Political Economy of Fiscal Decentralization and Poverty in Pakistan: An Empirical Analysis

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ARTICLE DETAILS	ABSTRACT
History: *Accepted 29 April 2020* *Available Online 15 June 2020*	*Theoretically the decentralization in any form may put very promising impact on the economy and the welfare of community. The current study examines the impact of fiscal decentralization on poverty in Pakistan. The fiscal decentralization is captured by two indicators, i.e. revenue decentralization and expenditure decentralization and political economy by government stability. The findings reveal that expenditure decentralization has positive while revenue decentralization has negative impact on poverty. The government stability as a proxy of political economy has shown negative impact on poverty. The study provides the evidence that fiscal decentralization has neutral effect on poverty in Pakistan. The policy framework of fiscal decentralization needs specific modifications to attain the desired impact. However, the political economy may be further strengthened.*
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1. Introduction

The traditional theory of public finance has supported fiscal decentralization as a policy to improve allocation of public sector resources and to provide the public services according to preferences and needs of local communities. The decentralization eliminates the monopolist status of central governments and the competition between local governments provides efficient public services [Musgrave (1959), Oates (1972)]. The second generation theory of fiscal decentralization explained that there exists a strong relationship between local expenditures and local revenue, and local prosperity [Qian and Weingast (1997), Qian and Roland (1998)]. The decentralized system acts productively to attain the outcomes of public sector resources according to community desires and increases political participation [Blais et al. (2011)].

Fiscal decentralization is a process of delegation of fiscal decision making process to lower tiers of the governments, that is a system of transferring responsibility of tax collection and spending

decisions from central to local governments [Thiessen (2001)]. In developing countries the political, economic and social systems are so complex that central governments remain unable to successfully address the issue of poverty. A large number of economies have initiated the process of fiscal decentralization in the last few decades to enhance the welfare of local community and eliminate poverty.

The empirical literature evidenced decentralization as a tool to eradicate poverty. It leads to improve the provision of social welfare goods like education, health, sanitation and water availability [Ahmed (2015)]. Public sector social welfare schemes and provision of social protection may help in mitigating poverty but it can only be achieved through resource distribution policies [Jamal (2006)]. The redistribution of resources and expenditures are the important policy tools to eradicate poverty and inequality but subject to provision of institutional quality [Shahzad and Yasmin (2016)]. Fiscal decentralization caters the local social needs and it is an important policy instrument for achieving social goals [Ahmed (2016)].

However, there are some evidences of failure of traditional theory of public finance given by Oates (1972) which states that regional and local governments have the position to provide the public services to the locals according to their preferences and needs as compared to the central government. For instance, Shahzad and Yasmin (2016) have found positive impact of fiscal decentralization on poverty and inequality. Similarly, Koethenbuerger and Lockwood (2010) presented the situations where fiscal decentralization can result in lower economic growth when provinces charge taxes even higher than the central governments.

The political economy may the bridging tool between the fiscal decentralization and its desirable effects like reduction in poverty, income inequality and regional disparity, and provision of social services, etc. which may be inferred from the findings of Jutting et al. (2004) who stated that characteristics of an economy like institutional quality and political conflicts affect the direction of impact of fiscal decentralization on poverty. Shahzad and Yasmin (2016) also explained that institutional quality (democratic values) can change the direction of impact of fiscal decentralization on poverty. Ahmed (2015) has also mentioned that elite capture element interferes in the implications of fiscal decentralization.

In Pakistan, the process of decentralization was started fifty years ago, though continuous efforts have not been done for its implementation. The tiers of fiscal decentralization also varied during this time period along with strength of political decentralization. The political economy of the country has not remained encouraging as well. In this scenario, the question arises whether the country has attained the objective of fiscal decentralization or not. The core objective of the current study is to evaluate the impact of fiscal decentralization on poverty in Pakistan.

2. Literature Review

Globally extensive research has been done on different dimensions of decentralization and poverty. A large number of studies have found a negative impact of fiscal decentralization on poverty [Galasso and Ravallion (2000), Bossuyt and Gould (2000), Valaris (2012), Faridi and Nazar (2013), Ahmed (2015), Nursi and Tawakkal (2019)] while some studies have found a positive impact of fiscal decentralization on poverty [Shazad and Yasmeen (2016)]. Some other studies have shown mixed effects or conditional effects. For instance, Silas et al. (2018) found that only intergovernmental transfers affects the poverty while country's won source revenue and expenditures do not affect poverty in Kenya. Similarly the intergovernmental transfers positively impacts poverty in low income

households while it negatively affects the poverty in high income countries.

In the earlier studies, Rao et al. (1998) examined the effect of fiscal decentralization on poverty alleviation in Vietnam. The study claimed that intergovernmental transfers play a vital role in ameliorating poverty so the best approach of fiscal decentralization is flow of fiscal resources from top to bottom.

Bossuyt and Gould (2000) discussed the impact of fiscal decentralization on three African countries that is Guinea, Mozambique and Ethiopia through qualitative analysis. They concluded that fiscal decentralization is the incredible factors for reeducating poverty in these countries. In addition, administrative decentralization and political decentralization are other factors of reduction in poverty.

Galasso and Ravallion (2000) proposed a model of decentralized targeting for anti-poverty programs like Bangladesh's Food-for-Education Program. The results explained that within village targeting is positively influenced by program size, lower land inequality, less remoteness, fewer shocks, and less private redistribution. The decentralization in the form of credit transfer reduces poverty which ultimately lowers the income inequality.

Jutting et al. (2004) found that an unambiguous link between decentralization and poverty reduction cannot be established. The fiscal decentralization may increase or decrease poverty depending upon the characteristics of countries including institutional quality, political conflicts, quality of infrastructure and capacity of the local governments.

In the recent studies, Valaris (2012) established the association between fiscal autonomy and poverty in 48 American states. The fiscal autonomy was measured by vertical imbalances of states that is the gap between own revenue and own expenditures. The results indicated that fiscal autonomy negatively impacts poverty.

Ahmed (216) has examined the effect of fiscal decentralization on education sector for a sample of 62 countries. The study found that different sources of fiscal decentralization have distinct effect on education expenditures and education quality. It evidenced that decentralized structure cater better to local social needs.

Agyemng-Duah et al. (2018) investigated the effect of fiscal decentralization on poverty in Ghana and other developing countries in two opposing views. First one is of optimist view which claimed that fiscal decentralization is a power sharing concept and the process of decentralization share all resources with local community. The local community reduces poverty by efficient and local community targeted programs and projects. The second one is pessimist view of fiscal decentralization which opposes this mechanism. The argument is based on the notion that decentralization flourishes corruption in the local community leaders. In this way the process of decentralization may increase poverty, income inequality and regional disparity. The study confirmed the potential role of fiscal decentralization in poverty reduction.

Nursini and Tawakkat (2019) used three indicators of fiscal decentralization, i.e. regional government expenditures, regional government revenues and intragovernmental transfers to see their impact on poverty covering 33 provinces of Indonesia. They found negative impact of regional government revenue and intragovernmental transfers on poverty but no effect of regional government expenditures on poverty.

For Pakistan, Faridi and Nazar (2013) focused on the relationship between fiscal decentralization and poverty in Pakistan using Ordinary Least Square (OLS) technique on data set covering the time period of 1972-2010. The results reported negative effect of expenditures and revenue decentralization on poverty.

Ahmed (2015) using legislative bargaining model of fiscal federalism concluded that decentralization has positive impact on pro-poor social services delivery in Pakistan. However, decentralization has higher effect on services like rural development and water management rather than education which reflects the capture of local elite. The political representatives may expect award of irrigation projects and physical infrastructure in elections.

Similarly, Shahzad and Yasmin (2016) investigated the relationship between fiscal decentralization and poverty as well as inequality in Pakistan by using GMM technique for the time period 1972 to 2013. They found a positive impact of fiscal decentralization captured by three indicators, i.e. expenditure decentralization, revenue decentralization and composite decentralization on poverty and inequality. They explained that fiscal decentralization has weakened the central government and curtailed its capability of spending on long-term development projects. However, the presence of institutional quality measured by democratic index through interaction term with fiscal decentralization makes the effect of all the three indicators negative on poverty.

Ahmad (2020) has attempted to see whether the mere decentralization (resource distribution under NFC award, i.e. federal transfers) or the other criterion of decentralization, i.e. revenue generation by the provinces in Pakistan is important to attain the goals of fiscal decentralization. The study evidenced that simple fiscal decentralization under NFC award has no enough impact on economic growth but provincial source revenue generation effectively impacts economic growth. The provinces should be encouraged and incentivized to generate their own resources instead of being dependent on federal government [Khattak et at. (2010)].

Although plethora of the work exists in the area of fiscal decentralization and poverty but a few number of studies have focused on Pakistan. Therefore, present study will be an addition to the literature by investigating the fiscal decentralization and poverty in Pakistan with new data set capturing the fiscal decentralization through expenditure decentralization and revenue decentralization and political economy through government stability. The present study departs from Faridi and Nazar (2013) and Shahzad and Yasmin (2016) by incorporation of political economy as a variable in the econometric analysis with latest data.

3. Political Economy, Fiscal Decentralization and Poverty

The decentralization makes the effects on development outcomes like poverty reduction, enhancing the quantity and quality of education, health outcomes, provision of social services, employment generation, and water and sanitation facilities, etc. through the political, fiscal and economic system of a nation [Kaliranjan and Otsuka (2012)]. Fiscal decentralization makes the policy makers and executors accountable through local elections and even some times by judicial system. The transparency remains the precondition for the process along with control of elite capture culture, leviathan governments and capacity issues of local governments. The political economy emerged as the center of these actors as it is defined as the process of collective efforts of political, economic and administrative institutions for attaining the national targets. If the stakeholders deviate from the objectives of national targets the process may results into collapse of the objectives. To empirically

estimate the impact of political economy in a stylish econometric way is a complex phenomenon that is why there is a need for proxy of political economy. If the governments have unity, legislative strength and popularity alternatively the government has no risk of stability the actors of political economy has less likelihood of deviating from the national objectives. So the stability of the government may be a proxy of political economy. The stable governments adopt the proper way of fiscal decentralization and set the achievable targets like the elimination of poverty and other socioeconomic indicators. In the current study government stability is being used a proxy of political economy.

4. Data and Methodology

The functional form of the poverty and fiscal decentralization is given as:

POV = f (EXPD, REVD, GSTAB, TOPEN, INF, HEALTH, EDU, UNEMP) .... (1)

For accessing the impact of fiscal decentralization on poverty in Pakistan, time series data from 1980 to 2019 is used. The data is collected from different sources, i.e. Economic Survey of Pakistan [FBS (Various issues)], World Development Indicators [World Bank (2020)], Pakistan Statistical Year Book [PBS (Various Issues)], and Jamal (2006). The brief summary of the variables, their measurement and source of data are presented in Table 1.

Table: 1 Description of Variables and Measurements

Description of variables	Measuring units	Source of data
POV: Poverty	Head count ratio	Jamal (2006) and Pakistan Economic Survey [FBS (Various issues)]
EXPD: Expenditure decentralization	Expenditure decentralization is calculated as a ratio of the provincial government expenditures (less grant in aid) to the total government expenditures.	Authors' calculation from the data set of Pakistan Statistical Year Book [PBS (Various issues)]
REVD Revenue decentralization	The revenue decentralization is calculated as a ratio of the provincial government revenue (less grant in aid) to the total government revenue.	Authors' calculation from data set of Pakistan Statistical Year Book (Various issues)
GSTAB: Government stability	It shows the government's ability to carry out its declared program and its ability to stay in office. It is sum of three components (government unity, legislative strength and popular support) each with a maximum score of four points (very low risk) and minimum of zero points (very high risk)	International Country Risk Guide [ICRG (2020)]
TOPEN: Trade openness	(Export + import) /GDP	Pakistan Economic Survey [FBS (Various issues)]
INF: inflation	Consumer price index	Pakistan Economic Survey [FBS (Various issues)]
HEALTH: Health infrastructure index	The index is comprised of number of nurses, number of basic health	Authors' calculation from the data set of Pakistan Economic Survey

	units, number of doctors, number of dispensaries, and number of hospitals. The index has generated using Principle Component Analysis.	[FBS (Various issues)]
EDU: Education index	The index is comprised of primary, secondary and higher education enrolment. The index has been generated by using Principle Component Analysis.	Authors' calculation from data set of Pakistan Economic Survey [FBS (Various issues)]
UEMP: Unemployment	Unemployment rate	Pakistan Economic Survey [FBS (Various issues)]

4.1   Descriptive Analyses

Descriptive analysis in Table 2 describes the summary statistics of the variables. All the variables show wide dispersal from their respective mean value. Almost all variables are little bit skewed, that is POV, GSTAB, TOPEN, INF, HEALTH and UNEMP are positively skewed while others are negatively skewed. Kurtosis values indicate that the INF has Lepto-Kurtic distribution, while all other variables are Platy-Kurtic. The Jarque-Bera (JB) test is a joint hypothesis measure of skewness and kurtosis. JB probability values show no problem of abnormality

Table: 2 Summary of Descriptive Statistics

	POV	EXPD	REVD	GSTAB	TOPEN	INF	HEALTH	EDU	UEMP
Mean	25.55	0.25	0.24	6.73	0.30	9.36	121.38	109.45	5.34
Median	25.65	0.24	0.34	6.50	0.30	10.10	120.64	99.99	5.37
Std. Dev.	3.58	0.04	0.19	2.11	0.03	3.86	58.85	71.36	1.46
Skewness	0.54	−0.12	−0.93	0.14	0.32	0.25	0.11	0.21	0.17
Kurtosis	2.60	2.82	2.39	2.19	2.15	3.15	1.91	1.65	2.35
Jarque−Bera	2.24	0.16	6.37	1.22	1.88	0.46	2.05	3.32	0.88
Probability	0.33	0.92	0.04	0.54	0.39	0.79	0.36	0.19	0.64
Observations	40	40	40	40	40	40	40	40	40

Source: Authors' calculation

Correlation matrix is given in Table 3. In the analysis, most of the variables are positively correlated to one another. The variables of EXPD, GSTAB and TOPEN are negatively related to POV, while all other variables are positively related to POV.

Table 3: Correlation Matrix

	POV	EXPD	REVD	GSTAB	TOPEN	INF	HEALTH	EDU	UNEMP
POV	1								
EXPD	−0.60	1							
REVD	0.05	−0.15	1						
GSTAB	−0.40	0.24	−0.31	1					
TOPEN	−0.48	0.69	−0.56	0.59	1				
INF	0.49	−0.66	0.38	−0.17	−0.76	1			
HEALTH	0.48	−0.71	0.42	−0.16	−0.79	0.99	1		
EDU	0.30	−0.22	−0.09	0.42	0.04	0.53	0.49	1	
UNEMP	0.29	−0.20	−0.38	0.46	0.27	0.26	0.21	0.65	1

4.2   Econometric Estimation

The stationarity of the variables is examined by Augmented Dickey Fuller (1979, 1981) and Philips-Perron [Phillips and Perron (1988)] tests while Schwarz Information Criteria (SIC) is followed for ADF equation.

The Autoregressive Distributed Lag (ARDL) technique is used when the stationarity results are mixed such as I(0) and I(1) or even I(1). The ARDL technique resolves the issue of endogeneity of variables. It provides a good long term results that are free from all the errors [Narayan (2005), Odhiambo (2008)] and therefore provides the appropriate estimation of short and long run estimation [Bentzen & Engsted (2001)].

For the long run estimation following equation is regressed

$$lPOV_t = a_0 + \sum_{n=1}^{\alpha} \beta 1\Delta\ (POV)_{t-1} \sum_{n=1}^{\beta} \beta 1\Delta\ (EXPD)_{t-1} + \sum_{n=1}^{\beta_1} \beta 2\Delta\ (REVD)_{t-1} +$$
$$\sum_{n=1}^{\beta_2} \beta 3\Delta\ (GSTAB)_{t-1} + \sum_{n=1}^{\beta_3} \beta 4\Delta\ (TOPEN)_{t-1} + \sum_{n=1}^{\beta_4} \beta 5\Delta\ (INF)_{t-1} + \sum_{n=1}^{\beta_5} \beta 6\Delta\ (HEALTH)_{t-1} +$$
$$\sum_{n=1}^{\beta_6} \beta 7\Delta\ (EDU)_{t-1} + \sum_{n=1}^{\beta_7} \beta 8\Delta\ (UNEMP)_{t-1} + \mu_t \qquad .... (2)$$

The equation for short run estimation is given as:

$$lPOV_t = a_0 + \sum_{n=1}^{\alpha} \beta 1\Delta\ (POV)_{t-1} \sum_{n=1}^{\beta} \beta 1\Delta\ (EXPD)_{t-1} + \sum_{n=1}^{\beta_1} \beta 2\Delta\ (REVD)_{t-1} +$$
$$\sum_{n=1}^{\beta_2} \beta 3\Delta\ (GSTAB)_{t-1} + \sum_{n=1}^{\beta_3} \beta 4\Delta\ (TOPEN)_{t-1} + \sum_{n=1}^{\beta_4} \beta 5\Delta\ (INF)_{t-1} + \sum_{n=1}^{\beta_5} \beta 6\Delta\ (HEALTH)_{t-1} +$$
$$\sum_{n=1}^{\beta_6} \beta 7\Delta\ (EDU)_{t-1} + \sum_{n=1}^{\beta_7} \beta 8\Delta\ (UNEMP)_{t-1} + \gamma ECM_{t-1} + \mu_t \qquad .... (3)$$

The error correction term lagged γECM_{t-1} represents the speed of adjustment of disequilibrium.

5.   Results and Discussion

5.1   Test for stationarity

Findings of stationarity tests are reported in Table 4. The results show that INF is integrated of I(0). The remaining variables are integrated at I(1) under both Augmented Dickey Fuller test and Phillips-Perron test statistics.

Table: 4   Results of Stationarity of Data

Variables	ADF Test Statistic			Phillips–Perron test statistic		
	At level	1st difference	Conclusion	At level	1st difference	Conclusion
	Intercept	Intercept		Intercept	Intercept	
LPOV	–	−4.522352 0.000000	I(1)	–	−4.493434 0.0009	I(1)
EXPD	–	−7.080838 0.00000	I(1)	–	−7.233933 0.0000	I(1)
REVD	–	−6.717240 0.00000	I(1)	–	−6.733951 0.0000	I(1)
GSTAB	–	−5.158394 0.0001	I(1)	–	−5.158394 0.0001	I(1)
TOPEN	–	−8.799529 0.00000	I(1)	–	−9.056906 0.0000	I(1)
INF	−2.825941	–	I(0)	−2.856077	–	I(0)

	0.0063			0.005		
HEALTH	–	−9.152986	I(1)	–	−9.885030	I(1)
		0.0000			0.0000	
EDU	–	−5.720507	I(1)	–	−5.718657	I(1)
		0.00000			0.0000	
UNEMP	–	−7.660590	I(1)	–	−7.688763	I(1)
		0.00000			0.0000	

5.2   Bound Test

The long run relationship is tested through Bound Test. The *F*-statistic value is 5.249. It is statistically significant at 1 percent. The upper boundary critical value is 3.714. Therefore, it is concluded that *F*-statistic value is greater than the upper bound critical value which confirms that co-integration exists in the model.

6. Results of ARDL Estimation

The results of ARDL for long run and short run are shown in Table 5 and 6 respectively. All the variables are highly significant at one percent level of significance.

Table: 5 Long run Results

Variables	Coefficient	Std. Error	t-statistic	Prob
EXPD	1.901567	0.126771	14.999994	0.0424
REVD	−0.802129	0.038025	−21.094765	0.0302
GSTAB	−0.012468	0.000763	−16.334588	0.0389
TOPEN	−5.409158	0.086579	−62.476328	0.0102
INF	0.014380	0.000249	57.710633	0.0110
HEALTH	0.011876	0.000405	29.340244	0.0217
EDU	−0.013542	0.000421	−32.168992	0.0198
UNEMP	0.051132	0.000989	51.680972	0.0123
C	2.352568	0.019952	117.912366	0.0054

Table: 6 Short run Results

Variables	Coefficient	Std. Error	t-statistic	Prob
D(EXPD)	−0.641833	0.030854	−20.802535	0.0306
D(REVD)	0.181738	0.009947	18.270383	0.0348
D(GSTAB)	−0.005413	0.000354	−15.281339	0.0416
D(TOPEN)	−0.544371	0.035588	−15.296327	0.0416
D(INF)	−0.002922	0.000167	−17.481195	0.0364
D(HEALTH)	−0.002463	0.000110	−22.459924	0.0283
D(EDU)	0.005097	0.000185	27.524540	0.0231
D(UNEMP)	0.003122	0.000446	6.996572	0.0904
ECM(−1)	−0.737047	0.011160	−66.044708	0.0096

The principal objective of the study was to see the impact of fiscal decentralization on poverty in the perspective of political economy in Pakistan. For the purpose two principal indicators of fiscal decentralization were included in the analysis. The first indicator was expenditure decentralization. The long run results in Table 5 show that expenditure decentralization (EXPD) leads to increase the poverty in Pakistan. Theoretically the expenditure decentralization should decrease poverty in the country.

However, the positive impact of expenditure decentralization may be due to the diseconomies of scale, misallocation of resources and corruption when provinces have more control over expenditures as compared to the central government. Similarly, the inferior administrative capacity of local authorities and leviathan government is also counted as the potential threats linked with fiscal decentralization [Weingast (2014), Ahmad (2020)].The positive impact of expenditure decentralization (alternatively fiscal decentralization) on poverty (or decreasing community welfare) has been evidenced by the literature. Shahzad and Yasmin (2016) have shown the increasing effect of fiscal decentralization on poverty and income inequality. Silas et al. (2018) used three indicators of fiscal decentralization, i.e. intergovernmental transfers, own source revenue and expenditures and found that own source revenue and expenditures have no effect on poverty in Kenya. Similarly, Nursini and Tawakkal (2019) have also found no effect of regional expenditures on poverty in Indonesia. Galiani et al. (2000) pointed out that there remains the chances of no improvement of social indicators by decentralization of even deterioration of social indicators if the local communities have no voice and face elite capture (Bardhan and Mookherjee 2005) of if local governments lack the capacity to administer pubic services efficiently (Smith 1985).

The second variable to capture the fiscal decentralization was revenue decentralization. The coefficient for revenue decentralization (REVD) demonstrates a fall in poverty by 0.8 percentage point due to one unit increase in revenue decentralization. It is inferred that if provinces are given the authority to collect and impose taxes then equality and equity principle of taxation prevails in tax structures. The provinces have a better position and in close contact with different segments of society and they impose taxes rationally keeping in view the welfare of the poor which leads to decrease the poverty. Nursini and Tawakkal (2019) have also found similar results for Indonesia, i.e. regional government revenue and intergovernmental transfers reduce the poverty but regional government expenditures does not. They suggested that regional governmental expenditures should focus on priority programs for poverty alleviation rather than operational expenditures.

However, the positive impact of expenditure decentralization and negative impact of revenue decentralization on poverty explain another mechanics of rent seeking by local political leaders. In the expenditure decentralization they have more chances of corruption by giving the inefficient, ill-defined, badly-managed projects to corrupt contractors through rent seeking. The badly identified projects and area are executed for rent seeking. On the other hand such type of chances of rent seeking remains low for political leaders in revenue decentralization.

Another important variable of the analysis was government stability used as a proxy of political economy. The coefficient of government stability demonstrates that one unit increase in government stability decreases poverty by 0.01 percentage point. The government stability represents the ability of the government to stay in office. It is basically comprised of three components, i.e. government unity, legislative strength and popular support. The governments with low risk of stability makes the rational and transparent decisions efficiently. They execute the programs and policies rapidly. Such type of decisions and executions result into increased employment, productivity and income which diminishes poverty. The stable governments never frame the policies which affect different segments of the society differently that is termed as political economy. They also restrict political corruption as they enjoy popular support. The legislative strength protect the economic rights of the people. As a result of totality of these components the poverty diminishes in the country.

The trade openness as an economic indicator was included in the analysis as control variable. The results show that trade openness reduces poverty in the country. It is supported theoretically and

empirically.

The inflation has shown positive effect on poverty. The result is consistent with the findings of Shahzad and Yasmin (2016). It explains the fact that high cost of living makes difficult for the poor to satisfy their basic needs.

The health infrastructure index was also included in the analysis as control variable. Conceptually the health infrastructure helps the community to gain human capital and enhance productivity. In this way the poverty may be reduced. The results have shown that health infrastructure index has positive impact on poverty. It is a strange result but may be explained on the basis that heavy expenditures on health infrastructure in the form of construction of hospitals and hiring the doctors burdens the local government resources. It shortens the expenditures for direct welfare of the poor community and for the projects of employment generation. The result is partially corroborated by the positive impact of expenditures decentralization on poverty. Malik (2008) has pointed out that at initial stage of decentralization the local governments face heavy capital costs in the form of construction of hospitals, schools, administrative offices and hiring of staff which may adversely affect the welfare of the local people.

The education index that is comprised of indicators of education outcomes like the primary and secondary school enrolment, and higher education enrolment. The education index decreases poverty. It is supported theoretically as well by the empirical literature [Jutting et al. (2004)].

The unemployment has shown positive impact of poverty. The unemployment directly affects the income level of the households so increase in unemployment pushes the households into poverty.

The short run results given in Table 6 show that coefficient of ECM_{t-1} is -0.74 which confirms that the variation in equilibrium is corrected by 74 percent each year. The results of diagnostic tests also show that the model satisficed all the diagnostic tests, i.e. no serial correlation have been found in regression, and no autoregressive conditional heteroscedasticity and White heteroscedasticity are found. Furthermore, the residual term is also normally distributed which justify the well specified functional form of the model.

6. Conclusion

The study has focused on the impact of fiscal decentralization on poverty in Pakistan in the perspective of political economy. The ARDL technique was applied on time series data for the period of 1980 to 2019. The major findings of the study are that revenue decentralization has negative impact on poverty while expenditure decentralization leads to increase the poverty. So it cannot be decided that fiscal decentralization has encouraging effect on poverty mitigation in Pakistan. The political economy captured by government stability has shown negative effect on poverty. In the control variables the trade openness, education have shown negative effect on poverty while inflation, unemployment and health infrastructure index have shown positive impact on poverty.

There are some policy recommendations to improve the mechanism of fiscal decentralization for poverty mitigation. The expenditure decentralization is of major concern which has shown positive impact on poverty. As discussed in earlier section the disguised reasons for such type of results may the inefficiency of the local governments in identifying the projects and particularly the incidence of corruption as well as insufficient capacity for execution of projects. It needs transparent accountability of the local governments and training for capacity building. The revenue decentralization has shown

negative impact on poverty so this side should be encouraged. However, political economy has satisfying results so it needs strengthening of government stability.

Furthermore, the employment generation should be focused and inflation should be curtailed for poverty mitigation. As the health infrastructure has shown positive impact on poverty due to its burden on local government funds, so the local governments should demand funds from central government for capital investments.

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