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ABSTRACT

This research paper empirically investigates the outcome of Political stability on economic growth (EG) of Pakistan for the period of 1988 to 2018. Political stability (PS), gross fixed capital formation (GFCF), total labor force (TLF) and Inflation (INF) are important explanatory variables. Whereas for model selection GDP is used as the dependent variable. To check the stationary of time series data Augmented Dickey Fuller (ADF) unit root (UR) test has been used, and whereas to find out the long run relationship among variables, OLS method has been used. The analysis the impact of PS on EG (EG) in the short run, VAR model has been used. The outcomes show that all the variables (PS, GFCF, TLF and INF) have a significantly positive effect on the EG of Pakistan in the long run period. But the effect of PS on GDP is smaller. Further, in this research we are trying to see the short run relationship between GDP and other explanatory variables. The outcomes show that PS does not have such effect on GDP in the short run analysis. While GFCF, TLF and INF have significantly positive effect on GDP of Pakistan in the short run period.

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1. Introduction

A favorite subject of economists is to find out the relationships between economy and politics. These two have a strong relationship as revealed by history of Asian countries. Even that relationship is not always constant due to the change in the pattern of government and politics. It is truth that irregular EG intensely caused by political instability (PI). Lipstel was the first economist who described the term PS in 1960. He explained that a country has consistent dictatorship or democracy for 25 years is considered as a stable country. However the concept of PI has redefined and changed in the recent political and economic conditions. Whatever the logic may be but the tendency to fall down by any government is PI.
Economic activities as well as EG are increased by PS so that foreign and local financiers can invest in a better safe environment. The purchasing power of masses increase earning capacity as preceded by the rise in investment which in turn also increases consumption level, savings and productivity. Unemployment and inflation slowed down due to the PS because uncertainty and social un-rest among the public is created by high inflation and unemployment; that unrest could direct towards violence and general strikes against government policies and employers. There is deep correlation between EG and PS. On the one side, uncertainty connected with the PI environment which can decrease the pace of economic development and investment. On the other side, Political unrest and government collapse both preceded by poor economic performance. But PS is achieved through domination or an elected political party has not to compete for re-elected. In that situation, PS considered as such type of sword which has two edges.

Societies with multiethnic or having diverse cultural attributes generates the serious problem of PI. All the society sections contributed their share in the politically stable state and they are fully satisfied this attitude acts as nation building attitude. In a politically stable situation society are exerted and empowered its capabilities for the nation development. In instability situation the conditions are vice versa, because in instability peoples are without power and unsatisfied, they are loosing trust on their institutions and peoples give importance to their interest rather than state ultimately themselves leads to split. So many nations which are underdeveloped in Africa and Asia, including Pakistan are keen to know that how to solve the uncertainty of social welfare to modernize the society, political participation, national integration, economic development and centralization of authority, these uncertainties have grown in the political systems of underdeveloped countries. By explaining the instability causes PS can be known in underdeveloped nations. Leonard Binder founded five areas which are issue based, these five issues are faced by many states when these states try to manage PS in their system. These five issues based areas are “Distribution crisis, dispersion crises, authenticity crisis, participation crises, as well as identity crisis” (Lucian, 1971). History shows that the countries with PI are considered economically poor along with decision making and policies uncertainty. The financiers observed that change in government again and again results in strategies and resultantly, investors want to invest in safe states and also these states have less political uncertainty. (Alesina & Perotti, 1996).

It is stated that, in the Solow model of growth considered as a traditional model explains EG relies on building capital, growth and savings. On the other hand modern theories about the growth state that human capital formation and technology are the key factors in EG (Sato, 1964). Like that a country’s political situation is also shows that country’s growth level, such as consistent government policies with implementation leading to EG (Baro,2013). According to the political scenario of Pakistan since creation, it could not celebrated politically stable scenario. Almost All kinds of parliamentary to relaunched military coups and democracy-presidential political controls has been experienced along with economic theories from socialism to capitalism and mix of these theses. Twenty four political governments have been past in sixty five years in Pakistan, including; 33 years of military regime which was under different four leaders, fifteen appointed or elected prime ministers and five governments were based on UK terms. Both models were experienced socialist economics and liberal economics. Mostly the liberal economic model sustained successfully in our country Pakistan. The Pakistan’s history is full of governance failures.

Pakistan has so many different ethnic as well as regional groups, on these groups Pakistan’s economy is based but these groups live a life for their particular interest; that was the main concern so that East Pakistan was separated. In 1951 soon after the independence Prime Minister Liaqat Ali Khan was assassinated and thus instability started. Ayub regime lasted for ten years, which led disturbance and Yehya khan in 1968 imposed martial law. At the time of Zulifqar Ali Bhutto, opposition political parties increased PI again this leaded another martial law imposed by Zia ul Haq (Army General). In 1960s growth rate was six percent that felt to 3.7 percent. In the period of Zia ul Haq Jihadi organization and
Kilashinkove culture was at the peak and supported by government ultimately PI followed (Hussain 2010). Zia ul Haq was died in a plane crash after then Benazir Bhutto has taken the office of the Prime Minister. In the era of 1990s, PI was very high in Pakistan. Benazir Bhutto and Nawaz Sharif exchanged the government frequently and therefore again martial law was imposed by Parvez musharaf on 12 October 1999. Musharaf regime continued nine years and in the election of 2008, PPP hold the government. At this time terrorism was in the high range in the country. First time in the history elected government succeeded to complete its time period and left the office to Nawaz Sharif as he won the election of 2013. PI witnessed in the country again at this time as Pakistan Tahreek e Insaf started an agitation in Islamabad the capital city of Pakistan. The government was formed by Pakistan Tehrik e Insaf after the winning of the majority seats in general election of 2018. The government again faced the hurdles for to smooth run created by the opposition parties after uniting themselves (Khan, 2018). This research empirically investigates the effect of PS on the EG of Pakistan in long run. This research empirically investigates the effect of PS on the EG of Pakistan in short run.

2. Literature Review

The literature, especially related to Pakistan, has shockingly revealed that only a small number of researchers explored the impact of political factors on economic development. Many researchers had concentrated on determining the economic development, inflation and investment. As per Qureshi (2010), the Pakistan’s economy has impacted by PI to a great extent since its formation. Since formation, thirty three years have been under military martial law and rest under unstable political systems. PI can lead unwanted basic leadership condition for strategy makers and authorities, it would consequence in short term judgments rather than an attractive long term arrangement. According to Aisen and Veiga (2010) uncertainty in politics decreases the ability of accurate forecasting so that it leads to short term economic policy making.

The research regarding the correlation between EG and PI reveals two main problems; from them the first one is related to the defining of PI. Robock (1971) argued that PI is such type of issue which relies on how to define it. Where as the second phenomena is related to the correlation between EG and PI. Does PS preceeded by EG or EG preceeded by PS or these two major issues comes simultaneously? To analyze above conditions contradictory reacts has been highlighted by research. The first issue is about EG in which high income is generated for citizens which ultimately leads them to government approval and that results in PS (good growth hypothesis) (Paldam, 1996). Another or second issue was the series of constrains was formulated by complex changes in society which changes and dissatisfies the political conditions that lead towards PI (destabilizing growth hypothesis) (Paldam, 1996).

In Pakistan PI observed through non democratic and democratic government, it is also a fact that this criteria is failed to identify PS in Pakistan. PS has only one factor that there is any democracy or not. Earlier it is mentioned that Pakistan has a more EG in military rule than the democratic rule. That is believed it was due to a long run of government in military regime, so long run in government concluded as another factor of PS. Some believe, that PI is due to frequent change in government. Therefor one of these issues is not justified by us. If we want to measure proper PS we have to use the index of PS for the period of 1988 to 2018 given by ICRG (International Country Risk Guide).

Mahmood Azid and Siddiqui (2010), investigated the connection between democracy and EG in Pakistan. They used the year based data and found the conclusion that the democratic system is so much significant for EG especially in Pakistan. They further concluded that continuous government change must impact on the EG; therefore to obtain good gross domestic product and growth in economy the PS is must be ensured. Paolo Mauro (1995), researched that if anyone has various proxies regarding PS is positively connected with private investment and EG. Haan and Siermann (1996) evaluated the negative relationship among lack of political freedom and lack of PS with EG. Authors anticipated cross section model relied
on simple neoclassical production function for the 1963-1988 period in which 97 countries used as sample. In this estimation it was found that in Africa PI is reduced due to EG but in Asia investment is reduced by PI. As stated by Sato, 1964 EG depends on capital buildup, savings and growth this is according to traditional growth model (e.g. Slow growth model). No doubt theories about modern growth are based on human capital formation and technology.

Alesina (1990) explained when a government has low chances to be in power and it would become unstable it starts borrowing money so extra expenditure has been created. Thus debt payments and inflation are increasing ultimately problem has been raised for new elected government. The Budget deficit and inflation conditions have been faced by unstable government. Grossman (1991) has a logic, that is not simillar with previous ones regarding the co-relation between EG and PI. He said that if the political system is week the chances of revolution are also high and also motivation for public is high in involve them in revolutionary as well as anarchist actions. On the other side the nations with strong regime society does not involve in activities which are unproductive and unhealthy. Nasir et al (2008) examined political behavior in various countries about macroeconomic indicators. The study given results that during the autocratic rule acheived aggregate growth in the economy is better than the democratic government. This study is conducted in Pakistan. He argued that autocratic rule perform more better than democratic rule. He further said that the average growth rate and GDP remains always high at the period of autocratic rule.

3. Model Specification

The Solow growth model has been used to check the correlation between PS and the EG of Pakistan. The model was also applied by Abeyasinghe (2004) and Fethi (2007), to analysis the long run and the short run relationship between PS and the EG.

\[ GDP_{it} = \beta_0 + \beta_1 PS_{it} + \beta_2 GFCF_{it} + \beta_3 TLF_{it} + \beta_4 INF_{it} \]  
\[ \Delta GDP_{it} = \beta_0 + ECT_1 + \beta_1 \Delta PS_{it} + \beta_2 \Delta GFCF_{it} + \beta_3 \Delta TLF_{it} + \beta_4 \Delta INF_{it} + ut \]  

In slow growth model, Where, GDP is real Gross Domestic Product, GFCF is gross fixed capital formation, TLF is total labour force, PS is political stability and INF is inflation, Ut is Error Term,. Δ and L are explained as disparity and logarithms correspondingly and ECT is the error correction term. One of the major causes of PI is inflation. Rapid inflation guides the country towards unexpected future investment. One of the main cause of PI is political inflation. Future investment uncertainties are because of high rate of inflation. This leads to political unrest created due to conservative investment’s planning. The Political system is affected by inflation in many ways; it restricts exports, which impacts on countries efficiency. Exports of the country are become more expensive as created by inflarion. Inflation can also affect on the system of tax. Coefficient is negative high inflation affect negtively on growth Edison et al. (2002) and Elder (2004).

3.1 Hypotheses Development

The hypotheses are formulated for estimation and testing. The Majority of the researcher noted that PS has a significantly positive effect on the EG. We have developed following hypothesis.

H1: There is a negative connection between EG and PS.
H2: There is a positive connection between EG and GFCF.
H3: There is a positive connection between EG and TLF.
H4: There is a negative connection between EG and INF.

3.2 Data

The data used in this paper are time series data for Pakistan for the period of 31 years between 1988 and 2018 annually. According to our empirical model, we reflect on five variables: GFCF, TLF, GDP, INF.
and PS. PS is measured on the basis of Government Stability, Socioeconomic situation, Bribery, Investment Profile, Interior Conflict, Exterior Conflict, Military in Politics, Law and Order, Tribal Tensions, Religion in Politics, Democratic responsibility, Bureaucracy Quality. The data of variables are obtained from OECD National Accounts data files, World Bank (WB) national accounts data, Worldwide Governance Indicators and ICRG.

3.3 Research Methodology
3.3.1 Stationarity and Non-Stationarity
Price, money consumption, income and trade are the few from many macroeconomic variable of time series; these variables in practical life are non-stationary by nature. In 1986 Philips has given report when he was given treatment to the non-stationary series along with OLS as misinterpret results will be brought for to achieve economic investigations. The research model can include several confusion after developing problems such as spurious regressions with R square which is very high approximately unity as well as significantly F-statistics value and t value (Newbold- Granger, 1974). If there was no any difference in the stationary series, then it could be integrated as I(0) stationary at level. After taken difference if series is stationary, then it can be called as I(1) integration. In (1979-1981) Dicky and Fuller have given the ADF model and this model is often used in the economics literature, so that the time series stationary can be examined.

3.3.2 Ordinary Least Squares Method:(OLS)
The Simple OLS model has been utilized for since quite a long run investigate. OLS is a procedure for linear regression model for to discovering the parameters that are obscure. This strategy is utilized for to lessen the whole of the squared vertical separation between anticipated reactions and watched the reactions through direct estimation in a specific informational collection. When regressor will be the right hand side as by a simple formula estimator will be shown. There is no perfect multicollinearity is found favor in exogenous regressors then a reliable model OLS estimator is to be used.

3.3.3 Vector Autoregressive Model: (VAR)
For to finding the short run correlation between the different variables, this model is effectively used. This model is also used for to finding the linear interdependence among several time series.

4. Estimation Of Data And Empirical Results
4.1 Econometric Analysis
In this study E-views software has been used for estimation purpose. R2 has been used to analysis the overall robustness of the model. If R2 is near to one it means the model is robust, but if R2 is near to zero, then, it shows that the model is not robust for estimation purpose. It means the relationship between the variables is week. T stats and F stats have been used for the checking overall significance of the model. On the other hand to check the probability of rejecting the null hypotheses we have been used P values. If the P value is less than 0.05, it means we are 95% confident to reject null hypotheses. But if the P value is bigger than 0.05, so in this case we cannot discard the null hypothesis.

4.2 ADF Unit Root (UR) Test
To check the stationary of the variables, the ADF UR test has been used. There are three ways to check the stationary by applying ADF. 1. Without Trend and Constant 2. With Trend and Constant 3. With Constant. The hypothesis is, Ho = 0 UR Problem, H1 ≠ 0 No UR Problem. Decision rules are The null hypotheses cannot be rejected if computed T-value is larger than its critical value. It means the data has faced a problem of a UR. If calculated T-value is lesser than its critical value, in this case we are able to reject the null hypotheses and accept the alternative hypotheses. It means data do not face the problem of a UR. In this research study, stationary of study variables has been checked through the ADF UR test, the Schwarz information measure is applied for receiving the lag selection. So we are able to reject the
null hypothesis if variables are non-stationary at 5% level of significance in time series data.

Table 1 Unit Root Test At Level

<table>
<thead>
<tr>
<th>Variables</th>
<th>Without Trend And Constant</th>
<th>With Trend And Constant</th>
<th>With Constant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T-Stat</td>
<td>P.value</td>
<td>T-Stat</td>
</tr>
<tr>
<td>GDP</td>
<td>3.452874</td>
<td>0.9996</td>
<td>-4.411417</td>
</tr>
<tr>
<td>PS</td>
<td>0.543307</td>
<td>0.8277</td>
<td>-1.692405</td>
</tr>
<tr>
<td>GFCF</td>
<td>2.670183</td>
<td>0.9973</td>
<td>-2.844565</td>
</tr>
<tr>
<td>TLF</td>
<td>19.53650</td>
<td>1.0000</td>
<td>-2.529982</td>
</tr>
<tr>
<td>INF</td>
<td>-0.739626</td>
<td>0.3876</td>
<td>-2.091940</td>
</tr>
</tbody>
</table>

4.2.1 Without Trend and Constant
In the above table, at the 5% significance level, the calculated ADF test-stats values are bigger than the critical value, respectively, so we do not have sufficient evidences to discard the null hypotheses. It explains that there is a UR problem in the variables (GDP, PS, GFCF, TLF and INF). Therefore, it concludes that at level without trend and constant all the variables are non-stationary.

4.2.2 With Trend and Constant
In the above table, at the 5% significance level, the calculated ADF test-stats values are bigger than the critical value, respectively, so we do not have sufficient evidences to discard the null hypotheses. It explains that there is a UR problem in the four variables (PS, TLF, GFCF and INF). While GDP does not have a UR problem because of smaller t-value then its critical value. So in the case of GDP, we can discard the null hypotheses. Therefore, it concludes that at level with trend and constant the four variables are non-stationary and one variable is stationary.

4.2.3 With Constant
In the above table, at the 5% significance level, the calculated ADF test-stats values are bigger than the critical value, respectively, so we do not have sufficient evidences to discard the null hypotheses. It explains that there is a UR problem in the variables (GDP, PS, GFCF, TLF and INF). Therefore, it concludes that at level with constant all the variables are non-stationary.

Table 2 Unit Root Test at 1st Difference

<table>
<thead>
<tr>
<th>Variables</th>
<th>Without Trend And Constant</th>
<th>With Trend And Constant</th>
<th>With Constant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T-Stat</td>
<td>P-value</td>
<td>T-Stat</td>
</tr>
<tr>
<td>GDP</td>
<td>-6.541273</td>
<td>0.0000</td>
<td>........</td>
</tr>
<tr>
<td>PS</td>
<td>-3.980597</td>
<td>0.0003</td>
<td>-3.950712</td>
</tr>
<tr>
<td>GFCF</td>
<td>-3.628158</td>
<td>0.0007</td>
<td>-3.632622</td>
</tr>
<tr>
<td>TLF</td>
<td>-6.790759</td>
<td>0.0000</td>
<td>-3.538362</td>
</tr>
<tr>
<td>INF</td>
<td>-5.932538</td>
<td>0.0000</td>
<td>-5.741970</td>
</tr>
</tbody>
</table>

4.2.4 Without Trend And Constant
In the above given table, at 5% significance level, the calculated ADF test-stats values are lesser than the critical values, respectively, so null hypotheses can be rejected. It explains that there is no UR problem in the variables (GDP, PS, GFCF, TLF and INF). Therefore, it concludes that after taking first difference without trend and constant all the variables are stationary.

4.2.5 With Trend And Constant
In the above given table, at 5% significance level, the calculated ADF test-stats values are lesser than the critical values, respectively, so null hypotheses can be rejected. It explains that there is no UR problem in the variables (PS, TLF, GFCF and INF). Therefore, it concludes that after taking first difference with
trend and constant all the variables are stationary.

### 4.2.6 With Constant
In the above given table, at 5% significance level, the calculated ADF test-stats values are lesser than the critical values, respectively, so null hypotheses can be rejected. It explains that there is no UR problem in the variables (GDP, PS, GFCF, TLF and INF). Therefore, it concludes that after taking first difference with constant all the variables are stationary.

### 4.3 Ordinary Least Square Method (OLS METHOD)
In the above table OLS model has utilized to check the long run connection among GDP and other explanatory factors. The outcomes show that all the factors (PS, GFCF, TLF and INF) in the long run investigation have shown a positively significant impact on the EG of Pakistan. The GDP growth increased by 0.036 units, if on average one unit raise in PS. The positive link among PS and GDP growth was also varified by Alesina et al. (1996), Bashir and Xu (2014), Sierrmann (1996). GFCF and TLF have also a positively significant effect on GDP. The GDP growth increased by 0.273 units, if one unit increase in GFCF on average. The positive link among GDP growth and GFCF was also varified by Barro (1996, 1999). One unit rise in TLF on average will leads to raise GDP growth by 1.073 units. Inflation has also positively significant effect on the GDP. The GDP growth increased by 0.020 units, if one unit raises in INF on average. The positive link among inflation and GDP growth was also varified by Awan (2012). To check the overall robustness of the model R2 has been used. The R2 value is 99.862, which indicates that model is robust.

**Table 3 Ordinary Least Square Method (OLS METHOD)**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficients</th>
<th>t-Statists</th>
<th>Probability</th>
<th>S.E</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.040186</td>
<td>0.274621</td>
<td>0.7858</td>
<td></td>
</tr>
<tr>
<td>PS</td>
<td>0.036685</td>
<td>1.989249</td>
<td>0.0573</td>
<td></td>
</tr>
<tr>
<td>GFCF</td>
<td>0.27771</td>
<td>9.422434</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td>TLF</td>
<td>1.073026</td>
<td>45.69657</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td>INF</td>
<td>0.020386</td>
<td>3.788259</td>
<td>0.0008</td>
<td></td>
</tr>
</tbody>
</table>

R2 = 0.99862, Adj. R2 = 0.99842, F-stat = 4767.90, Prob. (F-statistics) = 0.0000

**Table 4 Alternative Hypotheses**

| H1   | There is a negative connection between EG and PS. | Rejected |
| H2   | There is a positive connection between EG and GFCF. | Accepted |
| H3   | There is a positive connection between EG and TLF. | Accepted |
| H4   | There is a negative connection between EG and INF. | Rejected |

### 4.4 VAR Model
Further, in this research we are trying to see the short run connection between GDP and other explanatory variables. The results show that PS does not have an impact on the GDP of Pakistan in the short run investigation. While GFCF, TLF and INF has a positive impact on the growth rate of Pakistan in the short run investigation.

**Table 5 Vector Autoregression Estimates**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficients</th>
<th>S.E</th>
<th>T-statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP(-1)</td>
<td>0.668927</td>
<td>(0.28552)</td>
<td>[2.34284]</td>
</tr>
<tr>
<td>GDP(-2)</td>
<td>-0.439359</td>
<td>(0.17693)</td>
<td>[-2.48330]</td>
</tr>
<tr>
<td>C</td>
<td>0.209598</td>
<td>(0.16946)</td>
<td>[1.23686]</td>
</tr>
<tr>
<td>PS</td>
<td>0.031946</td>
<td>(0.02376)</td>
<td>[1.34426]</td>
</tr>
</tbody>
</table>
5. Conclusion
The connection between PS and GDP is one of the major points in discussion among researchers involved in field of political economy. EG and PS are genuinely interrelated which develop importance of PS in economic development of any state. This research study explores the impact of PS on EG in Pakistan from the time period of 1988 to 2018. Political stability, gross capital formation, total labour force and Inflation are important explanatory variables, where as for as concern about model specification GDPr has been chosen as a DV (Dependent Variable). To check the stationary of time series data Augmented Dickey Fuller (ADF) unit root test has been used, and whereas to find out the long run relationship among variables, OLS method has been used. The analysis the impact of political stability on EG in the short run, VAR model has been used.

The outcomes show that all the variables (PS, GFCF, TLF and INF) have a significantly positive effect on the EG of Pakistan in the long run period. But the effect of PS on GDP is smaller. Further, in this research we are trying to see the short run association between EG as well as other descriptive variables. The results show that PS has no effect on EG. While GFCF, TLF and INF has a positively impact on EG of Pakistan. PS enhances the EG and economic activity, also be enhanced to benefit the foreign and local investors so that investment would be in a safe hands. So that savings will be boosted, consumption level, as well as productivity; this is because of purchasing power and earning capacity of the masses. Unemployment and inflation are decreased due to PS because unemployment and high inflation create unrest and uncertainty in society and that unrest and uncertainty can create violence and general strikes against employers and Government policies. For the betterment of Pakistan let the political system to prosper; political system will not be discontinued because some time is needed to grow up for anything. For the betterment of Pakistan, unstable political system is harmful. As we know the political system is the center of decision making. Therefore, for the long term betterment of the country political system must be stable.

References


