DETERMINANTS OF ECONOMIC GROWTH OF PAKISTAN

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Abstract

This study investigates the relationship between democracy and economic growth in Pakistan, utilizing the Autoregressive Distributive Lag (ARDL) model to analyze annual time series data from 1984 to 2016. The results reveal that democracy significantly promotes long-term economic growth, with a positive coefficient of 0.466. Conversely, military intervention in politics is found to impede growth, with a negative coefficient of -0.756. Among the control variables, trade openness exhibits a positive association with GDP growth (0.399), while inflation has a substantial negative impact (-0.368). Additionally, foreign direct investment (FDI) positively influences economic growth, with a coefficient of 0.652. These findings underscore the critical role of democratic governance in fostering economic development and provide valuable insights for economies with emerging legal and political institutions to enhance their growth trajectories.

INTRODUCTION

Economic growth is a complex phenomenon influenced by various factors (Heshmati, A. (Ed.). 2017). Neoclassical growth models viewed physical and human capital as as fundamental drives of economic growth. Empirical research, on the other hand, indicates that these factors alone are insufficient for comprehending economic growth. Numerous cases exist where countries possessing similar levels of per capita physical and human capital experience significantly divergent rates of economic growth (Barro, 1991, Martin, & Sunley, 1998). Hence, the determinants of economic growth remain at the core of ongoing discussions among economists. A substantial body of literature, exemplified by studies such as Qasim (2022), Waseem and Ikhtiar (2022), and Qinglin (2023), predominantly emphasizes economic factors as primary drivers of growth, while the exploration of non-economic factors, such as democracy, remains relatively underexplored, despite its potential to play a significant role in shaping economic growth. Since 1980s, democracy has been firmly established as an integral component of a free market economy, consequently being recognized as a fundamental requirement for sustaining stable economic growth. Previous literature has discussed various channels through which a

democratic political system exerts effects over economic growth. These channels include the ability to empower citizens (El-Rufa'i 2003), protect individual rights (North 1993; Olson 1993), and promote political stability (Aggarwal and Goodell 2009; Apergis 2017) that ensure accountability and innovation, ultimately enhance growth (lipset 1959). Although extantliterature supports the idea of a positive role of democracy in economic growth (Heshmati and Kim 2017; Acemoglu et al. 2015; Acemoglu, et al. 2019), there are scholars that have divergent views on the relationship between democracy and economic growth, leading to mixed results (Rivera-Castro 2017; Madsen et al. 2015; Nosier and El-Karamani 2018). The literature thus presents contrasting viewpoints regarding the impact of democracy on economic growth both in developed and developing economies and makes it difficult to establish any conclusion.

The current study is an important addition in many ways to the ongoing debate in literature by taking country-specific case of Pakistan. First, the political and economic history of Pakistan s how's a vague picture. After 75 years of independence, it is still lies in lower middle-income countries having unstable economic and political structure. Pakistani society exhibits several noteworthy characteristics, including minimal financial growth, low per capita income, limited development in the social sector, the presence of ethnic divisions, low scores in institutional freedoms, poor governance, and frequent periods where authoritarian groups have ruled for over 50% of the time, resulting in restrictions on political rights and civil liberties. In the 1960s, Pakistan was once regarded as a development model, particularly in Southeast Asia, owing to its exceptional economic performance (Hasan et al., 1997). However, since then, Pakistan has struggled to maintain its economic performance, with growth figures fluctuating like a pendulum. This inconsistency can be attributed to political instability brought by frequent change in regimes and military interventions. Indeed, presence of authoritarian governments and frequent shifts in administration often disrupt institutional

freedoms and the steady pace of economic growth (Bahadur, 1998). This study is an attempt to provide the empirical evidence to the relationship between democracy and growth in Pakistan.

Second, we take the annual time series data from 1984 to 2016. Times series data best capture the fluctuation in response variables over a period and show how such variation is related to change in predictor variables. So, it is best suited for studying pattern and trend of a variable. Third, this study employed Autoregressive Distributive Lag Model for estimation and scrutinization of data (ARDL). ARDL is best suited in case of sample size and simple in application (Pesaran 2001). So as the case of our data period which is small and thus suitable for application of ARDL. Rest of the study is organized as; in second section we discuss the literature review, third section composed of the data and methods used to analyse data. Section four and fifth have results, discussion and conclusion of the study.

LITERATURE REVIEW

Economic growth constitutes a pivotal aspect of the economy, and there exists an extensive body of literature on the accumulation and distribution of wealth, with roots tracing back to Adam Smith's seminal work in 1776. Smith identified three pivotal factors that are central to a nation's prosperity: the division of Labor, the accumulation of capital, and the size of the market. The allocation of Labor into specialized roles enhances a nation's productivity and production capacity. Effective capital utilization leads to heightened productivity levels. Lastly, a broader market size offers increased opportunities for both investment and production.

Neo-classical models, which emerged in the mid-20th century, highlight the crucial role of technological progress in enhancing production. The Solow (1957) model, for instance, demonstrates that optimizing the utilization of resources can drive economic growth, and that growth rates tend to be higher in poorer countries compared to wealthier ones. In this model, labor force and technical progress are considered exogenous

factors, external to the model itself, emphasizing the significance of efficient resource management in economic development. Subsequently, Romer (1986) introduced the endogenous growth model, which diverged from the exogenous perspective and emphasized the importance of internal factors in driving economic growth. This model highlights external effects that are incorporated into the growth process, such as capital accumulation and investment externalities. Lucas (1988) and Peri (2006), among others, further contributed to this line of research by exploring the intricate dynamics of these external effects in shaping long-term economic growth.

Institutions play a key role in determining economic growth (North 1990,2016). There is vast number of literature available on topic of formal institutions and informal institutions (North 1990, Acemoglu 2000,2001). These two categories of institutions are critical in understanding various aspects of society, politics, and economics. Informal institutions encompass unwritten norms, customs, and practices that shape behaviour, while formal institutions involve laws, regulations, and politics. Formal institutions are subsequently delineated by Acemoglu (2005) into economic and political institutions. The growth stemming from political institutions, as highlighted by Olson (1995) and North (1990), falls under the purview of the "new political economy." In this context, Barro (1991) plays a pivotal role in elucidating that institutions serve as a fundamental determinant of economic growth. Barro (1996) conducted a more in-depth analysis of the impact of democracy on economic growth across a sample of 100 countries. His findings affirmed that democracy, as a crucial aspect of political institutions, had a substantial and positive effect on economic growth. Additionally, Barro noted that there are various other factors that contribute to the enhancement of economic growth. The pursuit of increased economic growth is indeed a desirable objective for every nation, and democracy is recognized as playing a significant role in fostering and promoting such growth (Qinglin 2023, Sorfina 2022, Qasim

2022, Acemoglu 2019, heliwell 1994, Nicholas cich 2021, Heo and tan 2001). Empirical evidence indicates that democracy has a significant positive influence on growth, particularly in impoverished and developing nations. Several studies, including those by Qasim (2022), Helliwell (1994), Nelson and Singh (1998), Heo and Tan (2001), and Polterovich and Popov (2007) support this claim. Furthermore, Krickhaus (2006) and Kisangani (2006) discovered that democracy also contributes to economic growth in Africa. Tang and Yung (2005) conducted individual country analyses of eight High Performing Asian Economies (HPAEs) in East Asia and found that democracy can enhance economic growth in Hong Kong, Indonesia, Malaysia, the Philippines, and Singapore.

There are contrasting viewpoints regarding the direct association between democracy and economic growth. The similarity perspective suggests that democracy positively influences economic growth (Qasim 2022, Waseem and Ikhtiar 2022, Qinglin 2023). Some scholars contend that in less developed countries (LDCs), democratic systems are suitable for fostering sustained and equitable economic growth. For instance, Sirowy and Inkeles (1990) and Feng (1997). Alternatively, considering the reverse causality perspective where economic growth drives the promotion of democracy, (Asif et al 2020, Helliwell 1994) and Heo and Tan (2001) argue that a nation experiencing significant economic growth possesses the capacity to enhance education levels and increase citizens' income.

But it is a reality that in developing countries and less develop countries do not have the luxury to achieve growth positively by democracy (Khunanan et al.2022, Saeed 2021, Roberto 2020, Wafa et al 2019, Huntington 1984, tavares and wacziarg 2001). Krichhaus (2006) found out that democracy impact negatively in latin America and Asian economies. Taiwan, Korea and Thailand also show negative effect to democracy when studied by (Tan and Yung 2005).

Sharif et al. (2018) examined the effect of economic growth on Pakistan's democracy. The data nature is a time series with a time period

of 1972–201, as is the ARDL technique used. The study found a positive and significant effect of democracy in both the short and long run. They also confirm the unidirectional causal effects of economic growth and democracy in Pakistan. The study suggested that the government adopt the proper tools of a democracy Hafiz Muhammad Qasim (2022) This paper analyses the relationship between democracy and economic growth in Pakistan, the time was 1984-2018, By applying co integration test he finds out that them exist a positive relationship between democracy and economic growth in the short run and long run as well, further more explain that democracy is having multidimensional effect on economic growth. Asif et al. (2020) Conducted a study of Democracy and economic growth of Pakistan, time was 1984-2017, uses granger causality test, and find out that there is causality between democracy and economic growth in the short run and long run, further more democracy improve good governance and good governance improve Growth.

Despite the growing body of literature exploring the relationship between democracy and economic growth in various contexts, there remains a notable research gap concerning this nexus in the specific context of Pakistan. While some studies, such as Sharif et al. (2018), Hafiz Muhammad Qasim (2022), and Asif et al. (2020), have examined this relationship within Pakistan's socio-economic landscape, there is a need for further comprehensive research that delves deeper into the multifaceted dynamics at play.

Furthermore, the existing studies often employ varied methodologies and data sources, yielding differing insights that underscore the complexity of the democracy-economic growth nexus in Pakistan. A more standardized and comparative approach would enable a clearer assessment of the consistency and robustness of findings across different studies. Additionally, while some research highlights the positive correlation between democracy and economic growth, the potential mediating factors and mechanisms through which democracy influences specific sectors of the economy, such as governance structures,

investment patterns, and human capital development, warrant more extensive investigation. Addressing these research gaps would contribute not only to a more nuanced understanding of Pakistan's unique dynamics but also to the broader scholarly discourse on the intricate interplay between political institutions and economic prosperity.

DATA AND METHODOLOGY
Data:
To understand how different factors are connected, we're using information from two sources: the International Country Risk Guide (ICRG) and the World Development Indicators (WDI). We're looking at data from 1984 to 2016 and the country is Pakistan, Due to the availability of data we took this time period. Our goal is to find out if there are connections between growth and democracy, government stability, how open the country is to trade, how prices change, foreign investments, how much is invested in building things, and the military's role in politics.

Variable	Variable Description	Source
GDP Growth	GDP growth (annual %)	WDI
Democracy	Democracy Accountability	ICRG
Ggovernment Stability	Government Stability	ICRG
Trade openness	Trade (% of GDP)	WDI
Inflation	Consumer price index (annual %)	WDI
Investment	Foreign direct investment (% of GDP)	WDI
GFCF	Gross fixed capital formation (% of GDP)	WDI
Military	Military in politics	ICRG

Source: www.wdi.com, and www.prsgroup.com

METHODOLOGY
Econometrics Model
$GDPG = +\beta_0 + \beta_1 DEMO + \beta_2 GS + \beta_3 TO + \beta_4 CPI + \beta_5 FDI + \beta_6 GFCF + \beta_7 MP + e$
DEMO = Democracy
GS = government stability
TO = Trade openness
CPI = Consumer price index
FDI = Foreign Direct Investment
GFCF = Gross Fixed Capital Formation of GDP
MP = Military in Politics

CONCEPT OF STATIONARITY
A stationary random process, as described by Gujarati in 2003, is characterized by having a constant mean and variance, and its covariance

does not depend on the specific time period over which it is calculated. Ensuring stationarity is crucial when dealing with time series data because failing to do so can lead to biased, spurious, and misleading results in our estimations. Therefore, it is imperative to check for the presence of a unit root in the time series before conducting any analysis.

Unit root testing is a fundamental step in time series analysis. If a unit root is detected in the time series, it indicates that the data has a non-stationary component that needs to be addressed. To mitigate this issue, the unit root can be eliminated by taking the first difference of the data. If the unit root still persists after differencing once, additional differences may be applied iteratively until the unit root is no longer present in the time series.

Numerous techniques are available for investigating unit roots in time series data, but in this context, we will focus on using the Augmented Dickey-Fuller (ADF) test for this purpose.

Augmented Dicky Fuller test estimate the following;

$$dYi = constt. + \varphi Yi - 1 + \sum_{j=1}^{p-1} \omega j dYi - j + \varepsilon i \dots \dots \dots i$$

Here the ε is the error term and $dY_{i-j} = Y_{i-1} - Y_{i-2}$

In case of having time trend the general form is,

$$dYt = constt. + \alpha 1t + \varphi Yt - 1 + \sum_{j=1}^{p-1} \omega j dYt - j + \varepsilon t \dots \dots \dots i i$$

In equation "ii" "t" stands for time trend and our null hypothesis in such case is $\varphi = 0$. The rejection of the null hypothesis indicate that there series is stationary.

ARDL

Cointegration essentially signifies the enduring connection between time series. Multiple tests, like Johansen cointegration and VECM, along with the ARDL (Auto-Regressive Distributed Lag) bound test, are employed for this purpose. The ARDL bound test serves to investigate the long-term relationship among multiple series in time series data. Often referred to as the "bound testing technique for

cointegration," the ARDL bound test is well-suited for assessing cointegration presence in variables (Afzal et al., 2010; Mehrara, 2011; Nasiru & Usman, 2012). It involves estimating an ARDL model, which is a regression model encompassing lagged variable values and other relevant variables (Nkoro & Uko, 2016). The model is estimated through the application of ordinary least squares (OLS) to assess the stationarity of residuals (Kripfganz & Schneider, 2018). When all series are stationary at I(0), OLS (simple regression) is applicable. For cases of all series being stationary at I(1), cointegration is used. When dealing with mixed orders, ARDL is the preferred approach.

$$
\begin{aligned}
\Delta GDPGp = \beta_0 &+ \sum_{i=1}^{n1} \beta_{11} \Delta DEMOt - i \\
&+ \sum_{i=0}^{n2} \beta_{12} \Delta GSt - i \\
&+ \sum_{i=0}^{n3} \beta_{13} \Delta TOt - i \\
&+ \sum_{i=0}^{n4} \beta_{14} \Delta CPIt - i \\
&+ \sum_{i=0}^{n5} \beta_{15} \Delta FDIt - i \\
&+ \sum_{i=0}^{n6} \beta_{16} \Delta GFCFt - i \\
&+ \sum_{i=0}^{n7} \beta_{17} \Delta MPt - i \\
&+ \eta_{11} GDPGt - i + \eta_{12} DEMOt \\
&- i + \eta_{13} GSt - i + \eta_{14} TOt - i \\
&+ \eta_{15} CPIt - i + \eta_{16} FDIt - i \\
&+ \eta_{17} GFCFt - i + \eta_{18} MPt - i \\
&+ aECTt - 1 \dots (1)
\end{aligned}
$$

where Δ shows I (1) operator; β0 indicates the constant term (intercept); and β11, ..., β17 represent short term coefficients; 11 ..., 18 is displaying long-term coefficients; the lag-length refers to the n1..., n7 and εt−1 error term of the particular model. The F-statistics calculated-value is compared with the upper I (1) and lower I (0) critical values reported by Pesaran et al. (2001). If the computed F-statistics-value is > I (1) and, H0 the of no cointegration is rejected regardless of whether

the variable is stationary I (0) or I (1). As Pesaran et al. (2001), mentioned, once we can establish the existence of cointegration between the variables, we proceed to the estimation of error correction models. The value can be anywhere within these two limits.

Error Correction Model ECM
The Error Correction Model (ECM) is an econometric technique used to estimate the connection between multiple time series variables that share a long-term equilibrium link. ECM functions as a model encompassing both the transient fluctuations and the stable equilibrium associations among variables. The concept of error correction pertains to the extent to which existing imbalances from previous points are rectified by the current point (Fatima, et al. 2023, Gul et al 2023). In practical terms, a significant and negative value of Error Correction Term (ECT) is indicative of the model's effectiveness.

$$\Delta GDPGp = \beta_0 + \sum_{i=1}^{n1} \beta_{11}\Delta DEMOt - i$$
$$+ \sum_{i=0}^{n2} \beta_{12}\Delta GSt - i$$
$$+ \sum_{i=0}^{n3} \beta_{13}\Delta TOt - i$$
$$+ \sum_{i=0}^{n4} \beta_{14}\Delta CPIt - i$$
$$+ \sum_{i=0}^{n5} \beta_{15}\Delta FDIt - i$$
$$+ \sum_{i=0}^{n6} \beta_{16}\Delta GFCFt - i$$
$$+ \sum_{i=0}^{n7} \beta_{17}\Delta MPt - i + aECTt$$
$$- 1 \dots (3)x$$

DIAGNOSTIC TESTS
In this study, the diagnostic assessments which are conducted as follows: To assess serial correlation, the Lagrange Multiplier (LM) test is employed. The LM test is particularly effective when the variables are correctly identified. It was developed by Breusch and Pagan and is designed to detect serial correlation in the

data. In the case of homoscedasticity, the LM test follows a chi-squared distribution with degrees of freedom corresponding to the total number of variables in the model. An advantage of this test is its sensitivity to the normality assumption, as noted by Koenker and Bassett (1982) and Gujarati (2003).
Heteroscedasticity is examined using two tests: the White test (White 1980) and the Breusch-Pagan-Godfrey test (1979). These tests are valuable for estimating consistent variance and standard errors in the data. This helps in making accurate statistical inferences about the model's parameters, as emphasized by Gujarati (2003).

STABILITY TEST
This study employs the Recursive and Cumulative Sum (CUSUM) test to assess the stability of the long-term coefficients. This test, originally introduced by Brown, Durbin, and Evans in 1975, relies on recursive residuals and serves as a valuable tool when confronting potential structural changes in time series data. It operates under the assumption that the coefficient vector "α" remains constant over a defined time frame. One significant advantage of this test is its ability to detect instability without requiring prior specification of when a structural break might occur.
The test involves establishing two error boundaries for the residuals. If a residual falls within these boundaries, the model is considered stable. Conversely, if a residual exceeds these boundaries, the model is indicative of instability. These two limits span from -2 to +2.

Table 1
Descriptive Statistics

	GDPG	DEMO	GS	TO	CPI	FDI	GFCF	MP
Mean	4.532	2.330	6.998	0.354	8.155	0.992	15.96	2.723
Median	4.731	2.000	6.750	0.355	7.844	0.688	16.34	3.000
Maximum	7.705	5.000	10.83	0.427	20.28	3.668	19.11	3.916
Minimum	1.014	0.500	2.166	0.276	2.529	0.178	12.52	1.000
Std. Dev.	1.824	1.325	2.199	0.039	3.9352	0.834	1.702	0.736
Skewness	-0.016	0.497	-0.119	-0.130	0.742	2.054	-0.302	-0.862
Kurtosis	2.339	2.053	2.158	1.989	3.858	6.456	2.121	2.924
Jarque-Bera	0.601	2.592	1.052	1.497	4.042	39.63	1.562	4.102
Probability	0.740	0.273	0.590	0.472	0.132	0.000	0.457	0.128

The descriptive statistics show that mean and median values are normal. The maximum value

among the variable is 20.28 and minimum value is .276, which means that there is no big outliers in the data. The probabilities show that all the variable data is normal and normally distributed.

Table 2
ADF Unit Root Results

Variables	At level				At first difference				Order of integration
	Constant		Constant & trend		Constant		Constant & trend		
	t.stat	Prob.	t.stat	Prob.	t.stat	Prob.	t.stat	Prob.	
GDPG	-1.9587	.3025	-0.7464	0.8233	-5.5827	.0001***	-5.5528	.0005***	I(I)
DEMO	-1.2336	0.6474	-1.3540	0.8552	-4.8504	.0005***	-4.7806	.003***	I(I)
GS	-1.6573	.4426	-1.5373	.7950	-5.0158	.0003***	-4.8778	.0024***	I(I)
TO	-2.0109	.2809	-2.6229	.2733	-6.2031	.0000***	-6.1030	.0001***	I(I)
CPI	-2.4398	.1394	-2.3309	.4064	-6.7442	.0000***	-6.7645	.0000***	I(I)
FDI	-2.8601	.0617*	-3.0041	.1472	-3.6551	.0102**	-3.5925	.0470**	I(I)
GFCF	-1.5494	.4962	-2.9826	.1528	-4.9536	.0004***	-4.8857	.0023***	I(I)
MP	-1.9587	.3025	-2.8532	.2898	-4.1305	.0031***	-4.0811	.0161**	I(I)

*, **, and *** denote the significance levels at 10%, 5%, and 1%, respectively.

As regressing nonstationary variables leads to spurious regression suggested by Gujrati (2005) therefore as per Box and Jinkin Method we take the difference of the selected variables to make it stationary. The unit root analysis was carried out once with constant only and then with constant and trend. It was observed that gdpg were found stationary at level and all other variables were found stationary at 1st difference as shown in the table 2. The ADF unit root test shows that there is mix order in the variables some are at level while others are at 1st difference but significantly there is not a single variable exceeds 1st difference.

Table 3
Lag-Selection criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-204.7917	NA	0.000127	13.72849	14.09856	13.84912
1	-50.12552	219.5261*	4.194607	7.879066	11.20962*	8.964742
2	32.08100	74.25105	3.334387*	6.704451*	12.99549	8.755174*

In our study, we analyzed an ARDL model to understand the relationships among variables. We needed to decide on the number of lags to include in the model, and two common criteria we considered were AIC and SC. AIC suggested using 2 lags, while SC suggested 1 lag. Since we had a relatively small dataset with less than 60 observations, it's generally recommended to prioritize AIC in such cases. Following this guideline, we opted to use 2 lags based on the AIC criterion, which we believe will be appropriate for making predictions in our study.

Table 4
ARDL Bounds-test

ARDL (ARDL)		F-statistics; 5.609213
Significance	Lower bound	Upper bound
10%	2.03	3.13
5%	2.32	3.5
2.5%	2.6	3.84
1%	2.96	4.26

The ARDL bound test value is well above the tabulated value at 1% of lower bound and upper bound which means that there exists cointegration relationship among the variable and second suggest long run relationship in the model.

Table 6
Long Run Results of ARDL

Variables	Coefficient	t-Statistic	Prob.
DEMO	0.466	2.562	0.021**
GS	-0.122	-1.040	0.314
TO	0.399	3.320	0.004*
CPI	-0.368	-4.857	0.000*
FDI	0.652	1.988	0.060**
GFCF	-0.28	1.517	0.150
MP	-0.756	-1.792	0.093***
C	3.9018	3.984	0.000*

*, ** and *** indicates 1%, 5% and 10% significant level respectively.

The results of the analysis show the relationships between various factors Democracy and GDPG. Firstly, the positive coefficient (0.4662) attributed to democracy suggests that an increase in democratic practices by one unit corresponds to an average GDP growth of 0.4662 units, a finding supported by the significant t-statistic (2.5628) and a low p-value (0.0216). This underscores the pivotal role of democracy in fostering long-term economic growth. Similarly, the coefficient (0.3996) attached to trade openness implies that augmenting trade openness by one percent is associated with an

average growth of 0.3996 units in the GDPG. The robust t-statistic (3.320) and p-value (0.0047). In contrast, the negative coefficient (-0.3680) linked to inflation suggests that a one-unit increase in the Consumer Price Index results in a reduction of 0.3680 units in the GDPG. The pronounced t-statistic (-4.857) and remarkably p-value (0.0002) emphasize the criticality of managing inflation for maintaining the desired outcome. Turning to Foreign Direct Investment (FDI), the coefficient (0.6520) implies that a one-percent rise in FDI corresponds to an estimated growth of 0.6520 units. While the t-statistic (1.9885) and the p-value (0.0653) suggests significance at the 10% level. Finally, the coefficient (-0.7567) attributed to military involvement in politics indicates that increasing the presence of the military in politics by one unit leads to a decline of 0.7567 units in the GDPG. While the t-statistic (-1.7926), the p-value (0.0932) indicates potential significance at the 10% level. While variables like GFCF and GS were insignificant.

These results show relationship through which various variables impact GDP growth. Democracy the positive coefficient associated with democracy suggests that an increase in democratic practices fosters economic growth the results are similar with (Sharif et al.2018, Hafiz Muhammad Qasim 2022, Asif et al.2020). This may occur through enhanced political stability, better protection of human rights, and increased investor confidence, all of which contribute to a conducive environment for economic activities. Trade Openness the positive coefficient for trade openness implies that a more open economy tends to experience higher GDP growth. This relationship can be attributed to increased international trade, which allows for access to larger markets, technological transfers, and the specialization of production, all of which can boost economic output. Inflation The negative coefficient linked to inflation indicates that controlling inflation is essential for sustaining economic growth. High inflation erodes purchasing power, disrupts economic planning, and can lead to uncertainty, discouraging investment and economic expansion. Foreign Direct

Investment (FDI) the positive coefficient for FDI suggests that attracting foreign investment can lead to economic growth. FDI can bring in capital, technology, and expertise, stimulating local industries, creating jobs, and increasing overall economic output. Military Involvement in Politics the negative coefficient associated with military involvement in politics indicates that a higher military presence in political affairs tends to hinder economic growth. Such involvement can lead to political instability, policy uncertainty, and potentially discourage domestic and foreign investment, which are essential for sustained economic growth.

Table 5
Short-Run Results ARDL

Variable	Coefficient	t-Stat	Prob
DEMO	0.7948	2.208	.0432**
GS	-0.2091	-1.013	.3267
TO	.23875	-1.1709	.1080
CPI	-0.1523	-1.4251	.1746
CPI(-1)	.55110	4.0471	.0011*
FDI	2.4500	3.5525	.0011*
FDI(-1)	-1.7964	-2.283	.0374**
GFCF	0.38138	0.8513	.4080
MP	-1.2900	-1.7687	.0973***
ECM	-.8704	-5.755	.0000*

*, ** and *** indicates 1%, 5% and 10% significant level respectively.

Table 5 describe the outcomes of the short run ARDL. In short run, democracy, foreign direct investment and military politics are statistically significant. Besides, government stability, trade openness, inflation and GFCF are insignificant in the short run. The ECM value should be negative -0.8704 and statistically significant (0.0000). It indicates, the short run equilibrium converts into long run.

Table 6

Breusch-Godfrey Serial Correlation LM Test			
F-statistic	1.589523	Prob. F(2,23)	0.2256
Obs*R-squared	4.007348	Prob.Chi-Square(2)	0.1348

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	0.477342	Prob. F(15,15)	0.9182
Obs*R-squared	10.01637	Prob. Chi-Square(15)	0.8187

| Heteroskedasticity Test: White			
F-statistic	0.551334	Prob. F(15,15)	0.8699
Obs*R-squared	11.01720	Prob.Chi-Square(15)	0.7514

Breush-Godfrey LM test for serial correlation suggest that there is no significant serial correlation exist in the model. As for the Heteroskedasticity we perform two of the most commonly used test breush-pagan-godfrey and white test. These tests also suggest that there is no significant Heteroskedasticity problem in this model.

CUSUM and CUSUMSQ:
The outcomes of the CUSUM and CUSUMSQ tests are represented in plots, where the red line marks a significant threshold at 5%. Each model's blue line is positioned within this red line, indicating that the projected variables remain stable over time. When the blue line consistently falls between the red line and another blue line, it signals long-term stability for the models. This study's findings reveal that all the models exhibit this behavior, confirming their overall stability.

CUSUM — 5% Significance

CUSUM of Squares — 5% Significance

Series: Residuals	
Sample 1986 2016	
Observations 31	
Mean	3.22e-16
Median	0.231061
Maximum	1.564635
Minimum	-1.785059
Std. Dev.	0.875489
Skewness	-0.195751
Kurtosis	2.148860
Jarque-Bera	1.133715
Probability	0.567305
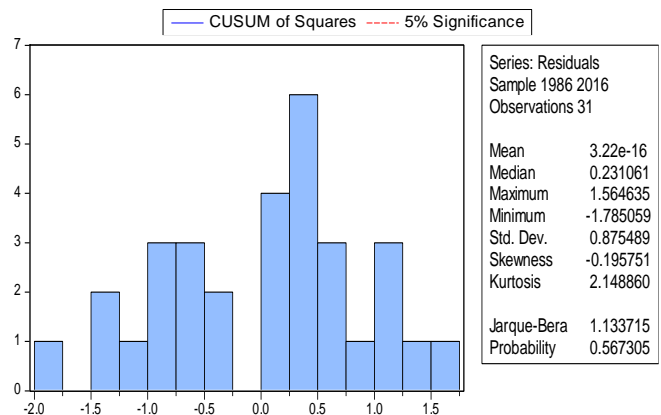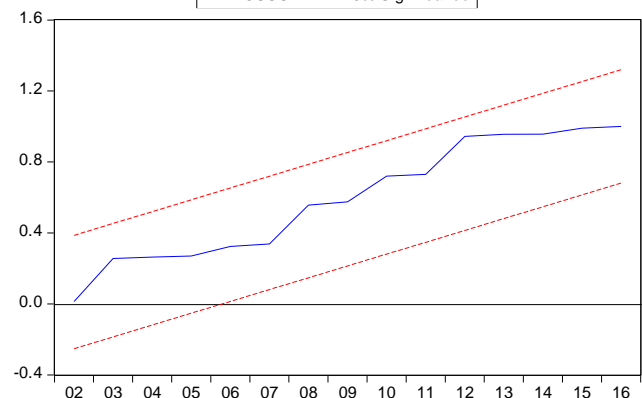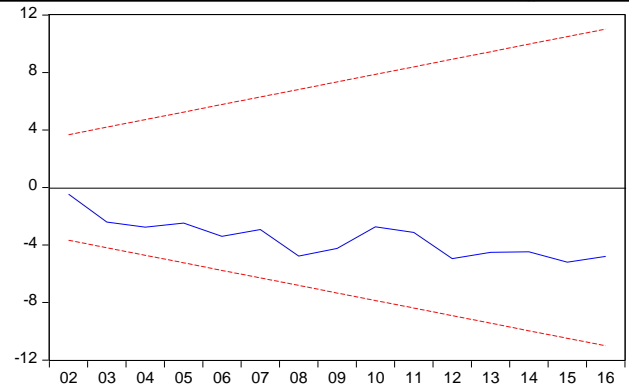
In this figure, the JB-statistics prob.value is >0.05 when the JB-statistics prob.value is >0.05, meaning that except for H0 and H0, the model is normally distributed

CONCLUSION AND POLICY RECOMMENDATIONS:
The analysis show the relationships between various factors and GDP growth (GDPG). The positive coefficient associated with democracy highlights its positive impact on economic growth, as supported by significant t-statistic and p-value. This underscores democracy's role

in fostering long-term economic development. Similarly, the coefficient for trade openness suggests its contribution to GDP growth, supported by robust t-statistic and p-value. In contrast, the negative coefficient linked to inflation indicates its adverse effect on GDPG, emphasizing the importance of effective inflation management. Foreign Direct Investment (FDI) also appears to have a positive coefficient, implying its potential contribution to growth, although its significance is suggested at the 10% level. The coefficient attributed to military involvement in politics suggests its potential negative impact on GDPG, with potential significance at the 10% level. Turning to the specific case of Pakistan. The findings of a positive coefficient for democracy align with the notion that stable democratic practices can foster economic growth. In the context of Pakistan, historical political instability and military interventions have at times disrupted democratic governance, potentially impacting economic growth. The analysis suggests that strengthening democratic institutions and practices could contribute to sustained economic progress in the country. However, it's important to note that the relationship between democracy and growth can be complex and may vary based on specific contexts. Overall, these results underscore the significance of democracy and other factors in shaping economic growth patterns, providing valuable insights for policy considerations in countries like Pakistan.

POLICY RECOMMENDATIONS

Recognizing the positive relationship between democracy and economic growth, policymakers should prioritize efforts to enhance democratic governance. By creating a stable and accountable political environment, countries can potentially attract more investment and stimulate long-term economic growth. Given the significant impact of trade openness on GDP growth, governments should implement policies that encourage international trade. Reducing trade barriers, streamlining customs processes, and pursuing trade agreements can promote economic diversification and expansion. Fostering an open and dynamic trade environment can lead to increased economic opportunities and enhanced growth prospects. Given the potential negative impact of military involvement on GDP growth, it is essential for governments to ensure a stable and civilian-led political environment. Policymakers should work to minimize military interference in politics and prioritize civilian governance. By preserving political stability, countries can create an atmosphere conducive to economic development, investment, and growth.

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