The Role of Institutions in Economic Growth: A New Evidence from Pakistan

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ABSTRACT

This paper empirically investigates the institutions-growth relationship of Pakistan by measuring the indirect effect of political institutions on the economic performance through economic institutions and de jure political power. A GMM technique is employed on time series data for the period 1980-2014. We find evidence that political institutions contribute towards economic performance only through economic institutions. And they undermine economic development if the de jure political power is exercised. These results suggest that manipulation of de jure political power by elites for personal interests seems to be major obstacle in the way of establishing inclusive institutions, which are a pre-requisite for increasing economic performance. Hence, we propose to undertake structural reforms in all spheres of polity and economy.

Key Words: Economic Growth; Political Institutions, Economic Institutions, De jure political power, GMM

JEL Classification: O4; O43

Introduction

Inclusive institutions increase economic performance (Acemoglu et al., 2001; Bennett et al., 2017; Di Liberto and Sideri, 2015; Easterly and Levine, 2003; Goes 2016; Hall and Jones, 1999; North and Thomas 1973; Ogilvie 2014; Rodrik et al., 2004). North (1990) describes institutions as "the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction." Moreover, Acemoglu and Robinson (2012) classifies institutions as being 'extractive' and 'inclusive' in terms of their impact on economic development. Inclusive institutions are crucial for development as they allow broad segment of society to participate in growth process. In contrast, extractive institutions are harmful for growth as they satisfy the interests of narrow elite only. They identify 'extractive' nature of institutions as the root cause for the under development of many developing countries. And Pakistan is no exception when it comes to poor performance of its institutions due to which it is still an underdeveloped country despite it has been blessed with immense human capital and natural resources (Akbar 2015). Few studies have highlighted extractive nature of institutions as being root cause of Pakistan's underdevelopment (Husain 1999 and 2009; Kemal 2003). However, issues have not been taken on empirical level in single comprehensive study.

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Therefore, this paper aims to investigate to what extent institutions determine economic development of Pakistan. In particular, we investigate the interplay of political and economic institutions maneuvered through de jure political power in shaping economic performance of Pakistan.

Existing literature on institutions-growth discourse highlights two approaches to analyze impact of institutions on growth. The first approach extends formal growth model (Lucas 1988; Romer 1986; Solow 1956) by inserting both institutions and growth variables jointly in a single equation and estimates model in terms of elasticity in variables (Knack and Keefer 1995; Mauro 1995). The focus of second approach is to estimate model by exercising conventional unit root, cointegration and causality tests (Glaeser et al.,2004; Justesen 2008). However, the evidence primarily consists of cross-country growth regressions and there is a dearth of micro-level studies which leads to lack of consensus on specific channels through which institutions may affect the economic performance of a country (Alexiou et al., 2014). Moreover, Efendic et al. (2011) points out that data of cross country analysis seems to be inherently flawed due to problems of endogenity, heterogeneity and measurement errors due to differences in nature and quality of data since every country has a unique economic and political environment. Therefore, existing literature suggests that institutions-growth nexus should be narrowed down to country specific studies in order to understand various channels through which institutions may affect economic development of a country (Pande and Udry 2005). The main contribution of this paper is that unlike past studies, proxies of institutional variables are not based on subjective indices which have drawn criticism in recent times (Shirley, 2005). Instead, this study uses indices based on annual time series data for various variables of interest, thus attempts to give more reliable results. Moreover, it employs system GMM technique, which accounts for the problem of endogeneity in institutional variables, and separately captures the indirect impact of political institutions on economic performance of Pakistan through economic institutions and de jure political power channels.

Background

Institutional Crisis of Pakistan

Since its inception in 1947, Pakistan has been consistently lagging behind on socio-economic front as compared to developed countries. During the four decades (1971-2009), Pakistan's economy posted a GDP growth rate of 4.9 percent on average as compared to China's was 9.1 percent, Malaysia's 6.4 percent and India's 5.3 percent (Pakistan Planning Commission 2011). Similarly, Pakistan's performance considering the quality of governance has remained below par (-1.14 average value) compared to the averages of Sub-Saharan Africa (-0.64 average value) and South Asia (average value of -0.69), as stated by 'World Governance Indicators' of World Bank (2013). Further, its HDI Value of 0.537 was below mark to South Asian countries HDI of 0.588. (Human Development Report [HDR] 2014).

The inclusive-extractive institutional framework theorized by Acemoglu and Robinson (2012) seems very germane to the core reasons for the underdevelopment of Pakistan. In this context, root cause for Pakistan's underdevelopment lies in its inability to develop an inclusive institutional infrastructure deemed prerequisite for sustainable and equitable economic development (Hussain 2013). Rather, its institutional mechanism, inherited from British Raj, is in essence extractive in nature as it offers an incentive structure that would serve the interest of narrow elite at the expense of mass population. Post- independence rulers maintained these extractive institutions and utilized them to serve the interests of a narrow elite comprised of civilian-military bureaucracy, feudal lords and industrialists (Husain 1999). For example, political setup during Ayub regime was highly controlled and bureaucratically governed which enabled functional inequality and economic concentration both among regions and individuals due to which benefits of high growth rates could not trickle down to masses. Another manifestation of extractive institutions in Pakistan is that they generate various forms of rent seeking opportunities for power holders. For instance, large amount of funds was drained off as 'rents' from national financial institutions under the rule of Nawaz Sharif and Benazir Bhutto (Hussain 2008).

The fundamental reason that inclusive institutional transformation remained marginalize in Pakistan is attributed to the fact that participatory democracy in its true form and sense never existed in Pakistan. Throughout history, its democratic institutions had been unsuccessful in upholding frequent, free and fair elections, accountability of elected representatives by the electorate and development and implementation of pro-growth policies (Zaidi 2005). Especially the parliament of Pakistan, rather than enacting laws representing the interests of general public, had been a mere rubber stamp protecting the interests of influential class. Moreover, political instability and frequent interruption of the democratic process by periodic military dictatorships also inhibits the evolution of inclusive institutions in Pakistan (Memon 2011).

Review of literature

The literature on the association between institutions and economic growth can be categorized into two distinctive streams. The first highlights rule of law, effectiveness of government, regulatory quality, protection of property rights, control on corruption, enforcement of contracts, economic freedom, law & order , as pre-requisites for better economic performance in the long run (Acemoglu, et al., 2001; Aron 2000; Easterly and Levine 2003; Hall and Jones 1999; Knack and Keefer 1995; Mauro 1995; Rigobon and Rodrik 2005).The other ascertains possible factors such as democracy, political and civil liberties, stability of political system, absence of violence, etc., contributing to variations in growth rates across countries(Alesina and Perotti 1996; Chong and Zanforlin 2000; La Porta et al.1999; Norman 2004).

The literature generally employs regime characteristics such as democracy and autocracy as proxy for political institutions (De Haan 2007; Hicken et al., 2005). The nexus between political institutions and economic growth has been investigated in a number of studies. Flachaire et al. (2014) investigates the relationship between institutions and economic growth using cross section and panel data for both developed and developing countries by upholding hierarchy of institutions hypothesis. They find that in comparison to economic institutions, political institutions matter more for growth in a way they provide an environment for economic institutions to flourish and

hence affects growth indirectly. Cavallo and Cavollo (2010) examine the role of political institutions for growth productivity during crises period using panel data for the time period 1970-2004, and concludes that growth has been affected by political institutions through crises management mechanisms. Autocracies tend to aggravate a crisis situation, whereas democracies help to alleviate the harmful effects of crisis. The association between political 'institutions' and economic growth 'volatility' has been analyzed by Klomp and de Haan (2009) using data from more than 100 countries for the years 1960 - 2005, and they find a negative and significant relationship between economic volatility and democracy. However, volatility seemed to increase because of un-predictability in political system. Inquiring the nature of impact of democracy on growth, Doucouliagos and Ulubaşoğlu (2008) in a meta-regression analysis conclude that overall democracy is favorable to enhance long-term per capita GDP growth rates. Nelson and Singh (1998) demonstrate in a study that developing countries could accomplish higher goals for development if they opt for 'democratic regimes' that encourage greater political and civil rights. It is comparatively more difficult to achieve in presence of 'non-democratic regimes' as they tend to curb the political freedom and civil liberties. Alesina and Perotti (1996) are of the opinion that political economy of a country must be stable along with strong democratic institutions to resolve problems of under-development.

The impact of economic institutions on growth rates has been explored in number of empirical studies. Ali and Crain (2001) find a positive and robust evidence for the impact of economic institutions on growth. On the other hand, political establishment and civil rights find to be un-correlated with growth rates. Additionally, the study underlines that the degree of political and civil freedom do not influence the level of economic freedom in country. Adkins (2002) employing panel data for two sets of developing and advance economies and years find that factors like better performing economic institutions, economic freedom, and human capital were instrumental for economic growth. Knack and Keefer (1995) divulge that good economic institutions such as well enforced contracts and secured property rights boosted rate of investment which translated into higher growth rates. Vijayaraghavan and Ward (2001) underscores government size and property rights as an indicator for economic institutions as the most efficacious proxies. Carlsson and Lundstrom (2002) reveal that except freedom of trade and size of government, all other proxies of economic freedom affect growth performance positively and significantly.

Political institutions disseminate de jure political power in society and the examples may include system of electorate or written constitutions (Acemoglu and Robinson 2006). Chatterjee (2006) concludes that dis-proportionate spread of resources leads to relatively lesser de jure power and more de facto power. As a consequence, political institutions debilitate, and which deters the process of participatory development in Bangladesh.

In Pakistan's context, much had been discussed and documented about the detrimental impact of institutions on economic performance of Pakistan, however there is lack of empirical evidence, specifically political factors involved behind grim economic outcomes have seldom being investigated. Lopez and Touqeer (2013) identify poor institutions and faulty bureaucratic structure to be the 'binding constraints' for economy of Pakistan. They propose that Pakistan could achieve its growth potential if serious attempts would be made to overhaul the foundations of its institutions. Husain (2009) reports that un-restrained and narrow distribution of political

power lead to institutional crisis which in turn abates the growth rates of economy. Qayyum et al. (2008) suggest that institutions in Pakistan could not be strengthened which resulted in poor governance. Resultantly, red-tapism, frail contract enforcement, defective regulatory framework, dubious land titles, all affected economy in an adverse manner. Hussain (2004) highlights that malfunctioning institution, un-predictability in political system and corrupt governance to be key causal factors for underachievement of Pakistan on 'development' front. In Fardoust's (1998) view, inadequate investment in physical infrastructure and education system surrounded by flawed institutional environment are the main drivers for untenable economic performance of Pakistan. Haider et al., (2011) find evidence that political instability, poor governance and rampant corruption in public administration augmented inflation rates and budget deficits which in turn proved to be detrimental for Pakistan's economy.

Considering the above literature on institutions-growth nexus, it is evident that there is predominance of cross-country studies and micro-level empirical evidence is inadequate. As a consequence, overall evidence remains inconclusive regarding specific institutional channels which may influence economic growth of a country. This presupposes need for micro level studies to capture institutional variations inside a country. To fulfill this gap, present study aims to empirically explore the institutions-growth nexus in Pakistan, by using time series annual data and employing "Generalized Method of Moments" (GMM).

Data and Empirical Approach

Data

The empirical analysis is based on annual time series data for Pakistan covering time period from 1980-2014 because frequent change of political regimes intensified the institutional crisis in Pakistan during this time period. It is plausible to use time series data as it enables to study causality pattern (Jalil and Ma 2008).

Though there is sufficient empirical evidence that supports the hypothesis that institutions matter for economic growth, nonetheless the debate on how to measure institutions is still inconclusive (Glaeser et al.2004; Voigt 2013). Shirley (2005) detects heavy reliance on subjective indices of institutional quality (such as International Country Risk Guide (ICRG), Index of Economic Freedom, Freedom House democracy index, BERI index, World Governance Indicators) and dearth of country specific data to be the main reason for this disagreement. Besides, most of the previous studies have employed single proxy in order to measure institutions due to which conclusive results could not be generated (Sarwar et al., 2013). To fill this literature gap, this study uses more composite measure of institutional quality as it employs an index for variables of interest, therefore attempts to give more authentic results. Moreover, the index is country specific and based on quantitative dataset. For most of the variables, data is gathered from Pakistan Bureau of Statistics, Pakistan Economic Survey, and World Development Indicators. Variables used for estimation purpose along with their proxies, definitions and sources are mentioned in Table 1. In addition, in light of literature on determinants of economic growth, we include certain control variables to control for their plausible effect on Real GDP, per capita (Barro 1996; Bleaney and Nishiyama 2002; Sachs and Warner 1997).

Table 1: Names, Proxies, Definitions and Data sources of Variables			
Variables of Interest	**Proxies for variables of interest**	**Definition**	**Sources**
Political Institutions	Democracy / Autocracy	It measures three broad dimensions of key features of regime and authority characteristics which are executive recruitment, constraints on executive authority and political competition. The project records data on democracy, autocracy and polity indices. It is developed on a scale of 21point spanning from -10 (complete autocracy) to +10 (complete democracy).	Polity IV
Economic Institutions	Appeals in Supreme Court of Pakistan	It includes criminal appeals, civil appeals; criminal (sharia appeals) registered in the Supreme Court of Pakistan. Disposal rates have been taken.	Pakistan Bureau of Statistics
	Petitions in Supreme Court of Pakistan	They include Civil Petitions, Civil Review Petitions, Criminal Petitions, Criminal Review Petitions, Jail Sharia Petitions, Jail Petitions and Criminal Sharia Petitions listed in the Supreme Court of Pakistan. Disposal rates of petitions have been selected.	Pakistan Bureau of Statistics
	Industrial Disputes	It includes incidents causing temporary work-stoppage in industry.	
	i. Strikes	They include work-stoppage by employees of an organization when they have to put up a demand or convey a grievance in front of higher management,	Pakistan Bureau of Statistics
	ii. Lockouts	They include suspension of work activities when the employer of an establishment stop workers from performing their job duties due to matters relate to terms and conditions of employment, financial losses etc.	Pakistan Bureau of Statistics
	No. of man-days lost due to industrial disputes	It represent data on actual absences occurred in different shifts of a working day because of work-stoppages (excluding scheduled holidays).	Pakistan Bureau of Statistics
De Jure Political Power	Laws & Amendments	It includes acts of parliament and constitutional amendments passed by parliament.	Acts of Parliament (National Assembly of Pakistan) and Constitutional Amendments (Senate of Pakistan)
	Taxation revenue as % GDP	Revenue is cash receipts from taxes, social contributions, and other revenues such as fines, fees, rent, and income from property or sales	World Development Indicators
Economic Performance	Real GDP, per capita (constant 2005 US$)	Real GDP per capita is gross domestic product divided by midyear population. GDP is the sum of	World Development

		gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.	Indicators
Control Variables	**Proxies for Control Variables**	**Definition (Sign)**	**Source**
Globalization	Globalization Index	Only actual flows component of KOF economic globalization index has been incorporated, which includes data on following variables: Trade (percent of GDP), Foreign Direct Investment, stocks (percent of GDP), Portfolio Investment (percent of GDP) and Income Payments to Foreign Nationals (percent of GDP).	KOF Index of Globalization (Dreher, 2006)
Government Size	General government final consumption expenditure(constant 2005 US $)	It includes all government current expenditures for purchases of goods and services (including compensation of employees). It also includes most expenditure on national defense and security, but excludes government military expenditures that are part of government capital formation.	World Development Indicators
Price Stability	Inflation, consumer prices (annual %)	It is measured by the consumer price index and reflects the annual percentage change in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly.	World Development Indicators
Investment	Gross Fixed Capital Formation(constant 2005US$)	It includes land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. According to the 1993 SNA, net acquisitions of valuables are also considered capital formation. Data are in constant 2005 U.S. dollars.	World Development Indicators

Literature suggests well protected property rights as a suitable proxy for economic institutions (Acemoglu et al., 2001; Berkowitz et al., 2015). The index of economic institutions is composed of four dimensions: appeals in Supreme Court of Pakistan, petitions in Supreme Court of Pakistan, number of industrial disputes and number of man-days lost. Data on industrial disputes includes number of strikes and lock outs. [16]

[16] Work-stoppage occurs when daily activities in an industrial unit are terminated for a short period due to which workers could not perform their routine job. Strikes and lock-outs are the major causes of work-stoppage.

$$\boldsymbol{Index\ of\ Economic\ Institutions} = \frac{1}{3}(\boldsymbol{Index\ of\ appeals\ \&\ Petitions}) + \frac{1}{3}(\boldsymbol{Index\ of\ industrial\ disputes}) + \frac{1}{3}(\boldsymbol{Index\ of\ man-days\ lost})$$

Political institutions determine de jure political power in society such as parliament votes, constitutions or electoral systems (Acemoglu et al., 2005). The index of de jure political power is meant to measure the efficacy of parliament of Pakistan in making laws and amendments in constitution promoting inclusive growth. The index is comprised of two dimensions: Laws & Amendments and Taxation revenue as % GDP. Data on laws & amendments includes acts of parliament and constitutional amendments passed by parliament. [17]

$$\boldsymbol{Index\ of\ De\ jure\ Political\ Power} = \frac{1}{2}(\boldsymbol{Index\ of\ laws\ \&\ amendments}) + \frac{1}{2}(\boldsymbol{Index\ of\ taxation\ revenue})$$

We employ natural logarithm of Real GDP, per capita as a proxy for economic performance / growth following Roubini and Sala-i-Martin (1992) and King and Levine (1993) and Jalil and Ma (2008).

Methodology

The objective of present study is to capture the indirect effect of political institutions on economic performance through economic institutions channel and de jure political power channel. For this purpose, a simultaneous equation model is designed to estimate parameters of separate equations by employing system GMM technique. However, the most common problem with institutional variables is that these are endogenous in growth models (Aghion et al., 2004; Efendic et al., 2011; Lichbach and Zuckerman 2009). This give rise to the problem of simultaneity or endogeneity bias as endogenous variables and error terms are mutually correlated in simultaneous equation models. Furthermore, serial correlation in the errors and heteroskedasticity are common problems encountered in application of linear time series models. Therefore, OLS estimation of a structural model entailing aforesaid problems generally produces bias and inconsistent results (Gujarati 2012).

[17] "Act of Majlis-e-Shoora (Parliament)" means an Act passed by Majlis-e- Shoora (Parliament) or the National Assembly and assented to, or deemed to have been assented to, by the President" (Article 260 of Constitution of Pakistan).
Constitution of a country can be amended and it is considered as a parliamentary function in any democratic regime. Article 238 and 239 narrates modus operandi for making amendments in constitution of Pakistan. Two third majority of both the members of Senate and National Assembly is required to amend constitution or any of its provision through an act of Parliament. Data is collected from the websites of National Assembly (lower house) and Senate (upper house) of Pakistan.

Literature on institutions and growth suggests the application of instrumental variables techniques to address the problem of endogeneity of institutional measures. Instrumental variables provide a set of variables that are correlated with independent variables of the equation but are uncorrelated with error terms. Instruments eliminate the correlation between independent variables and error terms. Therefore, estimates obtained are reliable and efficient. The present study employs system Generalized Method of Moments technique which is an extension of Instrumental Variable (IV) methodology and both single equation and system estimator. It was developed by Hansen (1982) primarily for the application of time series data.

It is preferred over other estimators of its class because of several reasons. It encompasses many standard estimation methods such as maximum likelihood, least squares, instrumental variables and two-stage-least-square. Furthermore, unlike maximum likelihood method (MLE), GMM is flexible as it does not require full information about model specification and distribution of the error terms. Another unique feature of GMM estimation is that it facilitates testing the specification of the proposed model in case number of moment conditions exceeds the number of parameters. In contrast to conventional IV estimator, GMM estimator is more efficient in the presence of heteroskedasticity and serial correlation in error terms.

Keeping this in view, we employ SYS-GMM developed by Arellano and Bover (1995) and Blundell and Bond (1998) and applied by Bond et al. (2001)

Econometric Model

$$ecoper = \alpha + \beta_1(Index\ of\ ecoinst) + \beta_2(Index\ of\ glob) + \beta_3(Index\ of\ govce) + \beta_4(Index\ of\ infla) + \beta_5(Index\ of\ gfcap) + \varepsilon$$ **Eq. (1)**

$$ecoinst = \alpha + \beta_1(Index\ of\ polinst) + \beta_2(Index\ of\ glob) + \beta_3(Index\ of\ govce) + \beta_4(Index\ of\ infla) + \beta_5(Index\ of\ gfcap) + \varepsilon$$ **Eq. (2)**

$$ecoper = \alpha + \beta_1(Index\ of\ dejpow) + \beta_2(Index\ of\ glob) + \beta_3(Index\ of\ govce) + \beta_4(Index\ of\ infla) + \beta_5(Index\ of\ gfcap) + \varepsilon$$ **Eq. (3)**

$$dejpow = \alpha + \beta_1(Index\ of\ polinst) + \beta_2(Index\ of\ glob) + \beta_3(Index\ of\ govce) + \beta4(Index\ of\ infla) + \beta_5(Index\ of\ gfcap) + \varepsilon$$ **Eq. (4)**

$$ecoinst = \alpha + \beta_1(Index\ of\ dejpow) + \beta_2(Index\ of\ glob) + \beta_3(Index\ of\ govce) + \beta_4(Index\ of\ Definfla) + \beta_5(Index\ of\ gfcap) + \varepsilon$$ **Eq. (5)**

$$dejpow = \alpha + \beta_1(Index\ of\ polinst) + \beta_2(Index\ of\ glob) + \beta_3(Index\ of\ govce) + \beta_4(Index\ of\ infla) + \beta_5(Index\ of\ gfcap) + \varepsilon \quad \textbf{Eq. (6)}$$

Where,

$\boldsymbol{ecoper}$ = Economic Performance, $\boldsymbol{polinst}$ = Political Institutions, $\boldsymbol{ecoinst}$ = Economic Institutions, $\boldsymbol{dejpow}$ = De jure Political Power, $\boldsymbol{glob}$ = Globalization, $\boldsymbol{govce}$ = General government final consumption expenditure, $\boldsymbol{infla}$ = inflation, $\boldsymbol{gfcap}$ = Gross Fixed Capital Formation

Results and Discussion

In this section we discuss the empirical results of estimation of simultaneous equation regression model using GMM technique. Table 2 shows the GMM estimates of six separate equations.

Table 2: GMM Estimates of the Regression Model.

Explanatory Variables	Dependent Variables					
	Economic Performance	Economic Institutions	Economic Performance	De jure Political Power	Economic Institutions	De jure Political Power
	Eq. 1	Eq. 2	Eq. 3	Eq. 4	Eq. 5	Eq. 6
Constant	5.35*** (7.78)	2.28 (0.78)	6.67*** (6.48)	10.71 (1.09)	-2.25 (-0.85)	10.71 (1.09)
Economic Institutions	1.69** (2.34)					
Political Institutions		0.10** (2.09)				
De jure Political Power			(-0.21)** (-2.22)			
Political Institutions				0.20 (1.15)		
De jure Political Power					-0.12 (-0.46)	
Political Institutions						0.20 (1.15)
Globalization	-0.01 (-1.15)	0.89* (1.86)	0.39** (2.11)	(-3.72)* (-1.69)	1.82*** (3.68)	**(-3.72)* (-1.69)**
Government Consumption Expenditure	0.00 (0.24)	-1.10 (-1.40)	0.50 (1.40)	1.51 (0.85)	**0.04 (0.03)**	1.51 (0.85)
Inflation	0.02*** (3.56)	-0.17 (-0.80)	0.08 (1.33)	-0.07 (-0.23)	-0.21 (-1.01)	-0.07 (-0.23)
Gross Fixed Capital Formation	0.02 (0.63)	(-1.07)** (-2.75)	(-1.18)*** (-3.66)	-0.96 (-0.63)	(-1.65)*** (-3.14)	-0.96 (-0.63)
R-squared	0.53	0.61	0.69	0.46	0.63	0.46
Adjusted R-squared	0.45	0.55	0.63	0.36	0.56	0.36
Durbin-Watson stat	1.50	1.79	1.45	1.38	1.78	1.38
J-statistic	5.73	1.06	2.65	1.90	1.93	1.90
Probability J-statistic	0.01	0.30	0.10	0.16	0.16	0.16

***, ** & * represent significant at 1, 5 & 10 percent levels respectively , T-values in parenthesis

Political Institutions -Economic Institutions -Economic Performance Nexus

Economic Performance

In Eq. (1) the results depict that economic institutions have positive and significant relationship with economic growth inferring better the performance of economic institutions higher would be the growth rates of a country. These results are in line with theory, as economic institutions shape the incentives of key economic agents in society; in particular, they influence investments in physical and human capital and technology (North 1990). Literature also underscores economic institutions as a supreme candidate for economic growth in comparison to geographical and cultural factors (Hasan 2007; Rodrik et al., 2004). Further, this finding implies that economic institutions in Pakistan are to some extent inclusive and thus conducive to accelerate aggregate growth rates.

Inflation is positively and significantly related to economic growth implying that higher inflation rates help economic progress. This growth promoting role of inflation strikes a chord with Structuralists who are of the point of view that inflationary finance i.e., financing of real budget deficits through money creation, may play a pivotal role in economic growth of developing countries (Mallik and Chowdhry 2001). Furthermore, recent literature also supports a positive relationship between inflation and economic growth below a certain threshold level of inflation (Li 2006; Mubarik 2005).

Globalization affects economic performance negatively and insignificantly. This result is in line with literature on growth and development which underlines contradictory and inconclusive association between globalization and growth and supports the fact that globalization inhibits growth if universal set of pro-globalization policies is adopted .On the contrary, if policies are designed in line with individual country conditions, it may lead to higher growth rates (Rodrik 2008; Stiglitz 2002).

Both government consumption expenditure and gross fixed capital formation have positive and insignificant relationship with economic performance. The positive insignificant relationship between government consumption expenditure and growth is in line with Barro (1990) who explained that government productive spending (such as spending on enforcement of property rights and on activities that promote private production) may accelerate growth. Nonetheless, government non-productive spending (such as on defense) could undermine growth as it could increase tax rate without affecting private sector productivity which discourages productive behavior.

Economic Institutions

In Eq. (2) economic institutions are being regressed on political institutions and the estimated coefficient of political institutions is positive and significant, showing the better the performance of political institutions; the stronger would be the economic institutions. The results are in line with theory (Acemoglu et al., 2005). Moreover, literature also substantiates the findings that political institutions set the environment in which economic institutions operate. As economic institutions have a direct significant impact on growth rates therefore, political institutions

influence growth levels indirectly through economic institutions (Flachaire et al., 2014; Radu 2015).

Globalization is positively and significantly associated with economic institutions. This result is in line with literature as the processes of globalization induce government to provide hospitable environment for private business activities by strengthening property rights and contracts enforcement in country which in turn spur investment, enterprise and technological progress, thereby contributing to faster growth on a more sustainable basis (Gurgul and Lach 2014; Potrafke 2013).

Political Institutions - De jure Political Power - Economic Performance Nexus

Economic Performance

GMM estimation of the second structural Eq. (3) depicts that estimated coefficient for de jure political power is negative and significant, displaying a detrimental impact of formal political power on economic performance of Pakistan. This finding is relevant to political history of Pakistan, specifically to particular time period of this study. It implies that de jure political power in Pakistan had been concentrated in the hands of narrow elite and there had been few constraints on its exercise, which facilitated their rent seeking activities and retarded the process of equitable economic growth. As an example, during Zia's autocratic rule (1977-88), the main form of rents comprised of multibillion- dollar US military and economic assistance to Pakistan in the wake of Soviet invasion of Afghanistan. The government utilized a large chunk of such funds to favored individuals and groups in return of potential support to perpetuate its rule. Moreover, in order to support US sponsored 'Afghan Jihad' against Soviet Union, militant wings of religious parties and religious seminaries had been nurtured through inappropriate allocation of public funds and US aid. This facilitated the emergence of religious and sectarian violence in society which aggravated the macro-economic situation (Noman 1990) Likewise, Musharraf's administration apparently generated 'rents' through maneuvering of share prices in stock market to benefit a specific group favored by government officials (Hussain 2004). Consequently, this unchecked use of political power and corruption by politicians impaired the process of economic development by inhibiting the private sector investment.

The estimated coefficient for globalization is positive and significant, inferring growth rates increases with an increase in degree of openness in an economy. The findings are substantiated by the empirical evidence which supports the growth stimulating role of globalization especially in developing countries like Pakistan through adoption of transport and communication technologies, efficient allocation of domestic resources, increase in capital formation and factor productivity (Edwards 1998; Dollar and Kraay 2004).

The estimated coefficient for inflation is positive but insignificant. This inconclusive nature of relationship between inflation and economic growth is supportive of the past studies which indicate that inflation does not affect growth rates of an economy (Bruno and Easterly 1998; Sidrauski 1967).

De jure Political Power

In Eq. (4) de jure political power is being regressed on political institutions and the estimated coefficient for political institutions is positive but insignificant; inferring political institutions do not determine de jure political power. This implies that political institutions are extractive in nature. Keeping in view of chequered political history of Pakistan, the results are justified. The evolution of inclusive political institutions in Pakistan remained flawed due to rampant political instability, widespread corruption and periodic military coups. For instance, since its creation in 1947, Pakistan had been under direct military rule for 33 years (Hassan 2011). As a result, parliament of Pakistan, which is prime source of de jure political power, could not emerge as a supreme legislative institution in country making laws to promote inclusive growth in the country. Instead it had been manipulated by the political elite to protect their economic interests (Husain 1999; Waseem and Hayat 1997).

Political Institutions De jure Political Power Economic Institutions Nexus

Economic Institutions

GMM estimation of the structural Eq. (5) depicts that estimated coefficient for de jure political power is negative and insignificant which shows that de jure political power does not impact economic institutions of Pakistan. This finding suggests the extractive nature of economic institutions of Pakistan. Literature also supports this finding as historically in Pakistan the institutions of formal power and decision making had been dominated by an elite class who tend to design economic rules of the game which facilitate expropriation of wealth of masses by privileged class due to weak property rights and contract enforcement (Kemal 2001). For that reason, investment levels had traditionally been inadequate to spur economic growth (Hussain 2009). For example, Nawaz Sharif government (1997-99) froze foreign currency accounts (1998) in the aftermath of nuclear testing. It resulted in massive capital flight due to shattering of the confidence of foreign investor on Pakistan's economy (Akbar 2015).

De jure Political Power

In Eq. (6) the results depict that political institutions have positive but insignificant relationship with de jure political power, inferring political institutions do not determine de jure political power. This implies that political institutions are extractive in nature. Keeping in view of turbulent political history of Pakistan, the results are justified. The evolution of political institutions in Pakistan remained flawed due to rampant political instability, hostile civil-military relationships and widespread corruption (Memon 2011). As a result, parliament of Pakistan, which is formal institutions of political power, could not emerge as a supreme legislative institution in country making laws to promote inclusive growth in the country (Waseem and Hayat 1997).

Conclusion

This study aims to investigate to what extent institutions affect the level of economic development of Pakistan. To capture the indirect effect of political institutions on economic performance through economic institutions and de jure political power channels, we employ a

simultaneous equation model for estimation of parameters of separate equations, by utilizing system GMM technique, for the time period 1980-2014.

The results depict that political institutions affect economic performance of Pakistan positively and significantly through economic institutions channel. This finding highlights the relative importance of political institutions for higher growth performance as they set the environment in which economic institutions may operate efficiently to influence growth rates directly

Further, the results show that the political institutions do not determine growth performance of Pakistan through de jure political power channel. This empirical evidence confirms the common view point that that the political institutions in Pakistan are inherently extractive in nature as they tend to distribute political power narrowly and arbitrarily, allowing political and economic elite to enrich themselves by expropriating resources from rest of society. Moreover, the results reveal an interesting finding that de jure political power has negative and significant impact on economic performance. This finding has an important implication against the back drop of Pakistan's politics that historically the political institutions of Pakistan placed de jure political power in the hands of ruling elite who had little interest in devising effective check and balances for use the of political power, security of property rights of general public and implementation of contracts . Thus, inadequate constrains on the use of political power impeded the evolution of 'inclusive political and economic institutions' in Pakistan

The results for the nexus between political institutions-de jure political power- economic institutions--- validate the extractive nature of political institutions of Pakistan which are favorable to foster extractive economic institutions. This suggests that political institutions in Pakistan are likely to engender an environment for weak property rights and contracts enforcement. Consequentially, foreign, and private investment is discouraged which is considered an important driver for economic growth.

Overall results of this study highlights the relative importance of political institutions for economic progress and lends empirical support to the general notion that the prime factor for the poor economic performance of Pakistan is its inability to develop inclusive political institutions which may support inclusive economic institutions. Moreover, the evidence signifies maneuvering of de jure political power by elite for personal gain as a major obstacle in the way of establishing inclusive institutions. Therefore, these findings imply that concentrated effort on the part of government is imperative to make structural reforms that may put stringent constraints on the arbitrary use of political power. Further, steps may also be taken by government to diffuse monopoly of power in hands of narrow elite and distribute it broadly in society, so as to ensure greater participation of masses in availing economic opportunities. Resultantly, such efforts may set stage for inclusive institutions to prosper in Pakistan, which are crucial to achieve sustainable level of economic development.

A next step in our analysis would be to investigate the role of various exogenous factors, such as culture, technology, media and law & order, in shaping the institutions and ultimately the economic development of a country, particularly in the wake of globalization.

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