Proceedings of the 3rd International Conference on International Law and Legal Policy
DOI: 10.54254/2753-7048/65/20240147

Benefits and Drawbacks of FDI to Host States: Difference in Developing Countries and Developed Countries

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Abstract: FDI has brought both benefits and drawbacks to host states and investors. But there are some inequalities in international investment systems. This article uses Spearman Rank Correlation Coefficient to test the influence of FDI, and analyzes cases in India, Peru and the United States to explore benefits and drawbacks of FDI, finding that the situation of inequality is more serious in developing host states like India and Peru, because the immorality of investors and the irresponsibility of governments. This article appeals that international investors should take social responsibilities and governments of host states should modify policies to improve the efficiency of regulation and construct a friendly business environment.

Keywords: FDI, international investment, inequality, investors, host states.

1. Introduction

In many countries, especially in developing countries, the public usually have a paradoxical attitude towards international corporations. On the one hand, international investment has introduced capitals, management practices, advanced technologies into these countries [1], which has created lots of jobs, improvement of tax revenues, prompting public welfare and the economic growth. On the other hand, contamination, public security hazards, human rights violations accompanied with international investment have caused many troubles to host states, besides, it cannot be ignored that the damage usually has more effects on residents instead of governments.

International investment is widely discussed by scholars. Some scholars focus on the relationship between domestic business environment and FDI (Foreign Direct investment), and conclude that FDI is important to the development of host states, so effective measures should be taken to facilitate inflows of FDI. Some researchers concentrate on benefits and drawbacks FDI can bring, and some researchers test the correlation between FDI and development of host states by comparing FDI inflows and other indicators such as HDI (Human Development Index), discovering the significance of governance in international investment.

This article concentrates on the imbalance between host states and international investors, using the method of data analysis and cases study to explore the situation of the inequality in the international investment system, discovering that developing countries usually undertake more risks than developed countries while developing countries have fewer effective measures to deal with drawbacks accompanied with multinational investment than developed countries. It is of great importance to advocate international investors to take social responsibilities and host states to modify their domestic investment laws, encouraging the cooperation among investors, the government and local people to prompt interests of both investors and host states.

2. Literature Review

Lots of scholars have made discussion on the relationship between FDI and the development of host states. These researchers mainly focus on three aspects: Firstly, how domestic polices and business environment in host states can influence FDI. Secondly, benefits and drawbacks accompanied with multinational investment. Thirdly, the correlation between FDI and other development indicators of the host country.

2.1. The influence of domestic policies and business environment on FDI

Public policies and business environment in host states have a significant influence on FDI. KH Zhang uses the data of 11 countries and the method of empirical assessment to illustrate benefits that international investment can bring are linked with related policies of the host state [2]. Mudambi Ram, Pietro Navarra and Andrew Delois focus on the relationship among international investment, corruption and government regulation, finding that the burden of government regulation is highly relevant with corruption, which have bad influence on FDI [3]. Rahim M. Quazi uses figures which contain tax, the degree of corruption, the development of financial market and so on in 9 Latin American countries to express how FDI is impacted by the domestic business climate, showing the harm of excessive bureaucracy and inefficient financial markets [4].

2.2. Benefits and drawbacks accompanied by multinational investment

Jian Wang and Xiao Wang make a comparison between the post-acquisition performance changes of foreign and the post-acquisition performance domestic-acquired firms in China, and jump to a conclusion that foreign ownership can play an important role in prompting exports, increasing employment and staffs' wages [5]. Dupoux Patrick, Lisa Ivers, Stefano Naava's, Abdeljabbar Charita concentrate on how African companies are improving the economic integration of the continent by expanding their operations and their capabilities. They find that the investment of multinationals can bring benefits to both states and enterprise [6]. Ullah Subhan, Kweku Adams, Dawda Adams and Rexford Attah-Boakye find that international investors can exert pressure to make sure that they have the advantage when facing the public and even the government of the host state, and at sometimes, the government of the host country support investors instead of the public because of employment [7]. Itzhak Ben-David, Yeji Jang, Stefanie Kielmeyer, Michael Vies illustrate the export of pollution, and they also reveal that it is hard to prevent the transaction of pollution only if countries work together [8].

2.3. The connection between FDI and other development indicators of the host country

Almutairi Majed presents the situation of FDI inflows, HDI index in GCC countries (Gulf Cooperation Council) and illustrates: "productivity gains and economic growth fostered by capital deepening impacts from FDI provide governments with more room invest in 3 systems (the adult literacy index, the gross enrollment index, the health index that considers life expectancy) of HDI." One of the reasons why GCC countries have been ranked high human development countries is the increase of FDI [1]. Nam Hyun-Jung and Doolin Ryu assume that FDI inflows have negative effects on human development in ASEAN (Association of Southeast Asian Nations) countries and governance can moderate the negative relationship between FDI and HDI, and they use the method of data analysis, revealing that whether FDI can prompt HDI is due to the governance of the host

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country, if the host country has rational governance, FDI can boost human development of the host state, otherwise, it wouldn't [9]. Prior literature has presented the relationship between investors and host states comprehensively, but the benefits and obligations of host states and investors are still worthwhile to explore. This paper analyzes economic data and relevant cases, hoping that some new suggestions can be brought to relative research areas.

3. Methodology

Data analysis and cases study are two main methods of this research. Three indicators from 1990 to 2022: FDI (net inflows portion of GDP), GDP growth (annual %), and HDI are introduced in this research, and Spearman rank correlation coefficient is used to analyze the data. Besides, there are 3 cases in this research to support conclusions: The Bhopal tragedy, The La Oroya Case and BP Gulf of Mexico Oil Spill.

4. Hypotheses

H1: States and investors both get equal benefits from international investment.

H2: Developing states get far less benefits than do investors.

H3: Developed states get about equal benefits as do investors.

H4: States get more benefits from international investment than do investors.

5. Data analysis and cases study

5.1. Data analysis

FDI: Foreign direct investment. Considering that the economic volume is different among countries, so the research uses FDI (net inflows portion of GDP) to explore the correlation among FDI, GDP growth and HDI. The source of FDI comes from World Bank [10].

GDP growth: The growth of GDP. GDP is the standard to measure the value increased created by the production of commodities and services in a state (or a region) during a certain period [11]. The source of GDP growth comes from World Bank.

HDI: The Human Development Index is a figure to measure the total development level of a country (or a region), which contains factors such as public health conditions, economy, education, residents' life qualities [12]. The source of HDI comes from United Nations Development Programme.

Spearman rank correlation coefficient: The Spearman rank correlation coefficient (Spearman ρ) is used to test the relation existing between two sets of data. The value of the coefficient ranges from -1 to 1, and if the value is a minus value, the relationship between data can be negative otherwise the relationship between data can be positive. Besides, if the absolute value is closer to 1, the correlation between data will be more significant. The formula of Spearman rank correlation coefficient is [13]:

$$\rho = 1 - \frac{6\sum_{i=1}^{n} d_i^2}{n\left(n^2 - 1\right)} \tag{1}$$

This paper analyzes the data of FDI, GDP growth and HDI by Stata. The significant value in the process of data analysis is 5%.

Significance level: The significance level is a value that the researcher sets in advance to check the possibility of false positive conclusion. The maximum risk that the researcher accept is significance level [14]. Researchers usually choose different significance levels according to different types accuracy demands of different researches. Results are as follows:

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Table 1: The result of data analysis.

	Spearman's rho	Prob > |t| =
FDI and GDP growth around the world	0.4318**	0.0121
FDI and GDP growth in low- and medium-income countries	0.5802**	0.0004
FDI and GDP growth in high income countries	0.2423	0.1743
FDI and HDI in India	0.7832**	0.0000
FDI and GDP growth in India	0.1233	0.4941
FDI and HDI in Peru	0.1302	0.4701
FDI and GDP growth in Peru	0.6283**	0.0001
FDI and HDI in The United States	0.3560**	0.0420
FDI and GDP growth in The United States	0.1995	0.2656

** Coefficient is significant at 5% level of significance

The table 1 shows there is a positive connection between FDI and GDP growth in the world, and in low-and-medium income countries, there is a positive correlation between FDI and GDP growth. But in high income countries, correlation between FDI and GDP growth is not significant. The table 1 also shows that there is a significant positive correlation between HDI and FDI in India, besides, the correlation of GDP growth and FDI in Peru is also significant. In the United States, there is only a little positive relation between FDI and HDI.

The reason why FDI in developing countries can have more influence on GDP growth or HDI is that many developing countries lack the capital of development, so inflows of foreign investment can provide lots of capital to prompt economy and then foster the development of society. However, developed countries have a complete industrial system, and high value-added industries in developed countries can create considerable resources to bloom their economy and society.

5.2. Cases study

5.2.1. The Bhopal tragedy

The India government took measures to encourage international investment in 1970s. Union Carbide Corporation was invited to build a factory to produce Sevin, a pesticide commonly used throughout Asia. However, there were some hazards. Firstly, the location of the factory is in central area of the city, and there were a lot of people living in that place. Secondly, the safety standard of the factory was lower than its sister factory in West Virginia. At the same time, many devices had trouble because lack of funds to maintenance. On December 3rd 1984, the tragedy happened [15]. After a blast, plenty of toxic gases fled into the air of Bhopal. Suddenly, there were plenty of people crowded in the street [15]. People rushed to hospitals. However, physicians did not know the ingredient of the toxic gas and had no effective ways to treat patients. Within hours, corpses began to emerge in wards. It is estimated that 15,000 to 20,000 people perished from this accident. Besides, there are about 500,000 people still struggle with sequelae caused by this calamity [16]. Under the system of international law, investors should be regulated by laws and policies of host states, however, until 2010, several former executives of Union Carbide's India subsidiary were tried by a Bhopal court and found guilty [16]. The parent company in the United States only took the moral responsibility and paid for only US$ 470 million to compensate victims [15]. From this case, it is evident that some international investors adopt different standards in different states, which breaches the principle of good faith and is also immoral.

5.2.2. The La Oroya Case

La Oroya is a town located at the Peruvian Andes, 175km from Lima, and it is one of the most polluted places in the world. There are about 30,000 inhabitants living in La Oroya, and many of them are workers of local smelter [17]. Sources of pollution include the mining waste, toxic dust, and acidic fumes emitted by a 100-year-old metal smelting plant. For more than 60 years, this factory was owned and operated by U.S. companies [18]. Residents in La Oroya were incessantly exposed to pollutants such as lead, arsenic, cadmium, and sulfur dioxide pollution caused by multi-metal smelting activities. There were 4 blood tests in 1999, 2000, 2001, and 2005 revealed that plenty of heavy metals in the blood of local people exceed the Peruvian national and World Health Organization permitted standards. The damage of toxic materials exposure has caused on local people range from cognitive problems to death. Besides, the irresponsibility of Peruvian government, such as the absence of regulation, lack of actions to solve issues related with pollution in La Oroya also makes the situation worse [17]. On March 22nd 2024, Inter-American Court of Human Rights declared that the government of Peru was responsible for the infringement of human rights, the contamination of local environment in La Oroya, because failure to fulfil obligations of regulation. However, lack of responsibility of Peruvian government is only one of the reasons of the tragedy in La Oroya. Factors such as inequality of wealth between local people and the investor cannot be ignored as well. Besides, Peruvian government prefers to adopt measures that can prompt large extractive investments instead of environment protection, because the need of economy growth [19]. According to the case of La Oroya, it is obvious that there is a dilemma between public welfare protection and economic development in developing countries.

5.2.3. BP Gulf of Mexico Oil Spill

On April 20th 2010, there was a sudden explosion in the Gulf of Mexico, and 11 people died in the accident immediately. After the explosion, the drilling rigs sank in 2 days, and a larger disaster of environment happened. Four million barrels of oil fled from the damaged Macondo well, until July 15th 2010, the oil flow stopped [20]. After the accident happened, there were over 6,000 vessels assigned to observe real-time and to verify oil trajectory modeling. A Marine Transportation System Recovery Unit was established to make sure the flow of commerce. Approximately 48,000 people were responded to deal with the accident [21]. In 2015, the Justice Department and five states announced a $20 billion final settlement of compensations arising from the 2010 Deep water Horizon oil spill in the Gulf of Mexico [22]. From this case, it is obvious that developed countries usually have an effective system to cope with accidents or drawbacks accompanied with international investment. The efficiency of accidents disposal can be attributed to three factors: a good legal system, the capacity of social mobilization and the robust support of governance. Investors and states are more likely to have a balance relationship in developed countries because of countries' strength.

6. Conclusion

Through data analysis and cases study, there are 3 conclusions: Firstly, FDI has more influence on developing host countries than developed host countries. Secondly, bad impacts usually affect the public in developing host states instead of the government, Thirdly, the strength of country plays an important role in the acquisition of profits.

FDI has more influence on developing host states. Inflows of FDI enables developing countries to have enough money and advanced management practice to develop industries and then to improve the level of social governance [1], while developed countries have possessed a lot of capital, cutting-edge technologies and efficient management methods. Because of the weakness in public management, developing host states always do not have sufficient effective methods to deal with drawbacks and accidents accompanied with international investment.

The public in developing host countries are usually affected by drawbacks of international investments. Through the case of Bhopal and the case of La Oroya, it is obvious that local people have undertaken more risks such as social security hazards, environment pollution and healthy problems, while governments of both 2 countries have gotten a lot of tax and other benefits from international investments and only have paid for loss of reputation.

The strength of country can influence balance between the investor and the host state. In the accident of Bhopal and the contamination of La Oroya, the investors did not take social responsibility and acquired more profits than obligations, but in the case of BP Gulf of Mexico Oil Spill, the investor took actions immediately and made compensation to recover problems the accident caused under the pressure of judgement. Which also cannot be ignored is that under the pressure of economy, employment, social problems, developing countries are more likely to sacrifice some of their own benefits, many of which are undertaken by the public, to attract international investments.

6.1. Recommendations

Both host states' benefits and investors' benefits should be taken into consideration in the international investment. This paper has 3 recommendations: Firstly, host states can modify the domestic investment law adapt to BITs and other investment treaties. Secondly, public welfare should be guaranteed in the international investment. Thirdly, multinational investors should take necessary social responsibilities.

The domestic investment law can be modified to adapt to BITs and other investment treaties. Especially aspects of social responsibilities in the investment law. There are 25 investment laws mention "national security" and "public order" safeguards, and 21 investment laws mention "environment protection", while there are only 2 investment laws in the world mention that investors should respect international principles and instruments on company's social responsibility [23]. For host states, modifying the domestic investment law to make sure the domestic investment law fitting with changing international investment situations, encouraging investors to undertake social responsibilities is a good choice.

States and investors should work together to protect public welfare in host states. According to Guiding Principles on Business and Human Rights by United Nations Human Rights of The High Commissioner, states should make sure that they retain proper policy and regulatory ability to guarantee human rights under the system of international law while providing the necessary investor protection [24]. So, it is necessary to build a system that includes laws, policies, negotiation which can balance the interest of host states and investors, encouraging the cooperation between host states and investors in the field of human rights protection.

International investors are supposed to take social responsibilities, which can help them win a good reputation. Private sectors also have public attributes. If multinational investors can make their contribution to local construction, they will be respected by local communities, which can help their strategies of long-term development. For example, Danone, a world food company, combines its strategy with social responsibility, cooperating with host states to improve nutrition and health condition of children, promoting the view of a reasonable diet [25]. These actions also help the corporation to discover new trends of food markets and make this company has a positive reputation. To sum up, taking social responsibilities is good for both host states and investors.

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