



Impact of Fiscal Policy on Economic Growth: A Panel Data Analysis across Political Regimes

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ABSTRACT

The relationship between the policies of different political regimes (Democracy and Dictatorship) and economic growth is a topic of debate for political economists since the time when democracy was introduced in the West. Many scholars have endeavored to explore the direct and indirect impact of (the policies of) political regimes on economic growth, but the myth is still unrevealed. The present study intends to shed some light on the impact of political regimes on economic growth through the channel of fiscal policy. The discussion revolves around the effectiveness of fiscal policy variables towards economic growth under different political regimes and to seek the possible reasons for the said relationship. The study uses a panel data of 159 countries over the period 1978-2018. The System GMM (generalized method of moment) has been applied for the analysis that is supposed to tackle effectively the issue of endogeneity. The study proceeds through testing of different behavioral assumptions; for instance, that democratic countries formulate more efficient fiscal policies, which are pro-growth in nature, or that autocratic countries spend public money for their own interests and for the interests of pressure groups, or that the credibility of democracies among the public is stronger as compared to dictatorships and therefore tax collections are more rewarding in democracies, or that democratic regimes spend more on the social sector (health and education) as compared to dictatorships, which leads to higher economic growth through human resource development. The results indicate that the effect of government expenditure is significant and positive on economic growth in democracies relative to dictatorship. Similarly, tax rate shows positive and significant implication on economic growth in democracies while the variable is insignificant in dictatorship. In conclusion, we can safely argue that democracies design effective fiscal policies as compared to non-democratic regimes.

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1. INTRODUCTION

Political economy is concerned with the allocation of scarce resources through political process within a state and to provide livelihood to its people. The combination of economics and political science or politics is actually the core ingredient of political economy (Maggi & Ossa, 2021). Political economy is mostly concerned with social philosophy and behavior of societies as a whole in a political system (KhosraviNik, 2018; Oniş & Kutlay, 2020). It deals with the relationship between society and state or between citizens and state (Ramsay,

2002) a political economist, focused on the relationship between rulers, state and use of power by the rulers whereas (Aubrey, 1957) was in favor of the use of power on individuals on the assumption that individuals are naturally bad.

After the less free era, role of individual became important and as a result John Locke and Adam Smith put forward theories that were strictly against the intervention of government in the economy (Vaubel, 2019). Since then, a more liberalized concept of political economy emerged in the shape of capitalism (a form of political economy). As capitalism flourished in Europe overtime it also brought problems within economic system. The weaknesses in capitalism paved paths for those social scientists that were against the concept of liberalism in economic and political system like Carl Marx, Hegel and Malthus (Boldizzoni, 2020). They provided alternative systems to liberalism of capitalism. Later in 20th century many modern political economists wrote against perfect liberalism in economy like John Maynard Keynes especially after great depression of 1930s (Keynes, 2019; Morgan, 2021). All these scholars of time tried to provide strategies for optimum allocation of resources keeping in mind the relationships between individuals and state.

Therefore, political economics is divided into two broad categories classical political economics and modern political economics. Classical theory advocates and supports laissez-faire economy while modern theory favors more defined and enhanced role of government in the economy (Bonanno, 2017; Zafirovski, 2019).

As the social and political system changed overtime from 16th to 21st century, the role of government has also become more pronounced and complex (Kuhner, 2020). More dependence of individuals on the government has drastically changed the concept of political economy (Estes, 2020). The governments now have to regulate markets, control prices, provide public goods and engage in policy making for operating the economy (Giocoli, 2021).

The increasing role of the government over time has also started a debate that which form of government is efficient in regulating the economy. Some argue that democratic regime best regulates the economy while others are in favor of autocratic regime (Singer, 2018). Then the contradictions on the direct and indirect impacts of political regimes on economy emerged among economists like (Przeworski & Limongi, 1993), (Helliwell, 1994) and (Barro, 1996). It is argued that democracy influence economic growth like (Roll & Talbott, 2003), (Persson & Tabellini, 2005). In the same way, (Rodrik & Wacziarg, 2005) and (Persson & Tabellini 2006a) also explores the (within boundaries of a country or region not across countries) effects of democracy on growth. Some of the studies argued that there are implications of democracy on economic growth but through indirect channels of investment, education, governance and human capital like (Hann & Siermann 1996), (Rivera & Batiz, 2002) and (Baum & Lake, 2003) and (Awad & Ragab, 2018). Lipset (1959) was the first who study the relationship between democracy and economic growth.

Research Objectives

The focus of this study is to examine the implications of fiscal policy variables on economics growth across democracy and dictatorship. The current study will also elaborate the direct and indirect effects of political regimes on economic growth. The indirect channel will run through fiscal policy variables like government expenditures and tax policies. Fiscal policy will play the mediating role between economic growth and political regimes.

Research Question

Is there any relationship between political regimes and economic growth?

Hypothesis:

Ho: There is insignificant relationship between fiscal policy and economic growth.

Ha: There is significant relationship between fiscal policy and economic growth.

2. LITERATURE REVIEW

The literature on the relationship between economic growth and political regimes is very much diverse and rich. Many different philosophers, economists and other social scientists studied this relationship according to their own perspective and understanding. There is a contradiction on the findings of earlier empirical and theoretical studies. The debate on which political regime is socially and economically optimal is not new but dates back to Socrates, Plato and Aristotle. The debate is not only academic and philosophical, but also has important policy implications.

In the last three decades, the world has experienced a great transition from non-democratic to democratic forms of government and the investigation of this relationship has become so much important to social scientists. Many studies have been conducted that used different measures of growth and found its relationship with democracy or other political regimes. Different researchers have also been found to be interested in relationships like democracy and globalization, democracy and inequality, democracy and trade liberalization, democracy and redistribution policies, democracy and inflation, etc.

Weede (1984,b) analyzed the impact of political democracy on economic growth along with state strength using data of 75 less developed countries for the period 1960-1979. State strength is represented by proxy of government revenue as percent of GDP. The results revealed that democracy negatively affects growth in less developed countries (LDC). The study concludes that strong states (that which have high government revenues/GDP) may avoid the tradeoff between democracy and economic growth by providing basic necessities to general masses. In weak states the impact of democracy on growth is negligible because of low government revenues/GDP collected from poor and miserable masses.

Pourgerami (1988) investigated the causal relationship between development-democracy-growth and concluded that democracy has positive significant impact on growth of about 40 percent through direct channel. Democracy transmitted its impacts on growth of about 50 and 10 percent via the indirect channel of labor and welfare respectively. In a nutshell, development affects democracy positively through both direct and indirect channels. In return democracy also affects growth through direct and others indirect channels.

Leblang (1996) showed the relationship between democracy and economic growth. The results showed insignificant impact of democracy on growth through the channel of property rights. This effect provided support to the argument that property rights have positive and significant impact on growth irrespective of political regime type. To test the above arguments author of this study regress property rights proxies on democracy variable. It was found that as countries move from authoritarian regime to democratic one, they remove restrictions on current account and provide more resources to private sector. Therefore, in conclusion, democracies protect property rights and enhance growth. However, protection of property rights in dictatorships depends on their commitment to property rights.

Rivera & Batiz (2002) investigated the impact of democracy on growth through the channel of governance or the quality of governance. It was concluded that democracy has a positive and significant impact on growth of GDP per-capita through the channel of governance. The study also explains that as democratic institutions gets stronger they lead to higher rate of return on capital domestically which ultimately lead to capital account liberalization and rise in steady state growth rate.

Baum & Lake (2003) analyzed the impact of democracy on growth through the channel of human capital by investigating data of 128 countries for the time period 1967-1997. They concluded that there is positive and significant impact of democracy on growth through the channel of life expectancy in developing countries where per-capita income is less than \$12500. The channel of education is strong in developed democracies where per-capita income is greater than \$12500.

Drury *et al.* (2006) studied that corruption negatively affects growth but democracy mitigates the negative effect of corruption on growth as compared to non-democracies. The study concludes that democracy offsets the negative effects of corruption on growth as compared to non-democracies. It was further found that non-democracies show greater negative impact of corruption on growth which is due to lack of check and balance by general public, institutions and more powers to dictators.

Miller (2012) investigated the link between economic development and democracy through the mediating role of violent leader removal. It was argued that economic development reduces the probability of violent executive turnover and gives strength to autocratic regimes. On opposite poor economic development leads to violent turnover that further resulted into democratization. It is concluded that economic development has a negative and significant impact on irregular turnover in both autocratic (dictatorships) and democratic regimes. Further results show that economic development increases the probability of democratization only when violent turnover occurred in recent past.

Cervellati and Sunde (2014) observed the empirical relationship between democracy, social conflicts and economic growth. Two main results were that when there is conflict it must lead to negative growth effects and secondly impacts of democratization become smaller on growth when conflicts are introduced. It is further found that democracy has a positive and significant effect on growth in peaceful transition while in case of violent transition have no or even negative effects on growth.

Przeworski and Limongi (1993) analyzed both theoretically and statistically the positive and negative effects of democracy on growth by investigating 21 different studies and discussed flaws in those studies. They argue that in democratic regime, there is high demand for immediate consumption which hinders savings and negatively affect investment and growth. In contrast dictatorship mobilizes savings which leads to rise in investment and growth. Democracy better protects property rights which further leads to growth while dictatorship can alter property rights policies for its own benefits. Growth friendly dictatorships have advantage to be more autonomous and suppress pressures from interest groups. On the other hand efficient democratic institutions also give autonomous powers to democratic government to bear pressures of rent seekers which ultimately lead to growth.

Burkhart and Lewis-Beck (1994) figured out that how economic development increases democratic rating of a country in the world on democracy scale. They concluded that economic development has significant positive impact on democratic prospects of a nation. It is revealed that for every tenfold increase in economic development indicator taken here as (energy consumption per-capita) there is two and a half point rise of a nation on democracy scale.

Helliwell (1994) investigated two way relationships between democracy and economic growth. The results show negative and relatively insignificant impact of democracy on growth. The impact of democracy on economic growth is positive through the channels of education and investment. Therefore, direct impact of democracy is negative while indirect impact is positive. There is no significant impact of democracy on economic growth (GDP per-capita) even by using different measure of democracy index like (Bollen, 1979 & Gastil, 1994).

Barro (1996) analyzed the impact of democracy on growth by investigating data from a panel of 100 countries. In the presence of some explanatory variables democracy shows negative impact on growth while in the absence the impact becomes positive. The author argued that the omitted variables were also growth enhancing and affected from democratization. It was further found that at low level of political freedoms under democracy shows high growth of GDP reaches to maximum at middle level and at high level of political freedom shows diminishing economic growth.

De Haan and Siermann (1996a) analyzed the impact of political regime on economic growth by using alternative measure of democracy that is of (Gasiorowski, 1996). It was concluded that there is no direct relationship between political regimes and economic growth. In the study of indirect effects of political regimes it was concluded that democracy positively affect investment and economic growth while authoritarian regime have adverse effects. Political regimes have no robust impact on growth through the channel of secondary school enrollment.

Minier (1998) compared growth experiences of countries that came across significant changes in democracy level with those countries which were almost similar but did not face such democratic changes. Looking at different samples of countries it was concluded that countries experienced increase in democracy grow faster than countries that did not. On the other hand countries that face decline in democracy level grows slower than its rival control group countries.

Gasiorowski (2000) investigated the effect of democracy on macroeconomic performance by observing the indicator of inflation and economic growth differences in more and less democratic regimes. Granger causality test were carried out which indicates that democracy does granger causes inflation and economic growth but the two variables does not granger causes democracy even at different lags. Democracies are more inflationary in nature due to focus on fulfillment of consumption demands of public hence retard economic growth. Next the focus turns to comparison between new and mature democracies.

Almeida and Ferreira (2002) compared the variability of economic performances under different political regimes. This paper basically gives empirical evidence to theoretical arguments of (Sah & Stiglitz, 1991) and (Rodrik, 1999). From the first test of growth variances, it was concluded that autocratic regimes show more volatile growth than democratic regimes. Even with different specifications and techniques, the results still hold that most centralized societies show more variability in growth and also in policies than less centralized economies. This paper evidences that both best and worst performance are shown by autocratic regime but democratic regimes are relatively stable growth performers.

Bhagwati (2002) provided theoretical support to his argument that democracy is not a necessity to derive economic development. He argued that there is a mixed experience of the impact of democracy and dictatorship on economic development. It is concluded that democracy and dictatorship alone cannot lead to economic development. But other complementary sources such as open trade and markets, peace, low wastage and efficient allocation of resources, good governance, proper check and balance through free media and judiciary are required for economic development.

Rodrik and Wacziarg (2005) showed that democratization is not associated to bad economic outcomes in reaction to the arguments that democratization leads to poor economic growth. It is concluded that democratic transitions lead to a lower economic growth. The results change as dummies for old and new democracies were introduced. It is found that coefficient of new democracies was positive and significant while for established democracies were small and negative. In conclusion democracy had no bad effects on growth and output volatility as opposed to different claims of scholars.

Doucouliaagos and Ulubaşoğlu (2008) showed democracy and economic growth relationship through Meta-analysis by looking at 84 studies in which they estimates 483 regressions. They concluded that democracy is having positive impact on growth. Indirect effect of democracy on economic growth is positive through different channels like economic freedom, human and physical capital, trade openness, inflation and political stability.

Papaioannou and Siourounis (2008) investigated the effects of democratization on growth and explore the relationship through within country approach in contrast to cross-sectional approaches. Before transition some shows positive significant effects and is considered due to anticipation of investors that country is moving

toward democracy. The transition period shows negative impact and considers it transition cost. After democratization shows highly positive growth effects because now institutions becomes more free and strong. Schiffbauer and Shen (2010) analyzed growth performance under democracy and dictatorship. It was concluded that long-run growth of democracies are better than dictatorship in relatively rich and high income countries. On empirical grounds it was concluded that poor dictatorships performs better than poor democracies in terms of average long-run GDP growth.

Diebolt *et al.* (2013) investigated dynamic interdependence of growth processes across countries that vary according to democracy level. It is found that countries having high democracy level are not interacting in growth processes with countries that have low democracy level on the scale. It was further argued that geography alone is not there but democracy level is another determinant of economic growth in interdependent world.

Fiscal Policy and Political Regimes

The democratic governments are more accountable to the public because after certain period of time they have to go back to people for votes on the basis of their pervious performance. Therefore they try to formulate such a fiscal policy that benefits general masses with a view to come into power again in coming elections. That's why they fulfill the immediate demands of general public according to their preferences and try to provide better life necessities like health, education and food (Box, Marshall, Reed, & Reed, 2001).

The democratic regime tries not to indulge in wars and conflicts, thus leads to lower spending on military and devotes more resources to social spending and welfare programs (Habibi, 1994) (Oneal & Russet, 1997) (James *et al.*, 1999) and (Lebovic, 2001). Similarly Plümper & Martin (2003), Hausken *et al.* (2004) and Adit *et al.* (2010) states that at low levels of democracy there is high government spending to gain support of elites while at high level of democracy spending is high to fulfill demands for public goods. The democratic government also tries to lower the burden of taxation because they have the fear that, there may be a reaction against the new tax in the form of protests and riots against the government. Similarly there is a check and balance by the legislative bodies and fiscal policy should be approved by the legislative bodies before implementation (Acharya, 2018). Similarly fiscal policy decisions are also affected from the ideology of the political party in power (Barnes & Hicks, 2018; Benedictis-Kessner & Warshaw, 2020). A more communist party will try to allocate more resources to poor and deprived community of country and will try to allocate more resources to basic necessities according to their political manifestos. In contrast a capitalist party will try to reduce taxation for businesses and allocate more resources to enhance economic activities and encourages investments (Felber & Hagelberg, 2020). The above two arguments regarding party manifestos may or may not be implemented according to the commitment by the political parties in their political campaign in elections.

The fiscal policy decisions of autocratic regime found to be more diverse and there are variations in fiscal policy as in China, Saudi Arabia and in Syria the situations differ radically. It is general agreement that autocrat is not accountable regarding his decisions of resource allocations and heads of expenditures. Similarly he had no obligations to approve the national budget from the parliament. Autocrats allocate more resources to elites and pressure groups to gain support for his government. Therefore less spending on public goods relative to democracies (Deacon and sha2006). Similarly to repress public to avoid protests against the autocrat regime, there is high spending on military and security apparatus. Thus leads to lower allocation of resources for social goods provision (Wintrobe, 2001, 2012) and (Acemoglu *et al.*, 2010).

3. MODEL AND METHODOLOGY

Economic growth is an indicator of development and prosperity of an economy. Due to such importance of growth many scholars attempted to find different variables that affect growth in one way or another. Some find variables that directly affect economic growth while other focused on variables that affect growth through some channels and role of mediating variables. Similarly inertial impact is also discussed by economists. Lagged dependent variable is used because current values of dependent variable are influenced mostly from its past values (Shumway & Stofier 2006), (Beck & Katz, 2011).

Achion (2000) criticizes the use of lagged dependent variable on the basis that it leads to model misspecification and biasedness. Kelle and Kelly (2006) opposed Achion (2000) and argued in favor of lagged dependent variable that if we exclude it from the model, it will lead to omitted variable biasedness. Similarly if there is autocorrelation in residuals then lagged dependent variable specification are more appropriate (Hendry, 1995) and (Wooldridge, 2012). Due to these reasons our first variable in equation (1) on RHS is lag of GDP per-capita which is suggested by neo-classical growth theory to control inertial and dynamic trends see Barro (1997), Baklouti & Boujelbene (2018) and Drury *et al.* (2006).

The relationship between political regimes and economic growth is crucial one among political economists. The empirical studies on the relationship between political regimes and growth based their analysis mostly on neo-classical growth model and their extensions. For references see P. M. Romer (1990), Barro (1996), Lebleng (2006), Shiffbaur and Lin (2010), D. Romer (2011). However we follow the augmented Solow model by Mankiw *et al.* (1992). Similarly we follow North (1973) to bring political institutions in our neo-classical growth model. We have made some modifications and our baseline model as follows:

The Model

$$Y = A f(Y_{(t-1)}, HC, PC)$$

Where $A = g$ (Political regimes, Economic Policies)

In econometric form we can write the equation as

$$Y_{it} = \beta_0 + \beta_1 Y_{i,t-1} + \beta_2 hc_{it} + \beta_3 pc_{it} + X' \varphi + \delta_i + \epsilon_{it}$$

Where $i = 1.2.3 \dots n$, $t = 1.2.3 \dots T$

The subscript (i) refers to each cross-sectional unit and subscript (t) refers to time. The dependent variable is natural log of GDP per capita. Labor is not introduced directly in the above equation instead effective labor (which acquire knowledge and skills) in the shape of human capital (hc) is introduced because many scholars suggest that human capital is a determinant of economic growth (Lucas, 1988; Mankiw *et al.* 1992). pc refers to physical capital, it is found from earlier literature that along with human capital, resources devoted to physical capital leads to economic growth. Third variable which is the lag of dependent variable is included in baseline equation in order to capture inertial and dynamic trends in growth and is included to control for convergence and to tackle first order autocorrelation. At last vector X includes other control variables while δ_i refers to individual fixed effects.

The variable (democ) is introduced in the baseline equation as a political variable that will capture the regime impact on economic growth in equation (2). This variable is further based on two worldwide used indices of political regime that is freedom house and polity index. Vector X includes control variables that are likely to be correlated with growth.

$$Y_{it} = \beta_0 + \beta_1 Y_{i,t-1} + \beta_2 hc_{it} + \beta_3 pc_{it} + \beta_4 democ_{it} + X' \varphi + \epsilon_{it} \quad (2)$$

Where $i = 1.2.3 \dots n$, $t = 1.2.3 \dots T$

In equation (2.1) polity index (ranges from -10 to 10) measure of democracy level is used to capture political regimes impacts on growth.

$$Y_{it} = \beta_0 + \beta_1 Y_{i,t-1} + \beta_2 hc_{it} + \beta_3 pc_{it} + \beta_4 polity_{it} + X' \varphi + \epsilon_{it} \quad (2.1)$$

Model of Economic Policies and Political Regimes

The role of pro-growth policies i.e. fiscal which enhance economic growth are intensively discussed and appreciated in earlier literature. Different studies discussed that growth did not depend on political regimes but pro-growth policies are required to enhance growth like (Weede, 1984a), (De Haan & Siemann, 1996b). Similarly (Persson & Tabellini, 2002) analyzed relationships between political institutions and economic policy. This study is an attempt to explain the growth enhancing policies and to discuss effectiveness of fiscal policy variables for growth under different political regimes. Fiscal policy variables along with democracy are incorporated in following baseline model.

$$Y_{it} = \beta_0 + \beta_1 Y_{i,t-1} + \beta_2 hc_{it} + \beta_3 pc_{it} + \beta_4 democ_{it} + \beta_5 pol_{it} + X' \varphi + \epsilon_{it} \quad (3)$$

Where $i = 1, 2, 3, \dots, n$, $t = 1, 2, 3, \dots, T$

Variable (pol) is basically policy variable. It will capture direct impacts of different policies on economic growth. There are three policies in current analysis, monetary and trade policy. We will develop model for both individual impact and conditional (under political regimes) impact of policies on economic growth. Now we are going to develop our model step by step by introducing different policies in equation 3.

Fiscal Policy and Economic Growth

Literature suggests that role of fiscal policy in growth model is significant and positive. If government increases its expenditure or decrease taxes both leads to enhance growth. In equation (4) β_4 will capture the fiscal policy impacts on growth. However, the main question is what is the role of fiscal policy in growth under different political regimes? Sub equations incorporate different indicators of fiscal policy along with political regime variable and their interactive part. The vector X includes control variables that also influence growth. This vector includes additional controls from monetary and trade policy indicators. These additional controls are added to capture partial effects of fiscal policy on growth under democracy and dictatorship.

$$Y_{it} = \beta_0 + \beta_1 Y_{i,t-1} + \beta_2 hc_{it} + \beta_3 pc_{it} + \beta_4 fp_{it} + X' \varphi + \epsilon_{it} \quad (4)$$

Equation (5) introduces fiscal policy (fp) and regime variable (democ) at the same time and interactive term of regime and Fiscal policy that will find the impact of fiscal policy variable on growth conditioned upon political regimes. Pryor, (1968) and Kornai, (1992) carried out some analysis on the impacts of democracy on size of public sector and also differences in different public policies between democratic and non-democratic regimes.

$$Y_{it} = \beta_0 + \beta_1 Y_{i,t-1} + \beta_2 HC_{it} + \beta_3 pc_{it} + \beta_4 democ_{it} + \beta_5 fp_{it} + \beta_6 fp_{it} * democ_{it} + X' \varphi + \epsilon_{it} \quad (5)$$

Where $i = 1, 2, 3, \dots, n$, $t = 1, 2, 3, \dots, T$

GE in equation (5.1) is government expenditure as indicator of fiscal policy. Different types of government expenditures are there but studies are found which analyze military expenditure under different political regimes like (Schmitter, 1971) and Habibi (1994) find military spending correlation with political regime. Easterly and Rebelo (1993) also find relationship between democracy and other items of tax and government spending. Similarly Lindert (1994) compares between democracies and non-democracies in terms of spending on pensions, welfare, and unemployment and health sector. Persson, Roland, and Tabellini (2000) compare the differences between spending in presidential democracies and parliamentary democracies.

The variable (tax) in equation (5.2) refers to tax revenue of the government as another indicator of fiscal policy used worldwide. A small number of studies were found that showed a relationship between government revenue and economic growth through taxes like (Olson, 1993) and (Boix, 2003). (Mulligan, Gil, & Sala-i-Martin, 2004) disagree with the argument that democracies and non-democracies have different public policies but autocratic government had higher taxation because of extra military spending. In the same manner changes in political (electoral) costs of taxation lead to changes in taxation and spending levels (Becker & Mulligan, 2003) and (Kato, 2003). Similarly (Lindert, 2004) argued that democracies have efficient tax structure which leads to higher taxation. Democracy and fiscal policy variables Interactive terms are also introduced which will show fiscal policy in different political regimes through its tools.

$$Y_{it} = \beta_0 + \beta_1 Y_{i,t-1} + \beta_2 hc_{it} + \beta_3 pc_{it} + \beta_4 democ_{it} + \beta_5 ge_{it} + \beta_6 ge_{it} * democ_{it} + X' \varphi + \epsilon_{it} \quad (5.1)$$

$$Y_{it} = \beta_0 + \beta_1 Y_{i,t-1} + \beta_2 hc_{it} + \beta_3 pc_{it} + \beta_4 democ_{it} + \beta_5 tax_{it} + \beta_6 tax_{it} * democ_{it} + X' \varphi + \epsilon_{it} \quad (5.2)$$

4. DATA DEFINITIONS AND DESCRIPTIONS

Economic Growth

The dependent variable is economic growth, mostly refers to annual percentage increase in real per-capita gross domestic product or output. Earlier studies used growth in real per-capita GDP or per-capita GNP includes Barro (1996), Gasiorowski (2000) and Diebolt *et al.* (2013). In this analysis we will use natural log of real per-capita GDP in constant 2005 US dollar represented through (Y) in the model for the time period 1978-2013 Main sources include World development indicators (WDI) of World Bank.

Democracy / Political Regime

We used two more common indices that are freedom house and polity. Freedom house is an American based autonomous organization involved in ranking of countries on a seven point democracy scale ranges from 1 to 7. The extreme lower value of the scale that is 1 refers to democratic regime and other higher extreme which is 7 refers to non-democratic regime. Freedom house index is based on further two categories. First is a political right¹ and second are civil liberties and by averaging these two categories a seven point scale is developed on which democracy level of each country is measured. Earlier studies which use this index include Helliwell (1994), Lebleng (1996), Minier (1998) and Papaioannou & Siourounis (2008).

Polity Index

This polity project is a continuation of research program established by Gurr (1985). We will use this index in our study for the time period of 1978-2018. In this index a 21 point scale is constructed ranging from -10 to +10. The extreme negative value indicates non-free and non-democratic countries. On the contrast extreme positive value on the scale represent free and perfect democratic country. The latest issue that is Polity-V will be used for this variable.

Human Capital

Human capital is considered as a major determinant of growth in endogenous growth models Lucas (1989). It refers to high level of skills, personal abilities, intelligence and knowledge with labor force. Two major variables used in the literature are gross secondary school enrollment and log of life expectancy. Earlier literature which use this variable includes Weede (1984), Helliwell (1994), Barro (1996) and Shiffbauer and Shin (2010). In this study, we will use secondary school enrollment (gross) in percentage form for the time period 1978-2018. Main sources of data are World development indicator (WDI) of World Bank.

Physical Capital

Along with human capital physical capital is also required to produce output and enhance growth. Physical capital refers to machines, equipment, infrastructure, building and tools etc. required for production. In this study we will use gross fixed capital formation (investment) as a percent of GDP for the time period 1978-2018. Main source of data include World development indicator (WDI).

Government Expenditure and Taxation

Government expenditure is a major tool of fiscal policy. In this study we used government expenditure as a percent of GDP for the time period 1978-2018. Earlier studies which use this variable is (De Haan & Siermann, 1996a). Another indicator of fiscal policy is taxation. Tax revenue and tax/GDP ratio is mostly used in empirical analysis. We will use tax revenue as a percent of GDP for the time period 1974-2013. The main sources are World Development Indicators (WDI) of World Bank.

5. ECONOMETRIC FRAMEWORK

Empirical literature used different techniques in analysis of the relationship between economic growth and political regimes. In this paper we will start from Ordinary least square (OLS) as it provides basis for further considerations of advanced techniques. Then we will apply fixed and random effect specifications to our dynamic panel model. As Fixed effects model allow individual specific unobserved characteristics to correlate with regressors. To account for such heterogeneity intercept are allowed to vary across countries. As we have large no of cross-sectional units, we expect that disturbance of one unit may affect estimates of other cross-sectional unit. Therefore we will also provide estimates of random effect model which did not allow unobserved characteristics to correlate with regressors. Therefore the individual constant terms are randomly distributed across cross-sectional units. In random effects model disturbance term is compound in nature as it includes individual; specific and whole panel error terms.

Hausman Specification Test

Now to address the question that which estimator or specification either fixed effect or random effect is applicable to our panel data models. We apply test proposed by (Hausman, 1978), in which he compares between fixed and random effect estimator. In fixed effect regressors are allowed to be correlated with unobserved individual effects but in this case random effect is non-consistent because it assumes that unobserved individual specific effects is uncorrelated to regressors. It is not valid in the presence of heteroskedasticity and serial correlation. Arellano (1993) generalizes this test to make it heteroskedastic and autocorrelation consistent. The strict exogeneity assumption about regressors should hold while performing Hausman test.

Dynamic Panel Models

Arellano and Bond (1991), Blundell and Bond (1998) suggest GMM estimator along with Sargan and Hansen test for over-identification restrictions. They argued that GMM performs better than instrumental variable techniques as it incorporates additional movement's conditions due to asymptotic properties.

Instrumental Variable Techniques

We used this method to tackle the problem of endogeneity. This method has two assumptions that instruments should be strong i.e. appropriately correlated with endogenous regressors but also independent of error term. We have many instrumental variable techniques like two stage least square (2SLS), three stage least square (3SLS) and generalized method of movements (GMM).

In this study we will apply dynamic panel data estimators proposed by Arellano and Bond (1991) and then by Arellano & Bover (1995) and further modified by Blundell and Bover (1998). These estimators use generalized method of moment (GMM) proposed by Hansen (1982). Earlier studies used lags of regressors as instruments but one can also use exogenous instruments from outside the model.

To check the strength of instruments, R^2 of the first-stage regression is used proposed by Bound *et al.* (1995). A second option is to test the joint significance of instruments by F-test.

To check the over-identification we apply commonly used test called J-test proposed by (Hansen 1982). This test is chi-square distributed. If the null hypothesis is rejected it implies that instruments are not fulfilling the required condition of exogeneity.

We will also use system Generalized method of moment proposed by Arellano, Bond (1995) / Blundell and Bover (1998) in estimations to tackle the endogeneity problem along with other problems.

Fiscal Policy Variables across Political Regimes



Fiscal Policy Variables and its Relationship with Political Regimes

The above graph shows fiscal policy indicators trend against political regimes. It shows the difference between democracy and dictatorships regarding government expenditures and revenue from taxations. The bold line shows that how government expenditure changes overtime as regime shifts from autocratic to democratic regimes. We can observe that there is no such difference between democracy and dictatorships in terms of government expenditures. As the data show a linear horizontal line parallel to x-axis. What could be the reason? In autocratic regime the autocrats try to favor those who support him and also his ministers who are engaged in clarifying the character of autocrat.

Now come to democratic regime and government expenditures patterns. The situation is relatively better in democratic as compared to autocratic regime because there is check and balance on the expenditures of government. There are categories of countries where government expenditures are made with great care and treated it as a sacred trust of the people. It includes those countries that are relatively mature democracies along with good economic conditions. It includes United Kingdom (UK), United States (USA), Norway and other high income European countries. The opposite is true in relatively less mature and low income democracies like that of Pakistan, Bangladesh, Srilanka and other Latin American countries.

As far as second indicator of fiscal policy is concerned which is taxation it shows some positive trends as regime shifts from dictatorship to democracy. It means that actually the revenue from taxation increases as a country moves toward more democratic norms. It can be perceived in countries like America (USA), UK, Germany, France and others where democracy flourished and as a consequence their most of revenue came from direct and indirect taxation. In contrast countries like Saudi Arabia, Pakistan and former Iraq, Iran and even China they collect lower revenue from taxation.

In democracies general masses trust its rulers and are willing to pay taxes without any difficulty. They know that government we select is efficient, not corrupt and capable to handle our money. Democracy itself came into existence due to development of moral values, institutions and giving social liberties. On the opposite dictator comes into power through back door. That's the reason that general people are reluctant in handing over their money in the shape of tax. In dictatorships there is huge line of tax evaders.

6. RESULTS AND DISCUSSIONS

This section focused on fiscal policy implications for economic growth to discuss that how fiscal policy decision performs under democracy and dictatorships. The question we are addressing is that how fiscal policy affects economic growth under democracy or dictatorships or in other words how this tool is used by the two regimes. We used polity index to capture impact of political regimes.

Table 1 provides empirical estimates of fiscal policy and political regimes by applying OLS. We Split the sample into further sub-samples of democracy and dictatorship. Model 1 and 4 used full sample and present results of interactive terms like government expenditures and political regimes and taxation and political regimes respectively. Other models that are 2, 3, 5 and 6 presents estimates of sub-samples in which models of democracies and non-democracies are separately presented. The first three models are related to government expenditure and later models are related to tax revenue decisions.

Model (1) shows that government expenditures negatively affect economic growth where rise in government expenditure leads to decline in economic growth. The negative sign is due to the fact that government expenditure includes expenditures on defense and government consumption expenditure. As these are burdens on the government treasury.

Table 1. Fiscal Policy and Economic Growth Under Political Regimes (OLS).

Variables	Whole Sample (1)	Non-Democracies (2)	Democracies (3)	Whole Sample (4)	Non-Democracies (5)	Democracies (6)
LDV	0.974*** (0.00467)	0.967*** (0.00949)	0.982*** (0.00536)	0.971*** (0.00668)	0.983*** (0.0214)	0.965*** (0.00697)
Govt exp	-0.00525*** (0.000764)	-0.00614*** (0.00139)	-0.00411*** (0.000921)			
Govt exp*polity	6.77e-05 (4.54e-05)					
Investment	0.00710*** (0.000602)	0.00658*** (0.000901)	0.00772*** (0.000846)	0.00776*** (0.000858)	0.00854*** (0.00182)	0.00682*** (0.00101)
Inflation	-0.00143*** (0.000174)	-0.00107** (0.000447)	-0.00156*** (0.000184)	-0.00215*** (0.000473)	-0.00184 (0.00157)	-0.00285*** (0.000525)
Education	0.00133*** (0.000244)	0.00207*** (0.000398)	0.000705** (0.000331)	0.00104*** (0.000362)	0.00115 (0.000829)	0.000976** (0.000447)
Pop-growth	-0.0119*** (0.00399)	-0.0139** (0.00591)	-0.0136** (0.00655)	-0.0147*** (0.00471)	-0.0193** (0.00942)	-0.0192** (0.00770)

Cont.

Tax				-0.000817	-0.00157	-0.000365
				(0.00105)	(0.00287)	(0.000828)
Tax*polity				-3.34e-05		
				(7.88e-05)		
Constant	0.177***	0.211***	0.134***	0.155***	0.0716	0.227***
	(0.0312)	(0.0558)	(0.0416)	(0.0444)	(0.124)	(0.0517)
Observations	771	258	523	391	86	308
R-squared	0.995	0.989	0.995	0.995	0.987	0.996

Note: *** shows significant at 1 %, ** significant at 5 % and * at 10 %.

Most economists believe that higher government expenditure shifts resources from private sector to public sector although they believe that private sector allocates resources more efficiently (Durary *et al.*, 2006). The expenditure on day to day functions of government which includes expenditures of president/ prime minister, ministers and other organs of state, compensations to employees and other necessary expenditures negatively affect economic growth. Mostly governments make expenditures on projects through which they attract votes in the upcoming elections and to increase public support for their governments. Governments not all but some of them invests in most popular demands of their peoples in order to get their trust which ultimately benefits few at the cost of others which leads to decline in economic growth as a whole.

This gesture is from both types of governments whether that is democratic or autocratic form. However, it was observed that this behavior is relatively lower in democratic regimes than autocratic ones. The reason is that there is check and balance on democratic government by the institutions like judiciary, media and others as well as by general masses. It is required (Constitutionally) for democratic or elected government to approve each of expenditure before it is practically made from the congress or parliament. If the general living standard is not increasing and governments are making huge budgets and makes higher expenditures then people will kicked out rulers from their offices in the upcoming elections.

Agell *et al.* (1999) were strictly against each other regarding the effect of fiscal policy on economic growth. The former study argued in favor of inverse relationship between government expenditures and economic growth. In response Agell *et al.* (1999) criticizes on the grounds that these results are due to incorrect tackling of endogeneity problem. In reaction Hanreksan (2002) conclude again the negative relationship with extreme care for endogeneity.

In Table 1 model (2) and (3) compares the two regimes while we drop political regimes and interactive terms to extract better intuitions. We can observe that the government expenditure coefficient of democracies are lower than non-democracies in magnitudes. The magnitude of democracies are (-0.004) while for non-democracies its (-0.006) which is clearly greater than the former. It means that although expenditure in both regimes affects economic growth negatively but in democracies its magnitudes is lower.

In Table 1 model (4) presents second tool of fiscal policy that is taxation and its implications for economic growth. In this although taxations negatively affects economic growth by reducing private consumptions demand. Secondly its reduce inflation if taxes are increased and the opposite is true as we know that inflation is fatal for economic growth. Third tax revenue also finances government expenditures which have both positive and negative multiplier impact on growth. In model (4) the direct impact of tax revenue is negative but insignificant while indirect impact under democratic regimes it's positive. We can observe this by looking at the interactive terms of tax and political regimes. This shows that tax revenue is used efficiently in those projects which are beneficial for society and leads to positive effects on economic growth in democratic

societies. The matter of insignificance and maybe some changes in the signs are observed in GMM estimations at later stages.

In model (5) we drop interactive terms and observe the impacts of tax revenue on economic growth under dictatorships. We can observe that the sign of tax coefficient is negative although insignificant. The negative sign is due to high taxation under autocratic regimes which not even discourage investors but also reduces consumption and hence economic growth. If we think from supply side economics, the situation will be clear that if producers and entrepreneurs observe that most of the income is taken by the government in the form of income tax. They will simply quit and shifts their businesses somewhere else or to other countries where tax are moderate and they do their businesses in a pleasant and unrestrictive environment. Laffer curve provides a better answer for high rates of tax which after some threshold level lead to lower tax revenue and hence decrease economic growth.

Dictatorships mostly impose high tax to finance their high consumption expenditures and to provide luxuries to his supporters and rent seekers. In autocratic regimes some cluster of pressure groups and rent seekers get benefits by paying lower tax or even evade tax by supporting the dictator. In return the whole burden is transferred to other social classes of the society. Tax evasion, tax exemption to specific groups is considered as corruption in fiscal budget and revenue collection. This juncture is quite evident in both democratic and autocratic regimes. There are differences in collection of revenues in democracies and dictatorships. In the sense that autocrat and some democratic government officials give tax exemption to their family members, friends and those who support them politically.

If we take the example of Pakistan in Musharraf's regimes new type of taxes were introduced which harm the poor and middle class like value added taxation. Musharraf regime was reluctant to impose taxation on landlords and feudals related to agricultural sector and are partners in government.

In contrast model (6) presents tax implications for growth under democracies. The situation is quite different from that of autocratic regime. We can see negative but smaller magnitude of coefficient of tax revenue for economic growth. It should be clear that sign may change in GMM estimations. It may be due to more moderate taxation in democratic regimes and have more business and productive activities. Other reasons may be efficient allocation of tax revenue, better accountability and more strong democratic institutions. In democratic regime politicians are elected for a finite term. This influences politician behavior toward formulating macroeconomic policies drastically. Alesina and Tabellini (1990), (Lockwood, 2015) (Devereux & Wen, 1998) and Sieg (2001) discussed that democratic government with uncertainty regarding reelection in future don't consider the future cost of current policies. It leads to formulation of inefficient and short sighted fiscal policy which affects severely macroeconomic health of economy. These short sighted policies benefitted private sector for a short time span but in long run it leads to distortion in markets and economic growth.

In comparison autocratic regime need to design long sighted fiscal policies to achieve much broader goals. However this is a normative statement. The reality is that maybe they design and spend on projects for future but there are other components which resulted in distortion on fiscal front. First non-development expenditures (as earlier discussed) which are quite high in dictatorship and affect economic growth badly. Similarly pressure groups, rent seekers and corrupt officials tries to evade tax which reduces revenues for welfare projects. This will ultimately leads to financing the fiscal deficit through internal and external borrowing. In the future the burden will be transferred to budget and bring much harm to economic growth.

Therefore the positive effects of long sighted fiscal policies are offset by the negative effect of rent seekers and corruption in autocratic regime. In the end there is nothing which boost up economic growth. Therefore expenditure reforms are required irrespective of political regimes to enhance economic growth.

Table 2. Fiscal Policy and Economic Growth in Democratic and Autocratic Regimes (Fixed Effects Specification).

Variables	Whole Sample (1)	Non-Democracies (2)	Democracies (3)	Whole Sample (4)	Non-Democracies (5)	Democracies (6)
LDV	0.886*** (0.0180)	0.988*** (0.0331)	0.808*** (0.0237)	0.755*** (0.0308)	0.639*** (0.0862)	0.769*** (0.0342)
Govt exp	-0.00852*** (0.00129)	-0.00646*** (0.00244)	-0.0104*** (0.00198)			
Govt exp*polity	0.000256*** (6.96e-05)					
Investment	0.00773*** (0.000844)	0.00527*** (0.00160)	0.00798*** (0.00112)	0.0123*** (0.00149)	0.0127*** (0.00434)	0.0126*** (0.00177)
Inflation	-0.00181*** (0.000196)	-0.00166** (0.000717)	-0.00196*** (0.000208)	0.00245*** (0.000517)	-0.00548** (0.00220)	-0.00313*** (0.000592)
Education	0.00126*** (0.000418)	0.000824 (0.000887)	0.00257*** (0.000507)	0.00238*** (0.000718)	0.00674*** (0.00172)	0.00199** (0.000876)
Pop- growth	-0.00968 (0.00632)	-0.00700 (0.00958)	-0.00900 (0.0114)	-0.00479 (0.00876)	-0.000499 (0.0126)	-0.0125 (0.0190)
Tax				0.00431* (0.00257)	0.00331 (0.00741)	0.00511** (0.00199)
Tax*polity				0.000360** (0.000161)		
Constant	0.897*** (0.132)	0.148 (0.228)	1.541*** (0.181)	1.565*** (0.242)	2.012*** (0.586)	1.564*** (0.280)
Observations	771	258	523	391	86	308
R-squared	0.867	0.872	0.861	0.804	0.815	0.800
Number of countries	146	82	116	129	38	105

Note: *** shows significant at 1 %, ** significant at 5 % and * at 10 %.

Economic Growth, Fiscal Policy and Political Regimes

The first indicator of fiscal policy is government expenditure. If we look at whole sample model (1) in Table 2, we can see that government expenditure direct impact is negative on economic growth which is consistent with OLS estimates in model (1) of Table 2. However indirect impact i.e. the interactive term of government expenditure and polity is positive. It means that when we move from -10 to +10 (from dictatorship to democracy) the impact of government expenditures become positive on economic growth. This support the OLS estimates of Table 2. The opposite is the case of dictatorship.

In model (2) and (3) of Table 2 split the sample into non-democracies and democracies. In both cases impact of government expenditure is negative on economic growth irrespective of political regimes. It is also obvious that when government consumption expenditure increases, it divert resources from developmental expenditures. Therefore unemployment, inflation and fiscal deficit may rise which retard economic growth. Therefore either regime which fails in optimal and productive allocation of resources lead to lower economic growth. In model (4) of Table 2 present fixed effect estimates of tax revenue implications for growth across political regimes. The model show that direct impact of tax is positive along with indirect impact through

interactive terms. The positive sign can be think of as due to the use of tax revenue. If it is used for the welfare, betterment and uplift of the society, then definitely economic growth will acclerate. Democarcies are more accountable to its public regarding usage of government revenues collect through taxation. That's why the democratic government tries to minimize the wastage of resources and gain the confidence of their voters. In opposite autocratic regime have no such incentives and public are not that much influential as they have no voting powers in the future. So the use of tax revenue is much fragile and the element of wastage in terms of non-development expenditures are high.

Model (5) and (6) in Table 2 split the sample into non-democracies and democracies and present implication of taxation on economic growth. In both regimes the impact is positive but in autocratic regime its is insignificant relative to the significant and positive value in democracies. The insignificant impact of tax revenue on growth in autocratic regime is due to non availability of observations.. Other reasons maybe poor tax collection mechansim in autocratic regimes and also improper and inappropriate taxation on public. Similarly tax exemption to its own supporters and pressure groups like landlords, fuedals and other powerful personal. So in conclusion we can say that tax implications for economic growth are relatively better in democracies as compared to dicatatorship.

Fiscal Policy and Economic Growth (Polity Index)

If we look at Table 1, 2 and with models (1), (2) and (3). We can see that throughout government expenditure is negative irrespective of technique and political regimes. However the magnitude of negative value is lower in democracies as compared to dictatorship. Similarly interactive terms in model (1) of whole sample in all tables are positive and significant. It means that in democarcies as compared to autocracies government expenditure have positive impact on economic growth. It maybe due to the accoutable nature of fiscal policy in democracies. Democracies needs to approve its fiscal expenditures from the parliament that's why they are also accoutable to their parliaments and to public. Therefore democracies due to fear of public response tries to reduce government consumption and luxurious expenditures from the exchequer.

In opposite dictatorships have no such accoutability mechansms and is the sole decision maker regarding fiscal and budgetary policy. He have to spend more money to pleased those interests groups and pressure groups who support his regime and to keep his seat intact. If we observe from practical life the ministers of democracies are more open to public and are from the public that's why they try to safeguard and avoid wastages of people tax money. On other side ministers with dictatorships are selected not eleceted that's why they have no concern on efficient allocation of tax money for the welfare of public. That's why economic growth retard more in dictatorship relative to democracies which is confirmed from magnitudes of estimates in tabes 7.1,7.2.

Tax revenue collection totally depends on the institutional structure and quality. However the use of tax revenue depends on the regime and government in power. If we look at model (4) whole sample in Table 1, and 2, we find that interactive term with polity and direct impact of tax on growth is positive. It means that democracies consider tax revenue as sacred trust in their hands and spend it for the public welfare as a whole not for their individual benefits. However in model (5) and (6) we can see that in GMM democracies shows significant and positive impact while autocracies shows positive but insignificant impact of tax revenue on economic growth. In fixed effect specification results are positive and significant.

These differences is due to the facts that in OLS there is problems of autocorrelation, heteroskedasticity and also endogeneity. When we remove the issues in GMM we find that results of tax implications for growth is positive and significant in democracies. This means that democracies collect more revenues relative to dictatorship but as far as use of resources is concerned democracies are efficient practically. In living style and luxurious Saudis shiekhs are living a more luxurious life. They spends huge amount of money on their cars

irrelevant expenditures, gambling etc. On other hand in India it is very difficult for prime minister even to afford his own car or house. Sometimes the data is unable to capture the practical issues especially when you are dealing with indices. However practically the issues prevails and there is differences in fiscal policy behavior in democracies and dictatorships.

Usually tax collection and tax revenue doesn't depend on democracy or autocracies. It really depends on the structure, efficiency and simplicity of tax collecting institutions. If there is rule of law for all and institutions are strong then tax as an instrument of fiscal policy matters for economic growth positively. In such situations political regimes don't matter at all. However if institutions are weak, law is not exercised properly and tax structure is complex, then political regimes cannot stop its adverse effects on economic growth.

Table 3. Fiscal Policy and Economic Growth across Political Regimes (GMM with Polity Index).

Variables	Whole Sample (1)	Non-Democracies (2)	Democracies (3)	Whole Sample (4)	Non-Democracies (5)	Democracies (6)
LDV	0.968*** (0.00345)	0.952*** (0.00168)	0.982*** (0.00269)	0.962*** (0.00240)	0.977*** (0.0185)	0.962*** (0.00258)
Govt exp	-0.00232*** (0.000719)	-0.00732*** (0.000314)	0.00200*** (0.000504)			
Govt exp*polity	0.000145*** (3.33e-05)					
Investment	0.0124*** (0.000656)	0.0119*** (0.000188)	0.0118*** (0.000480)	0.0119*** (0.000764)	0.00985*** (0.00186)	0.00948*** (0.000847)
Education	0.0588*** (0.00916)	0.0629*** (0.00395)	0.0659*** (0.00695)	0.0206*** (0.00787)	0.00349 (0.0273)	0.0581*** (0.0114)
Pop-growth	-0.0131** (0.00513)	-0.0443*** (0.00241)	0.00381 (0.00243)	-0.0320*** (0.00409)	-0.0538*** (0.00800)	-0.0165*** (0.00401)
Inflation	-0.00165*** (0.000229)	0.000956*** (0.000129)	-0.00118*** (7.56e-05)	-0.00228*** (0.000270)	-0.00264*** (0.000882)	-0.00251*** (0.000313)
Tax				0.00147** (0.000730)	0.00235 (0.00389)	0.00239*** (0.000413)
Tax*polity				0.000101*** (3.73e-05)		
Constant	-0.0898** (0.0361)	0.152*** (0.0171)	-0.244*** (0.0271)	0.106*** (0.0382)	0.166 (0.155)	-0.0233 (0.0462)
No of Instruments	97	55	78	71	26	59
AR(1)	0.002	0.138	0.027	0.106	0.637	0.146
AR(2)	0.426	0.189	0.765	0.353	0.188	0.764
Hansen J Stat	0.157	0.923	0.204	0.101	0.999	0.190
Observations	640	198	436	324	66	254
Number of countries	112	60	93	104	28	85

Note: *** shows significant at 1 %, ** significant at 5 % and * at 10 %.

Democratic countries like U.S.A, UK and European countries face efficient collection and allocation of revenues i.e., efficient growth enhancing fiscal policies. Similarly China an autocratic country spends most of their revenues on most valuable and welfare providing projects. Their fiscal policy is almost balance in every fiscal year and resembles better allocation of resources. Even in autocratic regime in Pakistan in 1960s, 1980s and in 2000. They show better economic growth performances, less corruption and better fiscal discipline.

Embezzlement in public tax money and government expenditures is also evident in political regimes. Corruption can distort the manner of expenditures and revenue collection. Studies like (Ghura, 1998), (Imam & Jacobs, 2007) and (Tanzi & Davoodi, 2001) argues that corruption reduces tax revenues and distract expenditures and hence retard economic growth.

Economic Growth and Fiscal Policy

We can observe in model (1) of Table 4 full sample that the direct impact of government expenditures is negative while indirect (interactive coefficient of fh*G) impact is positive. This indicates that as we move from democracy to dictatorship, government expenditures asserts positive impact on economic growth through multiplier effect and generation of employment opportunities. The democratic government cannot make any expenditures without prior approval from parliament as opposite to dictatorships which needs no such approvals. In Pakistan it is by law (constitutionally) binding on government to approve the federal budget or expenditures from the parliament every fiscal years see constitution (1973). That's why the accountability is very strict which prevent the government from making excessive non-developmental and consumption expenditures. This leads to mild negative implications on economic growth and efficient allocation of resources.

Table 4. Fiscal Policy Implications for Economic Growth Across Political regimes (GMM with Freedom House Index).

Variables	Whole Sample (1)	Non-Democracies (2)	Democracies (3)	Whole Sample (4)	Non-Democracies (5)	Democracies (6)
LDV	0.960*** (0.00435)	0.926*** (0.00312)	0.984*** (0.00187)	0.962*** (0.00327)	0.970*** (0.00383)	0.973*** (0.00255)
Govt exp	0.000627 (0.00110)	-0.0103*** (0.000158)	0.00182*** (0.000401)			
Govt exp*fdh	0.000809*** (0.000201)					
Investment	0.0121*** (0.000651)	0.0103*** (0.000221)	0.0138*** (0.000403)	0.0117*** (0.000727)	0.0102*** (0.000628)	0.0141*** (0.000632)
Education	0.0681*** (0.00759)	0.105*** (0.00298)	0.0827*** (0.00313)	0.0288*** (0.00860)	0.0136* (0.00752)	0.0271** (0.0117)
Pop- growth	-0.0112*** (0.00403)	-0.0143*** (0.00134)	0.0153*** (0.000920)	-0.0329*** (0.00421)	-0.0484*** (0.00229)	-0.0154*** (0.00365)
Inflation	-0.00188*** (0.000189)	-0.00199*** (6.45e-05)	-0.00118*** (8.09e-05)	-0.00203*** (0.000333)	-0.00109*** (0.000408)	-0.00192*** (0.000151)
Tax				0.00213*** (0.000483)	0.000159 (0.00122)	0.00293*** (0.000420)
Tax*fdh				-0.000211 (0.000146)		
Constant	-0.0474 (0.0416)	0.197*** (0.0156)	-0.392*** (0.0194)	0.0834** (0.0382)	0.160*** (0.0214)	-0.103** (0.0450)
Observations	641	252	389	324	106	218
Number of countries	113	72	79	104	44	73

Note: *** shows significant at 1 %, ** significant at 5 % and * at 10 %.

The results are confirmed by model (2) and (3). In which government expenditure have positive and significant implications for economic growth in democracies (3) as compared to significant and negative implications for growth in autocratic regime (2).

As far as tax is concerned. I discuss it earlier that it totally depends on uses and collection of tax revenues. That regime which imposes optimal tax on individuals and better institutional framework for tax collection will accelerate economic growth through the channel of taxation. If we think from supply side economics when can observe that excessive taxation always leads to distortion in economic growth (Gahvari, 1989). According to (Laffer, 1974) after a threshold level of tax rate, tax revenue tends to fall. As a result we can deduce that creates budgetary problems and hinder economic growth. Tax increases reduce the money available for businesses to make new investments or hire new workers. Tax increases also reduce individuals' "disposable income" (income remaining after tax) also alter people's incentives. When individuals get to keep less of their earnings from work, putting in extra hours becomes less attractive. The supply of labor and the amount of earned income shrinks as a result. Investors will invest less in new projects, ventures, and opportunities. That's what you tax, you discourage. As a result economic growth shrinks. Ibn Chaldea in 14th century in his book "the Muqaddamah" that after certain level of tax rate tax revenues starts decline.

In model (5) dictatorship in Table 4 shows positive but insignificant impact of tax revenue on economic growth. In Table 4 model (6) shows positive and significant impact of tax revenue on economic growth in democracies. We observe differences in implications for economic growth in both regimes but in democracies the legislative bodies have some check and balance on higher taxation and avoid tax rate which are against the desires of general public. Democracies cannot extract extra rents and will try to facilitate and avoid discouragement of labors as a whole. The results of freedom house index is consistent with that of polity index.

7. CONCLUSION

The democratic governments have to work for the welfare of their people because they know that general public has the power to kick out them from offices through votes in upcoming elections. We can observe that government expenditures in autocratic regime have negative while democratic regimes shows positive impact on economic growth. However democratic governments have to spend less public money on luxuries as compared to autocratic regime. They actually reduce non-development expenditures and do not praise their ministers by providing them luxuries in the shape of protocol and other benefits. This moral notion is missing in autocratic regime. He have to spend public tax money on rent seekers, lobbying groups and pressure groups in order to safeguard his rule and confirm his office for several years. Therefore in nutshell we concluded that in democracies, there is more check on government expenditure and that's why had relatively favorable impact on economic growth.

We further concluded that tax revenue has positive and significant impact on economic growth in democracies as compared to insignificant impact in autocracies. This result is due to the fact that democracies don't make over burden their constituents by charging high taxations. No extra tax can be imposed in democracies without prior approval from its legislative bodies. They usually devise tax policy on the basis of principle of equality and ability to pay. Democracies have to run their governments through their constitution and law for all slogan. Therefore no individual or group can evade from taxation. In contrast autocratic regimes wave off taxes from those who support the autocratic regime. That's why revenue in democracies have a positive impact on economic growth.

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