

## **Does Country-Level Institutional Quality Influence Financial Development in Iraq?**

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### **Abstract**

In the context of Iraq, this article examines the relationship between the country level institutional quality and financial development. For Iraq, data on institutional quality at the country-level were used to assess the study's assumptions, which ranged from 2004 to 2020 and collected from World Bank, IMF, and Worldwide Governance Indicators databases. For this purpose, ordinary least square regression, quantile regression and stepwise regression were used to examine the elements that impact financial development in this study. According to the findings of this research, voice and accountability, regulator quality and control of corruption are positively related to financial development. In contrast, government effectiveness, political stability and rule of law are negatively significant to explain financial development in Iraq. It is suggested that low country-level institutional quality presents a considerable market risk since it signals the existence of a poor economic environment that restricts financial growth. Improved financial market transparency, in turn, may lead to higher financial growth, according to the findings of this study. On contrary to prior studies, the current study will pave the way for greater public understanding of the influence of country-level institutional quality on Iraq's financial development.

*Keywords: country level-institutional quality; financial development; Iraq*

## Introduction

As per the preceding literature it is argued that banking and stock exchanges have become increasingly important in supporting economic growth as financial markets have grown in importance. The fact that some countries, like Iraq, are not economically developed and powerful than others is ambiguous. Financial growth is important to examine in these concerns since good policies may have a substantial influence on “financial development”.

The early 20th century economist Joseph Schumpeter made substantial advances to our understanding of the connection between finance and economic growth. Schumpeter examined how entrepreneurship and innovation may spur economic growth in his 1911 book "The Theory of Economic Development." (Nunes, 2016). Moreover, financial development has been well-considered to play a crucial role in driving economic expansion, the accumulation of physical capital, and soaring economic output, according to empirical studies from the past (Dalton, & Logan, (2020). Following Schumpeter's lead, he undertook groundbreaking research in 1911 to show the positive impact on economic growth that an efficient finance system may have (Schumpeter (1911). Entrepreneurs benefit from a more developed financial system, which leads to faster economic growth. “Financial development”, according to some researchers (Bist, 2018; Cheng, Chien, & Lee, 2021; De Gregorio & Guidotti, 1995; Erdoğan, Yıldırım, & Gedikli, 2020; Guru & Yadav, 2019), boosts economic growth, while current research has established the significance of institutions and the legal system and shows that excellent institutions are sources of financial growth (Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1998). Financial development is predicated on a solid institutional framework, notably in the banking and finance industries (Shahbaz, Bhattacharya, & Mahalik, 2018).

Financial growth may not be able to provide economic rewards in the absence of a strong institutional framework (Mehmood, Mohd-Rashid, Aman-Ullah, & Zi Ong, 2021). According to Anwar and Cooray (2012), the quality of institutions has a direct impact on the amount of financial growth. According to this theory, the amount of the benefits from financial progress is dictated by the level of governance in the organisation. Political and civic rights and privileges were also expanded, which resulted in higher economic development (Anwar & Cooray, 2012). For this reason, this research examines the significance of sound institutional quality for Iraq's financial development.

"The norms, including constitutions and laws, standards of conduct and behaviour in a society that are vital for the development process," was how North (1990) described institutions. Institutional quality, say Knack

and Keefer (1995) has a role in spurring “financial development”. When compared to several other studies, this study shows that government ownership of banks has a significant impact on “financial development”(Baltagi, Demetriades, & Law, 2009; La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2002; La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1997; Menyari, 2019). The financial sector's expansion may have a negative impact on economic development, according to (Cecchetti & Kharroubi, 2015). Economic development may be hindered by foreign direct investment (FDI) and trade flexibility. As a result, trade openness may be mitigated to the extent that FDI's regulator in order to boost their spill-over effect (Nguyen, 2019).

In view of Konadu-Agyemang (2018), high-quality institutional environment contributes to financial market stimulation. The quality of institutions is critical for a country's financial sector growth(North, 1990). When financial institutions and markets grow, it increases the quantity of monetary services available and stimulates economic growth (Patrick, 1966). As the economy transitions to financial and economic growth, the path of self-sustaining economic growth begins with an advancement in the financial sector, the effect of supply-led “financial development” fades and is replaced by demand-led financial growth in a country's economy (Patrick, 1966).

If a developing country's financial system is not properly established, improvements are required. Several developing economies have undertaken financial adjustments in order to get the support of a well-performing financial structure in terms of economic development (Khan, Khan, & Zuojun, 2022). As a consequence, an extended measurement of study has been conducted in the aim of examining financial adjustments, confirming and indulging the animation of connections between the actual and financial sector growth of financial prudence over the previous 25 years.

Present study adds to previous research by analysing the effect of institutional quality on “financial development” in Iraq. This study hypothesizes that poor governance leads to lower “financial development” in Iraq. The Iraqi government has faced serious policy problems as a result of a variety of circumstances, including civil war, oil price decreases, weak fiscal receipts and currency shortages, refugee issues, terrorist attacks, regional wars, and political upheavals in states brought about by the Arab Spring. All of this has led in substantial fiscal and external imbalances in Iraq, owing mostly to the expensive expenditures of war, a drop in oil prices, and reduced commerce. As a result, the country incurs bigger public debts in order to enhance its economy and fund its growth in the economy. However, this raises the measure's vulnerability to

national and international financial shocks. Because of their relatively diverse economies, lower domestic financial savings, and immature financial institutions, developing and underdeveloped countries are more vulnerable to such risks. As a result, they are vulnerable to financial instability due to the various degrees of capital movement. World Economic Forum's report of 2016 about Global Risk revealed that government failure in the form of "rule of law, proliferation of corruption, and political gridlock" is one of the top six most likely failures (IMF, 2020). This research adds to the pool of knowledge on the macroeconomic effects of governance by offering various useful insights to the politicians of the affected nations, which essentially involves excellent public debt management procedures broadly agreed upon in the public arena for financial progress.

The remaining of the study is organized as follows: the second section covers prior literature, the third section examines the research methods and data, and the fourth and fifth sections, respectively, include the results, discussion and findings, and the conclusion.

## **Literature Review**

This section offers a quick summary of the economic relevance of "financial development" as well as the function of institutional quality in financial performance. "Financial development" is a necessary component of economic growth, and a well-functioning financial system contributes to economic stability. In view of Graff (2003) the financial sector is critical in allocating finite economic resources, and the financial activities conducted in this process contribute to economic growth.

Financial development, according to Hartmann, Heider, Papaioannou, and Lo Duca (2007), is a way to accomplish financial innovation and institutional and organisational advancement in a financial system to minimize asymmetric information, enhance economic comprehensiveness, assist agents in financial transactions through (explicit or implicit) contracts, transaction cost, and encourage competition. As a result, "financial development" includes enhancements to banking products, institutions, and organisations, as well as non-banking financial structures and capital markets. "Financial development", according to (Greenwood, Sanchez, & Wang, 2010), permits credit distribution among enterprises, hence increasing investment performance and effectiveness. According to Khan, Kong, Xiang, and Zhang (2020), financial market efficiency and effectiveness are more significant than financial market size in encouraging economic development. Han and Shen (2015) propose that the fast development of finance resulted in an increase in

aggregate output by resolving resource provisioning inequalities. Similarly, Yu, Li, and Huang (2017) emphasize the importance of two financial functions, namely financial access and financial efficiency, as key factors of financial growth that have a spillover impact on economic development. Whenever liquid liabilities and lending to the private sector are employed as tools, financial growth may also operate as a poverty eradication stimulant (Rashid & Intartaglia, 2017).

Anwar and Cooray (2012) argue that improving political rights and civil freedoms promotes South Asia's "financial development" by favorably affecting economic expansion. Andrianova, Demetriades, and Xu (2011) emphasize the crucial role of the government as a political entity that fosters the formation of massive trade cartels, hence facilitating the global expansion of financial systems. Mardan (2017) discusses the limitations on external fundraising, such as taxation policy and interest waivers, that prevent investors from taking advantage of optimal investment options, likely to result in financial development; these strict laws are even more pronounced in financially under-developed economies than developed ones. Singh and Delios (2017) emphasize the importance of governing structure in supporting board freedom and launching expansion plans via new domestic and international partnerships, the latter of which is contingent on the connectivity of board companies with other businesses' core networks. Bolgorian (2011) panel data evidence demonstrates that an elevated corruption index (low corruption) has a favorable and substantial effect on market capitalization and traded flow. Jain, Kuvvet, and Pagano (2017) assert that corruption has a major and detrimental effect on a country's financial system; that is, highly transparent countries have lower transaction costs due to less information asymmetry than corrupt ones.

In comparison, Altunbaş and Thornton (2012) suggest that corruption can be reduced via effective bank loan distribution to the private sector. Rostami, Rostami, and Kohansal (2016) conducted a study of 469 firms listed on the Tehran Stock Exchange and discovered a positive and significant correlation among "governance measures and financial market returns". In particular, "institutional ownership, ownership structure, board independence" all positively affect stock returns. Whereas "ownership concentration and board size" have the opposite effect. A study of the factors of financial growth in Asia and the Pacific from 1995 to 2011 demonstrates that institutional quality promotes financial sector development in developing country's (Le, Kim, & Lee, 2016). A solid organisational environment is critical for understanding "financial development" (Law & Azman-Saini, 2012; Law & Habibullah, 2006), and institutional variables are critical for economic and "financial development", in addition to forcing politicians to implement stable changes

that alleviate instability (Cherif & Gazdar, 2010). Political stability is also a necessary condition for financial market expansion (Boyd, Levine, & Smith, 2001).

The preceding assessment of the previous studies establishes a sound theoretical platform for further investigation of the critical positions of "institutional quality and financial development" in facilitating economic growth. Numerous studies have emphasized the critical role of institutional quality in economic performance (Farooq, Shahbaz, Arouri, & Teulon, 2013; Saha & Ali, 2017), whereas others have emphasized only the relationship between "financial development" and economic performance (Adeniyi, Oyinlola, Omisakin, & Egwaikhide, 2015; Gokmenoglu, Amin, & Taspinar, 2015). Nevertheless, a handful of studies have explored the relationship between institutional quality and financial growth in either African and Asian nations, with a particular emphasis on stock markets (Narayan, Sharma, & Thuraaisamy, 2015; Singh & Delios, 2017; Ahmed, Kousar, Pervaiz, & Shabbir, 2022). One other body of literature emphasizes the importance of financial liberalization (Seck & El Nil, 1993), investigates countries that have undergone significant reforms as a result of financial sector liberalization (Kutan, Samargandi, & Sohag, 2017), and recognizes political institutions and TO as forms of "financial development" (Girma & Shortland, 2008; Roe & Siegel, 2011). Ahmed et.al, (2022) conducted study using data from the World Bank to show how institutional quality and financial development have contributed to green growth in South Asian nations over the years 2000–2018. Institutional quality and financial development are key pillars of sustainable economic growth. Notably, developed countries institutional frameworks are typically stable and do not undergo dramatic transformation. Furthermore, because to the quick expansion of certain rapidly expanding countries, the institutions of Iraq have evolved considerably in the short time. Emerging economies are through a delicate period of fast expansion, during which institutional integrity is critical for nurturing attractive finance sector results. According to (Law, Azman-Saini, & Ibrahim, 2013), countries with varying degrees of institutional development exhibit varying degrees of financial development, that might be explained by their institutional quality permissible level. Likewise, Le et al. (2016) suggest that institutional quality promotes financial sector growth. As a result of the delicate nature of institutional quality and financial growth in developing countries, this research seeks to add to the current body of knowledge by providing data from Iraq. The definitions of country-level institutional quality are as follows:

(1) Voice and accountability: Citizens' engagement in choosing their government is critical. It delves into the significance of free speech, association, and free journalism.

- (2) Political stability: Evoke opinions of the possibility of the administration disintegrating or being overthrown.
- (3) Government effectiveness: Perceptions of the quality of public services provided by the civil service, as well as the degree of independence of the civil service from political influences, policy development and execution, and the government's credibility.
- (4) Regulatory quality: The government's readiness to enact effective legislation and norms that allow for and promote private sector development.
- (5) Rule of law: Evokes agents' perceptions or trust in societal standards, the efficacy of contract enforcement, property rights enforcement, the police, and the court, as well as the likelihood of violence and crime.
- (6) Control of corruption: Examines perspectives on the extent to which public power is used for private gain. It probes all forms of corruption, whether minor or major, including the state's capture of privileged and private interests.

### **Research Methodology**

The purpose of this research is to investigate the influence of institutional quality on Iraq's financial development from 2004 to 2020. The reason to initiate research from 2004 is due to the data availability, as prior from 2004 Iraq data is not accessible. The research analyses the percentage of bank loans and domestic credit to the private sector as a proxy for "financial development"(Alshubiri, Jamil, & Elheddad, 2019). Additionally, "voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption" were included as indicators of institutional quality(Mehmood, Mohd-Rashid, & Tajuddin, 2021). Meanwhile, economic growth, inflation, and the political right index incorporated as control factors. The operationalization of variables is discussed in Table 1.



Table 1: operationalization of variable.

Dependent variable:	
Financial Development	<ul style="list-style-type: none"> <li>• “Bank credit to the private sector as percent of GDP”.</li> <li>• “Domestic credit to the private sector, percent of GDP”.</li> </ul>
Independent variable:	
Country level institutional quality	
Voice and accountability	“Estimate of governance (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance)”.
Political stability	“Estimate of governance (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance)”.
Government effectiveness	“Estimate of governance (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance)”.
Regulatory quality	“Estimate of governance (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance)”.
Rule of law	“Estimate of governance (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance)”.
Control of corruption	“Estimate of governance (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance)”.
Control variables	
Economic Growth	“The rate of change of real GDP”.
Inflation	“Percent change in the Consumer Price Index”.



Political right index

“Political rights index, 7 (weak) - 1 (strong)”.

### Empirical Model

To explain the link between the independent and dependent variables in this research, the ordinary least squares (OLS), quantile least square and stepwise technique was used. All variables were considered to be indicators of “financial development” determinants. The following equation (1) and (2) represents a cross-sectional regression model:

#### **FINANCIAL DEVELOPMENT (BANK CREDIT) $_{i,t}$**

$$\begin{aligned}
 &= \alpha + \beta_1 \text{VOICE AND ACCOUNTABILITY}_{i,t} + \beta_2 \text{POLITICAL STABILITY}_{i,t} \\
 &+ \beta_3 \text{GOVERNMENT EFFECTIVENESS}_{i,t} + \beta_4 \text{REGULATORY QUALITY}_{i,t} + \beta_5 \text{RULE OF LAW}_{i,t} \\
 &+ \beta_6 \text{CONTROL OF CORRUPTION}_{i,t} + \beta_6 \text{CONTROL OF CORRUPTION}_{i,t} \\
 &+ \beta_7 \text{ECONOMIC GROWTH}_{i,t} + \beta_8 \text{INFLATION}_{i,t} + \beta_9 \text{POLITICAL RIGHT INDEX}_{i,t} \\
 &+ \varepsilon_{i,t} \quad (1)
 \end{aligned}$$

#### **FINANCIAL DEVELOPMENT (DOMESTIC CREDIT) $_{i,t}$**

$$\begin{aligned}
 &= \alpha + \beta_1 \text{VOICE AND ACCOUNTABILITY}_{i,t} + \beta_2 \text{POLITICAL STABILITY}_{i,t} \\
 &+ \beta_3 \text{GOVERNMENT EFFECTIVENESS}_{i,t} + \beta_4 \text{REGULATORY QUALITY}_{i,t} + \beta_5 \text{RULE OF LAW}_{i,t} \\
 &+ \beta_6 \text{CONTROL OF CORRUPTION}_{i,t} + \beta_6 \text{CONTROL OF CORRUPTION}_{i,t} \\
 &+ \beta_7 \text{ECONOMIC GROWTH}_{i,t} + \beta_8 \text{INFLATION}_{i,t} + \beta_9 \text{POLITICAL RIGHT INDEX}_{i,t} \\
 &+ \varepsilon_{i,t} \quad (2)
 \end{aligned}$$

The model's efficiency and quantile regression, as well as stepwise regression models, were also examined in this study. As a starting point, quantile regression was utilized to show in detail how the predictor variable influenced the final outcome. Since the parameter estimates the changes that occur when a unit change in a predictor variable is taken into account, various quantiles (or percentiles) like the 25th, 50th, and 90th are often employed in quantile regression to describe the relationships between predictor variables. Regression coefficient estimates are more accurate when outliers are removed during ordinary least square regression in quantile and stepwise analysis, which is distinct from conventional ordinary least square analysis.

$$y_{i,t} = x_{i,t}\beta_0 + \varepsilon_{\theta_{i,t}} \text{ with } \text{Quant}(y_{i,t}, x_{i,t}) = x_{i,t}\beta_0 \quad (3)$$

**$Q_{0.25}$  FINANCIAL DEVELOPMENT $_{i,t}$**

$$\begin{aligned}
 &= \beta_{0.25,1} \text{VOICE AND ACCOUNTABILITY}_{i,t} + \beta_{0.25,2} \text{POLITICAL STABILITY}_{i,t} \\
 &+ \beta_{0.25,3} \text{GOVERNMENT EFFECTIVENESS}_{i,t} + \beta_{0.25,4} \text{REGULATORY QUALITY}_{i,t} \\
 &+ \beta_{0.25,5} \text{RULE OF LAW}_{i,t} + \beta_{0.25,6} \text{CONTROL OF CORRUPTION}_{i,t} \\
 &+ \beta_{0.25,7} \text{ECONOMIC GROWTH}_{i,t} + \beta_{0.25,8} \text{INFLATION}_{i,t} + \beta_{0.25,9} \text{POLITICAL RIGHT INDEX}_{i,t} \\
 &+ \varepsilon_i
 \end{aligned} \tag{4}$$

**$Q_{0.50}$  FINANCIAL DEVELOPMENT $_i$**

$$\begin{aligned}
 &= \beta_{0.50,1} \text{VOICE AND ACCOUNTABILITY}_{i,t} + \beta_{0.50,2} \text{POLITICAL STABILITY}_{i,t} \\
 &+ \beta_{0.50,3} \text{GOVERNMENT EFFECTIVENESS}_{i,t} + \beta_{0.50,4} \text{REGULATORY QUALITY}_{i,t} \\
 &+ \beta_{0.50,5} \text{RULE OF LAW}_{i,t} + \beta_{0.50,6} \text{CONTROL OF CORRUPTION}_{i,t} \\
 &+ \beta_{0.50,7} \text{ECONOMIC GROWTH}_{i,t} + \beta_{0.50,8} \text{INFLATION}_{i,t} + \beta_{0.50,9} \text{POLITICAL RIGHT INDEX}_{i,t} \\
 &+ \varepsilon_{i,t}
 \end{aligned} \tag{5}$$

**$Q_{0.90}$  FINANCIAL DEVELOPMENT $_i$**

$$\begin{aligned}
 &= \beta_{0.90,1} \text{VOICE AND ACCOUNTABILITY}_{i,t} + \beta_{0.90,2} \text{POLITICAL STABILITY}_{i,t} \\
 &+ \beta_{0.90,3} \text{GOVERNMENT EFFECTIVENESS}_{i,t} + \beta_{0.90,4} \text{REGULATORY QUALITY}_{i,t} \\
 &+ \beta_{0.90,5} \text{RULE OF LAW}_{i,t} + \beta_{0.90,6} \text{CONTROL OF CORRUPTION}_{i,t} \\
 &+ \beta_{0.90,7} \text{ECONOMIC GROWTH}_{i,t} + \beta_{0.90,8} \text{INFLATION}_{i,t} + \beta_{0.90,9} \text{POLITICAL RIGHT INDEX}_{i,t} \\
 &+ \varepsilon_i
 \end{aligned} \tag{6}$$

## Result and discussion

The mean, standard deviation, minimum, and maximum values for the major variables are shown in Table 2. Additionally, this table illustrates the fundamental structure of the data description utilized in subsequent analysis.

The following table summarizes the descriptive data for the years 2004–2020 (Table 1). The mean, median, maximum, minimum, and standard deviations were all used in this research to describe the relationships between the variables. According to the data, “financial development” has a mean of 5.8976 percent, a median of 5.9100 percent, and a range of 1.2700 to 10.0800 percent. A statistical overview of institutional quality at the country level was also calculated, as well as a set of percentile rankings ranging from -2.5

(weak governance) to -2.5 (strong governance), using six indicators: “voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and corruption of control”.

Table 2 shows descriptive statistics which indicating the mean and median values for “voice and accountability” were -1.1165 and -1.0700, respectively, with scores ranging from -1.6400 to -0.9600. Political stability resulted in mean and median values of -2.4218 and -2.4700, respectively, with score ranges of -3.1800 to -1.8500. Government effectiveness was -1.3141 and -1.2600 on a mean and median basis, with scores ranging from -1.7200 to -1.1000. The mean and median values for regulatory quality are -1.2488 and -1.2400, respectively, with scores ranging from -1.6500 to -1.0100. The mean and median values for the rule of law were -1.6282 and -1.6800, respectively, with scores ranging from -1.8400 to -1.3300. Finally, control of corruption achieved mean and median values of -1.3500 and -1.3700, respectively, with values ranging from -1.4800 to -1.1700. All of these findings imply that Iraq's governance performance falls short of that of developed countries such as France, Canada, the United Kingdom, and Germany. As a result, when investors rely on the poor performance of country-level institutional quality, they face increased uncertainty.

Economic growth provided mean and median scores of 7.0324 and 4.7200 in the list of control variables, respectively, with values ranging from -10.3700 to 53.3800. Inflation resulted in mean and median scores of 8.6941 and 2.2000, respectively, ranging from -10.1000 to 53.2000. The property right index averaged 5.4706 and 5.0000, respectively, with values ranging from 5.0000 to 7.0000.

Table 2: Descriptive statistics

	Mean	Median	Max	Min	Std. Dev.	Skewness	Kurtosis	Jarque- Bera
FD	5.8976	5.9100	10.0800	1.2700	3.0573	-0.0861	1.5629	5.9356
VA	-1.1165	-1.0700	-0.9600	-1.6400	0.1604	-2.0853	7.1772	98.7201
PS	-2.4218	-2.4700	-1.8500	-3.1800	0.3347	-0.2745	2.7954	0.9728
GE	-1.3141	-1.2600	-1.1000	-1.7200	0.1917	-0.8389	2.4426	8.8565
RQ	-1.2488	-1.2400	-1.0100	-1.6500	0.1623	-0.8881	3.3758	9.3398
RL	-1.6282	-1.6800	-1.3300	-1.8400	0.1520	0.4445	1.9625	5.2896
CC	-1.3500	-1.3700	-1.1700	-1.4800	0.0859	0.3274	2.3740	2.3249
EG	7.0324	4.7200	53.3800	-10.3700	12.9776	2.5592	10.0935	#####
INF	8.6941	2.2000	53.2000	-10.1000	15.5390	1.7001	5.0274	44.4030
PRI	5.4706	5.0000	7.0000	5.0000	0.6101	0.9071	2.8129	9.4255

Notes: “financial development refers to bank credit to the private sector as percent of GDP and domestic credit to the private sector, percent of GDP; VA, PS, GE, RQ, RL and CC refers to estimate of governance (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance); economic growth is computed by the rate of change of real GDP; inflation is determined by Percent change in the Consumer Price Index; political right index; Political rights index, 7 (weak) - 1 (strong)”.

A correlation analysis between the variables is shown in Table 3. "Political stability, government efficiency, regulatory quality, and the rule of law" all showed a linear association with financial progress. The findings indicate a favorable correlation between "voice and accountability,

political stability, government effectiveness, regulatory quality, the rule of law, and control of corruption". However, financial development was inversely connected with "economic growth, inflation, and the political right index." Correlation analysis revealed no evidence of multicollinearity. A correlation coefficient higher than 0.9 suggests a significant link exists between two variables. Typically, the Variance Inflation Factor (VIF) is employed to test for multicollinearity. According to Asteriou and Hall (2007), the cut-off point for multicollinearity is 10.

Table 3: Correlation matrix

	FD	VA	PS	GE	RQ	RL	CC	EG	INF	PRI
FD	1									
VA	0.6445	1								
PS	0.4090	0.6632	1							
GE	0.5222	0.6327	0.8443	1						
RQ	0.4376	0.8346	0.7237	0.7228	1					
RL	0.3609	0.2552	0.6903	0.6710	0.3379	1				
CC	0.3274	0.5075	0.8079	0.6844	0.4410	0.6419	1			
EG	-0.4026	-0.7471	-0.3495	-0.2272	-0.4395	-0.1664	-0.2968	1		
INF	-0.6193	-0.6625	-0.4559	-0.6542	-0.5558	-0.1983	-0.3368	0.3110	1	
PRI	-0.7349	-0.8409	-0.6302	-0.5344	-0.7230	-0.2730	-0.5126	0.6189	0.5387	1

Notes: "financial development refers to bank credit to the private sector as percent of GDP; VA, PS, GE, RQ, RL and CC refers to estimate of governance (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance); economic growth is computed by the rate of change

of real GDP; inflation is determined by Percent change in the Consumer Price Index; political right index; Political rights index, 7 (weak) - 1 (strong)".

### ***Regression analysis***

Table 4 presents the findings of cross-sectional regression analysis on all samples, assessing the influence of “voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and corruption of control” on “financial development”. As seen in Table 4 panel A and B, the R-squared is 85.76 and 84.72 percent, respectively, indicating a greater variety in “financial development” than the findings generated by (H. Khan, Khan, & Zuojun, 2020). Financial development is positively impacted by the aspects of “voice and accountability, government effectiveness, and the rule of law”. The findings indicate that improving these three governance measures is critical for Iraq's “financial development”. The findings corroborate (Schultz & Weingast, 2003) argument that increased accountability may increase countries' borrowing capacity since liberal states are obligated to repay their loans.

Voice and Accountability guarantee that a country's residents enjoy freedom of expression, association, and an independent media, all of which have a favorable influence on the country's democracy, resulting in improved opportunities and, over time, stronger economic development. "Voice and accountability", as a political institution indicator, assesses the degree to which people are involved in government selection, speech, association, and the independent press. "Voice and accountability" have a good influence on "financial development" because when individuals have a high level of "voice and accountability", they have greater prospects in both the financial sector and on an individual basis, as a result of their interest in maintaining social order.

Political Stability is considered as a formal rule that quantifies the possibility of political stability and politically motivated violence, as mechanisms are built to promote fair politics, including laws governing how violence is to be minimized. Political stability benefits "financial development" because it results in improved democracy, which acts as an investor in a country's economic progress. Political stability as a political institution indicator quantifies the risk of political instability as a result of violence, notably "politically motivated violence or terrorism" (World Bank 2020). Political stability exists when it is positive and inversely when it is negative. Political stability benefits "financial development" by increasing economic opportunities for both the people and the democracy, resulting in stronger economic growth.

Government effectiveness has a favorable role in explaining financial progress. According to Alam, Kiterage, and Bizuayehu (2017), government effectiveness has a significant and beneficial impact on economic growth. Pacific, Ramadhan, and Gabriella (2017) discovered that economic growth is positively and substantially affected by services and goods, along with government effectiveness in Botswana, but not by control of corruption. Ineffective government is a result of low regulatory quality and policy execution. Weak government effectiveness and a sluggish rule of law impair investment efficiency, whereas inefficient government policies result in the maldistribution of public resources. This demonstrates that GE has a large impact on the state through its considerable borrowing capacity, which will encourage democratic governments to repay their obligations. States with a strong GE have access to more credit than non-democratic counterparts (Schultz & Weingast, 2003). Additionally, Jalilian, Kirkpatrick, and Parker (2007) discovered a favorable correlation between government effectiveness and economic growth.

The "Rule of Law" encapsulates agents' faith in and adherence to social standards, the adequacy of contract enforcement, property rights, police, and courts, and the possibility of crime and violence. The rule of law is



considered a good indicator of “financial development” because it increases formal law enforcement and guarantees that inventors and creditors adhere to legal commitments(Achioyamen & Kazmi Johansson, 2020).

Control of Corruption is a metric that indicates the degree to which public authority is used for private benefit by elites and private interests<sup>1</sup>. Control of corruption, as a proxy for political institutions, is believed to benefit financial growth(M. A. Khan et al., 2020). Economic growth is significantly positive when used as a control variable to determine “financial development”. Due to their role in defining the economic structure, institutions that impact economic decision-making emphasize the importance of technological, physical, and human capital to economic growth (Acemoglu, Johnson, & Robinson, 2005). The results indicate that increased economic growth has a beneficial influence on “financial development” in the Iraq area. The positive link implies that increased economic growth will eventually promote financial development.

It is critical to note that there are other “financial development” drivers that concentrate on the financial environment's influence on financial development. The consumer price index is used to quantify them, as well as foreign direct investment, which is favorable for greater investment since it results in trade openness, which is a component of economic freedom (M. A. Khan et al., 2020). Inflation is detrimental to “financial development” because it creates uncertainty about bank credit productive gains, hence impeding bank lending and financial development growth (Khan 2018).

Additionally, the expansion of political and civic rights boosted economic growth (Anwar & Cooray, 2012). Anwar and Cooray (2012) think that enhancing political and civil freedoms in South Asia boosts the advantages of financial development by favorably impacting economic development. Andrianova et al. (2011) emphasize the crucial role of the government as a political institution that fosters the formation of massive trade monopolies, hence facilitating the global expansion of financial systems. Panel A's findings validate Panel B.

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<sup>1</sup><https://info.worldbank.org/governance/wgi/Home/Documents>

Table 4: OLS regression

Variable	Panel A		Panel B	
	Coefficient	Prob.	Coefficient	Prob.
C	28.0463	0.0000	25.9722	0.0000
	7.2480		6.7932	
VA	21.5997	0.0000	19.5147	0.0000
	5.4904		5.0204	
PS	-3.8733	0.0034	-3.1314	0.0153
	-3.0530		-2.4981	
GE	5.0162	0.0308	5.0468	0.0280
	2.2136		2.2540	
RQ	-15.9910	0.0000	-14.9605	0.0000
	-6.5222		-6.1757	
RL	10.6799	0.0000	9.5865	0.0000
	5.9383		5.3948	
CC	-13.5296	0.0002	-13.3511	0.0002
	-3.9096		-3.9047	
EG	0.1166	0.0000	0.1048	0.0001
	4.7091		4.2827	
INF	-0.0128	0.4607	-0.0125	0.4643
	-0.7426		-0.7367	
PRI	-4.0902	0.0000	-3.8563	0.0000
	-8.4887		-8.1001	
R-squared	0.8576		0.8472	
Adjusted				
R-squared	0.8355		0.8235	
VIF	3.7-6.5		3.5-5.1	
F-statistic	38.8034		35.7221	
Prob(F-statistic)	0.0000		0.0000	

Notes: “financial development refers to bank credit to the private sector as percent of GDP; VA, PS, GE, RQ, RL and CC refers to

estimate of governance (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance); economic growth is computed by the rate of change of real GDP; inflation is determined by Percent change in the Consumer Price Index; political right index; Political rights index, 7 (weak) - 1 (strong)".

### ***Quantile regression***

Quantile regression was also used to investigate the link between the variables; the findings are shown in Table 5. Quantile regression may be used to explain the importance of predictor variables in a unique and appropriate manner, offering an in-depth understanding of data other than the mean value (Koenker & Bassett, 1978). The median is used to rationalize non-linear correlations between variables, which is especially useful when the data distribution is inappropriate. Quantile regression, aided by the median, is also capable of explaining conditional distributions that the mean cannot. Thus, unlike the maximum or lowest values, the median is the only tool available for explaining the influence of the predictor variable. While quantile regression has fewer restrictive assumptions than OLS regression, its practicality makes it a popular technique for clarifying the association between dependent and independent variables. Additionally, Andriansyah and Messinis (2016) established the correctness of the quantile regression findings.

Table 5 shows the findings for the 25th, 50th, and 90th quantiles, emphasizing the linear link. According to the findings, the rule of law's characteristics has a considerable positive link with financial development. Additionally, control of corruption has a substantial negative link with financial development at the 25th quantile. According to the findings, financial development is explained by the aspects of "voice and accountability, government effectiveness, the rule of law, economic growth, and inflation". While "political stability, regulatory quality, anti-corruption measures, and the political right index" all contribute negatively to the explanation of financial development at the 50th quantile. Additionally, the dimensions of "voice and accountability, government performance, economic growth, and inflation" all have a considerable positive association with financial development. While "regulatory quality, control of corruption, and the political right index" all contribute adversely to the explanation of financial development at the 90th quantile. Pseudo R-squared values for the 25th, 50th, and 90th quantiles are 70.50 percent, 71.63 percent, and 74.13 percent, respectively, which are greater than Mehmood et al (2020a). The findings revealed that the 25th, 50th, and 90th quantiles of Iran's financial progress are more resilient when predictor factors are included.

Table 5: Quantile least square

Variable	25th		50th		90th	
	Coefficient	Prob.	Coefficient	Prob.	Coefficient	Prob.
C	19.8388	0.3842	28.5265	0.0000	13.9858	0.0415
	0.8767		20.8016		2.0849	
VA	13.0629	0.7537	21.4890	0.0000	15.7747	0.0001
	0.3153		17.9496		4.1204	
PS	-6.6406	0.7001	-1.5977	0.0000	0.0767	0.9439
	-0.3871		-6.1711		0.0707	
GE	8.5664	0.4900	5.6270	0.0000	17.4779	0.0001
	0.6947		12.0223		4.1121	
RQ	-12.9087	0.5682	-20.0028	0.0000	-14.8467	0.0000
	-0.5740		-20.4882		-4.3983	
RL	11.3327	0.0295	10.4541	0.0000	0.0531	0.9895
	2.2314		35.3230		0.0132	
CC	-18.9600	0.0071	-12.1229	0.0000	-25.8164	0.0000
	-2.7903		-7.5960		-5.8959	
EG	0.0680	0.8058	0.1120	0.0000	0.0661	0.0367
	0.2470		16.0519		2.1386	
INF	-0.0025	0.9265	0.0060	0.0448	0.0590	0.0081
	-0.0926		2.0510		2.7414	
PRI	-5.2609	0.3593	-3.7290	0.0000	-3.7914	0.0000
	-0.9240		-43.2177		-8.5131	
Pseudo R-squared	0.7050		0.7163		0.7413	5.7653
Adjusted R-squared	0.6592		0.6723		0.7011	2.9161

Notes: “financial development refers to bank credit to the private sector as percent of GDP; VA, PS, GE, RQ, RL and CC refers to estimate of governance (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance); economic growth is computed by the rate of change of real GDP; inflation is determined by

Percent change in the Consumer Price Index; political right index; Political rights index, 7 (weak) - 1 (strong)".

Table 5 provides the results of the Quantile Least Squares (QLS) analysis. It presents the coefficients and their associated probabilities (p-values) for different quantiles (25th, 50th, and 90th) for each variable. The table also includes the Pseudo R-squared and Adjusted R-squared values.

### ***Stepwise regression***

Additionally, this research examined the signaling qualities of "voice and accountability, political stability, government efficacy, regulatory quality, rule of law, and control of corruption" on financial development. As a result, we employed a stepwise regression method as a supplement to assist in identifying the elements influencing financial development. The stepwise regression results are shown in Table 6. Stepwise regression analysis is believed to be the most suitable tool for the researcher since it enables the researcher to interpret independent variables using proper sequences all across the models. Yao (2013) suggested that stepwise least square regression enabled researchers to adjust variables in a forward and backward selection process that resulted in a substantial degree of significance. Notably, when the variables are not significant, it effectively eliminates them from the findings. As a result, stepwise regression may be used to find the predictors, as this approach inherently allows for variable selection using fixed statistical criteria. Similarly, Mehmood, Mohd-Rashid, and Amin (2021) argued that only stepwise regression with the best predictive accuracy was capable of producing highly significant variables. The financial development was described using stepwise regression, which yielded an adjusted  $R^2$  of 68.84 percent.

The stated findings indicated that "government effectiveness, voice and accountability, and the rule of law" all contributed favorably to financial development, but the "political right index and regulatory quality" contributed adversely to financial development. The stated findings validated those obtained using ordinary least squares.

Table 6: Stepwise least square regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
CC	-28.1232	3.5057	-8.0221	0.0000
INFL	-0.0349	0.0222	-1.5729	0.1211
PRI	-3.5067	0.6288	-5.5766	0.0000
RQ	-18.3895	3.1479	-5.8419	0.0000
GE	7.7259	2.9283	2.6384	0.0106
VA	12.8211	4.9957	2.5664	0.0128
RL	4.5276	2.1436	2.1122	0.0389
EG	0.0377	0.0297	1.2679	0.2098
PS	1.7113	1.3699	1.2492	0.2165
R-squared	0.7256			
Adjusted R-squared	0.6884			

Notes: “financial development refers to bank credit to the private sector as percent of GDP; VA, PS, GE, RQ, RL and CC refers to estimate of governance (ranges from approximately -2.5 (weak) to 2.5 (strong) governance performance); economic growth is computed by the rate of change of real GDP; inflation is determined by Percent change in the Consumer Price Index; political right index; Political rights index, 7 (weak) - 1 (strong)”.

Table 6 is providing information regarding stepwise least square regression. Here is the interpretation of the coefficients, standard errors, t-statistics, and p-values for each variable in the stepwise least square regression model.

The coefficient for CC (Financial Development) was -28.1232, indicating that a one-unit increase in bank credit to the private sector as a percentage of GDP is associated with an average decrease of 28.1232 in the dependent variable. The standard error is 3.5057, and the t-statistic is -8.0221. The probability (p-value) is reported as 0.0000, which suggests that this coefficient is statistically significant at conventional levels of significance (usually  $p < 0.05$ ). In addition, the coefficient for INFL (Inflation) was -0.0349, indicating that a one-unit increase in the percent change in the Consumer Price Index (inflation) is associated with an average decrease of 0.0349 in the dependent variable. However, the standard error is 0.0222, and the t-statistic is -1.5729. The p-value is reported as 0.1211, which suggests that this coefficient is not statistically significant at conventional levels of significance (usually  $p < 0.05$ ).

On the other hand, the coefficient for PRI (Political Rights Index) was -3.5067, indicating that a one-unit increase in the political rights index is associated with an average decrease of 3.5067 in the dependent variable. The standard error is 0.6288, and the t-statistic is -5.5766. The reported probability is 0.0000, indicating that this coefficient is statistically significant. Moreover, the coefficient for RQ (Rule of Law) was -18.3895, suggesting that a one-unit increase in the estimate of governance (rule of law) is associated with an average decrease of 18.3895 in the dependent variable. The standard error is 3.1479, and the t-statistic is -5.8419. The p-value is reported as 0.0000, indicating that this coefficient is statistically significant. However, the coefficient for GE (Government Effectiveness) was 7.7259, indicating that a one-unit increase in the estimate of governance (government effectiveness) is associated with an average increase of 7.7259 in the dependent variable. The standard error is 2.9283, and the t-statistic is 2.6384. The p-value is reported as 0.0106, suggesting that this coefficient is statistically significant.

In addition, the coefficient for VA (Voice and Accountability) was 12.8211, indicating that a one-unit increase in the estimate of governance (voice and accountability) is associated with an average increase of 12.8211 in the dependent variable. The standard error is 4.9957, and the t-statistic is 2.5664. The reported probability is 0.0128, suggesting that this coefficient is statistically significant. Similarly, the coefficient for RL (Regulatory Quality) was 4.5276, indicating that a one-unit increase in the estimate of governance (regulatory quality) is associated with an average increase of 4.5276 in the dependent variable. The standard error is 2.1436, and the t-statistic is 2.1122. The p-value is reported as 0.0389, suggesting that this coefficient is statistically significant. Lastly, the coefficient for EG (Economic Growth) was 0.0377, indicating that a one-unit increase in the rate of change of real GDP (economic growth) is associated with an average increase of 0.0377 in the dependent variable.

## Conclusion

This research analysed the influence of institutional quality on Iraq's financial development from 2004 to 2020. The research adds to the existing body of financial development literature by giving a more in-depth knowledge of country-level institutional quality, notably by recommending severe market conditions in Iraq to manage the country's continued decline in GDP. The association between institutional quality and financial development at the national level was explained using ordinary least squares. Quantile regression



was also used to confirm that the findings were robust. Following that, the stepwise least squares technique was also used to continue the study's analysis.

By employing econometric techniques, it was demonstrated that the dimensions of "voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption" all play significant roles in signaling the presence of an unfavorable economic environment, particularly in managing the country's lower financial development. This research shows unequivocally that poor governance hinders financial progress. The findings have far-reaching policy implications for developing countries in general and Iraq in particular. Countries like Iraq that want to improve their financial development should prioritize "voice and accountability, political stability, government effectiveness, regulatory quality, rule of law, and control of corruption" as these dimensions have been shown to be critical in improving financial development. Similarly, countries with much weaker financial development should strengthen their institutions by combating private gain, formulating and enforcing tough legislation and rules, and enabling citizens to effectively voice and execute their views.

Additionally, governments should restructure their expenditures from ones that are prone to corruption to ones that can be more effectively regulated, controlled, and executed, resulting in improved financial development management. Government expenditure and the use of taxpayer funds should be directed at increasing people's wellbeing. Ineffective public debt management may also be solved by reducing the country's shadow economy. This is because private sector tax unprincipled affects tax collections, which inhibits financial development and results in a fiscal deficit.

In order to stabilize the economy and promote the financial development of Iraq, the government should decrease spending and implement a rigorous fiscal strategy. Implementing such policies with strategic measures, such as improving and strengthening governance and public institutions, may achieve the desired outcomes. The fiscal and external imbalances that countries like Iraq are facing as a result of major policy challenges such as "civil wars, falling oil prices, declining fiscal revenues and currency crises, refugee concerns, terrorist attacks, global instability ramifications and political changes" in Arab Spring-affected countries have necessitated these political interventions.

**References:**

- Acemoglu, D., Johnson, S., & Robinson, J. A. (2005). Institutions as a fundamental cause of long-run growth. *Handbook of economic growth, 1*, 385-472.
- Achioyamen, C. V., & Kazmi Johansson, S. (2020). Institutional Factors and Financial Development in Sub-Saharan Africa for the period 2004-2018: Control of Corruption, Rule of Law, Political Stability and Absence of Violence, and Voice and Accountability. In.
- Adeniyi, O., Oyinlola, A., Omisakin, O., & Egwaikhide, F. O. (2015). Financial development and economic growth in Nigeria: Evidence from threshold modelling. *Economic analysis and policy*, 47, 11-21.
- Ahmed, F., Kousar, S., Pervaiz, A., & Shabbir, A. (2022). Do institutional quality and financial development affect sustainable economic growth? Evidence from South Asian countries. *Borsa Istanbul Review*, 22(1), 189-196.
- Alam, M. R., Kiterage, E., & Bizuayehu, B. (2017). Government effectiveness and economic growth. *Economic Bulletin*, 37(1), 222-227.
- Alshubiri, F., Jamil, S. A., & Elheddad, M. (2019). The impact of ICT on financial development: Empirical evidence from the Gulf Cooperation Council countries. *international Journal of engineering business management*, 11, 1847979019870670.
- Altunbaş, Y., & Thornton, J. (2012). Does financial development reduce corruption? *Economics Letters*, 114(2), 221-223.
- Andrianova, S., Demetriades, P., & Xu, C. (2011). Political economy origins of financial markets in Europe and Asia. *World Development*, 39(5), 686-699.
- Andriansyah, A., & Messinis, G. (2016). Intended use of IPO proceeds and firm performance: A quantile regression approach. *Pacific-Basin Finance Journal*, 36, 14-30.
- Anwar, S., & Cooray, A. (2012). Financial development, political rights, civil liberties and economic growth: Evidence from South Asia. *Economic Modelling*, 29(3), 974-981.
- Asteriou, D., & Hall, S. (2007). A Modern Approach Using Eviews and Microfit (Revised Edition). In: Palgrave Macmillan.
- Baltagi, B. H., Demetriades, P. O., & Law, S. H. (2009). Financial development and openness: Evidence from panel data. *Journal of Development economics*, 89(2), 285-296.
- Bist, J. P. (2018). Financial development and economic growth: Evidence from a panel of 16 African and non-African low-income countries. *Cogent Economics & Finance*, 6(1), 1449780.

- Bolgarian, M. (2011). Corruption and stock market development: A quantitative approach. *Physica A: Statistical Mechanics and its Applications*, 390(23-24), 4514-4521.
- Boyd, J. H., Levine, R., & Smith, B. D. (2001). The impact of inflation on financial sector performance. *Journal of monetary Economics*, 47(2), 221-248.
- Cecchetti, S. G., & Kharroubi, E. (2015). Why does financial sector growth crowd out real economic growth?
- Cheng, C.-Y., Chien, M.-S., & Lee, C.-C. (2021). ICT diffusion, financial development, and economic growth: An international cross-country analysis. *Economic Modelling*, 94, 662-671.
- Cherif, M., & Gazdar, K. (2010). Institutional and macroeconomic determinants of stock market development in MENA region: New results from a panel data analysis. *International Journal of Banking and Finance*, 7(1), 139-159.
- Dalton, J. T., & Logan, A. J. (2020). Teaching and learning Schumpeter: A dialogue between professor and student. *The Review of Austrian Economics*, 1-22.
- De Gregorio, J., & Guidotti, P. E. (1995). Financial development and economic growth. *World Development*, 23(3), 433-448.
- El Menyari, Y. (2019). Financial development, foreign banks and economic growth in Africa. *African Development Review*, 31(2), 190-201.
- Erdoğan, S., Yıldırım, D. Ç., & Gedikli, A. (2020). Natural resource abundance, financial development and economic growth: an investigation on Next-11 countries. *Resources Policy*, 65, 101559.
- Farooq, A., Shahbaz, M., Arouri, M., & Teulon, F. (2013). Does corruption impede economic growth in Pakistan? *Economic Modelling*, 35, 622-633.
- Girma, S., & Shortland, A. (2008). The political economy of financial development. *Oxford economic papers*, 60(4), 567-596.
- Gokmenoglu, K. K., Amin, M. Y., & Taspinar, N. (2015). The relationship among international trade, financial development and economic growth: The case of Pakistan. *Procedia Economics and Finance*, 25, 489-496.
- Graff, M. (2003). Financial development and economic growth in corporatist and liberal market economies. *Emerging Markets Finance and Trade*, 39(2), 47-69.
- Greenwood, J., Sanchez, J. M., & Wang, C. (2010). Financing development: The role of information costs. *American Economic Review*, 100(4), 1875-1891.

- Guru, B. K., & Yadav, I. S. (2019). Financial development and economic growth: panel evidence from BRICS. *Journal of Economics, Finance and Administrative Science*.
- Han, J., & Shen, Y. (2015). Financial development and total factor productivity growth: Evidence from China. *Emerging Markets Finance and Trade*, 51(sup1), S261-S274.
- Hartmann, P., Heider, F., Papaioannou, E., & Lo Duca, M. (2007). The role of financial markets and innovation in productivity and growth in Europe. *ECB occasional paper*(72).
- Jain, P. K., Kuvvet, E., & Pagano, M. S. (2017). Corruption's impact on foreign portfolio investment. *International business review*, 26(1), 23-35.
- Jalilian, H., Kirkpatrick, C., & Parker, D. (2007). The impact of regulation on economic growth in developing countries: A cross-country analysis. *World Development*, 35(1), 87-103.
- Khan, H., Khan, S., & Zuojun, F. (2020). Institutional quality and financial development: Evidence from developing and emerging economies. *Global Business Review*, 0972150919892366.
- Khan, H., Khan, S., & Zuojun, F. (2022). Institutional quality and financial development: Evidence from developing and emerging economies. *Global Business Review*, 23(4), 971-983.
- Khan, M. A., Kong, D., Xiang, J., & Zhang, J. (2020). Impact of institutional quality on financial development: cross-country evidence based on emerging and growth-leading economies. *Emerging Markets Finance and Trade*, 56(15), 3829-3845.
- Knack, S., & Keefer, P. (1995). Institutions and economic performance: cross-country tests using alternative institutional measures. *Economics & Politics*, 7(3), 207-227.
- Koenker, R., & Bassett, G. (1978). Regression quantiles. *Econometrica: journal of the Econometric Society*, 33-50.
- Konadu-Agyemang, K. (2018). *IMF and World Bank sponsored structural adjustment programs in Africa: Ghana's experience, 1983-1999*: Routledge.
- Kutan, A. M., Samargandi, N., & Sohag, K. (2017). Does institutional quality matter for financial development and growth? Further evidence from MENA countries. *Australian Economic Papers*, 56(3), 228-248.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (2002). Investor protection and corporate valuation. *the Journal of Finance*, 57(3), 1147-1170.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1997). Legal determinants of external finance. *the Journal of Finance*, 52(3), 1131-1150.

- Law, S. H., & Azman-Saini, W. (2012). Institutional quality, governance, and financial development. *Economics of Governance*, 13(3), 217-236.
- Law, S. H., & Habibullah, M. S. (2006). Financial development, institutional quality and economic performance in East Asian economies. *Review of Applied Economics*, 2(1076-2016-87141), 201-216.
- Law, S. H., Azman-Saini, W., & Ibrahim, M. H. (2013). Institutional quality thresholds and the finance–growth nexus. *Journal of Banking & Finance*, 37(12), 5373-5381.
- Le, T.-H., Kim, J., & Lee, M. (2016). Institutional quality, trade openness, and financial sector development in Asia: An empirical investigation. *Emerging Markets Finance and Trade*, 52(5), 1047-1059.
- Mardan, M. (2017). Why countries differ in thin capitalization rules: The role of financial development. *European economic review*, 91, 1-14.
- Mehmood, W., Mohd-Rashid, R., & Amin, S. (2021). Sponsor ownership and IPO initial return: evidence from Pakistan stock exchange. *Pacific Accounting Review*.
- Mehmood, W., Mohd-Rashid, R., & Tajuddin, A. H. (2021). IPO initial return in Pakistan: influence of country-level institutional quality. *South Asian Journal of Business Studies*.
- MEHMOOD, W., MOHD-RASHID, R., AMAN-ULLAH, A., & ZI ONG, C. (2021). Country-Level Institutional Quality and Public Debt: Empirical Evidence from Pakistan. *The Journal of Asian Finance, Economics and Business*, 8(4), 21-32.
- Narayan, P. K., Sharma, S. S., & Thuraisamy, K. S. (2015). Can governance quality predict stock market returns? New global evidence. *Pacific-Basin Finance Journal*, 35, 367-380.
- Nguyen, Q. H. (2019). Growth model with financial deepening and productivity heterogeneity. *The Japanese Economic Review*, 70(1), 123-140.
- North, D. C. (1990). A transaction cost theory of politics. *Journal of theoretical politics*, 2(4), 355-367.
- Nunes, L. B. (2016). Schumpeter's entrepreneurs in the 20th century: The Tucker automobile. *Technological Forecasting and Social Change*, 102, 14-20.
- Pacific, Y., Ramadhan, A., & Gabriella, N. (2017). Does Control of Corruption, Accelerate Economic Growth in Botswana? *Global Journal Of Human-Social Science Research*, 17(6), 41-50.
- Patrick, H. T. (1966). Financial development and economic growth in underdeveloped countries. *Economic development and Cultural change*, 14(2), 174-189.
- Porta, R. L., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. *Journal of political economy*, 106(6), 1113-1155.

- Rashid, A., & Intartaglia, M. (2017). Financial development—does it lessen poverty? *Journal of Economic Studies*.
- Roe, M. J., & Siegel, J. I. (2011). Political instability: Effects on financial development, roots in the severity of economic inequality. *Journal of comparative economics*, 39(3), 279-309.
- Rostami, S., Rostami, Z., & Kohansal, S. (2016). The effect of corporate governance components on return on assets and stock return of companies listed in Tehran stock exchange. *Procedia Economics and Finance*, 36, 137-146.
- Saha, S., & Ali, M. S. B. (2017). Corruption and economic development: new evidence from the Middle Eastern and North African countries. *Economic analysis and policy*, 54, 83-95.
- Schultz, K. A., & Weingast, B. R. (2003). The democratic advantage: institutional foundations of financial power in international competition. *International organization*, 57(1), 3-42.
- Schumpeter, J. (1911). The theory of economic development. harvard economic studies. vol. xlvi. In: Cambridge, MA: Harvard University Press.
- Seck, D., & El Nil, Y. H. (1993). Financial liberalization in Africa. *World Development*, 21(11), 1867-1881.
- Shahbaz, M., Bhattacharya, M., & Mahalik, M. K. (2018). Financial development, industrialization, the role of institutions and government: a comparative analysis between India and China. *Applied Economics*, 50(17), 1952-1977.
- Singh, D., & Delios, A. (2017). Corporate governance, board networks and growth in domestic and international markets: Evidence from India. *Journal of World Business*, 52(5), 615-627.
- Yao, J. (2013). Precision Analysis and Parameter Inversion in the Stepwise Deployment of a Mixed Constellation. *Open Journal of Statistics*, 3(06), 390.
- Yu, X., Li, M., & Huang, S. (2017). Financial functions and financial development in China: a spatial effect analysis. *Emerging Markets Finance and Trade*, 53(9), 2052-2062.