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**FOREIGN CAPITAL INFLOWS AND EMPLOYMENT:
EVIDENCE FROM SOUTH ASIAN COUNTRIES**



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UUM
Universiti Utara Malaysia

**DOCTOR OF PHILOSOPHY
UNIVERSITI UTARA MALAYSIA
March 2018**

**FOREIGN CAPITAL INFLOWS AND EMPLOYMENT: EVIDENCE FROM
SOUTH ASIAN COUNTRIES**



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**Thesis Submitted to
School of Economics, Finance and Banking,
Universiti Utara Malaysia,
in Fulfillment of the Requirement for the Degree of Doctor of Philosophy**

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Tajuk Tesis / Disertasi
(Title of the Thesis / Dissertation)

: Foreign Capital Inflows and Employment: Evidence from South Asian Countries

Program Pengajian
(Programme of Study)

: Doctor of Philosophy (Economics)

Nama Penyelia/Penyelia-penyelia
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ABSTRACT

This study is conducted to enlighten the first-line issue of Foreign Capital Inflows (FCI) and employment in South Asian countries such as Bangladesh, India, Pakistan, and Sri Lanka. These countries are inclined to have heavy FCI, since realize the deficiency of capital as root cause of their macroeconomic problems. The study reveals that FCI are evident in their escalation towards South Asian countries however, are less prompt in the evacuation of depressed state of employment. The study was to analyze secondary data for two periods i.e. 1972 to 2014 and 1980 to 2014. Autoregressive distributed lag, impulse response and variance decomposition, fully modified ordinary least square, seemingly unrelated regression, and Granger causality analyses were performed to validate and measure the effects of FCI onto the level of employment. The analyses of autoregressive distributed lag reveal assorted outcomes of each category of FCI at either of the countryside whereas analytics of fully modified ordinary least square divulge worker remittances as the only form of FCI that ascertain positive relationship with employed labor force of South Asian countries. The results of impulse response and variance decomposition also illustrate different impacts of each of the component of FCI whereby Granger causality analyses confirm the causality between employed labor force and the components of FCI. At large, seemingly unrelated regression results suggest that the combined effects of FCI are significant and positive while South Asian countries are segregated. The study concludes to be as substantial for the governments and policy makers of South Asian countries to have different consideration among FCI. The implementation of pragmatic policy can lead towards much more of the progressive fallouts of such vital FCI on raising employment in such countries.

Keywords: employment, foreign capital inflows, South Asian countries.

ABSTRAK

Kajian ini dijalankan bagi merungkai isu utama yang berkaitan dengan Aliran Masuk Modal Asing (FCI) dan gunatenaga di negara-negara Asia Selatan iaitu Bangladesh, India, Pakistan dan Sri Lanka. Negara-negara ini cenderung untuk mempunyai FCI yang besar kerana menyedari kekurangan modal menjadi penyebab utama yang menghalang pencapaian kesejahteraan makroekonomi mereka. Kajian ini mendedahkan berlaku peningkatan FCI yang lebih terarah kepada negara-negara Asia Selatan, meskipun ianya agak lambat untuk mengatasi tingkat gunatenaga yang rendah. Kajian ini menganalisis data sekunder bagi dua tempoh iaitu 1972-2014 dan 1980 – 2014. Kaedah autoregresif lat tertabur, gerak balas impuls dan penguraian varian, kuasadua terkecil modifikasi penuh, *seemingly unrelated regression*, dan ujian Sebab-akibat Granger digunakan dalam analisis untuk mengesah dan mengukur keberkesanan FCI ke atas tingkat gunatenaga di negara-negara Asia Selatan. Analisis autoregresif lat tertabur menunjukkan pelbagai keputusan bagi setiap kategori FCI untuk sesebuah negara manakala analisis kuasadua terkecil modifikasi penuh menunjukkan hanya kiriman wang pekerja yang mempunyai hubungan positif dengan gunatenaga bagi negara-negara Asia Selatan. Keputusan gerak balas impuls dan penguraian varian menunjukkan kesan yang berbeza bagi setiap komponen FCI. Analisis Sebab-akibat Granger mengesahkan wujud hubungan sebab-akibat antara gunatenaga dan komponen FCI. Keputusan *seemingly unrelated regression* menunjukkan kesan gabungan FCI adalah penting dan positif apabila mengasingkan negara-negara Asia Selatan. Kajian mendapati amat perlu bagi kerajaan dan pembuat dasar memberi pertimbangan yang berbeza dalam kalangan FCI. Perlaksanaan dasar yang pragmatik dapat menjurus kepada sumbangan FCI yang lebih progresif ke arah peningkatan gunatenaga di negara-negara Asia Selatan positif apabila mengasingkan negara-negara Asia Selatan.

Kata kunci: gunatenaga, aliran masuk modal asing, Negara-negara Asia Selatan.

ACKNOWLEDGEMENT

I begin to write with all praises to Allah, The Most Gracious and The Most Merciful.

Millions of salutations on Mustafa, essence of mercy,
Millions of salutations on the light of guidance.

The blessed mouth whose every word was a revelation from Allah,
Millions of salutations on the fountain of knowledge and wisdom.

He owned the whole world yet fed on barley bread alone,
Millions of salutations on that contented appetite.

I am honored to dedicate my PhD to Muhammad "*Peace Be Upon Him*", his family, companions, and the followers.

The journey started by the heavy hearted me when I left my family home and travelled for Universiti Utara Malaysia. Within the endeavors of solitude, I remember the day when I met my estimable Sir Dr. Sallahuddin Hassan. Throughout the phases of my studies, he is the one who braced my PhD to be persistent, undamaged, and not a frail. His creditable guidance assisted me in knowing, understanding, and encompassing the entire genesis of my Thesis and thereby I have no contrite to surrender any of the forgone essentialities of my PhD.

I am grateful to my friends who always lent me wisdom and hope to consolidate my beliefs of going on the right track of research. I am also beholden to Bahauddin Zakariya University for granting me study leave.

Abbu and Ammi always prayed for me and made me capable of achieving my PhD. I pray to Allah that their shadow of affection should last long on me.

I thank my gorgeous wife for her encouragement and trust in me. She stood by my side throughout my PhD journey as a compassionate support. Nevertheless, I missed the time that I did not spend with my kids; Hassan, Ali, and Ashar while I was entrapped in the thorny clips of PhD. I am grateful to their love and support too.

Khawaja Asif Mehmood

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LIST OF ABBREVIATIONS

ADF	Augmented Dickey and Fuller
AIC	Akaike Information Criteria
ARCH	Autoregressive Conditional Heteroscedasticity
ARDL	Autoregressive Distributed Lag
CONS	Household Final Consumption Expenditure
CPI	Consumer Price Index
CUSUM	Cumulative Sum of Recursive Residual
CUSUMSQ	Cumulative Sum of Square of Recursive Residual
DAC	Development Assistance Committee
DF	Dickey and Fuller
DW	Durbin-Watson
ECM	Error Correction Model
ECT	Error Correction Term
EMPL	Employed Labor Force
FCI	Foreign Capital Inflows
FDI	Foreign Direct Investment
FEVD	Forecast Error Variance Decomposition
FGLS	Feasible Generalized Least Square
FMOLS	Fully Modified Ordinary Least Square
FORAID	Foreign Aid
FORDBT	Foreign Debt
GCF	Gross Capital Formation
GDP	Gross Domestic Product

LIST OF ABBREVIATIONS

GLS	Generalized Least Square
GMM	Generalized Method of Moment
GNP	Gross National Product
ILO	International Labor Organization
ILOSD	International Labor Organization Statistics and Databases
INF	Rate of Inflation
INVT	Investment
IPS	Im-Pesaran-Shin
IR	Interest Rate
IRF	Impulse Response Function
IRVD	Impulse Response and Variance Decomposition
LFSGOB	Labor Force Survey, Government of Bangladesh
LIT	Rate of Literacy
LKR	Sri Lankan Rupee
LM	Lagrange Multiplier
MEC	Marginal Efficiency of Capital
MFGOB	Ministry of Finance, Government of Bangladesh
MFGOI	Ministry of Finance, Government of India
MFGOP	Ministry of Finance, Government of Pakistan
MFGOSL	Ministry of Finance, Government of Sri Lanka
MLEGOI	Ministry of Labor and Employment, Government of India
MPC	Marginal Propensity to Consume
ODA	Official Development Assistance

LIST OF ABBREVIATIONS

OECD	Organization for Economic Co-operation and Development
OLS	Ordinary Least Square
PDOLS	Panel Dynamic Ordinary Least Square
PKR	Pakistan Rupee
POP	Population
RESET	Regression Equation Specification Error Test
SAARC	South Asian Association for Regional Cooperation
SAC	South Asian Countries
SBP	State Bank of Pakistan
SC	Schwarz Criteria
SDB	Statistics Department, Bangladesh
SUR	Seemingly Unrelated Regression
TSLS	Two Stage Least Square
UNSD	United Nations Statistics Division
US	United States
USD	U.S Dollar
VAR	Vector Autoregressive
VECM	Vector Error Correction Model
WBDI	World Bank Development Indicators
WREM	Worker Remittances

CHAPTER 1

INTRODUCTION

1.1 Introduction

Foreign Capital Inflows (FCI) are used for incorporating the measures to address the economic problems of the host country. This chapter initially gives a background of the study that enlightens the facts that employment creation is one of the important macroeconomic objectives of any country, supplemented with the situation of FCI and state of unemployment in South Asian Countries (SAC) for instance Pakistan, India, Bangladesh, and Sri Lanka in different time span. In this chapter, it is discussed via evidences about the persistent unresolved problem of unemployment in SAC in line with the unbroken flow of FCI. This chapter also raises questions for how FCI may affect the employment in SAC coupled with the research objectives. Lastly, followed by the importance of study, this chapter gives a precise note on scope of the study that is being executed on rationalizing the linkage of FCI with employment in SAC.

1.2 Background of the Study

Since the great depression of 1930's, unemployment issues are of great concern for especially the developing economies. In the sequel of rise of unemployment problems during that era, it induced the economists to work on coming up with the theories of unemployment and perhaps to suggest for the appropriate measures that could be taken to get rid of unemployment as well as to highlight the factors that are responsible for the cause. Probably if not a root cause, but indeed lack

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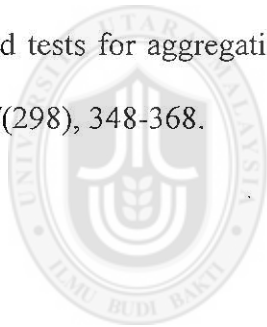
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END NOTES

- ¹ Pakistan (-1.4%); India (-4.2%); Bangladesh (-5.3%) & Sri Lanka (-5.3%).
- ² Indirect employment creation in terms of export orientation and import penetration (Greenaway, Hine, & Wright, 1999).
- ³ White noise means zero mean and finite variance. Thus, shows no correlation among the values in different times i.e. having constant conditional variance.
- ⁴ See Chaudhry *et al.* (2010), Malik *et al.* (2011), Imran *et al.* (2013), & Ali (2014).
- ⁵ It is due to the reason that, unlike other cointegration techniques, an ARDL approach is applied without the consideration of integration order of either I(0), I(1) or assorted, except that of I(II) (Pesaran, Shin, & Smith, 2001; Ali & Nishat, 2009; Khan & Ahmed, 2007). Having said that ARDL approach, according to Pesaran *et al.* (2001), is unbiased and efficient in respect of rendering better results than other cointegration approaches, it is indeed useful in publishing of small sample results (Narayan, 2005).
- ⁶ Weak exogeneity test looks for restrictions of H_0 that coefficients are not associated with an error term or exhibit weak exogeneity between one another (Johansen, 1992, 1995; Brüggemann, 2002; Ghassan, 2011) and gives off efficient influence on cointegration coefficient in the model (Jacobs & Wallis, 2010).
- ⁷ Where upper bound value is a representation that all variables are order of I(1) and lower bound value signifies for the fact that all the variables are order of I(0).
- ⁸ According to Nkoro and Furo (2012), reason being exercising IRVD in VAR is quite clear that; the desired information which is contained within the cointegrating variables become comprehensible. In applied research, to trace the responses of regressand against the exogenous shocks on the explanatory variables is not to be treated in cursory (Yousafzai, 2014).
- ⁹ When the error terms are contemporaneously uncorrelated to each other across the equations, no orthogonalization is required.
- ¹⁰ For the purpose of comparison on prescribed panel unit root test, see Banerjee, Marcellino, and Osbat (2005).
- ¹¹ IPS (1997) elaborated that this statistic contains a characteristics. When there is lack of correlation among sectors for errors and T is same for all of the sectors, the normalized statistics on normal distribution, that is $\sqrt{N} \left(\frac{\bar{t}_{N,T} - E[\bar{t}_{N,T}]}{\sqrt{Var[\bar{t}_{N,T}]}} \right) \Rightarrow N(0,1)$, where $E[\bar{t}_{N,T}] = \mu$ and $var[\bar{t}_{N,T}] = \sigma^2$ are arranged in accordance with Monte-Carlo simulation.
- ¹² See Khan and Khan (2011), Rivero (2007), Prasad *et al.* (2007), Hassan *et al.* (2011), Breitung and Pesaran (2005), and Ramirez (2006).
- ¹³ Model of SUR got initiated by Zellner in 1962, and was afterwards studied by Telser (1964), Kmenta and Gilbert (1968), Phillips (1977, 1985), Srivastava and Dwivedi (1979), and Baltagi (1980).
- ¹⁴ Also see (Park & Ogaki, 1991; Phillips, 1991).
- ¹⁵ If, in fact, there exist no relationship between the equation and the disturbances (error terms) are uncorrelated, OLS is appropriate methodology. However, if correlation exists, more sophisticated methodology is of mainly GLS (Gujarati, 1995), as it promises to give more realistic results (Sumer, 2012).
- ¹⁶ In case of POP for Model-I to Model-IV, though the H_0 of weak exogeneity is rejected, however, there is no run of causality from EMPL to POP. Therefore, POP may still be treated as weakly exogenous, as elaborated by Ghassan (2011).
- ¹⁷ Upper bound DW critical value for Pakistan is 1.89. For rest of the countries, it is 1.96, respectively.
- ¹⁸ For the detailed version of discussion on account of flight of capital and causes on exchange rate systems, crisis of financial system, national savings, and the reversals of foreign capital, see Papanek (1973), Corsetti, Pesenti, and Roubini (1999), and Chowdhry and Goyal (2000).
- ¹⁹ Within the forms of FCI, FORAID is one of the core components (Friedman, 1995; Little & Mirrlees, 1974).
- ²⁰ Countries like Pakistan heavily depend upon the external capital for addressing the needs of short fall of financial wealth. The capital is required for the carrying out of the developmental and non developmental projects. Base of FORAID is always seen increasing in Pakistan, due to low interest

payment – and/or because of being donation(s) by the donor countries without any repayable of principal amount.

Summing up the point of views of theorists and empirics, FORAID is found effective in exhibiting role in case of job creation, easing off of the taxation system, raising aggregate demand that initiates future investment, fighting against poverty, economic growth, and issues of unemployment (Little & Mirrless, 1974; Harris & Todaro, 1970; Isse, 1988; Adam & O' Connell, 1999).

- 21 Debate of raising level of employment has important linkage with back stage clause of household consumption. In this respect, Bakht and Mahmood (1989) realized that foreign inflows like those of WREM tend to amplify the consumption and investment level of a country. However, names of Keynes (1936) and Lerner (1967) fall in the fraternity of the economist who illuminated that consumption expenditure is one of the core determinants of EMPL, which provokes the producers to carry-on or initiate either new channels of production in response of the swelled level of consumption or amalgamate existing one. In this respect, Conway (1992) gave a verdict that when flow of WREM remains consistent in its course, not only favors the aspirants either, however, in sequel of an overall increase in spending of money, does positively promote the level of consumption.
- 22 Remittance income acts in context of “trickle-down effect” for the creation of new jobs due to increasing the level of investment in the host country at an intermediate state of point (Imran, 2004). Next to India and Bangladesh, where highest flow of foreign capital is nonetheless WREM, Pakistan is also being as a seventh largest country in the world in respect of the heir for the remittance income, according to MFGOP (2016), thus may not be treated as inefficient and less beneficial due to the situation that too much of the labor force (including artisan, doctors, engineers, teachers, technicians, and etc.) is working abroad rather can be declared as blessed due to couple of reasons. Firstly; the major flow of foreign income, though most of that is sent not through legal channel, i.e. instead of sent via legal route of Banks, so that to be recorded on the balance sheet of State/Central Bank of Pakistan and India, is sent by Hawala System (Hundi), then too contributes in the stoppage of exchange rate depletion. Secondly; manifold inflows of remittance income help in keeping alive the consumption level, though unsubstantial and perpetual, which is a successful motivator for publishing ads for new jobs.
- 23 In long run, Phillip Curve's negative and flexible slopping is also questioned by the Monetarist i.e. Milton Friedman to be perfectly inelastic and parallel to vertical axis – showing reach of full employment level. Too much of the rise in the prices (Inflation) leads to less precise effect on the employment level, or either just a rise in the prices with employment to remain the same, if full employment level is reached, however not realized by the state authorities.
- 24 Empirics stated mixed results of LIT and EMPL. In this respect, Wagner *et al.* (1989) looked into different state of consequences of on-job hiring on account of gender.
- 25 The findings are in contrast to that of De Jong and Gardner (1981) and of Frank (1968). However, Bencivenga and Smith (1997) acclaimed that rise in population later acts as a source of growth for a country. Whereas, economic growth and job creation both tend to have similarity on ground of macroeconomic issues.
- 26 According to Keynes (1936)'s verdict in “General Theory of Employment, Interest, and Money”, consumption is an important determinant of employment generation however, itself depends upon the investment. It is because of the accelerator effect that, “income determines the level of investment” and hereafter due to multiplier effect, “investment determines income”, it is the one that initiates consumption. Keynes (1936) believed that only investment capital cannot be sufficient in contributing to job creation unless have a follow up of continual consumption patterns.
- 27 The coefficient of an ECT term is to explain about the speed of an adjustment of the regressand (dependant variable) on which the equilibrium is to be restored, from short run to long run. The coefficient that is found to lie outside the specified range i.e. $(-1 < ECT < 0)$ gives a proposition that some proportion of disequilibrium that was accumulated on dependent variable is being adjusted for the changes in explanatory variables in the current period (Uwakaeme, 2015). Also, according to Asongu, Montasser, and Toumi (2015), while determining for the speed that posts to restore equilibrium, after deviation in short run, 0 indicates for no adjustment while 1 pin points for the full adjustment towards the equilibrium, one period later.
- 28 Moreover, unanticipated and before the due time reversals and change/take-over of State Governments in past (from democracy to military rulers), carried forward great deal of

inconsistency on the policy suggestions for the fetch of FORDBT either, however coupled with the changes of lending decisions of the donors, since changed scenarios of ruling governments were viewed.

²⁹ Somewhat negative bring ups of effects of FORAID on EMPL may not be seen surprising though, found to be positive in long run, because of the reason of the channel that initiates the EMPL on the backing of FORAID. The channels framed earlier by Friedman (1995) are the execution of developmental and non developmental project financing on the ground of FORAID that enable the authorities (government or either private sector) to whisper for the call of jobs. However, due to either the element of corruption, or too much of the spending on non developmental projects (health, education, and etc.) may squeeze EMPL temporarily, due to the nature of spending on projects types, probably in different time lags, but not in long run where the findings confirm for the significant and positive spillovers.

³⁰ As suggested by Monetarist (Milton Friedman) that; slope of Phillip Curve may be flexible and negative in short run however, tends to behave not the same in case of long run reason being the out looked natural rate of unemployment/full employment level of an economy. The findings thus clarify the view point of Monetarist in empirically testing that short run exposure of INF to EMPL is though positive, however turns out to be negative and significant in long run.

³¹ For the remembrance, it is already found that entire variables of the study sketched in Model- I to Model-IV (Time Series, SAC) have been established to settle as stationary at I(0) or I(1) and nevertheless cointegrated, therefore, estimation of unrestricted VAR is authorized. Wherein, after the prelim estimation, each model is processed with IRVD for obtaining the results. In this respect, the optimum lags are chosen in the light of AIC.

³² That is to capture scaled production target to be met in limited time, low in cost, properly furnished thus of acceptable and absolutely advantageous on other firms' product line, and appreciably plausible by foreign as well as local buyers. All such are only true if the production is carried out in scientific rather than that of being along artisans that are though favorable for the firms in short run due to the low payments as are cheap however, at the cost of future low demand for the products due to missing attributes, stated afore.

³³ The literature (empirical) possesses the negative as well as positive potential impacts of FDI on the employment level of the host country. However, according to Jenkins (2006), forms of effects of FDI on employment do tend to post different outcomes in result of type of FDI that is taken into account.

Also, see Braunstein and Epstein (2002), Jenkins (2006), Akcoraoglu and Acikgoz (2011), and not the least Rizvi and Nishat (2009) who published the findings that in Pakistan, India, and China, it is not the FDI that promotes employment.

³⁴ Despite of the fact that banks' officials and the governments of the economies, where capital is an instant need to gear up for the carry out of the actions to better off an economic stature, do know that the money (debts) would be by and large diverted towards the self interests by the corrupt elites, thus the volume of loans consistently rise (Hurley, 2007). Thereafter, not only though the government, either the same one that hires the loans or the newly elected, continues to bear the depression of the mandatory serving of such heavy debts by gathering heavy funds which otherwise would have been dispensed for curtailing chronic poverty and other challenges of economic development.

³⁵ Continual of dependency on foreign capital i.e. borrowed capital on no concessional rates when geometrically accumulates the size of external debts and liabilities on third world economies, for instance SAC, makes them realize that although already indebted heavily, should go for the further borrowing of capital from other international donors to pay off certain amount to some of those former lenders, as promised earlier. This myth keeps on accumulating the range of debt burden and further borrowings together with the request(s) for the rescheduling of the loans at the cost of compromising the address up of internal macroeconomic issues.

Also see Hepp (2005) for further elaborations on debt crisis and possible macroeconomic effects of the same on categorized heavily and non-heavily indebted countries.

³⁶ Government of especially less developed countries i.e. at present SAC levy heavy taxes to finance their budgetary deficit and to sponsor ongoing and/or futurist plans of developmental and non developmental project. Whereas, not realizing that such heavy imposition of taxes leads to condense the consumption expenditure of the people, due to the reduced amount of leftover (disposable income). Nevertheless, heavy taxes if introduced, most probably are not to bring new people in tax payers' regime rather further burden already tax payers. This altogether is what

Keynes (1936) thought to be as deterrent in the job creation process. Moreover, fall of consumption is also affirmed to be as harder towards employment. On the contrary, aid attractive exposure of a particular country/region (SAC) favors the government to gear up economic activities (economic growth and job creation), given that borrowed capital is interest free and not repayable such as FORAID. Therefore, enables them to fix not less steady rather gradual macroeconomic lift ups.

- ³⁷ For further gain of content(s), see Bakht and Mahmood (1989), Lerner (1967), Keynes (1936), and Conway (1992).

Whereas, Brown (1994), Taylor (1999), and Amjad (1986) added that worker remittance are the altruistic payments dispensed to the families that remain in immigrant's state of the origin in order to accommodate their day-to-day consumption patterns and/or investments in case of human as well as in physical capital by the mean of acquisition of assets in the shape of land, good (capital), and nevertheless, housing. Nonetheless, all of such amalgamation and inclusions of economic activities surely foster employment generation. On the contrary, Grigorian and Melkonyan (2011), Kovtun *et al.* (2014), and Mughal and Makhoul (2013) outreached that beneficiaries of worker remittance are led towards of longer hours for job search, descend in work skills, and thereby adhere to shorten the labor supply.

- ³⁸ Hertner and Jones (1986) called FDI as a component of FCI that deals with the transfer of financial assets from one country to that of the next and therefore has meaningful effects on the beneficiary. Subsequently, apart from a fact that FDI is essential for EMPL, it is important ingredient for coping up with the needs of sector wise growth. That's the reason FDI is always welcomed.

For sector wise causality relation of FDI, see Khan and Khan (2011).and Bekhet and Mugableh (2016).

- ³⁹ Good governance is defined as a composite of transparency and accountability. It is based on two premises. First; effectiveness of policy is strengthened if goals and the policy instruments are publically known and government should commit herself for meeting those. Secondly; good governance at; ministry of finance, offices that manage foreign aid and debt, central bank, and other public institutions those are involved in the machinery of managing, allocation, monitoring, and gauging such foreign inflows.

- ⁴⁰ According to Worldwide Governance Indicators (2012), the dimensions of governance for Bangladesh, Sri Lanka, Pakistan, and India are (-0.86, -1.09, -0.34, and -0.30, respectively) whereas, the estimates range within -2.5 (weak) and 2.5 (strong), are to gauge governance performance.