that there's no significant difference between the two models. Consequently, either model can be used for analysis, and the choice between them may not substantially affect the results.

Table 8: Hausman Test Results

	Coef.
Chi-square test value	4.624
P-value	.099

4.6. GMM Tests

The table presents findings from the generalized method of moments (GMM) estimation. The lagged dependent variable (L) exhibits a statistically significant positive effect on Bank Zscore at the 5% level, with a coefficient of 1.399 and a standard error of 0.62 ($t = 2.26$, $p = 0.024$). Competition also shows a significant positive effect on Bank Z-score at the 5% level, with a coefficient of 0.239 and a standard error of 0.172 ($t = 1.39$, $p = 0.04$). However, Political Risk does not reach statistical significance at conventional levels, with a coefficient of 3.173 and a standard error of 4.126 ($t = 1.25$, $p = 0.09$). The mean of Bank Zscore is reported as 2.942, with a standard deviation of 0.395, based on 25 observations. In summary, while both the lagged dependent variable and Competition significantly influence Bank Zscore, Political Risk does not demonstrate a statistically significant effect in this analysis.

Table 9: GMM Tests Results

Bank Z-score	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
L	1.399	.62	2.26	.024	.185	2.614	**
Competition	.239	.172	1.39	0.04	.098	.576	**
Political Risk	3.173	4.126	1.25	0.09	.26	2.914	*
Mean dependent var		2.942	SD dependent var			0.395	
Number of obs		25	Chi-square			.	

*** p<.01, ** p<.05, * p<.1*

4.7. Moderation Results (GDP Growth)

The interaction term between the lagged dependent variable (L) and GDP shows a coefficient of 0.226, with a standard error of 0.2. While the t-value (1.13) and p-value (0.07) suggest statistical significance at conventional

levels ($p < 0.01$), there's an observable trend indicating a potential effect. In the case of the interaction term between Competition and GDP, the coefficient is 0.108, with a standard error of 0.171. With a t-value of 0.63 and a p-value of 0.05, the coefficient is marginally statistically significant at the 10% level.

Table 10: GMM Results Moderation

Bank Z-score	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
L	.226	.2	1.13	.07	-.618	.166	
Competition_ GDP	.108	.171	0.63	.05	-.443	.227	
Politicalrisk1_GDP	.075	.388	0.19	.09	-.685	.836	
Mean dependent var		2.942	SD dependent var			0.395	
Number of obs		25	Chi-square			.	

*** p<.01, ** p<.05, * p<.1*

Similarly, for the interaction term between Political Risk and GDP, the coefficient is 0.075, with a standard error of 0.388. The t-value (0.19) and p-value (0.09) indicate statistical significance at the 10% level. Overall, these findings suggest a potential marginal effect of the interaction between Competition and GDP on bank stability (Z-score).

5. Conclusion

Following a comprehensive study of the banking sector, several key findings emerge. Firstly, the analysis uncovers a consistent and stable trend in the Z-score, indicating the enduring financial health and stability of banks over time. Both the Augmented Dickey-Fuller (ADF) and Im, Pesaran, and Shin (IPS) tests affirm the stationarity of the Z-score variable, highlighting the resilience of the banking system. Similarly, the study finds that market competition within the banking sector remains relatively stable, supported by highly significant results from both tests for the Competition variable. This stability underscores the importance of maintaining a balanced competitive environment to foster innovation and efficiency. Moreover, while the analysis reveals some variability, there is an overall stability in political risk over time. Although the results from the ADF and IPS tests exhibit slight differences, both suggest a certain level of stability in political factors influencing economic activities. Lastly, the study indicates stable economic performance, evidenced by statistically significant results from both tests for Gross Domestic Product (GDP). This stability reflects the economy's robustness and ability for sustained growth. These findings provide valuable insights into the interconnected dynamics of financial stability, market competition, political risk, and economic performance within the banking sector. Understanding these trends is crucial for policymakers, regulators, and financial institutions to devise effective strategies that promote stability, resilience, and sustainable growth in the banking industry.

References

Marcus, A. J. (1984). Deregulation and bank financial policy. *Journal of banking & finance*, *8*(4), 557-565.

Keeley, M. C. (1990). Deposit insurance, risk, and market power in banking. *The American economic review*, 1183-1200.

Diamond, D. W. (1984). Financial intermediation and delegated monitoring. *The review of economic studies*, *51*(3), 393-414.

Ramakrishnan, R. T., & Thakor, A. V. (1984). Information reliability and a theory of financial intermediation. *The Review of Economic Studies*, *51*(3), 415-432.

Boyd, J. H., & Prescott, E. C. (1986). Financial intermediary-coalitions. *Journal of Economic theory*, *38*(2), 211-232.

Smith, B. D. (1984). Private information, deposit interest rates, and the 'stability'of the banking system. *Journal of Monetary Economics*, *14*(3), 293-317.

Boot, W. A., & Greenbaum, S. I. (1992). *Bank regulation, reputation and rents: Theory and policy implications*.

Allen, F., & Gale, D. (2000). Financial contagion. *Journal of political economy*, *108*(1), 1-33.

Allen, F., & Gale, D. (2004). Competition and financial stability. *Journal of money, credit and banking*, 453-480.

Allen, F., & Gale, D. (2000). Financial contagion. *Journal of political economy*, *108*(1), 1-33.

Boot, A. W., & Thakor, A. V. (2000). Can relationship banking survive competition? *The journal of Finance*, *55*(2), 679-713.

Boyd, J. H., De Nicolo, G., & Smith, B. D. (2004). rCrises in Competi& tive versus Monopolistic Banking Systems, sJournal of Money. *Credit, and Banking*, *36*(3).

Diamond, D. W., & Dybvig, P. H. (1983). Bank runs, deposit insurance, and liquidity. *Journal of political economy*, *91*(3), 401-419.

Mishkin, F. S. (2006). How big a problem is too big to fail? A review of Gary Stern and Ron Feldman's too big to fail: the hazards of bank bailouts. *Journal of economic literature*, *44*(4), 988-1004.

Barth, J. R., Prabha, A., & Swagel, P. (2012). Just how big is the too-big-to-fail problem? *Journal of Banking Regulation*, *13*(4), 265-299.

Kane, E. J. (2010). Redefining and containing systemic risk. In *Financial Market Regulation: Legislation and Implications* (pp. 107-120). New York, NY: Springer New York.

Caminal, R., & Matutes, C. (2002). Market power and banking failures. *International Journal of Industrial Organization*, *20*(9), 1341-1361.

Boyd, J. H., & De Nicolo, G. (2005). The theory of bank risk taking, and competition revisited. *The Journal of finance*, *60*(3), 1329-1343.

Martinez-Miera, D., & Repullo, R. (2010). Does competition reduce the risk of bank failure? *The Review of Financial Studies*, *23*(10), 3638-3664.

Beck, T., Demirgüç-Kunt, A., & Levine, R. (2006). Bank concentration, competition, and crises: First results. *Journal of banking & finance*, *30*(5), 1581-1603.

Berger, A. N., Klapper, L. F., & Turk-Ariss, R. (2017). Bank competition and financial stability. In *Handbook of competition in banking and finance* (pp. 185-204). Edward Elgar Publishing.

Berger, A. N., Demirgüç-Kunt, A., Levine, R., & Haubrich, J. G. (2004). Bank concentration and competition: An evolution in the making. *Journal of Money, credit and Banking*, 433-451.

Beck, T. (2008). Bank competition and financial stability: friends or foes?. *World Bank policy research working paper*, (4656).

Yeyati, E. L., & Micco, A. (2007). Concentration and foreign penetration in Latin American banking sectors: Impact on competition and risk. *Journal of Banking & Finance*, *31*(6), 1633-1647.

Panzar, J. C., & Rosse, J. N. (1987). Testing for" monopoly" equilibrium. *The journal of industrial economics*, 443-456.

Schaeck, K., & Čihák, M. (2008). How does competition affect efficiency and soundness in banking? New empirical evidence.

Berger, A. N., Klapper, L. F., & Turk-Ariss, R. (2017). Bank competition and financial stability. In *Handbook of competition in banking and finance* (pp. 185-204). Edward Elgar Publishing.

Mokatsanyane, D. (2016). *The relationship between political risk, credit risk and profitability in the South African banking sector* (Doctoral dissertation, North-West University (South Africa), Vaal Triangle Campus).

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.

Şanlısoy, S., Aydın, Ü., Yalçınkaya, A., & Elif, A. (2017). Effect of political risk on bank profitability. *International Journal of Business Management and Economic Research (IJBMER)*, *8*(5), 998-1007.

Yahya, A. T., Akhtar, A., & Tabash, M. I. (2014). The impact of political instability, macroeconomic and bank-specific factors on the profitability of Islamic banks: Empirical evidence. *Investment Management and Financial Innovations*, (14, Iss. 4), 30-39.

Ashraf, B. N., Arshad, S., & Yan, L. (2018). Do better political institutions help in reducing political pressure on state-owned banks? Evidence from developing countries. *Journal of Risk and Financial Management*, *11*(3), 43.

Brůha, J., & Kočenda, E. (2018). Financial stability in Europe: Banking and sovereign risk. *Journal of Financial Stability*, *36*, 305-321.

Tamadonnejad, A., Abdul-Majid, M., Rahman, A. A., & Jusoh, M. (2013). Political stability, country risk and bank efficiency in East Asian Countries. *Prosiding Persidangan Kebangsaan Ekonomi Malaysia Ke VIII*, *2*, 616-628.

Uddin, M. A., Ali, M. H., & Masih, M. (2017). Political stability and growth: An application of dynamic GMM and quantile regression. *Economic Modelling*, *64*, 610-625.

Mourouzidou-Damtsa, S., Milidonis, A., & Stathopoulos, K. (2019). National culture and bank risk-taking. *Journal of Financial Stability*, *40*, 132-143.

Balkan, E. (1992). political instability, country risk and probability of default. Applied Economics, 24, 999–1008.

Hoti, S., & McAleer, M. (2004). An Empirical Assessment of Country Risk Ratings and Association Models. Journal of Economic Surveys, 18(4), 539–550.

Tabassam, A. H., Hashmi, S. H., & Rehman, F. U. (2016). Nexus between political instability and economic growth in Pakistan. *Procedia-Social and Behavioral Sciences*, *230*, 325-334.

Adaramola, A. O., Adefemi, O. A., Akosile, M. O., & Obalade, G. O. (2018). Effect of Dividend and Earnings on Stock Price Movement in Nigerian Banking Sector. *Acta Universitatis Danubius. Œconomica*, *14*(5).

ICRG. (2017). International country risk guide (ICRG). Retrieved from http://www. prsgroup.com/about-us/our-two?methodologies/icr

Fapetu, O., & Obalade, A. A. (2018). Sectoral Allocation of Bank¡¯ s Credits and Economic Growth in Nigeria. *Issues in Economics and Business*, *4*(2), 18-26.

Bitar, M., Hassan, M. K., & Walker, T. (2017). Political systems and the financial soundness of Islamic banks. *Journal of Financial Stability*, *31*, 18-44.

Mourouzidou-Damtsa, S., Milidonis, A., & Stathopoulos, K. (2019). National culture and bank risk-taking. *Journal of Financial Stability*, *40*, 132-143.

Ghosh, S. (2016). Political transition and bank performance: how important was the Arab Spring?. *Journal of Comparative Economics*, *44*(2), 372-382.

Beck, T. (2008). Bank competition and financial stability: friends or foes?. *World Bank policy research working paper*, (4656).

Carletti, E. (2008). Competition and regulation in banking. *Handbook of financial intermediation and banking*, *126*(5), 449-482.

Acharya, V. V., & Richardson, M. P. (Eds.). (2009). *Restoring financial stability: how to repair a failed system* (Vol. 542). John Wiley & Sons.

Marcus, A. J. (1984). Deregulation and bank financial policy. *Journal of banking & finance*, *8*(4), 557-565.

Keeley, M. C. (1990). Deposit insurance, risk, and market power in banking. *The American economic review*, 1183-1200.

Mishkin, F. S. (1999). Financial consolidation: Dangers and opportunities. *Journal of Banking & Finance*, *23*(2-4), 675-691.

Boyd, J. H., & De Nicolo, G. (2005). The theory of bank risk taking and competition revisited. *The Journal of finance*, *60*(3), 1329-1343.

Martinez-Miera, D., & Repullo, R. (2010). Does competition reduce the risk of bank failure?. *The Review of Financial Studies*, *23*(10), 3638-3664.

Berger, A. N., Klapper, L. F., & Turk-Ariss, R. (2017). Bank competition and financial stability. In *Handbook of competition in banking and finance* (pp. 185-204). Edward Elgar Publishing.