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# Impact of Foreign Direct Investment, Official Development Assistance, and Financial Development on Economic Growth: An Empirical Analysis in Selected Asian Countries



Hassan Shakeel Shah

Asghar Kamal †

Muhammad Tayyab ‡

Corresponding Author: Asghar Kamal (PhD Scholar, Department of Banking and Finance, University of Management and Technology, Lahore, Punjab, Pakistan. Email: <a href="mailto:asgharkamal5523@gmail.com">asgharkamal5523@gmail.com</a>)

Abstract: This research analyses the role of foreign direct investment (FDI) and official development assistance with financial development in determining the economic growth (EG) of selected Asian countries by using data from 2003 to 2018. In this research, we investigate the important role of official development assistance (ODA) and foreign direct investment along with other variables affecting GDP in selected Asian countries. By using panel data, a random effect technique is used to highlight the impact of ODA and FDI on GDP in selected Asian countries. The study results showed that official development assistance, urban population growth, and financial development have increased GDP in these countries. Findings suggest that a stable economic and political environment must be provided for further foreign aid and foreign direct investment. More credit facilities must be provided to the general public for more investment and economic growth.

Key Words: FDI, FD, GDP, Asian Countries

#### Introduction

Financial flows are promoting the sustainable development of economies, particularly emerging economies, considering the insufficiency of local means. The major worldwide flows that are the result of globalization are capital flows, persons, and commodities that have increased in the current decades. *FDI* improves monetary stability, encourages sustainable development, and also guarantees the comfort of the people. Financial development helps lessen the economic issues of countries by considering sufficient local resources. It improves production and growth. *FDI* is well thought out as a better way for high development by creating job chances, allocating and growing

modern know-how and manufacturing competences, and assisting indigenous businesses in availing themselves of novel global marketplaces.

According to findings from previous studies conducted by Liesbeth et al. (2009), investments play a substantial and critical part in the expansion of a nation's economy. The previous research works investigate the *EG* of the county through the lens of the gross domestic product as well as the character of the population's living standards. (Botha et al., 2020). In addition, research studies investigate the effects that FDI have on developing economies; however, this topic is also garnering a lot of attention in

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<sup>\*</sup> Associate Professor, University of Management and Technology, Lahore, Punjab, Pakistan.

<sup>†</sup> PhD Scholar, Department of Banking and Finance, University of Management and Technology, Lahore, Punjab, Pakistan.

<sup>\*</sup> BS, Department of Economics, International Islamic University, Islamabad, Pakistan.

developed economies. (Lucas, 1990; Gourinchas and Jeanne 2013). In addition, there is evidence that contradicts itself concerning the connection between FDI and EG (Mencinger 2003; Carkovic and Levine 2005; Johnson 2006; Turkcan, Duman, and Yetkiner 2008; Herzer 2012). In the meantime, Olofsdotter (1998) found that *FDI* has a substantial influence, both positively and significantly, on the inflows of both developing and developed nations. In a similar vein, Reisen and Soto (2001) found that *FDI* had a significant effect, as well as a positive one, on both types of inflows to developing and developed nations.

FDI is the major constituent of investment inflows for underdeveloped economies. It enhances worldwide economic development. Moreover, it has contributed to growth in underdeveloped economies in different ways. Thus, underdeveloped economies benefit from modern technologies and administrative information. Therefore, FDI may stimulate GDP in these economies. Makki and Somwaru (2004) found that FDI inflows effectively allocate knowinformation, and experience capitalizing nations to emerging states. It positively increases the growth of economies.

Urbanization has been enhancing the growth of different countries. Urban immigration has contributed much towards the growth and economic well-being of economies. The people in cities are getting jobs and making investments in different sectors, which improves growth. Financial development provides investment opportunities to the general public and thus improves the growth potential of economies. It also eliminates poverty and inequality. Poor populations may have access to financial resources and invest these funds, which resultantly increases GDP and development. Financial development improves accumulation and technological procedures because of a lot of investments. Furthermore, it encourages inflows of capital. A lot of empirical work has been done on EG, highlighting the role of major economic variables. However, such research presents the role of ODA and FDI in financial development and urban populations on the GDP of these countries.

#### Statement of the Problem

Economic growth and economic development have been discussed over the years. For this, the role of many macroeconomic variables has been highlighted, but results have not been achieved yet. So, this research highlights the contributing factors such as official development assistance, FDI, FD, and life expectancy in enhancing GDP in these countries.

## **Research Objectives**

This study shows that official development assistance, foreign direct investment, life expectancy, and financial development among urban populations increase economic growth in these countries.

The major objectives of the study are as follows.

- It indicates the influence of official development assistance on economic growth in Asian countries.
- It shows how foreign direct investment contributes to economic growth.
- It investigates the effect of financial development assistance on economic growth in selected Asian countries.
- It examines how urbanization enhances the economic growth of these selected Asian countries.

#### **Research Questions**

- How does a foreign direct investment affect the growth of the economies in some Asian countries?
- How does financial development assistance increase the economic growth potential of Asian countries?
- How does life expectancy increase economic growth in selected Asian countries?
- Does an urban population increase the lead to enhanced economic growth in selected Asian countries?
- What is the impact of official development assistance on economic growth in Asian economies?

# Significance of the Study

There has been much focus on how trade openness, population growth, secondary education, and other variables lead to increased GDP in Asian countries. However, this study

shows the significant role of financial development, official development assistance, and FDI in determining the GDP of selected Asian countries, which is very important for the survival of economies.

# **Research Hypothesis**

- The main hypotheses of our study are given below.
- H1: There is a positive association between foreign direct investment and economic growth.
- H 2: Official development assistance and economic growth are positively associated.
- H 3: There is a positive link between life expectancy and economic growth.
- H4: Higher the financial development assistance, the higher the economic growth.
- H 5: There is a positive relationship between urban population and economic growth.

The present research was conducted with the intention of highlighting the contributions to the Gross Domestic Product (GDP) of selected Asian countries that were made by official development assistance, foreign direct investment, financial development, and urban population. The question is laid out in the following manner: A summary of the previous research is presented in Section II. The statistics and the methodology are presented in the third section. The findings and their interpretation are discussed in Section IV. On the other hand, Section V substantiates the conclusion.

### Literature Review

In this section, we explain various studies linking growth with explanatory variables. Such as official development assistance, *FDI*, urban population, and financial development are being used in this study. The amount and distribution of aid have a significant impact on the rate of economic development in each country. Cungu and Swinnen (2003) have done research on this topic, concentrating on how aid affects economic development. It was discovered through the application of methods utilizing fixed effects that they contributed to an increase in the development rate of the economy. Again focusing on China, Zhang et al. (2012) investigated the

influence that financial development had on the expansion of the Chinese economy. The writers have performed regression analysis on the data, which spans the years 2001 to 2006 and was used. In addition, the findings of the GMM demonstrated that China's GDP was positively affected by financial development.

Kim (2012) did some research on this topic and found that foreign aid has led to more trade between economies. By allocating foreign assistance to these developing countries, the donor countries played an important role in determining the development potential of the economies. By employing an endogenous growth model, Azam and Ahmad (2015) investigated, among other things, how human capital and *FDI* contributed to economic expansion. The writers analyzed data spanning the years 1993 to 2011. The results with fixed effects highlighted the fact that development in central Asia has been promoted by growth in *FDI*.

The results of previous studies have been brought into question. The GMM estimation method was utilized by Nketiah-amponsah and Sarpong (2019) in order to investigate the effect that FDI had on the EG in 46 different countries across Sub-Saharan Africa. The findings indicate that *FDI* has a correlation that is both favourable and statistically significant with the EG. Both Mohd and Muse independently uncovered the same pattern. (Alfaro et al., 2021; Citation 2010; Alzaidy et al., 2017; Azman-saini et al., 2010; Borensztein et al., 1998; Nketiah-amponsah & Sarpong, 2019).

Rani and Zakia (2016) also looked into how the stability of the government and *FDI* affected the growth of Pakistan's economy. Using data from 1980 to 2013 and the ARDL model, it was found that *FDI* has had a much bigger impact on how the Pakistani economy has grown than political and economic instability. This was found to be the case when compared to the length of time that the data was used. Again, Nguyen (2017) looked into how the effects of direct investment from other countries helped Vietnam's *EG*. They have used statistics ranging from 1986 all the way up until 2015, as well as the ARDL model. The study's results showed that *FDI* helped Vietnam's economy grow in a good way.

Javaid did research in 2017 on the things that help Pakistan's *EG*. He focused on V, government aid for development, and

remittances. Using data from 1973 to 2014, researchers were able to figure out that increases in both *FDI* and government development aid helped Pakistan's economy grow. In addition to this, the government's development assistance program is another factor that contributes to the expansion of the economy. According to Das and Sethi's research (2019), government development assistance has contributed to increased *EG*. They suggested that governments work to improve the financial structures of their respective countries.

Govdeli (2019) looked at data from 1992 to 2016 to see how things like life expectancy, net direct foreign investment inflows, and trade openness affected GDP in the E7 economies. There is evidence of cointegration as well as causation. The findings pointed to a connection between the variables of economic development, trade openness, and FDI, as well as life expectancy. The long-term relationships between rising life expectancy and expanding economies have been the primary subject of He and Li's (2020) research. The writers have performed analyses of causality by making use of data spanning the years 1980 to 2014. According to the findings of the research, there is a favourable connection between growth and life expectancy. Zardoub and Sboui's research in 2021 was mostly about how remittances, government development aid, and FDI have helped the economies grow and develop. The findings showed that financial flows have significantly contributed to economic development. This was determined by using data ranging from 1990 to 2016, as well as controlling for fixed effects. However, the findings were not clear-cut at all.

# **Data and Methodology**

#### **Data Source**

We used a panel data collection that included nine different countries from 2003 until 2018. The information was compiled from worldwide development indicators that were collected in Bangladesh, China, India, Bhutan, Indonesia, Iran, Jordan, Pakistan, Nepal, Malaysia, the Philippines, and Sri Lanka. This study focuses on the factors that contribute to these countries' economic growth. These factors include official development assistance (flows in millions), foreign direct investment (per cent of GDP), urban population (per cent of GDP), life expectancy at birth, and financial development (domestic credit to the private sector as a percentage of GDP). For the purpose of analyzing this research, the random effect methodology was utilized.

Model

The equation is:

$$\begin{split} \text{GDPti} \ = \ \alpha_{\ 0} \ + \ \beta_{\ 1ti} \ \text{ODA} \ + \ \beta_{\ 2ti} \ \text{FDIN} \ + \ \beta_{\ 3t} \\ \text{iLIFEX} \ + \ \beta_{\ 4ti} \ \text{FDVM} + \beta_{\ 5ti} \ \text{URBNP} \ + \ \epsilon_{\ ti} \end{split}$$

GDP= Economic growth GDP per capita

ODA = Official Development Assistance

LIFEX= Life expectancy at birth per 1000

FDVM= Finacial Development (domestic credit to private sector % of GDP)

URBNP= Urban population % of GDP

 $_{t}$  = (time trend)

 $\mathcal{E}_{t}$ = (error term)

# Descriptive Statistics and Results Descriptive Statistic

**Table 1**This Section Highlights Summary Statistics of Important Variables used in this Research.

Variables	Observations	Mean	Standard Deviation	Minimum	Maximum
LGDP	144	3.3742	0.2970	2.7544	3.8925
ODA	144	1.1126	1.8250	-0.2875	12.7956
FDIN	144	2.3371	2.9694	-0.2542	23.5374
LIFEX	144	70.9741	3.6583	63.522	76.812
FDVM	144	50.9951	32.74182	15.3055	157.8091
URBNP	144	46.3988	32.74182	15.3051	157.8091

In table 1, descriptive statistics have been shown. The data shows that It is shown that, on average, GDP per capita is 3.3742 in selected developing countries. However, the average urban population

This section shows the results of the random effect

technique. The probability value of the chi-square

is 0.9997, which indicates favouring the Ranom effect. The p-value recommended by Hausman

suggests a random effect.

is 46.3988 inhabitants. There are large differences in the values of financial development, which range from 15.305 to 157.30 per cent.

# **Empirical Analysis**

 Table 2

 Random Effect Results, Dependent Variable is GDP Per Capita.

Variables	Coefficients, Standard Errors and z-values
ODA	0.0126*
	0.0046
	(2.77)
FDIN	0.0024
	0.0023
	(1.03)
LIFEX	0.0364*
	0.0044
	(8.21)
FDVM	0.0024*
	0.0010
	(4.02)
URBNP	0.0051*
	0.0016
	(3.20)
C	0.4399
	0.2752
	(1.60)
R-Square within	0.7677
R-Square between	0.7004
R-Square overall	0.7068
Wald chi2	441.00

*z*-values are in parentheses

The random effect results are shown in Table 2. The dependent variable is GDP per capita. *ODA* has a significant role in determining the GDP of selected Asian countries. The result highlights a positive association between both variables. It is found that a one per cent increase in *ODA* flow increases growth by 0.0127 per cent in Asian countries. This factor is important in enhancing the GDP of economies. With official assistance, investments and living standards must be increased. The result is supported by Das and Sethi (2019).

The rise in the average life expectancy of certain Asian countries has had a substantial effect on their respective GDPs. A positive and statistically significant number is exhibited by the coefficient of life expectancy. A correlation has been found between an increase of one per cent

in life expectancy and an increase of 0.0364 per cent in GDP in certain Asian countries. The data do not corroborate the hypothesis that he and Li came up with. (2020). In addition, countries that invest in their financial infrastructure have the possibility to boost their capacity for economic expansion. According to the statistics, an increase of one per cent in financial development results in an increase of 0.0023% in overall growth in the selected Asian countries. There is a positive relationship between EG and investment possibilities and the development of the financial sector. Zardoub and Sboui have a positive impression of the conclusion of the situation. (2021). In addition, urbanization is the single most significant contributor to the growth of a nation's GDP. According to the findings, a one per cent increase in metropolitan population was

<sup>\*\*\*</sup> p<0.01, \*\* p<0.05, \* p<0.1

associated with a 0.0051 per cent increase in GDP in the countries that were chosen from Asia. Economies of concern benefit from increased investment, production, and income when their urban populations are educated and skilled.

#### Conclusion

In this research, the potential for *EG* in a number of different Asian countries is analyzed. This study examines the significant role that government development assistance, *FDI*, and financial development with urban populations play in boosting GDP. The data for this study range from 2003 to 2018, and it was conducted using those years. The technique of random effect has been utilized in this situation. The Gross Domestic Product is our dependent variable, and the other

variables—official development assistance, FDI, financial development, metropolitan population, and life expectancy at birth—are our independent variables. The findings illustrated the substantial and favourable effects that urbanization, financial development, increased life expectancy, and official development assistance have had on the economic expansion of the countries that were studied. On the basis of these findings, it is suggested that the government should provide a stable economic and political environment to attract more ODA and FDI in these countries. Moreover, people should be given good educational facilities for more investment and earnings. Finally, credit facilities should be provided to a needy segment of the population for further growth and development.

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