



The impact of Foreign Direct Investment (FDI) on Economic Growth and Income Inequality in Developing Countries

Jinjia Li

Havergal College, Toronto, Canada
minali080218@gmail.com

Abstract: This paper explores the impact of Foreign Direct Investment (FDI) on economic growth and income inequality in developing countries, with a focus on regions in Africa and Asia. Drawing on recent data and case studies, it examines how the volume, sectoral focus, and structure of FDI influence GDP growth, environmental outcomes, and income distribution. The analysis reveals that while FDI can be a powerful driver of development, its benefits are not guaranteed. They are contingent upon certain threshold conditions, such as adequate levels of human capital, institutional quality, and government spending. Countries with strong education systems, effective governance, and open trade policies are more likely to experience sustained economic growth and inclusive development from FDI. However, profit repatriation of FDI limits local reinvestment and undermines long-term economic resilience of developing countries, therefore exacerbating existing global inequality. Also, the environmental impacts of FDI are also mixed: while FDI in resource-rich countries often leads to higher CO₂ emissions, investments in diversified economies can support greener outcomes. For developing countries, FDI should not be viewed solely as a financial transaction, but as a potential long-term partnership for sustainable and inclusive growth..

Keywords: Foreign Direct Investment, Economic Growth, Income Inequality, Developing Countries.

1 Introduction

In the past century, globalization has become a mainstream phenomenon, accelerating economic growth in various countries through international trade. Nations across the globe have reaped benefits from successful trading and are seeking expanded markets, lower labor costs, and lower production costs. With technological advancements in transportation and communication, companies can manage operations worldwide. Eventually, this causes the increase of FDI, which being one of the driving forces of globalization [1]. “FDI is a form of cross-border investment in which a resident or corporation based in one country owns a productive asset located in a second country” [2]. Usually, the host country is a developing country where economic growth can be driven by the investment of a developed country. It creates job opportunities in sectors across

manufacturing, services, and production, effectively reducing unemployment. The capital, technology, and expertise that is being introduced to the host country foster innovation, economic growth, and connection to the global supply chain. However, this is not always seen as an advantage, as developing countries risk becoming overdependent on the investing country. If investors pull out or reduce their presence due to political or economic instability, the host country's economy may suffer significantly [3]. Additionally, who is benefiting from these programs? Is the profit made exacerbating existing income inequalities in the country, or is it reducing

2 Economic Growth in Africa

Foreign direct investment of countries in Africa is mainly focused on the primary sector for resource exploitation. This includes minerals and their renewable energy commitment, such as sun, water, and wind. Renewable energy accounted for half of all foreign direct investment in 2023, with projects like Mauritania's US\$34 billion green hydrogen initiative highlighting Africa's role in the global energy transition [4]. According to Belesity Bekalu Ayenew's research, which examined 22 Sub-Saharan African (SSA) countries from 1988–2019, it was found that a 1% increase in FDI results in a 0.138% increase in GDP per capita growth, meaning that FDI positively and significantly contributes to long-term economic growth. However, FDI is not automatically beneficial. In Sub-Saharan Africa, its impact on growth depends on both the volume of FDI inflows and the country's readiness to absorb and leverage those inflows through sufficient human capital, openness, and institutional quality.

Table 1. Three distinct regimes based on the level of FDI inflows per capita [5].

FDI per capita (US\$/person)	Effect on GDP per capita growth
Below \$44.67	Negative and significant
\$44.67 – \$63.10	Positive and strong
Above \$63.10	Positive but weaker

Table 1 shows a threshold regression model by Asafo-Agyei and Kodongo. It suggests that low FDI inflow hurts the overall economic growth, and excessive inflows are not the most efficient due to diminishing returns. This is mostly likely due to changes made by local government that aim at attracting foreign investors. Methods such as tax holidays, subsidies, or infrastructure could be implemented, but if very little FDI comes in, the costs of attracting it outweigh the benefits.

Table 2. Threshold level on different affecting factors and its impact [5].

Factor	Threshold Level	FDI Impact Below Threshold	FDI Impact Above Threshold
Technology Gap	≥ 0.6904	Negative or none	Positive and significant
Trade Openness	$\geq 99.93\%$ of GDP	Negative	Weakly positive
Government Expenditure	$\geq 13.49\%$ of GDP	Negative	Positive
Human Capital	(measured with HDI, no precise threshold given)	Low HDI limits FDI impact	High HDI boosts FDI impact

Additionally, FDI only positively affects growth if the country meets certain threshold conditions. This is the minimum standard that countries must reach before FDI becomes beneficial. For example, FDI has no or negative effects when the technology gap is too large (i.e., local firms can't absorb advanced foreign technology), but once the gap narrows to 0.6904 or less, FDI becomes positive and significant. Similarly, FDI is harmful in economies that are not open to trade (less than 99.93% of GDP) or have low government spending (below 13.49% of GDP), but becomes helpful once those thresholds are exceeded, as shown in table 2.

3 Environmental Impact

FDI inevitably causes environmental impacts on the host countries. Its impacts depend on the resource wealth of different African countries. Based on the World Bank's classification of average annual natural resource rents, in 18 resource-rich countries, FDI is mostly directed into extractive industries (oil, gas, minerals) and exploitation of primary resources, therefore leading to increased CO₂ emissions. In these countries, a 1% increase in FDI is associated with a significant 0.45% rise in CO₂ emissions. However, in 28 non-resource-rich countries with more diversified economies, FDI and trade have a positive environmental impact. Specifically, a 1% increase in FDI is associated with a 0.13% reduction in CO₂ emissions [1].

This issue is resolved. When a country has strong institutions, the harmful effect brought by FDI become weaker. A strong institution means good governance, the rule of law, low corruption, efficient regulatory systems, and political stability. They can enforce cleaner practices, demand better environmental standards, and restrict the over-damaging actions of foreign investors. At low-level incomes, economic growth comes from factories, fossil fuels, and basic infrastructure that leads to higher pollution. These countries often respond with limited options and weak capacity. Therefore, a strong institution should also ensure the economic development of the country because, as income levels rise, countries can afford cleaner technologies, stricter monitoring, and sustainable growth with less environmental damage [6].

4 Income Inequality

4.1 Income inequality in Asia

Turkey, Iran, Indonesia, the Philippines, India, Pakistan, China, South Korea, Kazakhstan, and Uzbekistan are 10 developing countries from Asia that have been investigated on how FDI affects income inequality between 1990 and 2020. According to research, in these countries, a 1% increase in FDI leads to a 0.071% decrease in income inequality due to FDI's positive contribution towards creating jobs and improving wages and wealth [7]. Human capital plays a crucial role in reducing income inequality, both on its own and when combined with foreign direct investment. A more educated and skilled population enables broader participation in the benefits of FDI, such as access to better jobs and higher wages. This is confirmed by the significant and stronger impact of the $FDI \times HC$ interaction term, which shows that FDI is much more effective in reducing inequality in countries with higher levels of human capital. Similarly, while economic growth (GDP per capita) on its own tends to increase income inequality, it becomes a force for reducing inequality when coupled with FDI, as shown by the strong negative coefficient on $FDI \times GDP$. Also, it has been revealed that government expenditure consistently increases inequality, indicating that public spending in many of these Asian countries may be inefficient, poorly targeted, or disproportionately benefiting higher-income groups.

4.2 Income inequality in Africa

In West Africa, foreign direct investment (FDI) has helped reduce income inequality in countries like Côte d'Ivoire, Nigeria, Cape Verde, and Sierra Leone, where FDI programs supported job creation and wage gains. FDI investments improved various sectors of the country, including infrastructure and education, which have widespread benefits to low-income families. Nigeria also attracted non-oil FDI in sectors like automobiles and textiles, employing semi-skilled labor and having training programs that foster local employment [8]. This aligns with the previous finding that FDI reduces income inequality only when human capital is sufficiently high, specifically, above 60.04% secondary school enrollment, as this enables the local workforce to access better jobs and absorb skills and technologies from foreign firms [9]. In contrast, in countries with low human capital, FDI tends to worsen inequality, as it benefits a small elite or foreign

experts while the broader population remains excluded. This is particularly evident in resource-based FDI (e.g., mining and oil), which has generated few jobs and no significant positive impact on inequality in many African countries [8]. Meanwhile, services FDI, such as in finance and telecom, also increased employment but exacerbated income inequality due to their high skill requirements. For every million dollars invested, only about two jobs were created. In the manufacturing sector, FDI had the strongest positive impact on employment and inequality reduction, particularly in Egypt, Nigeria, South Africa, Algeria, and Morocco, by supporting industrial diversification and providing jobs for mid to low-skilled workers. Overall, the countries benefiting most from FDI share common features: strong governance, effective education systems, and urban innovation ecosystems, which together form the absorptive capacity needed to turn foreign investment into widespread, inclusive economic gains [8,9].

5 Profit Repatriation

Profit repatriation poses a serious challenge for developing countries by significantly weakening the long-term economic benefits of foreign direct investment (FDI). While FDI is often welcomed as a driver of growth, the reality is that much of the capital generated by foreign firms is not reinvested locally but sent back to the investor's home country. This outflow of profits results in a direct loss of capital that could have otherwise supported infrastructure, job creation, or technological advancement [10]. Without reinvestment, the job multiplier effect is limited, meaning fewer employment opportunities and lower wages for the local population. Additionally, profit repatriation worsens the current account balance by increasing primary income deficits, making the economy more vulnerable to external shocks. It also limits the transfer of technology and expertise, as foreign firms are less inclined to integrate into local supply chains or invest in training domestic workers if they do not intend to maintain a long-term presence in the country. These consequences are especially evident in countries like Nigeria, Egypt, and Ghana, where significant FDI inflows have not led to widespread development because foreign investors often extract profits early, limiting long-term contributions to the local economy [11]. Overall, profit repatriation turns FDI into a short-term transaction rather than a long-term partnership, undermining its potential to stimulate sustainable economic growth in developing countries.

6 Profit Repatriation and Global Inequality

Profit repatriation by transnational corporations has become a key factor driving global inequality, with profound economic consequences for developing and middle-income countries. Between 2005 and 2020, corporations repatriated over \$1 trillion annually, equivalent to 4.2% of the global FDI stock and 1.4% of global GDP each year [12]. In developing countries, on average, only 32% of profits were reinvested, while 68% were sent back to high-income countries, with repatriated profits exceeding reinvested earnings by 181%. Countries like Kazakhstan lost 21.1% of their gross operating surplus, while Nigeria and South Africa lost between 10–15% of gross fixed capital formation

due to outflows [11]. At the same time, just five countries—the U.S., Netherlands, UK, Germany, and France—captured 80% of global net profit inflows, with the U.S. alone absorbing nearly 40% [11]. These imbalances disproportionately affect “cheap nature” countries like Nigeria, “cheap labor” economies like Thailand, and “cheap money” jurisdictions like Ireland, where for every \$1 reinvested, \$1.60 to \$3.00 is repatriated. This pattern takes away money that host countries need for their development, while strengthening the gap between rich and poor countries.

7 Conclusion

In conclusion, foreign direct investment has significant potential to promote economic growth and reduce income inequality in developing countries. However, this potential is not automatic or uniformly distributed. As demonstrated in this study, FDI's effectiveness depends heavily on a country's institutional capacity, level of human capital, and policy frameworks. In nations that meet critical threshold levels, FDI contributes positively to GDP and equity. Conversely, in contexts lacking these conditions, FDI may deepen inequality and damage the environment.

Furthermore, the issue of profit repatriation raises serious concerns about the sustainability of FDI as a development strategy. When profits are extracted without reinvestment, host countries lose out on long-term gains like employment, technology transfer, and infrastructure improvements, exacerbating global inequality. For FDI to be truly transformative, developing countries must design policies that encourage foreign firms to integrate into the local economy, reinvest profits, and contribute to inclusive growth. Having strong governance, improving local education, and developing sustainable planning are crucial in turning FDI from a short-term inflow into a lasting economic progress in developing countries.

This study has certain limitations. It relies on secondary data and case studies, which may not fully reflect informal economic activities or the unique characteristics of specific sectors. Additionally, the threshold effects identified in the analysis can vary over time and across different contexts, which makes it challenging to generalize the findings. The influence of foreign direct investment is also shaped by domestic political conditions, regional trade dynamics, and broader global economic trends, many of which were outside the scope of this research. Future studies could benefit from primary data and more detailed country-level analysis.

References

1. Asafo-Agyei, G., & Kodongo, O.: Foreign direct investment and economic growth in Sub-Saharan Africa: a nonlinear analysis. *Economic Systems* 101003, (2022).
2. Ayenew, B.B.: The effect of foreign direct investment on the economic growth of Sub-Saharan African countries: an empirical approach. *Cogent Economics & Finance* 10(1) (2022).
3. Parnreiter, C., Steinwärdner, L., & Kolhoff, K.: Uneven development through profit repatriation: how capitalism's class and geographical antagonisms intertwine. *Antipode* 56(6) (2024).

4. Faheem, G., & Siddiqui, D.A.: SSRN Electronic Library. (2020).
5. Global, Y.: 2024 EY Africa Attractiveness Report. (2024).
6. Gong, Z., Wu, Y., Tawiah, V., & Abdulrasheed, Z.: The environmental footprint of international business in Africa; the role of natural resources. *Resources Policy* **80**, 103239 (2023).
7. Jinapor, J.A., Abor, J.Y., & Graham, M.: FDI, industrialisation and environmental quality in SSA—the role of institutional quality towards environmental sustainability. *Humanities and Social Sciences Communications* **11**(1), (2024).
8. Kaur, R., Wall, R., & Fransen, J.: The impact of FDI on income inequality in Africa (2018).
9. Kerner, A.: What we talk about when we talk about foreign direct investment. *International Studies Quarterly* **58**(4), 804-815 (2014).
10. Yuldashev, M., Khalikov, U., Nasriddinov, F., Ismailova, N., Kuldasheva, Z., & Ahmad, M.: Impact of foreign direct investment on income inequality: evidence from selected Asian economies. *PLOS ONE* **18**(2), e0281870 (2023).
11. Pekarskiene, I., & Susniene, R.: Features of foreign direct investment in the context of globalization. *Procedia - Social and Behavioral Sciences* **213**, 204-210 (2015).
12. Yeboua, K.: Human capital and the FDI-income inequality nexus in African countries: panel smooth transition regression approach. *Theoretical and Applied Economics XXVI* (1), 73-88 (2019).

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

