THE IMPACT OF DEBT AND EQUITY BASED CAPITAL INFLOWS ON MACROECONOMIC PERFORMANCE OF PAKISTAN

Muhammad Tariq, M.Phil. Scholar Department of Economics, University of Balochistan Quetta mohammad.tariq77@gmail.com
Muhammad Ayaz, Assistant Professor Department of Economics, University of Balochistan Quetta. ayaznasar@gmail.com.

Abstract. *On the three sectors of Pakistan economy, there indeed is a comparatively differing impact of external debt to that of foreign direct investment. In addition, comparatively between external debt and foreign direct investment, external debt not only has a dominant and significant but also a deteriorating impact across, almost all, the three macroeconomic sectors of Pakistan's economy as defined in this study. Conversely on a direct comparison basis between FDI and external debt, FDI has minimal and mostly insignificant impact on all the three macroeconomic sectors of Pakistan's economy. The methodology of this study comprises of Structural Equation Modeling analysis that is based on an extensive and rigorous literature review.*

Keywords: Equity inflows, Debt inflows, Macro economy, Structural Equation Modeling.

Introduction

Globalization is rampant. Economically speaking, globalization as a consequence is also threatening. In today's world there has been vast surge of net capital inflows inclusively in developing countries over the past few decades. Even though capital inflows to South Asia have been comparatively meager especially to that of developed economies and lesser to that of East Asian and Latin American economies, nevertheless these have shown extensive increasing trend within the South Asia, especially India, over almost the past three decades. According to Nasir and Hassan (2011), the second largest recipient of FDI in South Asia is Pakistan. Pakistan especially after liberalization, since the 1980s, has been experiencing variations not only in composition but also in quantity of different capital inflows.

Generally speaking, Krugman, Obstfeld, and Melitz (2012) assert that capital inflows can be divided into equity and debt-based inflows. In addition, the repayment dynamics of debt and equity financing have different responses to external shocks such as recessions and variations of terms of trade (Krugman et al 2012). Thus, debt and equity-based capital inflows

diversely impact an economy. To empirically probe the comparative impact of debt and equity-based capital inflows on the macroeconomic variables of Pakistan is the foremost research problem or issue of this study. Additionally, the study will also provide policy recommendations.

Significance of this study can be validly claimed. Firstly, in Pakistan, and in other South Asian countries there is a need of greater FDI inflows and also there is looming and chronic issue of external debt. Secondly, both theoretical and current empirical evidence of economics verify the divergent implications of equity-debt international shocks for a macro economy. Thirdly and importantly, this study for Pakistan's economy after analysis and synthesis of current available literature in the context of international macroeconomics, because especially probing the direct comparative impact of external debt and foreign direct investment on macroeconomy of Pakistan, is most probably a pioneering research endeavor.

Literature Review

In this study for the sake of simplicity and efficiency for analyzing and synthesizing the reviewed literature, is classified accordingly. Firstly, in the context of Pakistan's economy nationally based research literature is reviewed to see the macroeconomic impact of foreign direct investment. In Pakistan impact of foreign aid and FDI has been negligible (Le & AtaUllah, n.d). In the long run in Pakistan, there is negative effect of foreign debt, foreign direct investment and worker's remittances on economic growth. In the short run, there is one-way causality from foreign direct investment; debt servicing, literacy rate and inflation to economic growth etc. (Ali, 2014). Only in the long run manufacturing foreign direct investment and services foreign direct investment have significant positive effect on economic growth (Iram & Nishat, 2009). In the economic growth of Pakistan both FDI and foreign remittances play a significantly positive role (Tahir, Khan, & Shah, 2015). Khan and Ahmed (2007) propounds that three factors, exports, FDI and domestic investment have positive and significant impact on GDP. According to Ali, Nishat, and Anwar, (2010) foreign inflows are significantly important for economic growth of Pakistan. According to Afzal (2008) investment in both the public sector and private sector is conducive to both these sectors and it reinforces economic growth. Ahmad, Alam, Butt and Haroon (2003) find positive causality from FDI to domestic output and FDI do not help in increasing her export base. In both the long and short run FDI inflows have negatively impacted the current account balance excluding current transfers (Jaffri, Asghar, Ali, & Asjed, 2012). Additionally, in the

long run FDI inflows into Pakistan have worsen the income account outflows of current account balance (Jaffri et al., 2012). Trade balance of Pakistan's economy is deteriorated by her exchange rate nominal depreciation or devaluation of Pak-rupee (Akhtar & Malik, 2000 as cited in, Shahbaz, Awan & Ahmad, 2011). Foreign direct investment is not stimulating exchange rate instability (Sami Ullah, Haider & Azim, 2012). Nasir and Hassan (2011) if the currency of host country depreciates then it negatively impacts FDI inflows.

Secondly, in the context of international economies internationally based research literature is reviewed to see the macroeconomic impact of foreign direct investment. Output gap, appreciation of real exchange rate, inflation, credit escalation, and stock market prices significantly respond and rise due to an exogenous increase in debt inflows; nonetheless, these variables have almost no effect or response to exogenous equity increase (Davis, 2015). Samuels and Theobald (1989) in developing countries if greater numbers of firms increase equity financing then it would be more beneficial for business of these countries. Basnet and Pradhan (2014) find that in Sri Lanka, Pakistan, Bangladesh, Nepal, and India, FDI has been ineffectual in promoting economic growth. Varamini and Kalash (2010) argue that in 9 out of 10 European countries GDP unilaterally Granger cause FDI inflows. But in all these countries FDI inflows have not been able to Granger cause variation in economic growth. Additionally, in most of these countries FDI inflows have none or negative impact on their trade balances. Sayek (2009) emphasize that FDI helps in curtailing intensity of negative effects of inflation.

In Uzbekistan, Kyrgyzstan, Tajikistan, and Kazakhstan FDI has positive impact on domestic output but development aid has negative impact on it (Arazmuradov, 2016). FDI positively impacts an economy's development by employment generation, raising economic growth and levels of domestic savings (Dupasquier & Osakwe, 2003, Anyanwu, 2006, as cited in, Anyanwu & Yameogo, 2015). In long run FDI increase GDP, money supply, inflation; interest rate; and depreciates exchange rate (Gossel & Biekpe, 2012). In developing countries GDP growth correlates positively with terms of trade development and amount of FDI inflows (Wacker, 2015). In developing countries FDI inflows improves their unit value of exports and their terms of trade (Harding & Jovarcik, 2012, as cited in Wacker, 2015).

In Estonia industries, including both the nationally and internationally owned, FDI plays an important role in promoting export growth (Urmas & Ziacik, 2000). In Vietnam, specifically during the long term, FDI positively

impacts exports (Thanh and Duong, 2011). In some emerging economies FDI and current account deficits are positively associated and in other emerging economies these are negatively associated (Lahiri & Morshed, 2010). Jože Mencinger (n.d) found that in both short and long term the impact of FDI on current account balance differs across space and time. In all NMS, FDI inflows deteriorate current account balance because of rising investment account deficits that are accompanied by trade account deficits. In NMS capital inflows via FDI might soon lag greatly below capital outflow via income account. Sen (1995) proclaims that mainly in developing countries FDI will nearly always lead to short run trade balance worsening greater than that implied by the direct imports. In essence, FDI helps in aggregate output growth.

For developing countries real depreciation of domestic currency is not necessarily prolific for export promotion (Majeed & Ahmad, 2007). Pham and Nguyen (2013) show that the bilateral RER depreciation positively affects exports of Vietnam. For China, Singapore, South Korea, Malaysia, and India FDI more effectively reduced real exchange rate volatility. Nevertheless, for the Philippines, Indonesia, and Thailand greater FDI increased real exchange rate volatility (Al-Abri & Baghestani, 2015). In case of Romania in the long-term increase in current account balance and increase in FDI flows lead to increase in Lei/ Euro exchange rate (Iavorschi, 2014). Kandil (2015) propounds that in both the advanced and developing countries it is difficult to generalize and say, because of their mixed and complex relationship that if greater FDI inflows would either appreciate or depreciate the domestic currency. Jongwanich and Kohpaiboon (2013) show that foreign direct investment, mostly allocated in trade and export sectors, by nature is relatively stable and leads to slower speed of adjustment for real exchange rate. 0.15% appreciation of real exchange rate is being noticed due to 1% increase of FDI inflows. (Lane, 2015) inflows of foreign direct investment raise the demand for domestic currency and hence appreciate the exchange rate. Greater volumes of official aid and bigger fiscal deficits are associated with greater debt inflows; nonetheless only during 2010-2012 association between fiscal deficit and new FDI inflows has been witnessed.

Thirdly, in the context of Pakistan's economy nationally based research literature is reviewed to see the macroeconomic impact of external debt. Zeshan, Aslam, Fatima, and Muzaffar (2015) argue that external debt negatively effects economic growth, but domestic debt positively effects it. Capital investments and FDI inflows shall be promoted; nonetheless, debt

inflows should be minimized. Moreover, unproductive utilization of external debt shall be curtailed. Akram (2011) finds a significant and negative, in both short and long run, connection between foreign debt and economic growth. Ali and Mustafa (2012) found negative relationship between external debt and economic growth. Atique and Malik (2012) find negative or inverse relation not only between domestic debt and economic growth but also between external debt and economic growth. External debt, compared to domestic debt, of Pakistan poses more serious burden on economic growth rate. Debt accumulation in Pakistan have given rise to sluggish economic growth, towering fiscal deficits and scarcity, continuous deprecation of the exchange rate, and increased external debt liabilities (Awan, A., N. Asghar & H.U. Rehman, 2011, as cited in, Atique & Malik 2012). The increased debt servicing means payment of huge amounts of government revenue and income into huge amounts of interest payments. Additionally, these increased debt and debt servicing continually aggravate budget deficits (Atique & Malik 2012).

Mahmood and Rauf (2008) affirm that both the increase in external and fiscal gap, during and afterwards 2005 have negatively affected the debt to GDP ratio and external debt has been greatly increasing. Hasan (1999) as cited in, Mahmood and Rauf (2008) analyzes that domestic debt effect fiscal space, economic growth and development expenditure. Depreciation of Pakistani Rupee unfavorably impacts both the external debt and balance of payments position. In Pakistan domestic debt is increasing; the saving investment gap continues; and there is incremental increase in borrowings in order to finance both fiscal and external deficits. Additionally, fiscal and external deficits have been adversely impacting the real, fiscal, financial and external sectors. In analyzing the domestic public debt Ahmad, Sheikh, and Khadija (2012), as cited in, Veiga, Ferreira-Lopes and Sequeira (2016) concluded that in Pakistan increased levels of domestic public debt and debt servicing lead to inflationary pressures. Moreover, domestic public debt servicing is also burdensome that is one of the reasons for causing the budget deficits and consequently inflation. Iqbal and Bilquees (1994) claim that adjustment lending, because of its relatively stricter conditions on its use, seem to enhance capital formation more than other foreign borrowing.

Fourthly, in the context of international economies internationally based research literature is reviewed to see the macroeconomic impact of external debt. Westphal and Rother (2011) claim a nonlinear result of debt on economic growth. Importantly there is a turning point in this relationship after

which an increase in percentage of debt to GDP negatively impacts economic growth. Siddique. Selvanathan and Saroja (2016) show in the short run, that debt up to a certain level or magnitude positively impacts economic growth. Nevertheless, in the long run, debt beyond that certain level or magnitude has negative impact both on economic growth and current account. (Woo & Kumar, 2015) notes that in the long run there is negative correlation between primary government public debt and per capita real GDP growth rate. Choong, Baharumshah, Yusop & Habibullah (2010) investigate that in both the developed and developing countries there is positive relationship of FDI with economic growth and usually negative relationship of portfolio investment and foreign debt with economic growth. In African economies, high levels of public debt are related to reducing economic growth and increasing levels of inflation (Veiga et al., 2016). Salotti and Trecroci (2016) propound that ever increasing public debt has a significant negative impact on private investment expenditures and on the rates of productivity growth, all this might lead to impede long term economic growth.

In most of the cases of the study's sample no causality was witnessed from foreign indebtedness to increase in exports or imports (Afxentiou & Serletis, 1995). Foreign debt might also cause appreciation of real exchange rate, current account deficit, balance of payments crisis and increased foreign debt (Easterly & Schmidt-Hebbel, 1993 & 2003, as cited in, Folorunso & Falade, 2013). All this also may deteriorate fiscal deficit (Folorunso & Falade, 2013).

Kameda (2014) for the economy of Japan it is estimated that the current government debt to GDP ratio only raises by 1.2 basis points the real long-term interest rates. In consistency with (Feldstein, 1986, as cited in Kameda, 2014) budget deficits have larger effects, than government debt, on long term interest rates. Arnone and Presbitero (2007) note that in 14 heavily indebted poor countries as the domestic debt is increasing the interest payments on domestic debt are also raising. Consequently, this increased stock of debt is an extra burden on fiscal balance. Increased stock of debt is distressing due to increased interest rates and inflationary pressures. Bal & Rath (2016) for the Indian economy, point out that a positive shock to public debt leads to increased interest payments and decreased development expenditures. Additionally, gross primary deficits are negatively related or associated with interest payments. Folorunso and Falade (2013) find that high debt rates are positively related and are possibly caused by high domestic interest rates. They found bidirectional causality amongst fiscal balance (deficit) and public

debt; and fiscal balance (deficit) and domestic debt. Nevertheless, they evidenced unidirectional causality running from external debt to fiscal deficit. (Mahdavi, 2004) claims that during the last three decades, numerous developing countries experienced financial crisis that showed untenable fiscal deficits and increasing external debts. Due to increased external borrowings budgetary allocations are diverted to increased interest payments.

Data and Methodology

A total of 11 variables are used in this study. The variables are classified into internal and external blocks. The external block variables are divided into equity as total foreign direct investment and symbolized as nFDIA; and debt as total external debt and symbolized as nEXTDebtr. The domestic block variables comprise of real, trade, and financial sectors. The real sector block variables are gross domestic product, stock prices and inflation; these are respectively symbolized as nGDP5, nKSEAvg, nCPIIndex2. The trade sector block variables are trade balance, terms of trade, and exchange rate in term of US Dollars; these are respectively symbolized as nTRBal2, nToT, and nEXCHAvg. The financial sector block variables are total domestic debt, fiscal balance and interest rate; these are respectively symbolized as nTDDEbtr, nFSBal, and nMARKRate.

The sample size comprises of annual data starting form 1960 up to 2012. The data is collected from State Bank of Pakistan Publications; Pakistan Bureau of Statistics Publications; and International Monetary Fund's data sources. In this study since we are exploring the comparative impact of external variables on internal variables of Pakistan economy so this is a quantitative causal empirical research. Additionally, the empirical findings are supported or analyzed against existing theory via an extensive literature review. Structural equation modeling (SEM) is utilized via IBM SPSS/AMOS and IBM/SPSS data analysis softwares.

Hair at al. (2014) signifies that SEM is a multivariate method of data analysis that explains relationships amongst multiple variables. Structure of interrelationships examined via SEM can be depicted in a series of equations similar to a sequence of multiple regression equations. The uniqueness of SEM is that it can on a multivariate level analyze not only dependence but also interdependence cause and effect relationship among observed variable and also amongst unobserved variables i.e., constructs or latent factors. This is because SEM comprises methodology both of factor analysis and multiple regression analysis. In SEM multiple variables combined into a single entity are either known as constructs or latent factors.

Schumacker and Lomax (2016) argues that basically SEM aims at testing the validity of a given theoretical models against a given sample data. SEM is a technique liable for hypothesizing and testing various theoretical models. SEM tests theoretical models, either based on theory or empirical research, using hypothesis testing as a scientific method to advance our comprehension of the complicated relations depicted by data among constructs only; among observed variables only; or among a combination of both. Furthermore, the flexibility of SEM makes room for analyzing multiple independent observed variables and multiple dependent observed variables.

The researcher specifies the independent and dependent variables for example in our study, using only observed variables, foreign direct investment and external debt are the independent observed variables that impact and influence our dependent observed variables corresponding to our three models of real, trade and financial sector.

Findings of Structural Equation Modeling Analysis

Real Sector

This analysis is with reference to both Figure No.1 SEM Real Sector Model and Table No: 1 Real Sector (Regression Weights).

Dependent	Independent	Estimate	Standardized Estimates	C.R.	P
nGDP5	nEXTDebtr	-1.656	-.625	-2.829	.005
nCPIIndex2	nEXTDebtr	.004	.904	22.59	***
nKSEAvg	nEXTDebtr	.071	.426	3.631	***
nGDP5	nFDIA	-.276	-.008	-.035	.972
nCPIIndex2	nFDIA	.005	.097	2.437	.015
nKSEAvg	nFDIA	1.167	.515	4.388	***

For foreign direct investment a standardized increase in **nFDIA** on average, keeping the **nEXTDebtr** constant, insignificantly decreases **nGDP5** by 0.008 standard deviations. Similarly, an increase in **nFDIA** significantly increases **nCPIIndex2** by 0.097. Similarly, an increase in **nFDIA** significantly increases **nKSEAvg** by 0.515. For external debt a standardized increase in **nEXTDebtr** on average, keeping the **nFDIA constant,** significantly decreases **nGDP5** by 0.625 standard deviations. Similarly, an increase in **nEXTDebtr** significantly increases **nCPIIndex2** by 0.904.

Similarly, an increase in **nEXTDebtr** significantly increases **nKSEAvg** by 0.426.

Figure 1: SEM Real Sector Model

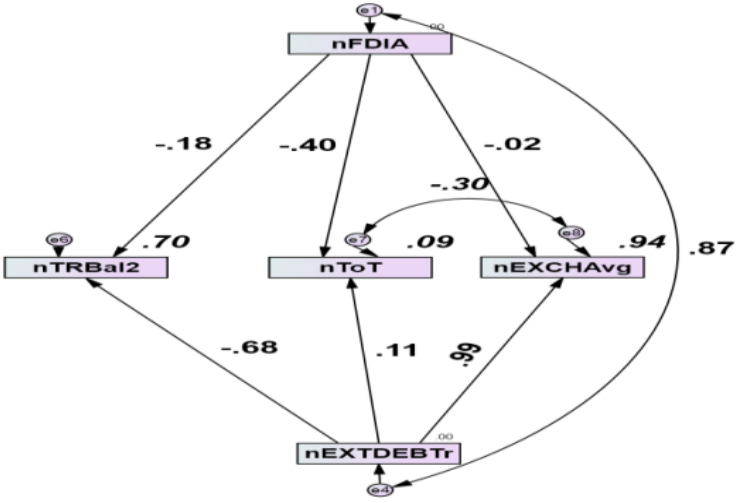


Table No: 2. Real Sector (Model Fit Statistics)

CMIN					
Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	17	**3.291**	3	**.349**	**1.097**
Baseline Comparisons					
Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.992	.973	.999	.998	**.999**
RMSEA					
Model	RMSEA	LO 90	HI 90		PCLOSE
Default model	**.043**	.000	.242		**.407**

Trade Sector

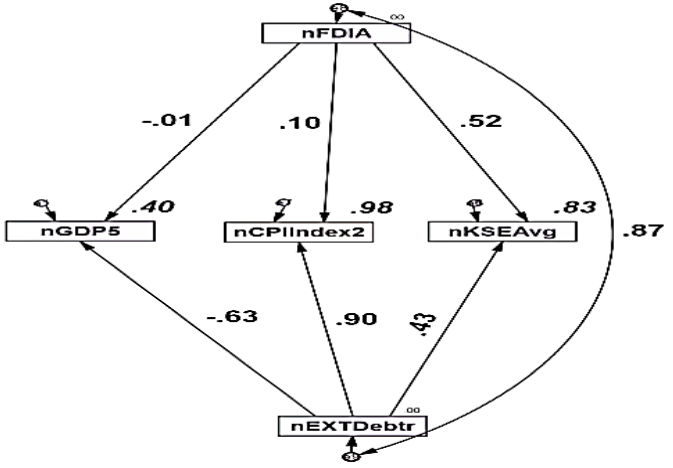
This analysis is with reference to both Figure No. 2 SEM Trade Sector Model and Table No: 3 Trade Sector (Regression Weights).

Table No: 3. Trade Sector (Regression Weights)

Dependent Variables	Independent Variables	Estimate	Standardized Estimates	C.R.	P
nTRBal2	nFDIA	-.795	-.176	-1.129	.259
nToT	nFDIA	-.006	-.401	-1.475	.140
nEXCHAvg	nFDIA	.000	-.021	-.315	.753
nTRBal2	nEXTDEBTr	-.226	-.679	-4.356	***
nToT	nEXTDEBTr	.000	.115	.423	.673
nEXCHAvg	nEXTDEBTr	.002	.990	14.737	***

For foreign direct investment a standardized increase in **nFDIA** on average, keeping the **nEXTDebtr** constant, insignificantly decreases **nTRBal2** by 0.176 standard deviations. Similarly, an increase in **nFDIA** insignificantly decreases **nToT** by 0.401. Similarly, an increase in **nFDIA** insignificantly decreases **nEXCHAvg** by 0.021.

Figure 2: SEM Trade Sector Model



For external debt a standardized increase in **nEXTDebt**r on average, keeping the **nFDIA** constant**,** significantly decreases **nTRBal2** by 0.679 standard deviations. Similarly, an increase in **nEXTDebtr** insignificantly increases **nToT** by 0.115. Similarly, an increase in **nEXTDebtr** significantly increases **nEXCHAvg** by 0.99.

Table No: 4. Trade Sector (Model Fit Statistics)

CMIN					
Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	18	2.365	2	**.306**	**1.183**
Baseline Comparisons					
Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.992	.961	.999	.994	**.999**
RMSEA					
Model	RMSEA	LO 90	HI 90		PCLOSE
Default model	**.059**	.000	.288		**.352**

Financial Sector

This analysis is with reference to both Figure No.3 SEM Financial Sector Model and Table No: 5 Financial Sector (Regression Weights).

Table No: 5. Financial Sector (Regression Weights)

Dependent Variables	Independent Variables	Estimate	Standardized Estimates	C.R.	P
nFSBal	nFDIA	-.591	-.189	-2.082	.037
nFSBal	nEXTDebtr	-.179	-.778	-8.554	***
nTDDebtr	nFDIA	1.596	.096	3.655	***
nTDDebtr	nEXTDebtr	1.111	.910	34.494	***
nMARKRate	nFDIA	.000	-.173	-.739	.460
nMARKRate	nEXTDebtr	.000	.718	3.065	.002

For foreign direct investment a standardized increase in **nFDIA on average**, keeping the **nEXTDebtr** constant, significantly increases **nTDDebtr** by 0.096 standard deviations. Similarly, an increase in **nFDIA** significantly decreases **nFSBal** by 0.189. Similarly, an increase in **nFDIA** insignificantly decreases **nMARKRate** by 0.173. For external debt a standardized increase in **nEXTDebtr** on average, keeping **nFDIA constant,** significantly increases **nTDDebtr** by 0.91 standard deviations. Similarly, an increase in **nEXTDebtr** significantly decreases **nFSBal** by 0.778. Similarly, an increase in **nEXTDebtr** significantly increases **nMARKRate** by 0.718.

Figure No.3 SEM Financial Sector Model

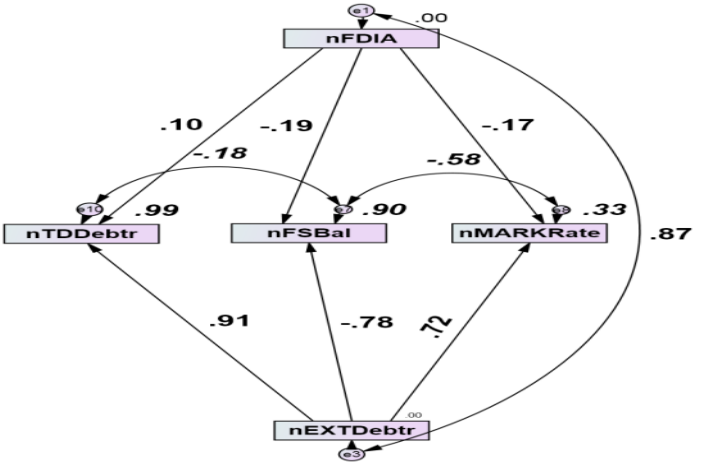


Table No: 6. Financial Sector (Model Fit Statistics)

CMIN					
Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	14	**1.314**	1	**.252**	**1.314**
Baseline Comparisons					
Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.997	.973	.999	.993	**.999**
RMSEA					
Model	RMSEA	LO 90	HI 90	PCLOSE	
Default model	**.078**	.000	.387	**.282**	

Table No. 7. All three Sectors (Normality Assessment)

Variable	min	max	skew	c.r.	kurtosis	c.r.
nFDIA	-1808.500	3013.483	-.032	-.096	-.545	-.810
nEXTDebtr	-15163.038	48690.253	.068	.201	-.474	-.705
nKSEAvg	-4008.308	6943.278	-.035	-.104	-.538	-.799
nCPIIndex2	-77.222	192.396	-.024	-.071	-.554	-.823
nGDP5	71483.883	247668.636	.017	.049	-.449	-.667
Multivariate[1]					33.819	14.714
Variable	min	max	skew	c.r.	kurtosis	c.r.
nEXTDEBTr	-15163.038	48690.253	.068	.201	-.474	-.705
nFDIA	-1808.500	3013.483	-.032	-.096	-.545	-.810
nEXCHAvg	-1.955	82.653	.310	.922	-.742	-1.102
nToT	52.363	122.259	-.014	-.043	-.447	-.664
nTRBal2	-14506.592	7446.366	-.037	-.110	-.501	-.745
Multivariate [2]					5.555	2.417

[1] Testing the null hypothesis that the model is correct, Bollen-Stine bootstrap p = .582 In other words, the data do not depart significantly from the model at any conventional significance level.

[2] Testing the null hypothesis that the model is correct, Bollen-Stine bootstrap p = .235. In other words, the data do not depart significantly from the model at any conventional significance level.

Variable	min	max	skew	c.r.	kurtosis	c.r.
nEXTDebtr	-15163.038	48482.716	.056	.167	-.492	-.732
nFDIA	-1808.500	3013.483	-.032	-.096	-.544	-.809
nTDDebtr	-20802.912	56837.870	.058	.172	-.490	-.728
nMARKRate	2.113	13.576	.002	.007	-.552	-.821
nFSBal	-10626.717	4418.435	-.033	-.099	-.543	-.806
Multivariate[3]					7.025	3.056

Result and Discussion

In the context of Pakistan based literature limited evidence could be found for the causality or relationship of FDI with the dependent macroeconomic variables. For the macroeconomic impact of foreign direct investment both the findings of reviewed literature and findings of SEM analysis are mixed or involved. Being specific the reviewed literature for the impact of FDI portrays either reinforcing or deteriorating and sometimes no impact on GDP; positive or negative on trade balance; and positive or negative exchange rate. The impact of FDI is very rare and difficult to find on inflation rate, total domestic debt, and fiscal balance. Internationally, meager evidence is found for the impact of FDI on terms of trade, and on stock prices.

[3] Testing the null hypothesis that the model is correct, Bollen-Stine bootstrap p = .217. In other words, the data do not depart significantly from the model at any conventional significance level.

Empirically, on the real sector only for nKSEAvg, nFDIA has stronger in magnitude impact to that of nEXTDebtr. **nFDIA** significantly increase **nCPIIndex2** and **nKSEAvg**. **nEXTDebtr** significantly increases **nKSEAvg**. Empirically, on the trade sector the impact of nFDIA is insignificant with all the three dependent variables. Nonetheless, nEXTDebtr has insignificant impact only with nToT. Empirically, on financial sector nEXTDebtr on all the three dependent variables has stronger in magnitude impact to that of nFDIA. **nFDIA** significantly decreases **nFSBal,** but it significantly increases **nTDDebtr**. **nFDIA** insignificantly decreases **nMARKRate**.

The macroeconomic impact of FDI from empirical findings and reviewed literature are comparatively discussed here. Empirically, **nFDIA** insignificantly decreases **nGDP5**. Le and AtaUllah (n.d) found that in Pakistan impact of foreign aid and FDI has been negligible. According to (Iram & Nishat, 2009) only in the long run manufacturing and services FDI have positive impact on economic expansion. But according to Ali (2014) in long run there is negative impact of FDI and foreign aid on economic growth; and in short run the impact of FDI is positive on economic growth. Basnet and Pradhan (2014); and Varamini and Kalash (2010) find ineffectual impact of FDI on economic growth. Similarly, according to Davis (2015) in the short run it is the increase in debt inflows and not the increase in equity inflows which raises macroeconomic variables. Nevertheless, Ali, et al (2010); Afzal (2008); Tahir et al. (2015), Khan and Ahmed (2007); and Ahmad et al. (2003) signify positive impact of FDI on economic growth. These authors including Arazmuradov (2016); Samuels and Theobald (1989); Dupasquier and Osakwe (2003); Anyanwu (2006), as cited in, Anyanwu and Yameogo (2015); (Sen, 1995); and Wacker (2015) also provide positive impact of FDI on economic growth. Gossel and Biekpe (2012) argue that in the long run FDI increases GDP.

Empirically, **nFDIA** insignificantly decreases **nTRBal2**. (Sen, 1995) proclaims that mainly in developing countries FDI will nearly always lead to short run trade balance worsening. According to (Ahmad et al., 2003) FDI do not help in increasing the export base. In addition, (Jaffri et al., 2012) signify negative impact of FDI inflows on current account and also on income account outflows of current account balance. (Sami Ullah et al., 2012) FDI is not causing exchange rate volatility. In some instances, the impact of FDI on current account balance is positive and in other instances it is negative (Jože Mencinger, n.d). According to Lahiri and Morshed (2010) FDI and current account deficits in some instances are positively associated and in other

instances are negatively associated. Empirically**, nFDIA** insignificantly decreases **nToT.** For developing countries there is positive correlation of GDP growth with terms of trade development and with amount of FDI inflows (Wacker, 2015). Harding and Jovarcik (2012), as cited in, Wacker (2015) stated that for developing countries FDI improves host country's unit values of exports, exports, and terms of trade.

Empirically, **nFDIA** insignificantly decreases **nEXCHAvg** (Kandil, 2015). FDI inflows in some instances results in exchange rate appreciation and in other instances results in exchange rate depreciation. Al-Abri and Baghestani (2015) stated that in some countries FDI more effectively reduced real exchange rate volatility; nevertheless, in other countries greater FDI increased real exchange rate volatility. According to Jongwanich and Kohpaiboon (2013) foreign direct investment leads to slower speed of adjustment for real exchange rate. Increase in FDI inflows leads to appreciation of real exchange rate. According to Lane (2015) inflows of FDI raise the demand for domestic currency and hence appreciate the exchange rate. Only during 2010-2012 was association between fiscal deficit and FDI inflows. Gossel and Biekpe (2012) argued that specifically in the long run FDI increase GDP, money supply, inflation, depreciates exchange rate and increases interest rates. Trade balance is deteriorated by exchange rate nominal depreciation or devaluation (Akhtar & Malik, 2000 as cited in Shahbaz et al., 2011). Nasir and Hassan (2011) for developing countries, currency depreciation of host country negatively impacts FDI inflows.

The findings of our literature review for external debt, both in case of Pakistan and international economies, in comparison with the empirical findings of SEM results are almost fully reinforcing, supporting and similar to each other. Importantly, evidence pertaining to impact of external debt on terms of trade could not be found. Meager or limited evidence could be found and quoted for stock prices.

The macroeconomic impact of external debt from empirical findings and reviewed literature are comparatively discussed here. Empirically, **nEXTDebtr** significantly decreases **nGDP5**. Zeshan et al (2015) external debt negatively impact economic growth but domestic debt positively impacts it. Akram (2011), Ali and Mustafa (2012), Choong et al. (2010), Veiga et al. (2016), and Salotti and Trecroci (2016) investigate negative impact of external debt on economic expansion. Atique & Malik (2012) signifies negative impact not only of external debt but also of domestic debt on economic growth. Debt accumulation causes towering fiscal deficits;

continuous deprecation of the exchange rate, and increased external debt liabilities (Awan et al., 2011, as cited in, Atique & Malik, 2012). Mahmood and Rauf (2008) affirm that both the increase in external and fiscal gap has negatively affected the debt to GDP ratio and there is increased external debt. Westphal and Rother (2011) proclaim negative impact of external debt beyond a certain magnitude on GDP. Similarly, for long run (Siddique et al., 2016) proclaims negative impact of external debt, beyond a watershed, on GDP. Woo and Kumar (2015) noted negative impact of public debt on economic growth. Empirically, **nEXTDebtr** significantly and dominantly increases **nCPIIndex2**. Ahmad et al. (2012) as cited in, Veiga et al. (2016) argues that in Pakistan there is mostly reinforcing impact of domestic debt and debt servicing on inflation rate.

Empirically, **nEXTDebtr** significantly, and overwhelmingly, increases **nEXCHAvg**. Awan et al. (2011), as cited in, Atique and Malik (2012) provides evidence of positive impact of external debt on exchange rate; consequently, depreciation of Pakistani rupee. In our analysis depreciation of Pakistani currency in terms of US Dollars would mean increased external debt principal amount and payments, increased interest payments and also increased inflation rates. Nonetheless, according to Jongwanich, and Kohpaiboon (2013) real exchange rate depreciates by 0.06 due to inflow of bank loans. **Empirically, nEXTDebtr significantly decreases nTRBal2**. Afxentiou and Serletis (1995) gives evidence of unavailability of any positive impact of external debt on export promotion; consequently, on trade balance. Easterly and Schmidt-Hebbel, (1993 and 2003) as cited in, Folorunso and Falade (2013) provides evidence of positive impact of external debt on exchange rate; consequently, depreciation of domestic currency. External debt increases current account deficits, balance of payment crisis.

Empirically, **nEXTDebtr** significantly and dominatingly increases **nTDDebtr** and **nMARKRate.** Awan et al. (2011), as cited in, Atique and Malik (2012) state that external debt reinforces total public debt, and interest payments. (Kameda, 2014) external debt aggravates inflation, public debt, interest rates, and interest payment. A positive shock to public debt leads to increased interest payments and decreased development expenditures (Bal & Rath, 2016). Gross primary deficits are negatively associated with interest payments.

Empirically, **nEXTDebtr** significantly and dominantly decreases **nFSBal**. Ahmad et al., (2012), as cited in, Veiga et al. (2016) stated that there is positive correlation between increase in domestic debt and deteriorating

both of fiscal and external deficits. According to Folorunso and Falade (2013) and Easterly and Schmidt-Hebbel (1993 and 2003), as cited in, Folorunso and Falade (2013) external debt aggravates fiscal deficits. (Arnone & Presbitero, (2007) state that an increase in domestic debt leads to increase in interest payments and increase of fiscal deficits. Folorunso and Falade (2013) high debt rates are positively related and are possibly caused by high domestic interest rates. There is unidirectional causality running from external debt to fiscal deficit. According to Mahdavi (2004) numerous developing countries since 1974 evidenced untenable fiscal deficits and increasing external debts in turn promoted increased interest payments. Lane (2015) argued that greater volumes of official aid and bigger fiscal deficits are associated with greater debt inflows.

Conclusions and Policy Recommendations

In conclusion firstly for Pakistan, comparative to external debt, the impact of FDI on macroeconomy is minimal and insignificant. This most probably has been due to far lesser amount of FDI inflows in absolute value to that of external debt inflows. Furthermore, both the quality and quantity of FDI are important. Policies shall be formulated and implemented to attract the FDI that is most conducive and suitable to the innate nature, and structure of our economy. FDI shall be suitable to the improvement of our trade balance via enhancing our indigenous export base of our goods and services. In addition, FDI shall be conducive to our economic productivity; aggregate income; employment generation, and terms of trade.

Secondly for Pakistan, comparative to FDI, the impact of external debt on macroeconomy is significantly overwhelming, deteriorating, and negative. The deteriorating and worsening impact of external debt is established with regard to decreasing GDP growth rate; increasing rate of inflation; decreasing trade balance; causing exchange rate appreciation consequently depreciating the domestic currency; increasing domestic debt; decreasing fiscal balance; and increasing interest rate. Emphatically, this worsening and deteriorating macroeconomic impact of external debt most probably has been due to the innate nature of external debt inflows. In addition, regarding external debt its historical and current usage shall be critically analyzed, minimized, and stopped. Crucially, the association and causation of external debt not only with corruption in general but also with corruption in development policies and expenditures shall be seriously discouraged, dealt with, and stopped.

Finally, for Pakistan here has been a further need not only of an in-depth and rigorous exploration of the dire and extensive issue of economic debt but

also of curtailing and diminishing the use and reliance on debt. Similarly, here has been a need of knowing the best type of FDI and the means for attracting it. For the economy of Pakistan has been a dire need to understand and implement her future optimal and efficient management.

References

Al-Abri. A., Baghestani. H (2015). Foreign investment and real exchange rate volatility in emerging Asian countries. *Journal of Asian Economics*, (37), 34–47.

Afzal, M. (2008). The Impact of Globalization on Economic Growth of Pakistan. *The Pakistan Development Review*, 46 (4), 723-734.

Ahmad. M. H., Alam. S., Butt. M. S., Haroon Y., (2003). Foreign Direct Investment, Exports, and Domestic Output in Pakistan. *The Pakistan Development Review*, 42 (4), 715-723.

Ahmad. M. J., Sheikh. M. R., Tariq. K. (2012). Domestic Debt and Inflationary Effects: Evidence from Pakistan. *International Journal of Humanities and Social Science*, 2 (18), 256-263.

Akram, N., (2011). Impact of Public Debt on the Economic Growth of Pakistan. *The Pakistan Development Review*, 50 (4), 599-615.

Ali, M., Nishat, M. and Anwar, T. (2010). Do Foreign Inflows Benefit Pakistani Poor? *The Pakistan Development Review*, 48 (4), 715-738.

Ali, R., and Mustafa, U., (2012). External Debt Accumulation and Its Impact on Economic Growth in Pakistan. *The Pakistan Development Review*, 51, (4) 79-95.

Ali. S., (2014). Foreign Capital Flows and Economic Growth in Pakistan: An Empirical Analysis. *World Applied Sciences Journal* 29 (2): 193-201.

Anyanwu. J. C., (2006). Promoting of Investment in Africa. *African Development Bank, Blackwell Publishing Ltd*. 42-71.

Anyanwu J. C & Yameogo N. D., (2015). What Drives Foreign Direct Investments into West Africa? An Empirical Investigation. *African Development Review*, 27 (3), 199–215.

Arazmuradov. A (2016). The Impact of Foreign Capital on Macroeconomic Performance in Central Asia. *Annals of Public and Cooperative Economics* 87 (2), 275–304.

Arnone. M., Presbitero. A. F. (2007). External Debt Sustainability and Domestic Debt in Heavily Indebted Poor Countries. *Rivista Internazionale di Scienze Sociali*, 115 (2), 187-213.

Atique. R & Malik. K, (2012). Impact of Domestic and External Debt on the Economic Growth of Pakistan. *World Applied Sciences Journal* 20 (1), 120-129.

Basnet, H. C., Pradhan, G., (2014). Does the Inflow of FDI Stock Matter? Evidence from SAARC Countries. *Economic Papers*, 33 (3) 305–312.

Bal. D. P., Rath. B. N., (2016). Is Public Debt a Burden for India? *Economic Papers*, 35 (2), 184–201.

Choong C. K., Baharumshah. A. Z., Yusop. Z. & Habibullah. M. S, (2010). Private capital flows, stock market and economic growth in developed and developing countries: A comparative analysis. *Japan and the World Economy* 22, 107–117.

Davis, J.S., (2015). The macroeconomic effects of debt-and equity-based capital inflows. *Journal of Macroeconomics*, 46, 81–95.

Dupasquier, C., P. N. Osakwe. (2003). Performance, Promotion, and Prospects for Foreign Investment in Africa: National, Regional, and International Responsibilities. paper prepared for the 'Eminent Persons' Meeting on Promotion of Investment in Africa', Tokyo, February.

Easterly. W., Schmidt-Hebbel. K. (1993). Fiscal Deficits and Macroeconomic Performance in Developing Countries. *World Bank Research Observer*, 8(2), 211-237.

Easterly, W., Schmidt-Hebbel. K. (2003). The Macroeconomics of Public Sector Deficits: A Synthesis. In William Easterly, Carlos Rodriguez, and Klaus Schmidt-Hebbel, eds., Public Sector Deficits and Macroeconomic Performance. New York: Oxford University Press.

Feldstein, M.S., (1986). Budget Deficits, Tax Rules, and Real Interest Rates. NBER Working Paper 1970. Cambridge, MA: National Bureau of Economic Research.

Folorunso. B. A, Falade. O. E., (2013). Relationship between Fiscal Deficit and Public Debt in Nigeria: An Error Correction. *Journal of Economics and Behavioral Studies*, 5 (6), 346-355.

Hair. J. F. Jr., Black. W. C., Babin. B. J., Anderson. R. E., (2014). Multivariate Data Analysis. *Pearson New International Edition*, Seventh Edition.

Harding, T., B. S. Javorcik (2012). Foreign Direct Investment and Export Upgrading. *Review of Economics and Statistics*, 94 (4), 964–80.

Hasan. P. (1999). Pakistan's Debt Problem: Its Changing Nature and Growing Gravity. *The Pakistan Development Review*,38 (4), 435–470.

Hossein V., Svetlana K., (2010). Foreign Direct Investment Inflows, Economic Growth, and Trade Balances: The Experience of the New Members of the European Union. *Journal of East-West Business*, 16 (1) 4-23.

Iavorschi. M., (2014). The Influence of Foreign Direct Investments and the Current Account of the Balance of Payments on the Evolution of the Lei/Euro Exchange Rate in Romania. *Procedia Economics and Finance* 16, 448 – 457.

Iqbal, Z., Bilquees F., (1994). Macroeconomic Effects of Adjustment Lending in Pakistan. *The Pakistan Development Review,* 33 (4) 1011-1031.

Iram. S., Nishat M., (2009). Sector Level Analysis of FDI-Growth Nexus: A Case Study of Pakistan. *The Pakistan Development Review*, 48 (4) 875-882.

Jaffri A. A., Asghar N., Ali. M. M., Asjed. R., (2012). Foreign Direct Investment and Current Account Balance Of Pakistan. *Pakistan Economic and Social Review*, 50 (2), 207-222.

Kameda. K (2014) Budget deficits, government debt, and long-term interest rates in Japan. *Journal of the Japanese and International Economies* 32, 105–124.

Kandil. M., (2015). On the benefits of nominal appreciations: Contrasting evidence across developed and developing countries. *Borsa I˙stanbul Review* 15 (4), 223–236.

Khan, M. A., Ahmed A., (2007). Foreign Aid—Blessing or Curse: Evidence from Pakistan. *The Pakistan Development Review*, 46 (3), 215-240.

Krugman, P. R., Obstfeld, M., Melitz, M. J. (2012). International Economics Theory & Policy. 9th edition.

Lahiri. S., and Morshed M A. K. M., (2010). Current Account Imbalances and Foreign Investment: A Theoretical Analysis of Interrelationships and Causalities. *Review of International Economics*, 18 (2), 369–381.

Lane. P. R., (2015). International Financial Flows in Low-Income Countries. *Pacific Economic Review*, 20 (1) 49–72.

Le, M. H., AtaUllah, A. Foreign Capital and Economic Performance of Pakistan. *The Lahore Journal of Economics*, 7 (1), 287-88.

Veiga. J. A. L. D., Ferreira-Lopes. Alexandra., Sequeira. Tiago. Neves., (2016) Public Debt, Economic Growth and Inflation in African Economies. *South African Journal of Economics*, 84 (2), 294-322.

Mahdavi. S., (2004). Shifts in the Composition of Government Spending in Response to External Debt Burden. *World Development,* 32 (7), 1139–1157.

Mahmood, T. Rauf, S. A., (2008). The profile of debt structure: Monetary and fiscal policies: A case of Pakistan (1971 -2007). *Pakistan Economic and Social Review,* 46 (2), 201-234.

Majeed. M T., Ahmad. E., (2007). FDI and Exports in Developing Countries: Theory and Evidence. *The Pakistan Development Review*, 46 (4) 735-750.

Mencinger. J., Direct and Indirect Effects of FDI on Current Account. *EIPF and University of Ljubljana*, 1- 19.

Nasir, Z. M., and Hassan, A., (2011). Economic Freedom, Exchange Rates Stability and FDI in South Asia. *The Pakistan Development Revie*w, 50, (4) 423-432.

Pham. T. H. H., Nguyen. T. D., (2013), Foreign Direct Investment, Exports and Real Exchange Rate Linkages in Vietnam: Evidence from a Co-Integration Approach. *Journal of Southeast Asian Economies,* 30 (3), 250-262.

Panos C. A., & Apostolos S., (1995) The Impact of International Indebtedness on the Import-Export Sectors of Developing Countries. *International Economic Journal*, 9 (1) 73-87.

Salotti. S & Trecroci. C., (2016). The Impact of Government Debt, Expenditure and Taxes on Aggregate Investment and Productivity Growth. *Economica* 83, 356–384.

Sami Ullah., Haider. Syed. Zeeshan., Azim. Parvez., (2012). Impact of Exchange Rate Volatility on Foreign Direct Investment: A Case Study of Pakistan. *Pakistan Economic and Social Review*, 50 (2), 121-138.

Samuels, J., Theobald, M., (1989). Equity Finance in Developing Countries. *Savings and Development,* 13, (4), 337-349.

Sayek. S (2009), Foreign Direct Investment and Inflation. *Southern Economic Journal*, 76 (2), 419-443.

Sean Joss Gossel & Nicholas Biekpe., (2012). The effects of capital inflows on South Africa's economy. *Applied Financial Economics*, 22 (11), 923-938.

Sen. P., (1995). Foreign Direct Investment: A Solution to BOP Problems? *Economic and Political Weekly,* 30 (30), 1921-1927.

Shahbaz. M., Awan. R. U., Ahmad. K., (2011). The Exchange Value of The Pakistan Rupee & Pakistan Trade Balance: An ARDL Bounds Testing Approach. *The Journal of Developing Areas*, 44 (2), 69-93.

Schumacker R. E., and Lomax R. G., (2016). A Beginner's Guide to Structural Equation Modeling. *Routledg*e, Fourth Edition.

Siddique Abu., Selvanathan. E.A., Selvanathan Saroja., (2016). The impact of external debt on growth: Evidence from highly indebted poor countries. *Journal of Policy Modeling* 38 (2016), 874–894.

Tahir. M., Khan. I., Shah. A. M., (2015). Foreign Remittances, Foreign Direct Investment, Foreign Imports and Economic Growth in Pakistan: A Time Series Analysis. *Arab Economics And Business Journal,* 10, 82–89.

Thanh. V. T., Duong. N. A., (2011). Revisiting Exports and Foreign Direct Investment in Vietnam. *Asian Economic Policy Review* 6, 112–131.

Urmas V., Terri L. Z., (2000). The Impact of Foreign Direct Investment on the Export Activities of Estonian Firms. *Journal of East-West Business*, 5 (1-2), 173-190.

Wacker. K.M., (2015). Do Multinationals Deteriorate Developing Countries' Export Prices? The Impact of FDI on Net Barter Terms of Trade. *The World Economy*, 1-25.

Westphal, C.C., Rother P., (2011). The Impact of Government Debt on Growth: An Empirical Investigation for the Euro Area. *Revue économique*, 62 (6), 1015-1030.

Woo. J. & Kumar. M. S., (2015). Public Debt and Growth. *Economica,* 82, 705–739.

Zeshan, A., Aslam, S., Fatima, M. and Muzaffar, A. (2015). Debt Accumulation and Economic Growth: Empirical evidence from Pakistan Economy. *International Journal of Economics and Empirical Research*, 3 (8), 405-410.