



## Foreign Inflows and Poverty in Pakistan: A Quantitative Approach

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ARTICLE DETAILS	ABSTRACT
<p><b>History</b>  <i>Revised format: February 2019</i>  <i>Available Online: March 2019</i></p> <hr/> <p><b>Keywords</b>  <i>Foreign Inflows; Poverty;</i>  <i>Johansen Juselius; Granger</i>  <i>Causality.</i></p> <hr/> <p><b>JEL Classification:</b>            F35, P45, F24, B22</p>	<p>Foreign Inflows (FI) acquire immense importance for the open economy. Empirical as well as theoretical findings highlight that FI intensely affect the economic state of the host country. Important issue in this respect is to examine the impact(s) of FI on poverty. The study was based on data from 1972 to 2017. It is concluded a long term relationship between poverty and FI. At large, FI do exhibit having opposite relationship with poverty. Moreover, poverty being long run macroeconomic problem does have short run causality with some of FI. Granger causality is also confirmed on some of FI and poverty. Policy recommendation is the appropriate capital allocation for the efficient restoration of the results of FI.</p> <p>© 2019 The authors, under a Creative Commons Attribution-NonCommercial 4.0</p>

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### 1. Introduction

Pakistan is amongst the South Asian countries is victimized of capital scarcity. It is one of the central explanations for her reliance onto FI for the finance of ongoing projects and to bridge-up broadened gaps among savings and investment level (Siddiqui & Kemal, 2006) FI have prime standing for less developed countries (Ozturk & Kalyoncu, 2007). Recipient country is expected to achieve macroeconomic goals by such FI. Realizing that FI contribute in positively affecting macroeconomic variables, Pakistan energetically relies upon such. To Obadan (2004), FI can be categorized into foreign aid, worker remittance, foreign debt, and Foreign Direct Investment (FDI). Foreign trade also exhibit to have capacity in tilting chronic issues like of poverty (Yasmin & Khan, 2011).

FDI is the important belonging of FI (Khan, 2007; Mehmood & Hassan, 2015). FDI in Pakistan, during July-April of fiscal year 2016, remained at \$1016.3 million as against \$963.8 million last year. However, depressed FDI inflows are backed at; crises within the global euro- zone(s) and relating financial crisis. At country level, it is because of stumpy investment in financial businesses, such as; telecommunication and power sector. Reasons of fall, at internal level, are backed at circular debt and energy crisis.

Complementarily, to the World Bank (2016), flow of overall remittance to developing economies has increased to \$431.6 billion in 2015 i.e. 0.4 percent growth since 2014. The remittance of such flows to Pakistan by fiscal year 2016 has swelled by five percent. During July-April of fiscal year 2016, worker remittance remained at \$16.03 billion compared to \$15.24 billion last year.

Further, in the line of trade, overall exports during July-April of fiscal year 2016 are witnessed at \$18.2 billion. Mainly 47.2 percent of exports are focused towards 5 countries like, UK, USA, Germany, UAE, and Hong Kong.

On dissimilar note, by July-April 2016, imports are reached at \$43.2 billion.

Foreign debt and their excessive reliance is bound to retards economic growth. By March 2012, public debt has stood at 58.2 percent as compared to 55.5 percent. External debt(s) has reached to \$69.6 billion. On the contrary, share of foreign aid is minor in overall debt that is \$5441 million till by fiscal year 2016 i.e. composite of project, non-project aid component and other relief(s).

This study is focused upon exploring the relationship between FI and poverty in Pakistan because according to economic survey 2016, 29.4 percent of population is a victim of living below the poverty line whereas in recent years, Pakistan received billions of FI which should not leave any reason for lack of capital however, the query still persists that “How and when poverty, hunger, famine, and mal nutrition would be overcome”<sup>1</sup>. Therefore, short run and long run relationship among poverty and FI and nevertheless causality tie-ups between FI and poverty are of specific objectives of our study. Next to the introduction of the study in Section 1, the Section 2 describes the empirical evidence(s) on components of FI. Data source, model specification, methodological issues are discussed in Section 3. The Section 4 infers the outcomes of study. The concluding remarks are offered in the last section.

## 2. Literature Review

Foreign aid is considered for operative assistance towards that of the development (Burnside & Dollar, 2000). Chenery and Strout (1965) emphasize that range of investment is indispensable to achieve certain growth rate and the existing amount of saving (domestic) to attain the preferred investment level.<sup>2</sup> This investment is dispensed for addressing poverty issues. There exist linkages between foreign aid on poverty relief(s). Dynamic spillovers of investment capital significantly increase household income and thereby engender income of individuals (Carvalho & White, 1996). However, if foreign aid is utilized improperly, the consequences turn to be negative (Kraay & Raddatz, 2005; Masud & Yontcheva, 2005). Remittance is the source of coping with financial needs. To Goff (2010) worker remittances possess significant and positive effect upon macroeconomic stability, poverty, and trade balances. Remittances do act in shrinking of poverty, income volatility, and inequality (Rapoport & Docquier, 2005).

The considerations got from Harrod-Domar Model clarify that around 18 to 20 percent saving rate is needful to maintain rate of economic growth of 6 percent. In this context, on the reasons that how foreign debt is valuable is due to the powerful exposure for the gap bridge-ups within saving and investment and to achieve macroeconomic targets. The Solow-Swan’s Two-Gap Model ascertains that filling up of gaps between imports and exports and savings and investment can be realized since rely upon foreign debt component of FI (Mohey-ud-din, 2005).

FDI is dynamic but volatile form of FI (Mehmood & Hassan, 2015). FDI enhances economic growth of heir (Khan, 2007; Hassan, 2003; Chowdhury & Mavrotas, 2006; Romer, 1993). It is not irrelevant to believe that FDI-caused economic growth benefits in condensing poverty.<sup>3</sup> However, few researches are conducted in this area like; White (1992), Bengoa and Robels (2003), and Carvalho and White (1996).

Better state of domestic financial markets not only attracts foreign companies towards invest rather does exert altruist effect upon economic conditions (Khan, 2007). To Khan and Khan (2011), FI are needed (with consistency) to fix saving-investment, exports and imports, and revenues and expenditures gaps. The miracles of FI never end up here rather provoking advancement in technology, raising employment level, and addressing other macroeconomic issues in the host country are the fallouts of such FI (Kobrin, 2004; Le & Ataullah, 2006).

Among FI, foreign trade adds to aggregate welfare of participating countries (Harrison, Rutherford, & Tarr, 2002) but countries need to gain specialty in the line of products (Hecksher-Ohlin, 1933) and devote their resources towards the production of advantageous products (Richardo, 1817). If trade is liberalized \_\_ leads to create jobs and helps in poverty alleviation (Yasmin & Khan, 2011). Hecksher-Ohlin’s trade theory of Factor Endowment of (1933) is proficient to offer rejoinders to fundamental questions that are connected to the theory of trade i.e. it makes capital obtainable for complementing policies for alleviating socioeconomic issues - one of those is poverty. Hence, it increases welfare of participating nations (Todaro & Smith, 2004).

1 The literature is extracted from the website: [bbc.co.uk](http://bbc.co.uk) 02:07 GMT, Saturday 3 July 2010.

2 For further suggestion and guidance, read Todaro and Smith (2004).

3 For further reference, read Borensztein *et al.* (1995); Bengoa and Robels (2003); De Mello (1999); Durham. (2004) and Li Liu (2005).

### 3. Data Source and Methodology

This section accommodates for data source, construction of model, and methodological issues.

#### 3.1 Data Source

The study bases upon secondary data for the period from 1972 to 2017. Major sources of data are; Pakistan Economic Survey (various issues), World Bank (World Economic Outlook), and Hand Book of Statistics on Pakistan Economy (2005).

#### 3.2 Model Specification

Based on the study objective, the focus is to find out impact of FI on poverty. Thus, the established model is given in Equation (1):

$$POV_t = \alpha_0 + \alpha_1 FAID_t + \alpha_2 FDI_t + \alpha_3 WRM_t + \alpha_4 FDBT_t + \alpha_5 FTR_t + \alpha_6 HEX_t + \alpha_7 LEX_t + \alpha_8 LIT_t + \alpha_9 CPI_t + \mu_t \quad (1)$$

whereas  $\alpha_0$  is model's intercept and  $\alpha_i$  are the respective coefficients of regressors at time (t), i range from 1 to 9.

Error term is represented as  $\mu_t$ . Additionally, Table 1 gives off the descriptions of prefix at each variable and measurement.

**Table 1: Variables and their Measurement.**

Variable	Measurement
Poverty (Pov)	Poverty on Head Count Ratio
Foreign Aid (FAID)	In PKR Million.
Foreign Direct Investment (FDI)	In Percentage of GDP.
Worker Remittance (WRM)	In PKR Million.
Foreign Debt (FDBT)	In Percentage of GNI.
Foreign Trade (FTR) proxy with trade openness	Trade openness ((100 (Export X Imports /GDP)).
Health Expenditure (HEX)	In PKR Million.
Life Expectancy (LEX)	In percentage.
Literacy Rate (LIT)	In percentage.
Inflation (CPI)	Consumer Price Index.

#### 3.3 Test of Unit root

In the line of investigating cointegration, status of stationarity is considered mandatory (Dickey & Fuller, 1979). The Augmented Dickey Fuller (ADF) test, as developed by Dickey and Fuller (1979), qualifies for such explorations. The procedure of testing stationarity under ADF is given in Equation (2):

$$y_t = \rho Y_{t-1} + \mu_t, t = 1, 2, \dots, \quad (2)$$

wherein,  $Y_0 = 0$  and  $\rho$  is the real number.  $\mu_t$  is the sequence of normal and independent random variables with mean of zero and constant variance ( $\sigma_\mu^2$ ). If  $|\rho| < 1$ , time series  $Y_t$  is stationary and vice versa if  $|\rho| > 1$ . ADF recommends of adding extra lags to avoid issue of auto correlation. Therefore, three possible computational forms i.e. no constant and no trend, constant with no trend and constant with trend can be expressed as Equation (3-5):

$$\Delta y_t = Y y_{t-1} + \sum_{s=1}^m \rho \Delta y_{t-s} + \mu_t; \quad (3)$$

$$\Delta y_t = \alpha + Y y_{t-1} + \sum_{s=1}^m \rho \Delta y_{t-s} + \mu_t \quad \& \quad (4)$$

$$\Delta y_t = \alpha + Y y_{t-1} + \sum_{s=1}^m \rho \Delta y_{t-s} + \mu_t; \quad (5)$$

### 3.4 Cointegration Test

If all the series are integrated of order 1, Equation [1] is to be examined by Johansen Juselius (1990) cointegration test. The evidence of cointegration in vector 'r' is observed by Eigen value and Maximum likelihood ratio. The proposed methodology for multivariate cointegration can be defined in Equation (6) where  $X_t$  is the vector of  $P = 10$  elements.

$$\Delta X_t = (\text{POV}, \text{FAID}, \text{FDI}, \text{WRM}, \text{FDBT}, \text{FTR}, \text{HEX}, \text{LEX}, \text{LIT}, \text{CPI}). \quad (6)$$

The procedure of Johansen and Juselius (1990) for checking cointegration vectors among poverty and FI bases on maximum likelihood estimation of Error Correction Model, (ECM) and is given in Equation (7):

$$\Delta X_t = \Gamma_1 \Delta X_{t-1} + \dots + \Gamma_{k-1} \Delta X_{t-k+1} + \Pi X_{t-k} + \mu + \Phi D_t + \varepsilon_t \quad (7)$$

where  $\Delta X_t$  denotes vector of endogenous variables, introducing notion that  $Z_{0t} = \Delta X_t$ .  $Z_{1t}$  denote stacked variables i.e.  $\Delta X_{t-1}, \dots, \Delta X_{t-k+1}, D_t, 1$ , and  $Z_{kt} = X_{t-k}$ .  $\Pi X_{t-k}$  depicts long run relationship.  $\Gamma$  is a matrix of parameters which correspond to  $Z_{1t}$  that consists matrix of  $\Gamma_1, \dots, \Gamma_{k-1}, \Phi$  and  $\mu$ . The Equation (7) can be transformed into Equation (8):

$$Z_{0t} = \Gamma Z_{1t} + \Pi Z_{kt} + \varepsilon_t \quad (8)$$

For estimating maximum likelihood, where  $X_t$  is the vector of  $P = 10$  element, regression of  $Z_{0t} = \Pi Z_{kt}$  upon  $Z_{1t}$  is written in Equation (9):

$$\sum Z_{0t} Z_{1t}' = \Gamma \sum_{t=1}^T Z_{1t} Z_{1t}' + \Pi \sum_{t=1}^T Z_{kt} Z_{1t}' \quad (9)$$

The concentrated version of likelihood is shown in Equation (10):

$$|\Lambda|^{-T/2} \exp \left\{ - \sum (R_{0t} - \Pi R_{kt})' \Lambda^{-1} (R_{0t} - R_{kt}) / 2 \right\} \quad (10)$$

The cointegration relationship within  $Z_t$  variables is explained by rank of  $\Pi$  matrix where  $\Pi$  is decomposed into two matrices of  $n \times r$  and  $\Pi$  ( $0 < r < p$ ). The  $H_0$  of no cointegration is thereby rejected, if estimated value ( $\gamma_i$ ) in Equation (11) is greater than the critical value and is significant at 5 percent.

$$\gamma_i \left\{ = -m \sum_{t=k+1}^p (1 - \hat{\eta}_i) \right\} \quad (11)$$

Thus, given the estimates of Eigen value i.e.  $\hat{\eta}_i$  weights,  $\Psi_i$  and the Eigen vector  $\xi_i$ , evidence of long run cointegration are found provided estimated value on  $\hat{\eta}_i$  exceeds the corresponding critical value and is significant at 5 percent.

### 3.5 Error Correction Model

Having established cointegration among variables and the long run coefficients estimates, ECM is specified in Equation (12).

$$\begin{aligned} \Delta POV = & \alpha + \beta ECT_{t-1} + \sum_{i=1}^p \delta_{POV} \Delta POV_{t-i} + \sum_{i=1}^p \delta_{FAID} \Delta FAID_{t-i} + \sum_{i=1}^p \delta_{FDI} \Delta FDI_{t-i} + \sum_{i=1}^p \delta_{WRM} \Delta WRM_{t-i} + \\ & \sum_{i=1}^p \delta_{FDBT} \Delta FDBT_{t-i} + \sum_{i=1}^p \delta_{FTR} \Delta FTR_{t-i} + \sum_{i=1}^p \delta_{HEX} \Delta HEX_{t-i} + \sum_{i=1}^p \delta_{LEX} \Delta LEX_{t-i} + \\ & \sum_{i=1}^p \delta_{LIT} \Delta LIT_{t-i} + \sum_{i=1}^p \delta_{CPI} \Delta CPI_{t-i} + \mu_t \end{aligned} \tag{12}$$

where  $\beta$  is ECT's coefficient.  $\alpha$  is the intercept and  $\delta$ , the short run coefficient(s).  $\mu_t$  is the error term. Additionally, to have no repentant of lacking in multi angle view of FI and POV, short run causality is also found.

### 3.6 Granger Causality

After exploring cointegration and the estimation(s) of long run and short run coefficient, Granger (1969) causality analyses is run. It is none other than to explore the deterministic ability of one variable over another, especially POV and FI.

$$y_t = \alpha_1 + \sum_{i=1}^n \beta_i x_{t-1} + \sum_{i=1}^n \alpha_i y_{t-1} + \varepsilon_{1t} \tag{13}$$

$$x_t = \alpha_2 + \sum_{i=1}^n \chi_i x_{t-1} + \sum_{i=1}^n \alpha_i y_{t-1} + \varepsilon_{2t} \tag{14}$$

Where  $\varepsilon_{1t}$  &  $\varepsilon_{2t}$  are uncorrelated error terms. If lag term Y is statistically non zero, X is caused by Y and vice versa. If both lag terms are indicated as non zero, this indicates bidirectional causality and elsewhere.

## 4. Interpretations of the Results

The study initiates to identify poverty and FI associations in Pakistan. In this respect, the empirics are discussed below.

### 4.1 Stationarity Test

To run Johansen Juselius (1990) cointegration analysis, the pre-assumption of I(1) is viewed by ADF test. Results given in Table 2 confirm that entire variables are turned stationary at first difference. Thus, integrated of I(1) i.e. order (1).

**Table 2: Results of Unit Root**

Variables	Constant and Intercept			First Difference Intercept		
	5% level	t-Statistics	Prob.	5% level	t-Statistics	Prob.
POV	-2.94	-3.08	0.04*	-2.94	-7.42	0.00*
FAID	-2.94	-2.03	0.27	-2.94	-6.06	0.00*
FDI	-2.96	2.01	0.99	-2.96	-4.63	0.00*
WRM	-2.94	2.74	1.00	-2.94	-3.43	0.01*
FDBT	-2.94	-0.23	0.92	-2.94	-4.14	0.00*
FTR	-2.94	-2.49	0.13	-2.94	-7.40	0.00*
HEX	-2.94	3.87	1.00	-2.94	-4.17	0.00*
LEX	-2.94	-2.24	0.19	-2.94	-9.11	0.00*
LIT	-2.94	1.42	0.99	-2.94	-5.39	0.00*
CPI	-2.94	-3.08	0.03	-2.94	-7.42	0.00*

Note: \* shows significant at 1 percent.

### 4.2 Unrestricted Cointegration Rank Test

Summarizing the facts in Table 3 and Table 4, on maximum Eigen value statistics criteria, two cointegration equations are confirmed.

**Table 3: Unrestricted Cointegration Rank Test (Maximum Eigen value)**

Hypothesized No. of CE(s)	Eigen value	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.96	121.25	64.50	0.00
At most 1 *	0.82	64.63	58.43	0.01
At most 2	0.73	49.56	52.36	0.09

**Table 3: (Continued)**

At most 3	0.70	45.55	46.23	0.05
At most 4	0.60	34.82	40.07	0.17
At most 5	0.50	26.00	33.87	0.32
At most 6	0.39	18.77	27.58	0.43
At most 7	0.32	14.27	21.13	0.34
At most 8	0.22	9.23	14.26	0.26
At most 9	0.03	1.3	3.84	0.23

Note: \*denotes rejection of the hypothesis. \*\* are MacKinnon-Haug-Michelis (1999) p-values.

On account of Trace statistics criteria, five cointegration equations are confirmed i.e. the H0 of no cointegration is rejected at 'None to at most 4' cointegration equations. Therefore, long run association is confirmed among the endogenous variables constructed in Equation (1).

**Table 4: Unrestricted Cointegration Rank Test (Trace Statistics)**

Hypothesized No. of CE(s)	Eigen value	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.96	385.52	239.24	0.00
At most 1 *	0.83	264.27	197.37	0.00
At most 2 *	0.74	199.63	159.53	0.00
At most 3 *	0.71	150.06	125.62	0.00
At most 4 *	0.61	104.50	95.75	0.01
At most 5	0.50	69.68	69.82	0.05
At most 6	0.40	43.67	47.86	0.12

**Table 4: (Continued)**

At most 7	0.32	24.89	29.80	0.17
At most 8	0.22	10.62	15.49	0.24
At most 9	0.04	1.39	3.84	0.24

Note: \* denotes rejection of the hypothesis. \*\* are MacKinnon-Haug-Michelis (1999) p-values.

### 4.3 Long Run Results

For the determination of magnitude and signs of long run coefficients, results are represented in Table 5 that show that coefficient of entire variables are held significant.

The results show very minute positive POV effects of FAID. It is not surprising since on contrary end, Pakistan is confronting with negative externalities such as political unrest, ineffective management, and corruption that dampens the positive fallouts of such FI. FAID, according to Burnside and Dollar (2000), is not useless in all respects of macroeconomic needs and effective development assistance since fulfills needs for capital to minimize gaps between saving and investment (Chenery & Strout, 1965). FAID stalwartly affects money holding by household which is later spent to buy all components of required goods and services (Carvalho & White, 1996). What can effect the efficacy of positive sequels of FAID is nonetheless its improper utilization.

Long run findings acknowledge negative impact of FDI on poverty. An increase of 1 unit of FDI lessens POV by 71.07 units. FDI is, for instance, a major component of foreign capital to enable meeting needs for credit required in bringing up devastating poverty and its dimension(s).

**Table 5: Long Run Results at 1 Co-integrating Equation(s)**

Variable(s)	Coefficient	Standard error	t-statistics
FAID	0.04	0.01	4.00*
FDI	-71.07	3.74	-19.00*
WRM	-0.01	0.00	-4.10*
FDBT	-75368.20	8746.24	-8.62*
FTR	-211.43	49.86	-4.24*
HEX	0.00	0.00	-7.14*
LEX	-2.69	0.79	-3.41*
LIT	6.25	0.91	6.89*
CPI	1.27	0.27	4.70*

Note: \* indicates significant at five percent.

Moreover, study reveals of 1 unit increase in WRM to lower POV by 0.01 units. WRM appears to increase the money circulation in an economy therefore engages economic activity. When capital is invested, it bifurcates into various sectors of economy to raise up economic activity and to create jobs, thus depress poverty pressures. Long run coefficient of FDBT signifies that 1 unit increase of FDBT reduces POV by 75368.2 units. FDBT is needed to catch the delicate needs of capital. Harrod-Domer envisages that FDBT is desired for nurturing future investment and to sponsor present needs in case of on-going projects completions. FDBT bears numerous impacts on macroeconomic indicators of its heir \_\_ one of those is poverty reduction.

If FTR is exerted progressively, increases job opportunities and helps in reducing POV. Course of development of the nation is accelerated via trade openness (David & Kraay, 2004). Same postures appear in this study which show that 1 unit increase in FTR dampens poverty by 211.43 units. Wealthy nations are reflected by healthy minds. Governments have to adhere for resolving abrupt health statuses of the population to have population which is free from ailment. Energy requirement is required to be fulfilled to set-off an envy of poverty and moreover to disclose unexplored opportunities. The results, however, acknowledge nonlinear association of HEX and POV.

A rational individual always saves while expecting for long life. Unsurprisingly, to be benefited in old age, people intend to spend less portion of their income. The findings also slither in the similar direction i.e. 1 unit increase in LEX waysides POV by 2.69 units. Pakistan falls with the slab of countries which possess texture of inappreciable level of LIT. Educated individuals unless secure highly paid employment take refuge at home and be continuous burden on head of the family. This state leads poverty, at family head, toward the inclement. The long run analysis suggests positive relationship within poverty and literacy rate. At present, 1 unit rise in LIT increases POV by 6.25 units. As cost of living next to the inflationary pressures unable the nation to defy against such challenges. Persistent increase at price level of the country does break up moral strength of the nation \_\_ particularly poor. The findings intricate an increase of 1.27 units in poverty \_\_ backed at 1 unit rise in CPI.

#### 4.4 Results of Error Correction Model

Short run results are given in Table 6. The coefficient of ECT is negative and lies within the specific range. Thus, show convergence towards the equilibrium in long run, nevertheless inconsequential.

On account of short run causality, the Wald test is conducted where short run causality is found on FAID and WRM. It is concluded that in view of FI, POV is focused for limited short run but no long run causality. Moreover, the diagnostic results also show normal distribution of residuals with no evidence of serial correlation and heteroskedasticity.

**Table 6: Results of Error Correction model for Short Run Dynamics**

Dependent variable= POV			
Independent variable	Coefficient	t-statistics	Prob.
ECT	-0.01	-0.22	0.82
D(POV(-1))	0.56	3.62	0.00
D(FAID(-1))	0.00	1.97	0.06

D(FDI(-1))	-0.18	-0.18	0.85
D(WRM(-1))	0.00	-1.82	0.08
D(FDBT(-1))	-1247.04	-0.60	0.55
D(FTR(-1))	-3.01	-0.34	0.73
D(HEX(-1))	0.00	2.47	0.02
D(LEX(-1))	0.00	0.02	0.98
D(LIT(-1))	-0.42	-1.01	0.32
D(CPI(-1))	-0.01	-0.27	0.79

Note: R squared 0.58; Adjusted R squared 0.40 F-statistic 3.18 (0.00); Durbin-Watson statistic 2.12; Wald Test F-statistic for Short Run Causality of FAID and WRM is 3.82 (0.06) & 3.31 (0.08). Jarque-Bera F-statistic 1.26 (0.53); LM Test F-statistic 0.47 (0.62); Test of Heteroskedasticity F-Statistic 0.49 (0.93).

#### 4.5 Results of Granger Causality

The Table 7 illuminated results of Granger causality. Bidirectional causality is evident among POV and FAID. Moving forward, it is evident that FDI and POV do not Granger cause one another but unidirectional causality is found among WRM and POV whereas, FDBT and POV does not show causality in either case. In opposite, FTR and POV show bidirectional causality. However, HEX and LEX have no such show of causality with POV, akin to LIT and CPI.

**Table 7: Granger Causality Test Result(s)**

H0: No Granger Causality from;	F-statistic	Prob.
FAID to POV	18.86	0.00
POV to FAID	3.12	0.08
FDI to POV	0.83	0.36
POV to FDI	1.27	0.26
WRM to POV	0.44	0.50
POV to WRM	3.26	0.07
FDBT to POV	0.14	0.70
POV to FDBT	0.04	0.83
FTR to POV	5.18	0.02
POV to FTR	7.94	0.00
HEX to POV	0.03	0.86
POV to HEX	0.53	0.46
LEX to POV	0.32	0.57
POV to LEX	0.03	0.84
LIT to POV	0.17	0.67
POV to LIT	0.28	0.59
CPI to POV	1.24	0.27
POV to CPI	1.02	0.31

Note: \* shows significant at 1 percent.

#### 5. Conclusion and Recommendation of Policy

In this study we have established that FI are of profound significance being source to fulfill capital needs, especially on poverty. The study came along with findings that FDI, FDBT, and WRM, are contributing to reduce poverty. However, FAID portrayed positive but negligible impact at poverty. At conclusion, it is recommended to the state office to define such policy options that could transform entire forms of FI to have negative relationship with poverty, particularly in case of FAID. Nonetheless to get it done, peaceful border situations, better situations of law and order, political stability, intra and intra province harmony, eradication of massive corruption, and transparent policies are obligatory for solidifying the paybacks of FI towards the poverty.



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