Foreign Capital Flows and Human Development in Developing Countries: Does Institutional Quality Matter?

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Abstract: *The impact of foreign capital on human development has been at best ambiguous, while that of institutions is undoubtedly favorable. That said, the way foreign capital relates to human development may be affected by the quality of institutions. This paper assesses this very phenomenon in 65 developing countries over the time period 1984-2014. In this regard, this study incorporates three indicators of human development namely, per capita income (PCI), Secondary School Enrollment (SSE) and Life Expectancy (LE). Using two step system GMM estimation technique, we found that the impact of foreign capital varies with respect to the indicators of human development and the type of foreign capital being studied. Both FDI and FPI negatively affect per capita income and secondary school enrollment, while, remittances affect all the indicators of human development positively, except for life expectancy. The interaction between institutions and each type of foreign capital flow exerts a positive influence on all indicators of human development. However, this positive interaction fails to completely eliminate the adverse influence of the capital flows, which reflects inadequacy of existing institutional quality in developing countries and the need for institutional reforms.*

Keywords: Human Development; Foreign Capital Flows; Institutional Quality

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Introduction

The failure of the trickle-down theory has led the researchers to reevaluate the role played by foreign resource inflows in the development of a nation. There has been a great transition in the idea of development, from pre 1970s' focus on economic growth to concerns about social indicators in 1990s. It is believed that by focusing on economic growth, the early research have failed to capture multi-dimensional aspects of development [Nayak, (2013)]. From the late 1980s, the contribution of Amartya Sen and Mehboob-ul-Haq has redefined how the world assesses progress and prosperity by moving the spotlight on human development. Specifically, Sen (1999) defines standard of living in terms of functioning, which indicates attainment of different attributes, and capability, which is the ability to attain[1]. Both results in enhancement of freedoms, that improve quality of life in a more multi-dimensional and meaningful manner [HDR (2016)].

Recently, HDR (2016) indicates that due to dearth of resources available domestically, foreign capital resources may be the key to improve the state of low human development in developing countries. Foreign capital brings with it the access to basic necessities by creating employment opportunities, higher wages, transfer of knowledge, and credit availability. A number of studies [Borensztein et al. (1998), and De Mello (1999), among others] have examined the impact of foreign capital on economic growth but the studies dealing with the relationship between foreign capital and human development are relatively scarce. In addition, the findings of these studies remain inconclusive at best[2].

Despite receiving significant capital flows, which includes economic assistance as well as investment, developing countries are still lagging behind their developed counterparts. This trend may be attributed to factors such as lack of absorptive capacity, low financial development and most importantly, poor quality of institutions. Sen (1999) argues that social, economic and political institutions play an essential role in enabling a nation to attain increased access to basic education and good health, and create employment opportunities. For carrying out the process of human development through foreign resource flow, institutions can play a vital role through better policies, control of corruption, law and order, and governance and management. Capable governments and efficient allocation of resources are crucial to harness the means for development [Wahedi (2011)]. In the similar vein, HDR (2016) highlights that institutional barriers in developing countries hinder the process of human development.

In addition to their independent effect, redistributive implications of institutions may direct resources towards human development. If institutions are inclusive, the benefits from resource flow will be accessed by a wider cross-section, benefitting even the relatively low income members of the community. This will be reflected in better human development and well-being. On the other hand, in the presence

of extractive institutions, the foreign resources may lead to an increase in income inequality, resulting in deterioration of human resource. Hence, an argument can be built-in for assessing how inclusive institutions can contribute to the improvement of the quality of life in the country by channeling the foreign resources towards welfare enhancement.

The present study has three important contribution in the existing literature. First, the existing literature majorly incorporates the role of foreign capital flows through FDI, however, we have included all major types of foreign capital inflows namely FDI, FPI, and remittances to examine their impact on human development. This will enable us to examine the relative contribution of each type of capital flow in the human development. Secondly, human development is measured by taking three indicators namely, per capita income (PCI), secondary school enrollment (SSE) and life expectancy (LE). This exercise is important in determining that which dimension of human development is more sensitive to the selected set of foreign capital flows. Thirdly, the study has incorporated the mediating role of institutional quality in the relationship of capital flows and human development which has been overlooked/ignored by the existing literature. In doing so, we have introduced an interaction term of each measure of capital flow with institutional quality index. The interaction term captures the indirect impact of capital flows through institutional quality. Alternatively, the interaction term captures whether institutions play any role in affecting the impact of capital flows on human development or not. Hence, we not only examine the direct but also the indirect impact of capital flows on each dimension of human development. To capture the role of institutions, an index is constructed by following the methodology of Knack and Keefer (1995). The empirical analysis is conducted over the period from 1984-2014 for 65 developing countries.

The key findings of the study indicate that capital flows affects each indicator of human development in different manner. Notably, institutional quality is an integral factor to channelize the foreign capital flows towards human development. It has been observed that institutional quality improves the effect of foreign capital flows on human development indicators. Specifically, it helps in either reducing or mitigation the adverse impact of capital flows on human development. This is an important finding referring to the significance of institutions in effective utilization of capital flows. Our study recommends, based on the empirical findings, that developing countries need to improve the institutional quality in order to obtain the maximum benefit from the capital flows in terms of human development.

The following section i.e. section 2 reviews the impact of foreign capital flows and institutional quality on human development in the light of literature. Section 3 is comprised of methodology and data used in the study while section 4 discusses the results concerning the impact of foreign capital flows on human development. Finally, last section gives the conclusion and recommendations based on the empirical analysis of the study.

Literature Review

Foreign capital flows play an integral role in the development process of a country. The importance of these foreign flows is substantial for the developing world for managing their economies. However, the effective utilization of foreign capital incalculably depends on the functioning and quality of economic and political institutions. Therefore, this study is designed to empirically evaluate the impact of foreign capital flows on human development indicators in the presence of institutional quality.

Foreign Capital Flows and Human Development

The impact of foreign capital on human development depends on the nature and type of capital received by the country. For instance, FDI contributes to human welfare through three different channels; households, labor markets and governments. FDI supports the government by increasing the revenues through taxation, by which that money could be invested on health, education, household income, employment opportunities etc. [Blomstrom and Kokko (1998)]. In this way, if household income increases, then individuals can also invest the extra amount of income on improving their quality of life [Globerman and Shapiro (2003)]. FDI affects labor market through spillover effects of job creation [Jordaan (2005)]. Besides this, other spillover effects which FDI creates are; skill development, managerial and organizational practices and creating competition in the market [Noorbakhsh et al. (2001)].

For examining the impact of FDI on human development, the existing literature has used different measures. Emmanuel and Ajike (2015), Lehnert et al. (2013), Reiter and Steensma (2010), Vita and Kyaw (2009), Sharma and Gani (2004) and Durham (2004) analyze the impact of FDI on different indicators of human development such as Human Development Index (HDI), education, life expectancy, and GDP per capita. Except Vita and Kyaw (2009), all other studies report a positive impact of FDI on human development. The positive impact of FDI is advocated as FDI brings modern technology, creates employment opportunities, improves managerial skills, expands buying power and increases government revenues. While investigating the determinants of HDI in Pakistan, Khan et al. (2019) report that FDI exerts a positive impact on HDI as it brings more capital technology and employment opportunities which expand buying power of individuals due to which human development improves. Conversely, according to Vita and Kyaw (2009), who examined the impact of FDI on human development in upper and middle income countries, FDI brings prosperous results only in upper middle income countries while lower middle economies do not have enough absorptive capacity which leads to adverse impact of FDI in lower middle income countries. Gökmenoğlu et al. (2018) also investigate the impact of FDI on

three measures of human development namely; gross national income (GNI), school enrollment and life expectancy at birth in Nigeria. The study reveals a positive effect of FDI on GNI and school enrollment. While, FDI imposes a negative impact on the health indicator as FDI increases competitiveness which causes work related stress and undermines human health.

Similarly, remittances are considered as an important source of improving welfare for the recipient countries. The argument that remittances affect human development positively arises from the New Economics of Labor Migration (NELM) viewpoint. The short term impact of remittances is in form of poverty reduction, whereas, the long term impact includes improvement in children's education, contribution to better health, accelerating household's welfare, thus enhancing future human development [Giannetti et al. (2009)].

Huay et al. (2019) inspected the impact of remittances on HDI and found out that remittances impact HDI positively as remittance inflows expand consumption and investment. Moreover, Tsaurai and Ngcobo (2018), Ustubici and Irdam (2012), Wahedi (2011), Adenutsi (2010) and Bansak and Chezum (2009) have also found a positive impact of remittances on human development. According to Wahedi (2011) and Adenutsi (2010), remittances increase the consumption level through which attainment of basic human needs such as food, clothing, education, healthcare etc. can be achieved. However, Ustubici and Irdam (2012) argue that remittances increase human development level because these are directly transferred to the families without any hurdle.

According to Neoliberal school, globalization is a source of bringing creative destruction in cross border acquisitions including investment and technological advancement which increases production efficiency and provides a way to extraordinary prosperity in the region [Greenes (2003)]. Portfolio investment develops the financial markets of the host countries which plays a positive role in increasing per capita income growth, and consequently translates into higher human development [Gruben and Mcleod (1998)].

The empirical impact of FPI on human development is assessed by Emmanuel and Ajike (2015), Wahedi (2011), Vita and Kyaw (2009) and Durham (2004). The study of Emmanuel and Ajike (2015) exhibits a negative impact of FPI on human development, as increase in portfolio investment causes macroeconomic instability due to which consumption pattern disrupts and thus, human development deteriorates. Contrary to it, Durham (2004) reports a positive impact of portfolio investment because it gives access to credit through which domestic sector gets developed, and thus, level of human development improves. Similarly, Nwafor (2020) highlights a positive impact of portfolio investment on human capital development. However, the study focuses on human capital development instead of human development. However, the author caters two basic objectives for the human capital development i.e. health and education, indicating that increase in portfolio investment is beneficial for increasing the living standard of the people of Nigeria. o

The findings of Vita and Kyaw (2009) showed that FPI has positive affect on per capita income, only in upper-middle-income countries.

Institutional Quality and Human Development

Human development theories majorly start with the contribution of capability approach of Sen (1999). The direct and indirect capabilities of individuals will be established by good institutional rules, laws and policies, because, if institutions would be good, they will create opportunities for all [Shuaibu and Timothy (2016)]. Thereby, Sen (2008) has also emphasized on the importance of institutional quality for human development. He argues that government choices and policies play a vital role in fostering human development. According to North (1990), institutions are humanly devised limitations which construct human interaction. Analogously, Scott (1995) has also emphasized on the fact that institutions provide a true meaning to social behavior and they are also responsible for bringing the stability in a social environment.

On empirical grounds, various studies [Shuaibu and Timothy (2016), Balcerzak and Pietrzak (2015), Assadzadeh and Pourqoly (2013), Gohou and Soumare (2012), Catrinescu et al. (2009), Batuo and Fabro (2009), and Dollar and Kraay (2003)] have analyzed the impact of institutional quality on different measures of human development (GDP per capita, life expectancy and education). These studies found a positive impact of institutional quality on human development as the institutions play an essential role in streaming the expenditures towards the required sectors. Tibrewal and Chaudhuri (2022) also investigate the impact of various proxies for institutional quality such as; rule of law, control of corruption, government effectiveness, regulatory quality, political stability, voice and accountability on out-of-pocket expenditures on health. The study reports a negative relationship between the institutional quality indicators on out-of-pocket expenditures indicating that when government regulates the healthcare system and increases government expenditures on health, then individuals' out-of-pocket expenditures on health decreases leading to improved human development.

The literature concerning the relationship between foreign capital flows and human development reports ambiguous results, indicating that there is a need to explore further dimensions. As it was described earlier that institutions can be instrumental in enhancing effectiveness of foreign capital flows towards human development. Therefore, it is important to test the role of institutional quality in the relationship of foreign capital flows and human development. This study fills the gap by taking into account the combined impact of foreign capital flows and institutional quality on human development.

Methodology and Data

Given the complexity and multidimensional nature of human development, a single indicator cannot adequately capture the phenomenon. For this purpose, there is a need to separately study various facets of human development. This will help us in ascertaining the effect of capital flows and institutions in a more comprehensive manner. Our basic model takes the following form:

$$Y_{it} = \alpha_0 + \gamma_1 Y_{it-1} + \gamma_2 CF_{k,it} + \gamma_3 IQ_{it} + \sum_{j=1}^{n} \alpha_j X_{j,it} + \mu_{it} \tag{1}$$

$$Y_{it} = \beta_0 + \delta_1 Y_{it-1} + \delta_2 CF_{k,it} + \delta_3 IQ_{it} + \delta_4 (CF_k * IQ)_{it} + \sum_{j=1}^{n} \beta_j X_{j,it} + \vartheta_{it} \tag{2}$$

where 'i' refers to the ith country (i = 1,2,3,....,65) and 't' to time period (t = 1984-2014). Y_{it} is the vector of indicators of human development while Y_{it-1} is the lagged of respective indicator of human development. In order to encapsulate the multifaceted nature of human development, we have assessed and analyzed different dimensions separately. We have considered three facets of human development, namely living standards, education and health measured as per capita income (PCI), secondary school enrolment (SSE), and life expectancy (LE), respectively. CF_{kit} is the kth indicator of foreign capital flows, namely foreign direct investment (FDI) as percentage of GDP, remittances (Rem) as percentage of GDP and Foreign Portfolio Investment (FPI) as percentage of GDP. IQ_{it} is the index of institutional quality. The indicator for institutions incorporates three institutional quality attributes namely, bureaucratic quality, law and order, and control of corruption and the weighted average methodology of Knack and Keefer (1995) is used to construct the institutional quality index. In addition to the focus variables, each indicator of human development is regressed against its fundamental determinants ($X_{j,it}$) to ensure validity and also to avoid the omitted variable bias.

The nested model given in Equation 1 is estimated as a baseline model in order to check the robustness of other results as well as to comprehend the impact of institutions more clearly. Further, in the second model given in Equation 2, an interaction term between each type of foreign capital flow and institutional quality index has been incorporated to assess the role of institutions in the relationship of capital flows and human development. All the estimations are carried out by using two-step system GMM estimation technique developed by Arellano and Bond (1991) and later extended by Blundell and Bond (1998).

The data on all types of foreign capital flows as well as the control variables is accessed from World Development Indicators (WDI) published by the World Bank.

Institutional Quality dataset is obtained from the International Country Risk Guide (ICRG). The panel comprises of data of 65 developing countries from the year 1984 to 2014. All capital flow variables are taken as percentage of GDP. Finally, labor force and real exchange rate are included in log form while other variables are incorporated without any transformation.

Discussion of Empirical Results

The empirical findings for each aspect of human development are given in this section. The impact of foreign capital flows on per capita income is presented in 4.1, whereas section 4.2 discusses the empirical findings of education; section 4.3 highlights the impact of foreign capital flows on life expectancy. In each section, we present the empirical estimates of nested and non-nested models, therefore, each table comprises seven columns. In columns 2, 4, 6, we report the findings from nested models while in columns 3,5,7, we report the findings from the models comprising an interaction term for each measure of capital flow with institutional quality index. Moreover, Panel A of each table discusses the empirical estimates while Panel B displays the diagnostics. In all estimations, we report that the diagnostics approve the validity of the empirical estimates. In particular, AR(2) test verifies the absence of second order auto correlation. The Hansen test also signifies the validity of instruments in all models.

Foreign Capital Flows and Per Capita Income: Role of Institutional Quality

The empirical findings regarding the impact of foreign capital flows on living standard dimension of human development, namely PCI are presented in table 1.

The results reveal that institutional quality, as expected, exerts positive and significant influence on per capita income, in all specifications. High quality institutions enhance market efficiency, lower the cost of transaction in markets and make signals more reliable. Further, competition promoted under effective legal regulation intensifies the efficiency in labor market, and thus increases productivity [Balcerzak and Pietrzak (2015)]. Good institutions also improve the quality of information and reduce risks leading to higher investor and consumer confidence, which in turn allows for economic progress and prosperity.

Starting with FDI as the first measure of selected foreign capital flows, we observe that FDI has a negative impact on per capita income in both specifications. These results seem to be counter intuitive. However, Nagel (2015) believes that FDI's impact on economic prosperity depends on the level of dependence on primary exports and FDI volatility. For instance, high FDI inflows into primary sector may result in the neglect of highly competitive manufacturing sector, thus reducing productivity and

economic growth. In addition, volatility of FDI, as is the case in many developing countries, can lead to increased uncertainty and may result in the decline in domestic investment. This crowding out effect of FDI in case of many developing countries can out-strip its income enhancing effect and may explain its negative affect on per capita income.

As mentioned earlier, the role of institutional quality in the relationship of capital flows and PCI is captured by introducing an interaction of each type of capital flow with institutional quality. The interaction term estimates indicate, whether institutional quality plays any role in improving the impact of foreign capital flows on human development. Alternatively, it represents the conditional impact of foreign capital flows through institutional quality.

The estimate of the interaction term of FDI turns out as positive and statistically significant which reveals that the negative impact of FDI is reduced when the role of institutional quality is taken under consideration. It implies that, in the presence of institutional quality, FDI is productive towards income as institutions are responsible for properly channelizing the flows towards human development and poverty reduction [Sen (2008)]. Also, these results are supported by the study of Batuo and Fabro (2009) who found positive impact of institutional quality on per capita GDP. By combining the unconditional and conditional impact of FDI, we observe that the overall impact of FDI still remains negative. However, the severity of the adverse impact reduces when the role of institutional quality is incorporated. This signifies the need for institutional reforms in developing countries.

FPI (second measure of foreign capital flow) also has a negative impact on PCI. These results are supported by the study of Kula (2003) and Mucuk and Demirsel (2014). As FPI is highly volatile in nature, it may cause financial instability leading to precautionary holding of monetary assets due to which consumption and investment decline [Knill (2005)]. On the other hand, the interaction of FPI and institutional quality is positively linked with per capita income implying that the unfavorable impact of portfolio investment is mitigated to an extent when the role of institutional quality is factored in. This shows that if institutions play their role in productive utilization of the volatile capital flows i.e. FPI, then income level will improve. By combining the direct and indirect impact of FPI, it is noted that the overall impact of FPI is still negative but through the incorporation of institutional quality, the intensity of the negative impact on per capita income is reduced.

In contrast to FDI and FPI, the coefficient of remittances appear as positive, thus portrays a favorable impact on per capita income. Jibran et al. (2016) and Meyer and Shera (2016) have also reported a favorable impact of remittances on PCI. Remittances improve standard of living by increasing the income of households and individuals, which ultimately increases the consumption level [Massey et al. (1993)]. Furthermore, the result of the interaction term suggests a positive and significant influence of remittances on per capita income through institutional quality, but the

magnitude is smaller as compared to the direct impact of the remittances. That said, the results still provide a strong case for institutional reforms to derive maximum possible benefit from the rise in remittances. .

We also incorporate other determinants of PCI in the model. The positive impact of GFCF and labor force on per capita income is indicative of the affirmative role of capital and labor in production. Trade openness also has a positive and significant effect on PCI as it allows for efficient allocation of resources and productivity enhancing technology transfers [Busse and Koeniger (2015), Krugman (1979)].

Foreign Capital Flows and Secondary School Enrolment: Role of Institutional Quality

The second indicator of human development is secondary school enrolment. The estimates are displayed in table 2. For this measure of human development, we observe that institutional quality has a positive and significant impact on secondary school enrollment in all specifications. Enhancement in institutional quality ensures access as well as higher returns to education. Good quality institutions enhance allocative efficiency of public funds through effective accountability, leading to education and schooling becoming accessible to a wider cross-section. Furthermore, betterment in the quality of institutions also increases returns to education leading to higher demand for education thus enhancing the secondary school enrollment rates. This positive association has also been observed by previous studies such as Shuaibu and Timothy (2016), Okoi et al. (2015), and Carmignani (2013).

Moving towards the types of foreign capital flows, the findings show that FDI has a negative impact on secondary school enrollment. Mughal and Vechiu (2009) are of the view that financial liberalization without complementary infrastructure, institutional reforms for provision of social safety and accounting for short term adjustment costs is expected to exert negative influence on school enrollment. In the similar vein, FDI may also affect government's effort for increasing school enrollment through two channels. The government might choose to invest in developing infrastructure in order to attract FDI instead of focusing on the development of human resource. This is termed as the allocative effect. On the other hand, FDI may also lead to the achievement of growth objectives without spending public funds on human resource development, leading to complacency on the part of government concerning educational achievements.

The coefficient of the interaction term of FDI with institutional quality is positive and significant. It suggests that the unfavorable impact of FDI is neutralized to some extent when the role of institutional quality has brought in. These results are affirmed by the previous literature [Balcerzak and Pietrzak (2015)] as institutional regulations encourage a competitive environment, giving a rise in productivity, which increases investment on education. By combining the direct and indirect impact of FDI, it is

indicated that the combined impact is negative. However, it can be concluded that the institutional quality has mitigated the intensity of the adverse impact of FDI on school enrollment.

FPI also has a negative relationship with secondary school enrollment. These findings are in accordance with the study of Emmanuel and Ajike (2015) and Simplice (2013). According to Prasad et al. (2005), the relationship between financial flows and human welfare is not very clear. The welfare effect through the channel of growth is very small on human development. Moreover, in the time of greater macroeconomic instability caused by the volatile nature of portfolio investment, the state of human resource development in the nation deteriorates. Again, in this scenario, we can see evidence of uncertain returns to human capital investments leading to a decline in the demand for education and hence schooling.

The interaction term of FPI with institutional quality has a positive sign. It demonstrates that the inhibiting effect of FPI is offset by good quality institutions, but not completely, as the combined impact of FPI remains negative. However, we conclude that the intensity of unfavorable impact of FPI on education reduces when the role of institutional quality is incorporated. This negative value also indicates the inadequacy of institutional quality in developing countries and provides a case in favor of institutional reforms, and against reliance on volatile foreign capital flows.

Remittances, unlike FDI and FPI, affect SSE positively. These results are validated by Bansak and Chezum (2009). Earlier studies report that remittances increase the secondary school enrollment by reducing poverty level and increasing the ability of the household to invest in children's education. Remittances give rise to consumption and also investment in human capital which improves education level [Giannetti et al. (2009)]. This effect is hardly surprising and carries intuitive appeal. Furthermore, the interaction term of remittances with institutional quality carries positive sign, but the magnitude of this effect is smaller than the direct impact of remittances.

Among the control variables, trade openness, labor force, per capita income and government expenditure have positive and significant impact on secondary school enrollment. Rabbanee et al. (2010) state that trade has a direct impact on human capital as it becomes a source of providing employment opportunities and improving wages, leading to increase in the demand for education and schooling. The positive impact of labor force is confirmed by the Basdevant (2009) as labor force increases household's income which further increases the investment in education. Per capita income enhances consumption choices for individuals leading to availability of resources for schooling and education [Obowna and Ssewanyana (2007)]. According to Gomanee et al. (2003), increased government spending increases schooling as government spending directly finances education, healthcare, water and sanitation etc. through which human welfare level escalates.

Foreign Capital Flows and Life Expectancy: Role of Institutional Quality

Finally, we move to discuss the empirical findings for the third indicator of human development namely, life expectancy. The empirical estimates are displayed in table 3. We observe that institutional quality has a positive and significant effect on life expectancy. Good institutional policies, rules and laws create opportunities for everyone in avoiding discrimination [Shuaibu and Timothy (2016)]. These results are confirmed by the empirical literature such as Nasreen et al. (2012), who pointed out that institutional quality raises the health status because a competent institutional system brings good governance which benefits to a large proportion of society, leading to better provision of health services.

Among foreign capital flows, FDI has a positive influence on life expectancy. Emmanuel and Ajike (2015) and Lehnert et al. (2013) have also observed the same relationship between FDI and life expectancy. According to them, FDI is a source of funds for host countries which could invest these funds in health, education and other human welfare sectors. FDI also brings latest medical equipment and medical knowledge through which health sector improves [Nagel et al. (2015)].

The interaction term of FDI and institutions appears as positive and significant for life expectancy. According to Shuaibu and Timothy (2016), institutional quality produces opportunities for all, and therefore influences life expectancy positively. Institutions improve the governance at every level including health sector, through which health related facilities improve [Nasreen et al. (2012)].

Conversely, FPI influences life expectancy negatively. These results are in harmony with the findings of Emmanuel and Ajike (2015). The volatility in foreign portfolio flows may lead to reallocation of government funds from health sector to stabilization efforts, which may explain the negative implications of FPI on health outcomes. The interaction term of FPI and institutional quality has a positive coefficient. It shows that the adverse impact of portfolio investment turns favorable when the role of institutional quality is taken under consideration. However, by combining the direct and indirect impact of FPI on PCI, we observe that the overall impact of FPI remains negative. As the magnitude of the combined adverse effect is lower than the direct impact, it can be concluded that with the incorporation of institutional quality, the adverse impact of FPI diminishes.

The results show that remittances have a negative and significant effect on life expectancy. Samuel (1996) reports that, if remittances will be utilized for conspicuous consumption, then it may have a negative impact or very little impact on long run human development. Further, remittances may lead to adverse health outcomes through development of unhealthy life styles and consumption patterns. This may include reduction in physical activity, increased consumption of fats and carbohydrates and smoking etc. The conditional impact of remittances through the channel of institutional quality turns out as positive implying that the adverse impact of remittances gets reduced when institutional quality role is incorporated. The combined effect

portrays that institutional quality helps in reducing the adverse impact of remittances on life expectancy.

Among the control variables, per capita income and public sector expenditures on health are positively related with life expectancy, while fertility rate exerts a negative effect on life expectancy. Audi and Ali (2016) identify that socioeconomic factors have a strong influence on life expectancy, higher per capita income increases household's purchasing power and it gives a rise to health status in the long run. Availability of food is essential for human life, and higher income ensures its availability. Navarro et al. (2006) asserts that increase in public health expenditures improves medical care and it increases life expectancy. Reproduction, on the other hand, is associated with high metabolic and energetic costs [Kirkwood and Austad (2000)]. According to Dribe (2004), women's health deplete with the reproduction of large number of children as it is physically demanding. The genes responsible for high reproduction rate in early life are also associated with high risk of diseases and lower life expectancy [Kuningas et al. (2011)].

The overall results depict that while different types of foreign capital flows exhibit varying effects on different dimensions of human development, the impact of institutions remains consistent and positive across the board. The incorporation of the interaction terms does turn the tide a little by either reducing the negative effect of foreign capital flows on human development or by intensifying the enabling effect. However, wherever the capital flows exert adverse influence, incorporation of the interaction with institutional quality fails to mitigate it completely, asserting the insufficiency of institutional performance in case of developing countries.

Table 1: Foreign Capital and PCI: Role of Institutional Quality

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
			Panel A: Estimates			
PCI_{t-1}	0.971***(0.00)	0.964***(0.00)	0.993***(0.00)	0.985***(0.00)	0.976***(0.00)	0.969***(0.00)
FDI	-0.003***(0.01)	-0.009***(0.00)				
FDI*IQ		0.002**(0.02)				
FPI			-0.002*(0.06)	-0.011*(0.09)		
FPI*IQ				0.001*(0.08)		
REM					0.003*(0.09)	0.005***(0.01)
REM*IQ						0.001*(0.07)
IQ	0.008*(0.09)	0.006*(0.07)	0.004*(0.08)	0.004*(0.09)	0.005*(0.09)	0.006*(0.09)
TO	0.001**(0.03)	0.001**(0.04)	0.001**(0.03)	0.001**(0.03)	0.006***(0.01)	0.001***(0.00)
LF	0.042*(0.09)	0.039**(0.03)	0.022***(0.01)	0.019***(0.01)	0.187**(0.05)	0.003(0.58)
GFCF	0.007**(0.05)	0.003*(0.06)	0.001(0.37)	0.001(0.26)	0.003**(0.02)	0.002*(0.09)
LRER	0.047(0.42)	0.024(0.13)	0.002(0.86)	-0.003(0.29)	0.017(0.29)	0.002(0.83)

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Panel B: Diagnostics						
AR(2)	0.15	0.24	0.13	0.12	0.03	-0.04
p-value	0.88	0.81	0.89	0.90	0.97	0.96
Hansen test	53.15	52.98	49.50	0.12	56.34	56.87
P-value	0.87	0.89	1.00	1.00	0.86	0.94

Note: Table reports GMM estimates of foreign capital flows and education measured as secondary school enrolment over the period 1984-2015 for 65 developing countries. The estimation uses 1-4 lags of some exogenous variables as well as endogenous variables. TO, LF, GFCF, LRER refers to Trade openness as percentage of GDP, Log of total Labor force, Gross Fixed Capital Formation as percentage of GDP, Log of Real Exchange Rate, respectively. ***, **, * denotes significance at 1%, 5% and 10 % level of significance. In Panel a, values in parenthesis are the standard errors. In Panel A, parenthesis contains p-values of the respective coefficients.

Table 2: Foreign Capital and SSE: Role of Institutional Quality

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Panel A: Estimates						
SSE_{t-1}	0.974***(0.00)	0.974***(0.00)	0.974***(0.00)	0.973***(0.00)	0.979***(0.00)	0.970***(0.00)
FDI	-0.092*(0.07)	-0.393*(0.07)				
FDI*IQ		0.047*(0.08)				
FPI			-0.072*(0.09)	-0.656*(0.07)		
FPI*IQ				0.1004*(0.07)		
REM					0.087*(0.07)	0.112*(0.10)
REM*IQ						0.014*(0.08)
IQ	0.2323*(0.08)	0.1494*(0.09)	0.206**(0.03)	0.238*(0.07)	0.172*(0.09)	0.301*(0.07)
TO	0.0236**(0.03)	0.0167**(0.03)	0.012*(0.07)	0.011*(0.09)	0.0147***(0.01)	0.009(0.54)
LF	0.4644*(0.07)	0.3157**(0.04)	0.272*(0.07)	0.264**(0.04)	0.3191*(0.05)	0.076(0.63)
PCI	0.1074*(0.08)	0.0823*(0.07)	0.060*(0.07)	0.093*(0.09)	0.0790*(0.09)	0.094*(0.09)
GEXP	0.1179**(0.02)	0.0888**(0.03)	0.078***(0.00)	0.062**(0.03)	0.075*(0.09)	0.086* (0.09)
Panel B: Diagnostics						
AR(2)	-0.81	-0.78	-0.38	-0.44	-0.75	-0.73
p-value	0.41	0.43	0.70	0.65	0.45	0.46
Hansen test	50.41	39.39	46.60	45.28	54.43	50.82
P-value	0.78	1.00	0.94	0.95	0.77	0.79

Note: Table reports GMM estimates of foreign capital flows and education measured as secondary school enrolment over the period 1984-2015 for 65 developing countries. The estimation uses 1-4 lags of some exogenous variables as well as endogenous variables. TO, LF, PCI, GEXP refers to Trade openness as percentage of GDP, Log of Total Labor force, Per Capital Income, and Govt expenditures as percentage of GDP, respectively ***, **,* denotes significance at 1%, 5% and 10 % level of significance. In Panel a, values in parenthesis are the standard errors. In Panel A, parenthesis contains p-values of the respective coefficients

Table 3: Foreign Capital and LE: Role Of Institutional Quality

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Panel A: Estimates						
FDI	0.2172**(0.03)	0.1512**(0.03)				
FDI*IQ		0.0150*(0.08)				
FPI			-0.3123*(0.09)	-0.7222*(0.08)		
FPI*IQ				0.1103*(0.06)		
REM					-0.2387*(0.08)	-0.7171*(0.07)
REM*IQ						0.1491**(0.02)
IQ	0.7131**(0.03)	0.5797*(0.07)	0.4786*(0.09)	0.9009*(0.08)	0.2809***(0.01)	1.069***(0.01)
PCI	0.3517***(0.00)	0.2800***(0.01)	0.4075**(0.05)	0.4051***(0.01)	0.9252**(0.02)	0.4751***(0.00)
HEXP	1.661***(0.00)	1.346*(0.08)	1.763**(0.02)	1.442***(0.01)	2.81***(0.00)	1.656**(0.02)
FR	-3.949***(0.00)	-4.141***(0.00)	-3.4***(0.00)	-3.69***(0.00)	-4.25***(0.00)	-3.79**(0.02)
Panel B: Diagnostics						
AR(2)	0.14	0.09	0.26	-0.66	-0.01	0.22
p-value	0.88	0.92	0.79	0.51	0.99	0.82
Hansen test	47.50	45.33	46.96	13.05	41.98	60.01
P-value	0.75	0.99	0.80	0.99	0.95	0.86

Note: Table reports GMM estimates of foreign capital flows and education measured as secondary school enrolment over the period 1984-2015 for 65 developing countries. The estimation uses 1-4 lags of some exogenous variables as well as endogenous variables. PCI, HEXP, FR refers to Per Capital Income ,Govt Health expenditures as percentage of GDP ,and Fertility Rate, respectively ***, **,* denotes significance at 1%, 5% and 10 % level of significance. In Panel a, values in parenthesis are the standard errors. In Panel A, parenthesis contains p-values of the respective coefficients

Conclusion and Policy Implications

This paper is an attempt to assess and evaluate the impact of foreign capital flows on human development by incorporating quality of institutions in developing countries. Foreign capital flows tend to address the issue of resource inadequacy for the achievement of broader human development objectives. Good quality institutions direct these resources to where they are needed the most i.e. for the betterment of the masses. At the other end of the spectrum is the possibility that foreign capital flows exert negative influence on human capital, this may be an outcome of government complacency, where the achievement of growth objectives through foreign capital lead to neglect for social sectors. Further, the bid to attract foreign capital may also induce the state in directing resources towards development of physical infrastructure leading to dearth of funds allocated for human development.

Incorporation of institutions seems to have a mitigating influence on the adverse impact of the foreign capital flows and it enhances the enabling influence. The positive effect of institutions and the finding that institutions, in the context of developing countries in our sample, are inadequate in mitigating the adverse impact completely, reasserts the need for institutional reforms. The adverse effect of foreign

capital in no way justifies restriction on capital flows. If anything this points to positive effects of foreign capital flows being conditional on institutional reforms.

The inclusion of institutions is important for attracting and directing FDI towards the human development, as otherwise, it affects human development negatively. Moreover, there is need to implement policies to attract and direct FDI towards sectors that would provide employment opportunities to highly skilled individuals, leading to increase in the returns to education. This can be done through some level of regulation of FDI flows or institutionalized conditionality for establishing businesses by foreign investors, making sure that allocation of foreign investment does not come at a social cost. Over reliance on FPI should be avoided given its negative effect on all aspects of human development.

Remittances while beneficial do exert negative effect on life expectancy, owing to emergence of unhealthy consumption patterns, signifying need for awareness campaigns regarding dangers of smoking and drinking etc. The state can play a role in enhancing the healthcare system of the country through taking different measures such as; cutting down non-development expenditures and allocating the expenditures on health and education sector.

Trade interactions should also be increased in the global world through abolishment of non-tariff barriers, initiating multilateral trade negotiations, adopting export promotion strategies and reduction in restrictive trade e.g. taxes and import duties.

The upshot of this entire endeavor is that achievement of higher levels of human development through foreign capital requires complementary institutional framework. This study provides strong argument in favor of institutional reforms. All three aspects of institutional quality namely control of corruption, improving bureaucratic quality and effective maintenance of law and order combined to not only exert a direct positive influence on human development but also are instrumental in partially mitigating the negative influence of foreign capital flows. Significant institutional improvement may improve or even reverse the impact of foreign capital flows.

This brings us to the idea that a future comparative study may be in order to explore such a dynamic.

Further, future research can be done in this area by doing a regional based analysis or for the upper and lower middle income countries. This might generate region specific insights into foreign capital flows and human development relationship, which may turn out to be different for finding across aggregated sample.

As is, our study does depict a failure of conventional economic arguments in favor of foreign capital flows, rendering any possible positive effect of foreign capital flows on human development conditional on significant institutional change. It serves as a starting point towards reevaluating the desirability of foreign capital flows vis a vis human development.

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