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BANK RESILIENCE AND POLITICAL INSTITUTIONS: DO BANKING BUSINESS MODELS MATTER?

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ABSTRACT

This paper investigates the effect of political institutions on bank stability of dual banking countries. Applying the two-step GMM approach to a panel sample of Islamic and conventional banks from 2005 to 2020, we arrive at the following results. First, we observe that the quality of political institutions leads to more stable banking system, which is in line with the view that quality political institutions improve the transparency, thereby reducing adverse selection and leading to overall improvement in the banking stability. Second, when we look at components of political institutions, we document the significance of the voice and accountability dimension in enhancing bank stability. Finally, as a side result, we find evidence that competition leads to stability for Islamic banks. These findings are robust to several robustness tests. The implications of our findings are provided in the paper.

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I. INTRODUCTION

The impact and the magnitude of Global Financial Crisis (GFC) is arguably the worst since the Great Depression (GD). Following the GFC, the financial institutions have been placed under close scrutiny by both regulators and policymakers alike (Ibrahim, 2016). As interruptions brought by the GFC have been shown to have significant economic costs, numerous studies have been undertaken at the bank level as well as the macro level to assess factors that enable banks or financial institutions to remain resilience during crunch times.

In the empirical banking literature, several determinants of bank resilience have been explored and identified. Such bank-level variables as liquidity, capitalization, competition etc has been explored. Meanwhile, at the macro level, variables such per capita income, regulations, financial development has been used to predict resilience of banks. Another strand of the literature emphasizes legal protection of depositors and investors to have significant impact on ownership structures and financial markets (La Porta et al., 1998). Besides there have been numerous papers studying the linkage between bank stability and various aspects of institutions. For instances, Demirgüç-Kunt, & Detragiache (1997) focus on deposit insurance schemes and law enforcement, Levine (1998) look at how legal origin impacts enforcement of banking contracts, Hutchison and McDill (1999) examine the roles of central bank independence in the era of liberalization and insurance for depositors, and Hellman, Murdock, & Stiglitz (2000) examine competition in the times of liberalization. More recently, while studying foreign banks, Wang and Sui (2019) find that foreign banks are more stable when local political institutions are strong. Janbaz et al. (2022) provide a good summary and analysis of the literate on political risk and bank performance. These studies, in general, highlight the important roles that institutions play in shaping banking sector stability (Ashraf, 2017).

Based on the work on Ashraf (2017), the impact of political institutions on bank risk-taking could either be positive or negative or both. There could be two possibilities for the negative association. First, political institutions may induce higher risk-taking behavior by intensifying the competition in the credit market through alternative avenues for raising funds. Second, sound political institutions can result in lower bank stability by increasing the moral hazard and the adverse selection problems. This would occur due to the anticipation that the government will bail out the failing institutions. On the contrary, there could be a scenario in where sound political institutions lead to better stability. For instance, sound political institutions can lead to lower information asymmetries thereby reducing the risk of bank expropriation and insolvency.

Though there is a significant literature on the impact of legal institutions on bank stability, it is surprising to have dearth of literature on the role of political institutions in shaping the risk-taking behavior of banks. Given this gap, the main aim of this article is to extend the law and finance literature by investigating the relationship between political environment and bank stability. The closest paper to this work is that of Ashraf (2017). However, we extend his work by investigating the issue from the sample of Organization of Islamic Cooperation (OIC) countries. There is several uniqueness in the OIC sample as compared to others. First, these countries are Muslim majority countries and hence there is a homogeneity

in the sample in terms of religion/faith. Second, and more importantly, these countries have a significant presence of Islamic banks. Over the years, Islamic banks have become systemic importance in many Muslim countries and hence it is important to investigate as to how the political environment shapes the risk-taking behavior of Islamic banks vis-a-vis their conventional counterparts. Since there are significant structural and operational differences between the two banking systems, it is important to examine the implications of political institutions from the policy perspective. Furthermore, the OIC region in terms of its overall institutional structure is found to be weak (Dewandaru, Rizvi, Bacha, & Masih, 2014) and therefore it is crucial to investigate as to how the political environment hinders/promotes bank stability in this region. In the analysis, we disaggregate the political institution to key aspects - Government effectiveness, Voice and Accountability and the Political stability and absence of violence. This disaggregation is important, at least from the policy perspective as this would make it easier for regulators/policymakers to draft policy initiatives and guidelines based on the specific aspect of the political institutions.

Applying dynamic panel modelling, we find several interesting results. First, bank stability is positively associated with the quality of political institutions, indicating that strong political environment is conducive for stability, which hold true for both Islamic banks and their conventional counterparts. Second, as for the dimensions of political institutions, we find "Voice and accountability" to be the only aspect of political institutions that is significant in promoting bank stability. another side result from our analysis is the support for "competition-stability" view for especially Islamic banks.

The rest of the paper is organized as follows. The next section discusses data and methodology, followed by results and discussion. In the last section, we conclude the paper along with some implications.

II. DATA AND METHODOLOGY

As the objective of this study is to investigate the impact of political institutions on conventional and the Islamic banks, the sample is taken from countries with a dual banking system. We include banks that have at least 3 consecutive years of observations in the sample (Beck, Demirgüç-Kunt, & Merrouche, 2013; Azmi et al., 2019; and Ali et al. 2022). Our sample is from 14 dual banking economies with annual data on 354 banks (268 conventional and 86 Islamic banks) over the period of 14 years (2005 – 2020). The 14 countries are Bangladesh, Brunei, Indonesia, Jordan, Kuwait, Lebanon, Malaysia, Pakistan, Qatar, Saudi Arabia, Tunisia, Turkey, United Arab Emirates (UAE) and Yemen.

To investigate the impact of political institution and its various components on the bank stability, we specify the following econometric model:

$$Stability_{i,j,t} = \alpha + \beta_1 Stability_{i,j,t-1} + \beta_2\, Political\ Instituions_{j,t} + \beta_3 \mathrm{Macro}_{j,t} + \beta_4\, Bank_{i,j,t} + \beta_5\, Crisis_{2008-09} + \beta_6\, Islamic + \varepsilon_{i,t} \quad (1)$$

Stability is measured by the Z score (Čihák and Hesse, 2010). The Z score is measured as the sum of return on assets and equity-to-assets ratio divided by the standard deviation of return of asset over a three-year rolling window. Political institutions refer to the composite measure of political institution and its various components, namely government effectiveness, voice and accountability and political stability and absence of violence. They are sourced from World Governance Indicators (WGI). Please refer to the Table A.1 for the detailed explanation of these variables. In the equation, Macro refers to GDP per capita and inflation, sourced from World Development Indicators (WDI). Bank refers to bank specific variables. Following Ashraf (2017) and Azmi et al. (2019), we control for the following bank specific variables: Competition (Lerner index), ROA (return on assets), Size (total assets) and GTA (gross loans to total assets). Crisis is dummy variable taking a value of 1 for the period of 2008/09, 0 otherwise. Similarly, Islamic is the dummy variable taking the value of 1 in case of Islamic banks, 0 otherwise.

As far as Lerner index is concerned, it is a reverse proxy of market competition. It can be explained as the rate a bank charges over and above its marginal cost. Its value ranges from 0 to 1, where 0 represents pure competition and 1 represents monopolistic competition (see Ali et al. 2021 for more explanation). The Lerner Index is calculated as:

$$Lerner\ index_{it} = \frac{BP_{it} - BMC_{it}}{BP_{it}} \quad (2)$$

Here, BP represents the price charged by the bank and BMC represents bank marginal cost.

Note that, we frame our model in a dynamic setting, given that bank stability tends to exhibit persistence. Due to the dynamic modelling approach, we use two step System Generalized Method of Moments (GMM) for the estimation, which is a better methodological approach as compared to other traditional methods (Abedifar, Molyneux, & Tarazi, 2018).

III. RESULTS AND ANALYSIS

The descriptive statistics for bank-specific variables and institutional and macro variables are provided respectively in Tables 1 and 2. There are few key observations from the descriptive statistics. First, conventional banks are more stable, profitable, and larger as compared to their Islamic counterparts. Moreover, the standard deviation (ROA) of conventional banks is also lower as compared to Islamic banks. The summary statistics of political institutions indicate that mean value is in negative suggesting that, on average, sampled countries have weak political institutions. This is in line with Dewandaru et al. (2014) who have shown that the institutional framework of dual banking is weak. Similarly, the individual dimensions, except for government effectiveness, have mean negative values. As far as the GDP growth and the inflation are concerned, the mean value of GDP growth is 4.5% whereas the inflation rate in the sampled in the country is found to be moderately high at 5.5%.

Table 1.
Descriptive Statistics – Bank Specific Variables (Full Sample)

Variables	Obs	Mean	Std. Dev.	Min	Max
Panel A – Full sample					
Zscore	6238	2.847	.962	-5.059	7.212
Lerner index	5791	.32	.512	0	0.992
ROA	6332	1.432	4.269	-16.19	32.24
Size	6670	7.597	1.866	0.881	12.467
GTA	6506	.552	.213	0	1.863
Panel B – Islamic banks					
Z score	1153	2.735	.92	-2.466	5.299
Lerner	973	.266	1.115	0.823	0.882
ROA	1174	1.071	4.761	-16.19	32.24
Size	1230	7.395	1.987	0.881	11.537
GTA	1192	.57	.235	0	1.863
Panel C – Conventional banks					
Z score	5085	2.872	.97	-5.059	7.212
Lerner	4818	.33	.252	0	0.992
ROA	5158	1.514	4.145	-13.88	29.453
Size	5440	7.643	1.835	1.773	12.467
GTA	5314	.548	.208	0	1.215

Table 2.
Descriptive Statistics: Macro Variables

Variables	Obs	Mean	Std. Dev.	Min	Max
Political institutions					
Political institutions	6670	-.429	.501	-1.555	.431
Government effectiveness	6670	.021	.625	-2.23	1.509
Political stability	6670	-.753	.913	-3.006	1.388
Voice and accountability	6670	-.562	.502	-1.907	.305
Other macro variables					
GDP	6665	4.587	2.724	-5.072	11.113
Inflation	6396	5.492	3.949	-2.093	19.544

The correlation analysis is provided in Table 3. The main variable of interests - Z-score (bank stability) and political institutions are positively correlated. Moreover, Lerner index (competition) and bank stability are also positively correlated suggesting that less bank competition is better for bank stability. Furthermore, we find that profitability (ROA) is positively associated with bank stability, indicating profitable banks are more stable. More importantly, we find a positive correlation between bank size and bank stability. Presumably, the big banks are more stable as compared to their smaller counterparts. Finally, we find no effect of GDP growth on the bank stability. Meanwhile, the inflation is negatively associated with the bank stability, suggesting that the inflationary environment leads to instability in the banking system. Note that there pairwise correlations are

only suggestion. To be concrete, we proceed to the formal analysis by estimating our dynamic panel model as specified in (1).

Table 3.
Correlation Analysis

	Z score	Lerner	Political Institutions	ROA	Size	GTA	GDP	Inflation
Z score	1							
Lerner	0.244***	1						
Political Institutions	0.225***	0.263***	1					
ROA	0.267***	0.595***	0.045**	1				
Size	0.061***	0.444***	0.192***	0.127***	1			
GTA	-0.044**	0.093***	0.249***	-0.006	0.124***	1		
GDP	0.014	-0.058**	0.037**	0.096***	-0.125***	0.113***	1	
Inflation	-0.179***	-0.220***	-0.530***	0.049***	-0.164***	-0.050**	0.100***	1

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The main results are presented in Table 4, 5 and 6. The full sample results are provided in Table 4 whereas the findings of conventional banks (Islamic banks) are provided in Table 5 (Table 6).

The findings presented in the Table 4 (Model 1) indicate that quality of political institutions strengthens the banking system. That is, improvement in political institutions lead to improved banking institutions in terms of stability. This result holds true for conventional banks (Table 5 – Model 1) and for Islamic banks (Table 6 – Model 1). The positive relation between political institution and bank stability is broadly in line with the work of Roe and Siegel (2011) and others who argue that the cross-country variation in the financial development can be attributed to the political environment of a country. Taking a cue from them, we interpret our findings as follows. The increase in bank stability in a sound political environment could be a result of decreased adverse selection and improved information flow. The main reason for bank instability in credit market is often a result of highly asymmetric information environment which eventually leads to adverse selection in terms of selecting bad creditors. In a country with quality political institutions, it is easier to assess the creditworthiness of potential borrowers. In other words, increase in the quality of political institutions leads to more transparent environment which would eventually lead to lower chances of adverse selection, thus higher bank stability. However, our finding contradicts Ashraf (2017). He notes that the improvement in political environment is associated with instability in the banking institutions.

The findings related to individual dimensions of political institutions are presented in Models 2 – 4. We find a unique insight from the estimation results. Namely, the significance of only voice and accountability dimension suggests that this the only dimension which accounts for banking system stability. In other words, positive association between the stability and the voice and accountability indicates that a country which promotes accountability would have a more stable

banking system. The other two individual aspects of political institutions are however insignificant, and hence may not support the stability in the banking system.

These findings are similar even when we split the sample based on business models (Table 5 and 6). The main insight from the overall results indicate that the overall political institutions matter for the banking stability irrespective of whether it is conventional banks' stability or Islamic banks' stability. More importantly, it is only the accountability aspect which matters for the banking stability as compared to other dimensions.

Table 4.
Political Stability and Bank Resilience (Full Sample)

	(1)	(2)	(3)	(4)
L.Z Score	0.9342**	0.9356**	0.9318**	0.9360**
	[0.008]	[0.007]	[0.007]	[0.007]
Lerner Index	-0.2081*	-0.2038*	-0.2024*	-0.1862*
	[0.097]	[0.098]	[0.092]	[0.099]
Political Institutions	0.0249*			
	[0.013]			
Government effectiveness		0.0106		
		[0.010]		
Voice and Accountability			0.0371**	
			[0.010]	
Political stability and absence of violence				0.0010
				[0.008]
ROA	0.0596**	0.0592**	0.0604**	0.0585**
	[0.010]	[0.010]	[0.010]	[0.010]
Total Assets	-0.0002	-0.0005	0.0041	-0.0001
	[0.004]	[0.004]	[0.004]	[0.004]
Gross Loan/Total Assets	0.0163	0.0282	0.0135	0.0302
	[0.029]	[0.028]	[0.028]	[0.029]
GDP	-0.0039**	-0.0037**	-0.0040**	-0.0036**
	[0.001]	[0.001]	[0.001]	[0.001]
Inflation	-0.0050**	-0.0056**	-0.0058**	-0.0059**
	[0.001]	[0.001]	[0.001]	[0.001]
Crisis	0.0100	0.0111	0.0147	0.0122
	[0.011]	[0.010]	[0.010]	[0.010]
Islamic	-0.0471**	-0.0469**	-0.0366*	-0.0449**
	[0.016]	[0.016]	[0.015]	[0.016]
Constant	0.2384**	0.2198**	0.2198**	0.2112**
	[0.043]	[0.042]	[0.039]	[0.044]
Observations	4711	4711	4711	4711
Instruments	114.0000	114.0000	114.0000	114.0000
Overall	514.0000	514.0000	514.0000	514.0000
Arellano-Bond:AR(1)	0.0000	0.0000	0.0000	0.0000
Arellano-Bond: AR(2)	0.5994	0.5911	0.6042	0.5786
Hansen Test (p-Val)	0.9981	0.3454	0.4981	0.6710

Standard error in parentheses. * p < 0.1, * p < 0.05, ** p < 0.01

Table 5.
Political Stability and Bank Resilience (Conventional Banks)

	(1)	(2)	(3)	(4)
L.Z Score	0.9330**	0.9344**	0.9318**	0.9352**
	[0.009]	[0.009]	[0.008]	[0.008]
Lerner Index	-0.1170	-0.1081	-0.0891	-0.1009
	[0.113]	[0.114]	[0.107]	[0.115]
Political Institutions	0.0205**			
	[0.001]			
Government effectiveness		0.0068		
		[0.012]		
Voice and Accountability			0.0368**	
			[0.011]	
Political stability ad absence of violence				-0.0016
				[0.009]
ROA	0.0568**	0.0560**	0.0549**	0.0557**
	[0.012]	[0.012]	[0.012]	[0.012]
Total Assets	-0.0032	-0.0036	0.0001	-0.0030
	[0.004]	[0.004]	[0.004]	[0.004]
Gross Loan/Total Assets	-0.0000	0.0098	-0.0059	0.0144
	[0.034]	[0.032]	[0.031]	[0.034]
GDP	-0.0051**	-0.0049**	-0.0052**	-0.0049**
	[0.001]	[0.001]	[0.001]	[0.001]
Inflation	-0.0049**	-0.0054**	-0.0051**	-0.0058**
	[0.002]	[0.002]	[0.002]	[0.001]
Crisis	0.0105	0.0113	0.0134	0.0124
	[0.011]	[0.011]	[0.011]	[0.011]
Constant	0.2487**	0.2331**	0.2326**	0.2219**
	[0.047]	[0.045]	[0.040]	[0.048]
Observations	3898	3898	3898	3898
Instruments	113.0000	113.0000	113.0000	113.0000
Overall	423.0000	423.0000	423.0000	423.0000
Arellano-Bond: AR(1)	0.0000	0.0000	0.0000	0.0000
Arellano-Bond: AR(2)	0.6198	0.6072	0.6049	0.5978
Hansen Test (p-Val)	0.3762	0.5451	0.9981	0.7763

Standard error in parentheses. * $p < 0.1$, * $p < 0.05$, ** $p < 0.0$

Table 6.
Political Stability and Bank Resilience (Islamic Banks)

	(1)	(2)	(3)	(4)
L.Z Score	0.9338**	0.9426**	0.9239**	0.9392**
	[0.017]	[0.018]	[0.017]	[0.017]
Lerner Index	-0.3638*	-0.3671*	-0.2603*	-0.3330*
	[0.160]	[0.166]	[0.149]	[0.159]
Political Institutions	0.0505*			
	[0.022]			
Government effectiveness		0.0120		
		[0.019]		
Voice and Accountability			0.0897**	
			[0.028]	
Political stability ad absence of violence				0.0078
				[0.016]
ROA	0.0665**	0.09921**	-0.0871**	0.0621**
	[0.012]	[0.013]	[0.012]	[0.012]
Total Assets	0.0119	0.0131	0.0210	0.0109
	[0.015]	[0.014]	[0.014]	[0.015]
Gross Loan/Total Assets	0.0419	0.0724	-0.0036	0.0640
	[0.068]	[0.074]	[0.071]	[0.069]
GDP	-0.0023	-0.0009	-0.0017	-0.0009
	[0.003]	[0.003]	[0.003]	[0.003]
Inflation	-0.0043	-0.0075*	-0.0066*	-0.0080*
	[0.003]	[0.004]	[0.003]	[0.004]
Crisis	0.0026	0.0105	0.0171	0.0143
	[0.033]	[0.031]	[0.031]	[0.032]
Constant	0.1273	0.0619	0.1297	0.0934
	[0.120]	[0.109]	[0.113]	[0.123]
Observations	813	813	813	813
instruments	113.0000	113.0000	113.0000	113.0000
overall	91.0000	91.0000	91.0000	91.0000
Arellano-Bond: AR(1)	0.0000	0.0000	0.0000	0.0000
Arellano-Bond: AR(2)	0.5774	0.6021	0.6476	0.6296
Hansen Test (p-Val)	0.9774	0.9862	0.9546	0.9797

Standard error in parentheses. * $p < 0.1$, * $p < 0.05$, ** $p < 0.01$

The other key finding of this paper is that the Lerner index is negatively associated with the bank stability. These findings are in line with "competition-stability" view suggesting that as competitive environment improves in a country, banks become more prudent in their lending and thus become more stable. This is in line with Boyd and De Nicolo (2005) and Carlson, Correia, & Luck, 2022). The "competition-stability" relation is also holds when a sample of only Islamic banks is used. This indicates that Islamic banks are more stable in a competitive environment. However, we find no significant association between competition and bank stability for conventional banks.

As far as the dummy variables are concerned, surprisingly the crisis dummy is insignificant. This indicates that the crisis had no effect on the stability of sampled banks. The crisis results are similar for Islamic and the conventional banks. Moreover, the Islamic dummy enters negatively indicating that Islamic banks are less stable. This is in line with the descriptive statistics showing higher Z-score for conventional banks.

As far as the other control variables are concerned, we find ROA to have positive effect on bank stability. Surprisingly, we do not find any evidence of size effect. Hence, size may be an irrelevant factor for bank stability. This is not in line with Ali et al. (2022), Ibrahim and Rizvi (2017, 2018) who show positive association between size and stability.

On the effect of macroeconomic variables, we find a negative effect of both GDP growth and inflation. The effect of GDP growth suggests that bank stability is countercyclical. Perhaps, banks are more careful in their lending during crisis period as the probability of default significantly increases during the time. Due to high risk during economic slowdown, bank managers are more prudent in their lending and thus become more stable during bearish period. This is in line with Reinhart & Rogoff (2009). On the other hand, the negative association between bank stability and inflation suggests that banks risk taking significantly increases during high inflationary environment.

As a summary, our findings indicate that the political institutions play a key role in driving stability. Looking at components of political institutions, we note that banking stability is mainly driven by the voice and accountability dimension. Moreover, we find support for the "competition-stability" view for the full and Islamic banking samples. We also find Islamic banks to be less stable as compared to their conventional counterparts. Finally, we find bank risk taking increases during bullish and inflationary economic environment.

IV. ROBUSTNESS CHECKS

To add credence to our analysis, we conduct several robustness checks. In this section, we present and discuss their results.

4.1. Alternative Measure of Bank Stability

As a first set of robustness, we use an alternative measure of bank stability, namely the non-performing loans to gross loans ratio (NPL). The results presented in Table 7 – 9 indicate negative association between the composite measure of political

institutions and NPL. This suggest that quality of political institutions leads to more stable banking system. We may observe also that all other results prevail when NPL is used, in particular those pertaining to components of political institutions and to Islamic and conventional banks.

Table 7.
Political Stability and Bank Resilience (Full Sample) – Alternative Proxy of Stability

	(1)	(2)	(3)	(4)
L.NPL	0.8070**	0.8101**	0.8065**	0.8109**
	[0.014]	[0.014]	[0.014]	[0.014]
Lerner Index	-0.1448	-0.0581	-0.8384	-0.0772
	[1.088]	[1.101]	[1.079]	[1.104]
Political Institutions	-0.3545**			
	[0.125]			
Government effectiveness		-0.2286		
		[0.136]		
Voice and Accountability			-0.3343**	
			[0.123]	
Political stability ad absence of violence				-0.1093
				[0.082]
ROA	-0.3219**	-0.3300**	-0.2853**	-0.3243**
	[0.089]	[0.090]	[0.086]	[0.087]
Total Assets	-0.0464	-0.0359	-0.0741*	-0.0499
	[0.044]	[0.043]	[0.042]	[0.042]
Gross Loan/Total Assets	-0.0573	-0.1839	-0.0611	-0.1029
	[0.336]	[0.333]	[0.339]	[0.341]
GDP	-0.1386**	-0.1417**	-0.1403**	-0.1415**
	[0.017]	[0.017]	[0.017]	[0.017]
Inflation	0.0322*	0.0386**	0.0408**	0.0415**
	[0.014]	[0.014]	[0.015]	[0.013]
Crisis	0.2110	0.1932	0.1971	0.1994
	[0.138]	[0.138]	[0.141]	[0.139]
Islamic	-0.2043*	-0.1921*	-0.3100**	-0.2234*
	[0.111]	[0.113]	[0.113]	[0.112]
Constant	2.1736**	2.2620**	2.5461**	2.2180**
	[0.350]	[0.353]	[0.354]	[0.372]
Observations	4212	4212	4212	4212
instruments	114.0000	114.0000	114.0000	114.0000
overall	491.0000	491.0000	491.0000	491.0000
Arellano-Bond:AR(1)	0.0000	0.0000	0.0000	0.0000
Arellano-Bond: AR(2)	0.9588	0.9481	0.9020	0.9706
Hansen Test (p-Val)	0.0172	0.0174	0.0129	0.0139

Standard error in parentheses. * $p < 0.1$, * $p < 0.05$, ** $p < 0.01$

Table 8.
Political Stability and Bank Resilience (Conventional Sample) – Alternative Proxy of Stability

	(1)	(2)	(3)	(4)
L.NPL	0.8193**	0.8235**	0.8193**	0.8242**
	[0.014]	[0.014]	[0.015]	[0.014]
Lerner Index	0.1714	0.3494	-0.7592	0.2674
	[1.295]	[1.310]	[1.277]	[1.287]
Political Institutions	-0.3880**			
	[0.143]			
Government effectiveness		-0.2601		
		[0.142]		
Voice and Accountability			-0.3154*	
			[0.147]	
Political stability ad absence of violence				-0.1355
				[0.093]
ROA	-0.3611**	-0.3745**	-0.3089**	-0.3644**
	[0.103]	[0.104]	[0.101]	[0.099]
Total Assets	-0.0570	-0.0452	-0.0746*	-0.0590
	[0.048]	[0.046]	[0.044]	[0.046]
Gross Loan/Total Assets	0.0947	-0.0498	0.0746	0.0385
	[0.350]	[0.344]	[0.364]	[0.351]
GDP	-0.1520**	-0.1554**	-0.1554**	-0.1541**
	[0.018]	[0.018]	[0.018]	[0.018]
Inflation	0.0251*	0.0322*	0.0322*	0.0347*
	[0.015]	[0.015]	[0.017]	[0.014]
Crisis	0.1371	0.1199	0.1218	0.1301
	[0.144]	[0.143]	[0.150]	[0.146]
Constant	2.1538**	2.2211**	2.5512**	2.1641**
	[0.367]	[0.367]	[0.367]	[0.391]
Observations	3479	3479	3479	3479
instruments	113.0000	113.0000	113.0000	113.0000
overall	405.0000	405.0000	405.0000	405.0000
Arellano-Bond:AR(1)	0.0000	0.0000	0.0000	0.0000
Arellano-Bond: AR(2)	0.8429	0.8457	0.9457	0.8366
Hansen Test (p-Val)	0.2530	0.3615	0.4303	0.0445

Standard error in parentheses. * $p < 0.1$, * $p < 0.05$, ** $p < 0.01$

Table 9.
Political Stability and Bank Resilience (Islamic Banks) – Alternative Proxy of Stability

	(1)	(2)	(3)	(4)
L.NPL	0.7379**	0.7399**	0.7406**	0.7397**
	[0.032]	[0.030]	[0.031]	[0.030]
Lerner Index	-1.0053	-0.8893	-1.4956	-1.1833
	[1.659]	[1.530]	[1.611]	[1.463]
Political Institutions	-0.3793*			
	[0.037]			
Government effectiveness		-0.2830		
		[0.189]		
Voice and Accountability			-0.3783**	
			[0.039]	
Political stability ad absence of violence				-0.1077
				[0.146]
ROA	-0.1681*	-0.1704*	-0.1526	-0.1582*
	[0.096]	[0.092]	[0.094]	[0.096]
Total Assets	-0.0892	-0.0845	-0.1349	-0.0676
	[0.115]	[0.106]	[0.114]	[0.111]
Gross Loan/Total Assets	-1.0668	-1.1188	-1.2370	-1.3073
	[1.330]	[1.056]	[1.104]	[1.129]
GDP	-0.0866*	-0.0885**	-0.0910**	-0.0917*
	[0.040]	[0.032]	[0.035]	[0.037]
Inflation	0.0477	0.0517	0.0683*	0.0593
	[0.042]	[0.036]	[0.033]	[0.039]
Crisis	0.5087	0.4565	0.4239	0.4742
	[0.407]	[0.363]	[0.375]	[0.410]
Constant	3.1458**	3.2868**	3.5567**	3.1898**
	[1.068]	[0.940]	[0.968]	[1.041]
Observations	733	733	733	733
instruments	113.0000	113.0000	113.0000	113.0000
overall	86.0000	86.0000	86.0000	86.0000
Arellano-Bond:AR(1)	0.0035	0.0034	0.0037	0.0036
Arellano-Bond: AR(2)	0.7585	0.7482	0.7876	0.7717
Hansen Test (p-Val)	0.9750	0.9822	0.9745	0.9820

Standard error in parentheses. * $p < 0.1$, * $p < 0.05$, ** $p < 0.01$

4.2. Additional Control Variables

We also include addition of extra control variables. More specifically, we add liquidity and cost efficiency measures to assess if the results remain robust. The liquidity variable is measured as liquid assets to total assets whereas cost efficiency is measured as cost to income ratio. The results provided in the Table 10 are similar to the main findings in terms of sign and significance. These results suggest that our main findings are robust and hence can be relied upon to draw implications.

Table 10.
Political Stability and Bank Resilience – Inclusion of Additional Controls

	(1) Full sample	(2) Conventional banks	(3) Islamic banks
L.Z Score	0.9347**	0.9327**	0.9233**
	[0.008]	[0.009]	[0.018]
Lerner Index	-0.2034*	-0.1031	-0.5468**
	[0.101]	[0.119]	[0.205]
Political Institutions	0.0280*	0.0283*	0.0477*
	[0.013]	[0.016]	[0.020]
ROA	0.0596**	0.0565**	0.0725**
	[0.010]	[0.012]	[0.013]
Total Assets	-0.0011	-0.0056	0.0228
	[0.005]	[0.005]	[0.019]
Gross Loan/Total Assets	-0.0069	-0.0514	0.1335
	[0.046]	[0.050]	[0.096]
Liquid Assets/Total Assets	-0.0004	-0.0008	0.0030*
	[0.001]	[0.001]	[0.002]
Cost to Income Ratio	-0.0000	-0.0003	0.0004
	[0.000]	[0.000]	[0.001]
GDP	-0.0038**	-0.0050**	-0.0022
	[0.001]	[0.001]	[0.003]
Inflation	-0.0049**	-0.0046**	-0.0059*
	[0.001]	[0.002]	[0.003]
Crisis	0.0108	0.0111	-0.0035
	[0.010]	[0.011]	[0.031]
Islamic	-0.0472**		
	[0.016]		
Constant	0.2639**	0.3143**	0.0094
	[0.063]	[0.064]	[0.164]
Observations	4705	3895	810
instruments	116.0000	115.0000	115.0000
overall	513.0000	422.0000	91.0000
Arellano-Bond:AR(1)	0.0000	0.0000	0.0000
Arellano-Bond: AR(2)	0.5637	0.6267	0.4301
Hansen Test (p-Val)	0.4801	0.3692	0.9790

Standard error in parentheses. * $p < 0.1$, * $p < 0.05$, ** $p < 0.01$

4.3. Alternative Estimation Method

As a last set of robustness, we employ a different estimation method, namely Least Square Dummy Variable (LSDV) estimation method. The approach is shown to suffer from Nickell's (1981) bias in dynamic models. Nonetheless, we expect our estimation does not suffer from the stated bias as it (associated bias) decreases with the increase in time span. The results we obtain are in line with the main findings (Table 11).

Table 11.
Political Stability and Bank Resilience – LSDVC Approach

	(1) Full sample	(2) Conventional banks	(3) Islamic banks
L.Z Score	0.6076**	0.5900**	0.6368**
	[0.015]	[0.016]	[0.027]
Lerner Index	0.1127*	0.1838**	-0.1014
	[0.046]	[0.050]	[0.070]
Political Institutions	0.1862**	0.2011**	0.0861
	[0.029]	[0.029]	[0.065]
ROA	0.0674**	0.0653**	0.0743**
	[0.005]	[0.004]	[0.006]
Cost to Income Ratio	0.0001	-0.0001	0.0006
	[0.000]	[0.000]	[0.001]
Liquid Assets/Total Assets	-0.0022**	-0.0022**	-0.0018*
	[0.000]	[0.000]	[0.001]
Total Assets	-0.0971**	-0.0998**	-0.0746**
	[0.008]	[0.011]	[0.021]
Gross Loan/Total Assets	-0.0268	-0.0271	-0.0169
	[0.050]	[0.058]	[0.085]
GDP	-0.0078**	-0.0090**	-0.0022
	[0.001]	[0.001]	[0.003]
Inflation	-0.0036*	-0.0039*	-0.0028
	[0.001]	[0.002]	[0.003]
Crisis	-0.0313**	-0.0389**	0.0118
	[0.010]	[0.011]	[0.024]
Observations	4705	3895	810
overall	513.0000	422.0000	91.0000

V. CONCLUSION AND IMPLICATIONS

Sound institutional environment is desirable for many national and economic outcomes. In this paper, we investigate the impact of political institutional framework on bank stability. More importantly, we investigate if it has differential effect on Islamic and conventional banks. This is carried out using a panel sample of 354 banks (268 conventional and 86 Islamic banks) from 14 dual-banking countries covering the period of 16 years from 2005 to 2020.

The findings reveal several insights. First, political institutions are found to be a key factor driving bank stability. The analysis of the three main dimensions of political institution reveals that only voice and accountability matters for the bank stability. Second, we find bank market power as measured by the Lerner index and bank stability to be negatively associated. This suggests that higher competition leads to a more stable banking system. These findings are robust to an alternative measure of bank stability, inclusion of additional variables and an alternative estimation method.

Taken together, the empirical results suggest that policymakers should be mindful of individual dimensions of political institutions while drafting policy measures to strengthen banking sector stability. In other words, as a policy measure, policymakers should target "voice and accountability" dimension to get maximum benefits of potential positive impact of political institutions on the banking stability.

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APPENDIX

Table A.1.
Description of Institutional Variables

Political institutions	Definition	Source
Government effectiveness	The quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.	WGI
Political stability and absence of violence/ terrorism	The likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism.	WGI
Voice and accountability	The extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media.	WGI