

The Nexus of Governance Indicators and Foreign Portfolio Investment (FPI): A Case Study of Pakistan

Zeshan Anwar¹, Maria², Ayaz Qaiser³, Muhammad Noman Nagra⁴

^{1,2}University of Okara, Okara, Pakistan

zeshananwar58@gmail.com

maria.ali456768@gmail.com

³Grand Asian University, Sialkot, Pakistan

director.sa@gaus.edu.pk

⁴University of Sialkot, Pakistan

numannagra76@gmail.com

ARTICLE DETAILS

History

Received : August

Revised Format : September

Accepted : October

Keywords :

Governance indicators, FPI,
Pakistan.

ABSTRACTS

FPI is a critical factor for growth of developing nations, therefore, this study aimed at examining the relation of governance factors with FPI inflows in Pakistan during the period of year 2001 to 2020 by the OLS model. The results have depicted that all the factors positively and significantly influence inflows of FPI in Pakistan except rule of law which have insignificant relationship with FPI. Therefore, the government should improve the governance level for improving the trust of overseas investors and improving FPI flows which would ultimately result in growth of Pakistan's economy.

©2023 STIM Lasharan Jaya Makassar

Introduction:

The FPI is an investment for a shorter time duration and it involves investment in short term and long-term financial instruments for a shorter investment duration. The reason behind investing in short term instruments is to get revenue of favorable interest and exchange rates for trading of securities. When investment is made in foreign secondary market, higher returns are predicted and for obtaining the higher return, different investment approaches are adopted in markets. As a result of foreign investment, the host economy is to get benefits of improved liquidity position and increase in foreign reserves which results in exchange rate stability. Firstly, the FPI is useful in getting better returns and decreasing the risk by global diversification. On the other hand, the FPI also helps in host country's growth and development.

Given the unstable political environment in Pakistan, weak economic conditions and high market risk, foreign investors are avoiding to invest, so FPI is a very important and significant capital flow. The Pakistani government needs to provide incentives to attract foreign portfolio investment. Unfortunately, the current market conditions in Pakistan are instable, due to which the investors are hesitant in making the investment. The economists recommend that the stock market is an indicator of economy, and that Pakistan's stock market is in a serious situation.

The table 1 shows that FPI increased from the preceding value of (\$10) million in year 2001-2002 to \$ 1,820 million in year 2006-07. Then it started declining and reached (\$ 60) million in year 2011-12 and then it started rising again and reached at \$917.3 million in year 2014-

15. Then it started declining again and reached (\$ 281.7) million in year 2019-2020 and then finally started increasing again in year 2021-21 with a value of \$ 211.5 million.

Table 1: Foreign Portfolio Investment inflows in Pakistan (\$Million)

Year	Portfolio Investment
2001-02	-10.00
2002-03	22.00
2003-04	-28.00
2004-05	153.00
2005-06	351.50
2006-07	1,820.40
2007-08	44.30
2008-09	(510.30)
2009-10	587.90
2010-11	364.6
2011-12	(60)
2012-13	119.5
2013-14	622.8
2014-15	917.3
2015-16	(319.7)
2016-17	(512.8)
2017-18	(240.7)
2018-19	(415.2)
2019-20	(281.7)
2020-21	211.5

Source: State Bank of Pakistan

The economic development of a country is determined through the selection process of a government, including the people who obtain the power and the mechanism of running the government. It has also been observed that a government's ability of devising and implementing the policies and the reaction of the people to it also affects economic growth. Governance systems have six indicators that are used to assess the level of governance of a country (Kaufman et al. 2009). These factors include voice and accountability (VA); Political Stability and Absence of Violence / Terror (PV); Government Effectiveness (GE); Regulatory Quality (RQ); Rule of Law (RL) and Control of Corruption (CC). Due to the importance of the FPI in increasing Pakistan's economic growth, the aim of this study is to investigate the effects of governance indicators on FPI inflows through the use of OLS regression model during 2001-2020. This research is important because only a few studies have examined the factors that influence FPI in Pakistan generally, and association between governance indicators and FPI particularly.

Literature review:

Grabel (2003) worked on the foreign investment portfolio and researched that the world is now shifting investment to FPI and this seems to be a big change. Their research on FPIs concludes that FPIs are relatively safe and efficiently invested because they require a lot of investment. However, investigations into the 1994 crisis in Mexico and the South Asian crisis from 1997 to 1998 called into question Grabel. Based on Grabel's research and the crises in Mexico and South Asia, many economists have argued that these crises cannot be taken for granted, that they are not strange. If we do macro or even micro level research on FPI, we know that FPI had also played a critical function in a country's economic growth.

According to Onuorah et al. (2003), developing countries used FDI and FPI to establish financial markets, so FDI and FPI inflows had a positive impact on economic growth. The authors found the effect of foreign capital on the growth of the Indian economy. In the light of this study, the authors have observed that FDI and FPI have significant effects on the growth of the economy. FDI has a positive effect while FPI has a negative impact on the economy.

Agarwal (1997) examined the factors affecting FPI in developing Asian economies and the results highlighted some of the key factors in terms of FPI data, which were indicators of real

exchange rates, inflation, the distribution of the host capital market, and the economic movement. Based on these variables, it has been observed that there is a negatively association between inflation and positive relationship with the other three variables. A study on factors affecting the FPI in India by Rai and Bhanomurthy (2007) found that the FPI exceeded 12 billion US\$ at the end of 2002. It was found that these investment flows had significantly affected the performance of different domestic markets. Based on the study, it was found that stock market returns, past risk and inflation rate significantly affect FPI, and it was found that two factors compared to inflation, past risk and stock market returns (both domestic and foreign) turned out to be the most important factor in the arrival of FPI. Based on a study of two factors, the authors concluded that if the stock market stabilizes and the risk decreases, it will increase FPI inflows and it will have a positive effect on the national economy.

Ekeocha (2008) studied the factors that motivate foreign investors to shift their investments to developing countries. It has been observed that low productivity in developing countries as well as high profit margins and high economic growth are the major factors which result in high foreign investment in developing countries. Based on the authors' study, it was observed that increase in foreign investment would be directly related to trade development, international economic relations and also enlarge in productive resources that are useful in the host country. It was also observed that if such policies are implemented in developing countries which result in decline of capital flow restrictions and improvement in the home capital markets, then foreign investors should invest in FPI may be attracted towards which may result in economic growth.

The authors came up with evidence based on their study which shows the relationship of FPI with market growth, capital market level and market fluctuations and based on these relationships; assessed the benefits and costs associated with recipient economies. Duasa & Salina (2009) worked on the Malaysian economy and found a correlation between FPI and growth of the Malaysian economy between 1991 and 2006 and they also found a relationship between GDP and FPI. Based on the study, it was concluded that the foreign investment portfolio (FPI) positively affected the economic growth of the host country.

Shahbaz et. al. (2005) applied multiple regression analysis based on sector analysis and time series data and found an association between foreign remittances and economic growth in Pakistan. The variables examined include GDP at current prices, public investment, inflation rate, workers' remittances, private investment, per capita income. Based on these variables, it was found that there is a positive association between workers' remittances and economic growth. Azam and Luqman (2010) used the OLS model to study the relationship of FDI with political and social factors in Pakistan between 1971 and 2005. The study found that there was a negative relationship between political instability and FDI, while a positive association was found between human capital and FDI in Pakistan.

Arshad and Sajat (2011) worked to examine the relationship between FDI and Pakistan's economic growth during 1981-2008. For the study, they used four variables, which had a FDI, economic growth, and residual time effect, and found a direct correlation among these variables. Based on the relationship between their study and the variables, it was found that FDI is considered a primary factor in the growth of developing countries. Pleasure et. al. (2011) studied the growth of Pakistan's economy from 1985 to 2010 on the basis of the variable that was overseas capital inflow. Based on the study, he suggested that FPI and FDI play an important role in the growth of the economy and also found that foreign support negatively affects the growth of the economy. On the basis of their study, they determined that Pakistan should expand its domestic resources to increase foreign aid.

Talat and Zeshan (2013) used the ARMA regression model to investigate the relationship between

political instability, terrorism, electricity load-shedding, inflation, market size and trade openness, concessions provided to investors and stabilization of market rates with FDI in Pakistan from 1980 to 2010. The results showed that there was a negative association between terrorism and political instability. The results also showed that exchange rates, market size, investor incentives and trade openness positively affect FDI, whereas, inflation is negatively

correlated with FDI inflows. Zeeshan and Talat (2014) used OLS regression analysis and studied the effects of indicators on FDI and governance in Pakistan from 1996 to 2010. Based on the study, it was revealed that if there is stability in politics, accountability, government effectiveness, less terrorism, effective measures to control corruption and index of governance has a positive impact on FDI.

Osemene and Arotiba (2018) worked on association of FPI with exchange rates in Nigeria from 2007 to 2016. Based on the study, it was observed that the association of exchange has a positive effect on FPI inflows in Nigeria. Al-Samadi (2018) studied FPI in Jordan during 2000-2016. According to the study variables, inflation, economic activity, diversification of risk governance and a country's credit worthiness affect Jordan's FPI inflows. Yeh (2018) examined the relationship between board governance and overseas institutional investors for tourism companies in Taiwan and showed that due to the smaller boards and higher directors' ownership; there will be higher foreign ownership. Anwar et. al. (2019) observed the association of FPI with governance indicators, inflation and GDP in Pakistan's agricultural sector for the duration 2005 to 2017. The authors depicted that the Governance Index and GDP have a positive and significant effect on FPI, while inflation rate has a significant and negative correlation between FPI in Pakistan's agricultural sector.

According to the above literature review, it can be seen that there are no studies which studied the impact of governance indicators on FPI inflows in Pakistan. Therefore, the purpose of this study is to fill this research gap by examining the relationships between governance indicators and FPI inflows in Pakistan during 2001 to 2020.

Research Methodology:

This study used time series secondary data from 2001 to 2020 which was collected on dependent and independent variables from the Pakistan's Economic Survey, SBP reports and World Bank Development Indicators Database. The OLS regression method was used to examine the relationship between the dependent variable; FPI in Pakistan, and the independent variables; governance indicators such as VA, PV, GE, RQ, CC and RL.

This study has used the following regression model:

$$LnFPI = \beta_0 + \beta_1 VA + \beta_2 PV + \beta_3 GE + \beta_4 RQ + \beta_5 CC + \beta_6 RL + Ut$$

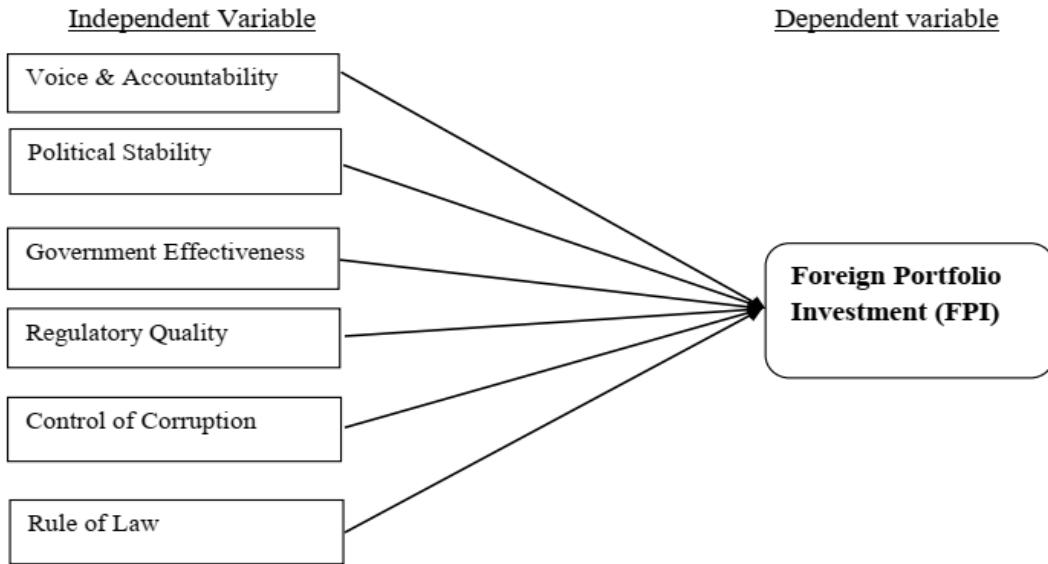
Where:

FPI	= foreign portfolio investment
VA	= Voice and Accountability
PV	= Political Stability and Absence of Violence / Terror
GE	= Government Effectiveness
RQ	= Regulatory Quality
CC	= Control of Corruption
RL	= Rule of law

In this study, the E-Wave 9.0 is used to measure the relationship between dependent and independent variables

Theoretical Model:

The theoretical model of this study is as follows:



Analysis and Discussion of Results:

Firstly, the ADF unit root test is used to check the stationary status of the variables and the results are table 2 describes them.:

Table 2: ADF Stationarity Unit Root Test for Variables

Variables	T-ADF Statistics	Critical Values	Decision
LnFPI	-4.843915 (0.0033)	1% level = -4.356068 5% level = -3.595026 10% level = -3.233456	Stationary at level
VA	-3.306256 (0.0365)	1% level = -4.057910 5% level = -3.119910 10% level = -2.701103	Stationary at level
PV	-3.341167 (0.0344)	1% level = -4.057910 5% level = -3.119910 10% level = -2.701103	Stationary at level
GE	-3.678204 (0.0208)	1% level = -4.121990 5% level = -3.144920 10% level = -2.713751	Stationary at level
RQ	-3.840105 (0.0492)	1% level = -4.886426 5% level = -3.828975 10% level = -2.362984	Stationary at level
CC	-3.102348 (0.0515)	1% level = -4.057910 5% level = -3.119910 10% level = -2.701103	Stationary at Level
RL	-3.801510 (0.0156)	1% level = -4.057910 5% level = -3.119910 10% level = -2.701103	Stationary at level

Table 2 shows that all variables are stationary at the same level. Therefore, based on the values of the Unit Root test, the appropriate model is OLS, which was used to estimate the relationship between governance factors with FPI and the table 3 shows the results. The value of Adjusted R-square is 0.81, indicating that independent variables have described around

81% of variations in FPI for Pakistan. The Durbin-Watson's value is 1.78, showing that there is no problem with auto correlation between explanatory factors.

Table 3: OLS Regression Estimates

Dependent Variable: LNFPI
Method: Least Squares

Variable	Coefficient	Std. Error	t-Statistic	Prob.
VA	5.599*	2.632	2.127	0.066
PV	4.110*	1.939	2.119	0.066
GE	7.868***	2.284	3.443	0.008
RQ	7.507***	2.233	3.361	0.009
CC	3.862***	1.807	2.136	0.065
RL	1.407	2.233	3.361	0.319
C	2.927	1.541	1.899	0.094
R-squared	0.861141	Mean dependent var		7.140533
Adjusted R-squared	0.811996	S.D. dependent var		0.982496
S.E. of regression	0.364986	Akaike info criterion		1.236809
Sum squared resid	1.065718	Durbin-Watson stat		1.787564
Log likelihood	-1.451067			
F-statistic	15.57444			
Prob(F-statistic)	0.000509			

***Significant at 1 Percent, ** Significant at 5 Percent, * Significant at 10 Percent.

The above results show that variable of VA has a significant and positive impact on FPI flows. FPI is expected to increase by 5.59 % if voice and accountability increase by 1%. The findings also show that PV has a significant and positive impact on FPI inflows. According to the estimated coefficient, if this variable is increased by 1%, FPI will increase by 4.11 %. The variable of GE has a significant and positive relationship with FPI flows, with a 1 % increase in GE, there will be a 7.87 % increase in FPI in Pakistan.

Furthermore, the RQ and CC variables show a positively and significantly relationship with FPI flows, which indicating that if these variables increase by 1%, the FPI will increase by 7.51 % and 3.86 %, respectively.

Conclusion and recommendation:

FPI plays a significant role in the growth of developing economies and it's played a significant role in the development of Pakistan's economy as well. Pakistan is a developing economy like the other developing economies which significantly depend on foreign capital inflows for economic growth. Thus, the purpose of this study is to examine the relationship between governance indicators and FPI inflows in Pakistan from 2001 to 2020. This study showed that all governance indicators except RL, have a significant and positive impact on FPI flows in Pakistan. This study's main contributions to the literature is that it is the first study which is investigating the relationship between governance variables and FPI in Pakistan. This study indicated that governance variables have a significant influence on FPI. Thus, these variables should be recognized in formulating policies to increase FPI flows.

It is recommended that the governing authorities should adopt efficient processes to improve governance variables in order to increase national and international investor trust and improve the flows of FPI in Pakistan.

The limitations of this study are as follows:

1. The model can also include the other important variables.
2. The model can also include the data for the extended time period.
3. The model can also include Pakistan's major issues such as terrorism, political instability and the energy crisis.

References:

Agarwal, R. (1997). Foreign portfolio investment in some developing countries: A study of determinants and macroeconomic impact. *Indian Economic Review*, 217-229.

Aggarwal, R., Klapper, L., & Wysocki, P. (2003). *Portfolio preferences of foreign institutional investors*: The World Bank.

Al-Smadi, M. O. (2018). Determinants of foreign portfolio investment: the case of Jordan. *Investment Management and Financial Innovations*, 15(1), 328-336.

Azam, M., & Lukman, L. (2010). Determinants of Foreign Direct Investment in India, Indonesia and Pakistan: A Quantitative Approach. *Journal of Managerial Sciences*, 4(1).

Durham, J. B. (2003). Foreign portfolio investment, foreign bank lending, and economic growth. *FRB International Finance Discussion Paper*(757).

Ekeocha, P. C. (2008). *Modelling the long run determinants of foreign portfolio investment in an emerging market: Evidence from Nigeria*. Paper presented at the International Conference on Applied Economics.

Ekeocha, P. C., Ekeocha, C., Malaolu, V., & Oduh, M. (2012). Modelling the long run determinants of foreign portfolio investment in Nigeria. *Journal of Economics and Sustainable Development*, 3(8), 194-205.

Grabel, I. (2003). Averting crisis? Assessing measures to manage financial integration in emerging economies. *Cambridge Journal of Economics*, 27(3), 317-336.

Grieg-Gran, M., Westbrook, W., Mansley, M., Bass, S., & Robins, N. (1998). *Foreign Portfolio Investment and Sustainable Development: a study of the forest products sector in emerging markets*: IIED.

Onuorah, A. C.-C., & Akujuobi, L. E. (2013). Impact of macroeconomic indicators on the performance of foreign portfolio investment in Nigeria. *European Journal of Business and Management*, 5(2), 81-90.

Osemene, O. F., & Arotiba, K. (2018). Exchange Rate Volatility and Foreign Portfolio Investment in Nigeria. *Global Journal of Management And Business Research*, 18(2), 12-19.

Prasad, E. S., Rajan, R. G., & Subramanian, A. (2007). Foreign capital and economic growth: National Bureau of Economic Research.

Rai, K., & Bhanumurthy, N. (2004). Determinants of foreign institutional investment in India: The role of return, risk, and inflation. *The Developing Economies*, 42(4), 479-493.

Raza, S. A., Sabir, M. S., & Mehboob, F. (2011). Capital inflows and economic growth in Pakistan. *PIDE Working Paper*.

Shahbaz, M., Ahmad, K., & Chaudhary, A. (2008). Economic growth and its determinants in Pakistan. *Pakistan Development Review*, 47(4), 471-488.

Talat, A., & Zeshan, A. (2013). Foreign Direct Investment (FDI) in Pakistan: Measuring Impact of Cost of War Against Terrorism, Political Instability and Electricity Generation. *Caspian Journal of Applied Sciences Research*, 2(3), 117-127.

Yeh, C. M. (2018). Does board governance matter for foreign institutional investors to invest in listed tourism firms? *Tourism Management*, 68, 66-78.

Zeshan, A., & Talat, A. (2014). Impact of Governance Indicators on FDI Inflows: Empirical Evidence from Pakistan. *Caspian Journal of Applied Sciences Research*, 3(9), 16-23.

Zeshan, A., Khaskhelly, F. Z., & Kausar, A. (2019). The impact of better governance on foreign portfolio investment (FPI) in agriculture. *Scientific Papers Series-Management, Economic Engineering in Agriculture and Rural Development*, 19(3), 67-73.