

# Foreign Aid vs. Foreign Direct Investment: Which Is More Effective for Sustainable Development?

**Noor-A- Tandid**

National Board of Revenue, Bangladesh

Received 08-08-2025

Revised 31-08-2025

Accepted 06-09-2025

Published 09-09-2025



Copyright: ©2025 The Authors. This is an open access article under the CC BY-NC-ND license

<https://creativecommons.org/licenses/by-nc-nd/4.0/>

## Abstract:

This study looks at how well foreign direct investment (FDI) and foreign aid work together to promote sustainable development in developing countries. Though their contributions to sustainability are still up for debate, both financial flows have historically been crucial to economic growth and the fight against poverty. The effects of foreign aid and FDI are assessed in three areas: economic performance, social development, and environmental sustainability. This is done by using a qualitative comparative analysis (QCA) and thematic synthesis of secondary data from sources such as the World Bank, UNCTAD, OECD, and United Nations Sustainable Development Goals (SDG) indicators. The recent worldwide drops in investment inflows show how sensitive FDI is to outside shocks, but the results show that it is still a major driver of economic growth, especially through technology transfer, industrial expansion, and capital accumulation. Foreign aid has a greater and more immediate impact on social development, particularly in the areas of gender equality, health and education; but its long-term effects are constrained by the risks of dependency and poor management. However, neither flow substantially closes the widening climate financing gap, and neither is adequate to address environmental sustainability. Overall, the study indicates that institutional strength, governance quality and policy alignment with sustainability goals all play a role in the effectiveness of foreign aid and FDI, which is highly context-dependent. Instead of arguing over which flow is better, the findings show that the most promising way to achieve the SDGs is through their complementarity, which uses FDI to spur growth and foreign aid to strengthen social systems.

## 1. Introduction:

The field of development economics has long focused on the issue of how developing countries can best finance sustainable development. International discussions have focused on two main external financial flows since the middle of the 20th century: foreign direct investment (FDI), which is mostly driven by private capital; and foreign aid, which is primarily driven by governments and multilateral institutions. Both are regarded as essential tools for reducing resource shortages, promoting

economic expansion and improving human welfare. However, there is still much debate regarding their overall effectiveness. Both academics and policymakers are debating which flow—or which combination of flows—best promotes long-term, inclusive and environmentally responsible development in light of the Sustainable Development Goals (SDGs) adoption in 2015 and the growing urgency of climate change.

FDI and foreign aid have very different origins, goals, and methods. Aid is commonly portrayed as

a global solidarity tool meant to stabilize shaky economies, advance social services and alleviate poverty. It has also come under fire for promoting corruption, dependency and a preference for donor priorities over recipient needs. However, it has also come under fire for promoting corruption, dependency, and a preference for donor priorities over recipient needs. FDI, on the other hand, is always about generating revenue because multinational companies invest in other countries to get access to workers, resources, and markets. Those who support it say that FDI helps move technology, creates jobs, and speeds up industrialization. Critics, however, warn of the risks of labor exploitation, profit repatriation and environmental degradation, particularly in contexts of weak governance.<sup>1</sup>

Therefore, the main conflict is not just about which financial flow is "better," but rather about the circumstances in which each can make a meaningful contribution to sustainable development. The theoretical literature exhibits a variety of viewpoints. The "two-gap model" shows how foreign aid can help fill in gaps in savings and foreign exchange<sup>2</sup>, while "endogenous growth theory" shows how FDI can help long-term productivity gains through spillovers<sup>3</sup> and the development of human capital<sup>3</sup>. Dependency theorists, however, caution that both aid and FDI risk reinforcing external control and inhibiting self-sustained growth<sup>4</sup>. These opposing viewpoints have influenced research and policy for decades, but they are still unresolved.

Mixed results are also found in empirical studies. A 2006 study by researchers Stephen Kosack and Jennifer L. Tobin found that foreign aid helps

people develop when there are democratic institutions, whereas FDI fails to assist people in low-income areas significantly. On the contrary, in another research conducted in 2020, Tunde Ahmed Afolabi and Imran Ur Rahman demonstrate that in Sub-Saharan Africa, FDI has a slight edge over aid in promoting growth, although both are conditional on macroeconomic stability. More recent evidence suggests that aid and FDI may be complementary rather than substitutes, with well-managed aid fostering infrastructure and human capital that in turn attract investment<sup>5</sup>. But the relationship seems to depend greatly on the circumstance, since it changes based on the institutional capacities, policy environments and geographical locations.

The sustainability aspect is noticeably overlooked in a large portion of this literature. Although FDI and aid have both been thoroughly examined in connection with economic growth, their wider effects on environmental preservation, climate resilience, and long-term social justice have received less attention. . As the financing gap for achieving the SDGs has grown from \$2.5 trillion in 2015 to over \$4 trillion in 2023<sup>6</sup>, the need to find effective and sustainable ways to finance has become more urgent. This gap shows that current financial flows are not enough and that we need to look at how existing streams of aid and FDI can better support sustainability goals.

In such a context, this paper seeks to answer the following research question: Which is more effective for sustainable development—foreign aid or foreign direct investment? Instead of identifying a single winner, the goal is to give a full picture of how, where, and under what conditions each of the three main dimensions of

---

<sup>1</sup> Aitken, Brian J., and Ann E. Harrison. 1999. "Do Domestic Firms Benefit from Direct Foreign Investment? Evidence from Venezuela." *American Economic Review* 89(3): 605–618.

<sup>2</sup> Chenery, Hollis, and Alan Strout. 1966. "Foreign Assistance and Economic Development." *American Economic Review* 56(4): 679–733.

<sup>3</sup> Romer, Paul M. 1990. "Endogenous Technological Change." *Journal of Political Economy* 98(5): S71–S102.

<sup>4</sup> Cardoso, Fernando Henrique, and Enzo Faletto. 1979. *Dependency and Development in Latin America*. Berkeley: University of California Press.

---

<sup>5</sup> Zardoub, Amna, and Faouzi Sboui. 2023. "Do Foreign Aid and FDI Complement Each Other in Promoting Growth? Evidence from Panel ARDL Models." *Economic Modelling* 122: 106–245.

<sup>6</sup> United Nations Conference on Trade and Development (UNCTAD). 2023. *SDG Investment Trends Monitor (Issue 4): SDG Investment Is Growing, but Too Slowly: The Investment Gap Is Now \$4 Trillion, Up from \$2.5 Trillion in 2015*. 14 September 2023. UNCTAD. <https://unctad.org/publication/sdg-investment-trends-monitor-issue-4>

sustainability—economic performance, social development, and environmental sustainability—contributes to sustainability.

To address this question, the study adopts a qualitative comparative analysis (QCA) combined with thematic synthesis. The analysis covers the Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs) from 2000 to 2023. It uses secondary data from well-known global sources such as the World Bank, OECD, UNCTAD, and the United Nations SDG tracker. This methodological approach is sensitive to differences in context between countries and regions, which make it easier to find general patterns. The study enhances the understanding of foreign aid and FDI effectiveness regarding sustainability by integrating comparative breadth with thematic depth.

The results, which are summed up in the following sections, show that foreign direct FDI is still a significant engine of economic growth, but that its advantages are not evenly distributed and are being increasingly limited by tighter regulations and global uncertainties. Foreign aid on the other hand, even though its amount is decreasing, still makes a significant impact on social development, especially in the areas of gender equality, health, and education. However, neither financial flow has been mobilized to the extent necessary to meet climate goals, so it is insufficient to address environmental challenges. Together, the findings indicate that the most promising path to sustainable development is provided by the complementarity of aid and FDI, rather than depending solely on either one.

This paper is organized in the following way: section 2 reviews the theoretical and empirical literature available on foreign aid and FDI, highlighting ongoing debates about their effectiveness and interaction. Section 3 portrays the methodological approach, including the use of QCA and thematic synthesis. Section 4 shows us the results of the analysis across the economic, social, and environmental dimensions, while Section 5 discusses their implications for theory, policy, and practice. Finally, the conclusion

reflects on the broader significance of these findings for development financing in the SDG era and proposes directions for future research.

This study emphasizes the significance of integration, governance, and strategic alignment by redefining the discussion away from a binary choice between foreign aid and FDI. For sustainable development, both flows must be used in ways that work together. FDI can help technology improve and businesses grow, while foreign aid can help institutions become stronger and social investments. The effectiveness of external finance ultimately depends on how inflows are coordinated, controlled, and steered toward long-term, sustainable goals rather than just the amount of money coming in.

## 2. Literature Review:

In the context of development economics, the role of ‘external funding’ has always been a widely debated topic. And as such the role of ‘foreign aid’ or ‘foreign direct investment (FDI)’ has always been prominent for developing countries. Although both aim to accelerate economic and human development but their effectiveness in terms of providing sustainable development varies across countries and scenarios. This literature review aims at analyzing both the theoretical and empirical aspects of past works on this topic. It also examines how foreign aid and FDI compare in achieving sustainable development.

### 2.1 Theoretical Perspectives

There are fundamental differences between foreign aid and FDI. Both have considerable differences in terms of goals and mechanisms. Foreign aid is generally provided by governments or multinational organizations. And they always have underlying geopolitical or humanitarian goals targeting social, economic and diplomatic developments. On the contrary, FDI is very much business oriented and profit-driven. Business entities invest their capital in host countries in search of a profitable outcome.

Starting from the 20<sup>th</sup> century onwards, different theories have been put forward by academics to explain the working dynamics of foreign aid and

FDI. The two-gap model put forward in the mid-1960s argue that foreign aid not only covers up for a lack of domestic savings and foreign exchange shortfalls but it also incentivizes investments.<sup>7</sup> The endogenous theory argues that FDI directly contributes to economic growth through technological spillovers and development of human capital.<sup>8</sup> However, dependency theorists warn that both foreign aid and FDI strongly reinforce external control and dependency if domestic priorities remain neglected.<sup>9</sup>

More recent arguments from foreign aid critics such as William R. Easterly<sup>10</sup> and Dambisa Moyo<sup>11</sup>, point out that foreign aid facilitates domestic corruption and creates persistent aid dependency. In a similar fashion, critics of FDI point to the risk of environmental degradation and labor exploitation in the host countries. Apart from this, profit repatriation particularly in resource-rich but institutionally weak countries is another major drawback of FDI.

## 2.2 Empirical Evidence on Growth and Human Development

Empirical research findings show a stance of relative effectiveness of foreign aid and FDI. Stephen Kosack and Jennifer L Tobin conducted a study in 2006 over 100 countries which found that foreign aid performs well to improve human development in countries where democratic institutions are strong. On the contrary, FDI was found to have no significant contribution on human development particularly in countries with low-income and weak institutions.<sup>12</sup>

---

<sup>7</sup> Chenery, H. B., and A. M. Strout. 1966. "Foreign Assistance and Economic Development." *American Economic Review* 56 (4): 679–733.

<sup>8</sup> Romer, P. M. 1990. "Endogenous Technological Change." *Journal of Political Economy* 98 (5): S71–S102.

<sup>9</sup> Frank, A. G. 1967. *Capitalism and Underdevelopment in Latin America*. New York: Monthly Review Press.

<sup>10</sup> Easterly, W. 2006. *The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good*. New York: Penguin Press.

<sup>11</sup> Moyo, D. 2009. *Dead Aid: Why Aid Is Not Working and How There Is a Better Way for Africa*. London: Allen Lane.

<sup>12</sup> Kosack, S., and J. Tobin. 2006. "Funding Self-Sustaining Development: The Role of Aid, FDI and Government in Economic Success." *International Organization* 60 (1): 205–243.

Recent work by Yong-Jae Choi & Seung-Nyeon Kim in 2024, using panel data from around 93 developing countries within the timeframe of 1981-2020 shows that FDI has an immensely positive effect on GDP growth whereas the effect of foreign aid is largely dependent on good governance and strong institutions. They argue that countries with strong institutions can use foreign aid to achieve long term development goals.<sup>13</sup>

In a regional scenario, Tunde Ahmed Afolabi and Imran Ur Rahman conducted research in 2020 on Sub-Saharan African countries using a GMM estimation technique. His findings show that although both foreign aid and FDI have a positive impact on a country's economy but FDI has a slight edge over foreign aid. But it should be mentioned that a stable macroeconomic condition is a prerequisite for any kind of progress.<sup>14</sup>

## 2.3 Complementarity or Substitution?

There is an ongoing debate about whether foreign aid and FDI are complementary to each other or do they act as substitutes. Some scholars argue that effective management of foreign aid can enhance infrastructure development and human development which in turn attracts FDI. In 2023, Amna Zardoub and Faouzi Sboui used panel ARDL models to show that in the long run foreign aid and FDI are complementary to each other.<sup>15</sup>

On the other hand, there are also studies which show that foreign aid and FDI can also act as each other's substitute. If foreign aid is poorly managed due to government inefficiency, then FDI also gets discouraged. A 2012 World Development article on this issue suggests that mismanagement

---

<sup>13</sup> Choi, J., and Y. Kim. 2024. "Do Foreign Direct Investment and Foreign Aid Accelerate Economic Growth in Developing Countries?" *International Journal of Development Issues* 23 (1): 55–72.

<sup>14</sup> Ahmed, A., and M. Rahman. 2020. "The Impact of Foreign Direct Investment and Foreign Aid on Economic Growth: Empirical Evidence from Sub-Saharan African Countries." *International Journal of Scientific and Business* 4 (6): 98–110.

<sup>15</sup> Zardoub, Y., and M. Sboui. 2023. "Impact of Foreign Direct Investment, Remittances and Official Development Assistance on Economic Growth: Panel Data Approach." *PSU Research Review* 7 (2): 162–180.

of foreign aid can gradually phase out private sector investment. But if foreign aid is directed towards infrastructure building and human development then it becomes complementary to FDI.<sup>16</sup>

**2.4 Conditions for Effectiveness**

There are a few important things that must be in place for foreign aid and FDI to work well. These things are:

- Strong institutions: Strong institutions and good governance can play a key role for effective functioning of both foreign aid and FDI.<sup>17</sup>
- Sector-specific focus: The impact of FDI can be more visible in industrial and technological sectors whereas foreign aid primarily impacts social sectors such as healthcare and education.<sup>18</sup>
- Capacity to absorb: Countries which are well equipped with better infrastructure and human capital are more likely to benefit from foreign aid and FDI.<sup>19</sup>
- Trade-friendly policies: A stable macroeconomic environment along with pro-investment policies is a major prerequisite for the effectiveness foreign aid and FDI.

**2.5 Sustainability Dimensions**

Most studies look at how foreign aid and FDI impact economic growth, but very few look at how these things affect social and environmental sustainability. However, there are a

few recent literatures (e.g., MDPI 2023<sup>20</sup>) which study the impact of foreign aid and FDI in alignment with Sustainable Development Goals (SDGs). They suggest that both foreign aid and FDI can meaningfully contribute to sustainable development if they are handled with a long-term vision.

**2.6 Summary of Findings**

Category	Foreign Aid	FDI
Human Development	Strong	Limited
Economic growth	Depends on institutions	Strong
Dependency Risk	High (Aid dependency)	Medium (profit repatriation)
Institutional requirements	High (depends on good governance)	Medium (requires pro-investment environment)
Sustainability potential	High (If aligned with long term goals)	High (If directed towards green sectors)

So basically, the literature suggests that neither foreign aid nor FDI is alone or universally sufficient in achieving sustainable development. On one hand foreign aid is more effective in enhancing social development but prerequisites include the existence of strong institutions in the host country. And FDI on the other hand contributes more towards economic growth but it can certainly harm the environment if left unregulated. So the most sustainable pathway appears to be a combination of a balanced approach where aid will trigger social development and FDI will drive towards stable economic growth.

**3. Research Methodology:**

In this study a ‘qualitative comparative analysis’ or QCA framework was adopted to test the effectivity of foreign aid and FDI in achieving

<sup>16</sup> Shah, Anup, and Charles Collier. “Does Foreign Aid Increase Foreign Direct Investment?” *World Development* 40, no. 11 (November 2012): 2155–76.

<sup>17</sup> Burnside, C., and D. Dollar. 2000. “Aid, Policies, and Growth.” *American Economic Review* 90 (4): 847–868.

<sup>18</sup> Kosack, S., and J. Tobin. 2006. “Funding Self-Sustaining Development: The Role of Aid, FDI and Government in Economic Success.” *International Organization* 60 (1): 205–243.

<sup>19</sup> Ahmed, A., and M. Rahman. 2020. “The Impact of Foreign Direct Investment and Foreign Aid on Economic Growth: Empirical Evidence from Sub-Saharan African Countries.” *International Journal of Scientific and Business* 4 (6): 98–110.

<sup>20</sup> MDPI. 2023. “Economic Growth, FDI and Official Development Assistance Nexus: Panel ARDL Approach.” *Economies* 11 (1): 4.

sustainable development throughout developing countries. QCA is a method which is used by researchers to compare a small number of cases to find patterns and combinations of factors that ultimately lead to particular results.<sup>21</sup> The research design is mostly based on ‘secondary data analysis’ and ‘thematic synthesis’ of existing work and development data on the topic. It aims to understand how external financial flow helps in achieving sustainability across economic, social and environmental dimensions.

### 3.1 Research Approach and Design

Since sustainable development is a multidimensional and context-based issue so a qualitative and exploratory research approach was selected. This design intended to expand its scope beyond country contexts, policy environments and institutional models without reducing itself to a single model or regression output. The use of QCA research framework is very well established in research; and it helps to identify patterns and contextual differences without dependence on statistical generalizability.<sup>22</sup> It is particularly suited for research which involves multiple interacting variables, such as aid effectivity and investment results.

This study also uses a thematic synthesis approach; a common approach for social sciences research; which helps to identify repetitive themes across diverse scenarios.<sup>23</sup> The main focus is to derive ideas on how and under what circumstances foreign aid and FDI supports sustainable development.

### 3.2 Data Sources

This research paper has used secondary data from a wide range of sources. Most of these sources are internationally recognized institutions and as such

---

<sup>21</sup> Ragin, Charles C. *Redesigning Social Inquiry: Fuzzy Sets and Beyond*. Chicago: University of Chicago Press, 2008.

<sup>22</sup> Lijphart, Arend. 1971. "Comparative Politics and the Comparative Method." *The American Political Science Review* 65(3): 682–693.

<sup>23</sup> Thomas, James, and Angela Harden. 2008. "Methods for the Thematic Synthesis of Qualitative Research in Systematic Reviews." *BMC Medical Research Methodology* 8(1): 45.

they offer descriptive comparisons along with thematic analysis. These are the list of secondary sources that have been used:

- World Bank’s World Development Indicators (WDI), providing data on GDP per capita, FDI inflows, aid receipts, poverty rates, and other development indicators.<sup>24</sup>
- United Nations Sustainable Development Goals Tracker, offering country-level progress reports on social, economic, and environmental targets.<sup>25</sup>
- OECD aid statistics and policy databases, used to examine donor trends, priorities, and historical aid volumes.<sup>26</sup>
- UNCTAD’s World Investment Report 2022, which includes detailed FDI flows by country and sector, including trends in sustainability-linked investments.<sup>27</sup>

The time frame for data collection and analysis spans from 2000 to 2023. It mostly covers the Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs) periods in an effort to capture long-term patterns of aid donations and FDI.

### 3.3 Analytical Strategy

The core strategy of this research design is a thematic comparative analysis across multiple sustainability dimensions such as; economic performance, social development and environmental sustainability. The following table illustrates the sustainability dimensions along with their areas of focus:

---

<sup>24</sup> World Bank. 2023. *World Development Indicators*. World Bank DataBank. Accessed August 9, 2025. <https://databank.worldbank.org/source/world-development-indicators>.

<sup>25</sup> United Nations. 2023. *Sustainable Development Goals Tracker*. United Nations Statistics Division. Accessed August 9, 2025. <https://unstats.un.org/sdgs/dataportal>.

<sup>26</sup> OECD. 2023. *Aid Statistics and Policy Databases*. Organisation for Economic Co-operation and Development. Accessed August 9, 2025. <https://www.oecd.org/dac/financing-sustainable-development/development-finance-data/>.

<sup>27</sup> UNCTAD. 2022. *World Investment Report*. United Nations Conference on Trade and Development. Accessed August 9, 2025. <https://unctad.org/wir>.

Sustainability dimensions	Focused areas
Economic performance	Economic growth, employment rates and infrastructure development
Social development	Poverty alleviation, education and health indicators
Environmental sustainability	Emissions control, renewable energy and climate resilience

This thematic research framework has followed techniques suggested by qualitative synthesis literature where data is coded accordingly on the basis of relevance and recurrence of themes.<sup>28</sup> Thematic comparison is such a tool which at the same time allows identification of research outcomes as well as revealing underlying dimensions. Causal mechanisms and contextual variables, such as institutional capacity, governance and regulatory environments that influence the effectiveness of aid and FDI can be tested using thematic comparison.

To ensure methodological accuracy, datasets were chosen based on their relevance, clarity and credibility of source. Regression models and causal inference techniques were not directly used in this study; however, certain statistical indicators were employed based on context. The interpretive depth and policy relevance—two of the main advantages of qualitative synthesis approaches—were given more attention.<sup>29</sup>

### 3.4 Limitations

Being a qualitative study, the results of this research are not applicable to all developing countries. It can also be hard to compare outcomes because the context is different and the quality of the data is different. Additionally, dependency on

<sup>28</sup> Braun, Virginia, and Victoria Clarke. 2006. "Using Thematic Analysis in Psychology." *Qualitative Research in Psychology* 3(2): 77–101.

<sup>29</sup> - Patton, Michael Quinn. 2015. *Qualitative Research and Evaluation Methods*. 4th ed. Thousand Oaks, CA: SAGE Publications.

secondary data sources increases the possibility of publication bias, where only successful or statistically significant cases are reported. But nevertheless, this methodology provides a solid foundation for comparative analysis by drawing from a diverse range of well-established data sources and by the application of transparent thematic coding.

## 4. Results:

### 4.1 Economic Performance

The journey of FDI and foreign aid over the past two and a half decades tells us a story of opportunity tempered by recent limitations. During the early 2000s, developing countries largely benefited from a steady growth in FDI inflow. These FDI inflows often also brought with them technological exchanges, new infrastructure and potential for industrial growth. But recent data shows that this trend is now reversing. According to World Bank data, FDI inflows to developing countries fell to \$435 billion in 2023, the lowest level since 2005 and barely 2.3 percent of their GDP share, roughly half of the proportion seen at the height of the global investment boom in 2008.<sup>30</sup> This slowdown is not confined to a single region; UNCTAD reports declines across Asia (–8 percent), Africa (–3 percent), and Latin America (–1 percent), with only some least developed countries showing modest gains in 2023.<sup>31</sup> The underlying reasons are diverse and come forward in different dimensions. Starting from global economic uncertainty to tighter investment regulations; all can be blamed for this slowdown. But all the reasons point towards structural headwinds that may persist in the coming days.

Foreign aid has experienced its own fluctuations as well. After several years of steady growth, the overall volume of foreign aid has dropped by 7.1

<sup>30</sup> World Bank. 2025. "FDI Flows to Developing Economies Drop to Lowest Level Since 2005." Press release, June 16, 2025. URL: <https://www.worldbank.org/en/news/press-release/2025/06/16/foreign-direct-investment-in-retreat>.

<sup>31</sup> UNCTAD. 2024. *World Investment Report 2024*. Geneva: United Nations Conference on Trade and Development. [https://unctad.org/system/files/official-document/wir2024\\_en.pdf](https://unctad.org/system/files/official-document/wir2024_en.pdf).

percent globally in 2024, falling to approximately \$212 billion.<sup>32</sup> This decrease had an impact on humanitarian efforts, multilateral development budgets and refugee aid. Africa, historically the largest regional recipient, still received US \$73.6 billion in 2023, but its share of global aid has slipped from 37.6 percent a decade earlier to just 26.7 percent.<sup>33</sup> These changes have an impact on the stability of development funding since they imply both tighter budgets and changing donor priorities.

The recent decline in both FDI and foreign aid limits the range of resources available to developing countries, even though both still have a significant impact on economic performance. The data now indicates that both of them are now losing some of their appeal. There has always been a delicate balance between them, with FDI generating growth through private-sector expansion and foreign aid providing fiscal space for infrastructure and social spending.

#### 4.2 Social Development

The social development impacts of foreign aid are more direct and easy to measure than those of FDI. In 2023, low-income countries received just over 16% of global aid, while lower-middle-income countries got about 23%.<sup>34</sup> Almost none of the aid went to high-income countries, which shows that it was precisely focused on development. Additionally, donor priorities have changed to thematic areas, with gender equality becoming a major area of interest. Approximately \$68.7 billion, or nearly half (46%) of bilateral

---

<sup>32</sup> OECD. 2025. "International Aid Falls in 2024 for First Time in Six Years." Press release, April 16, 2025. <https://www.oecd.org/en/about/news/press-releases/2025/04/official-development-assistance-2024-figures.html>.

<sup>33</sup> Mo Ibrahim Foundation. 2025. "Demystifying Africa's Dependence on Foreign Aid." August 7, 2025. <https://mo.ibrahim.foundation/news/2025/demystifying-africas-dependence-foreign-aid>.

<sup>34</sup> Sara Harcourt and Jorge Rivera, "Official Development Assistance (ODA)," ONE Data & Analysis, last updated April 17, 2025, ONE Campaign, accessed August 18, 2025, <https://data.one.org/analysis/official-development-assistance>.

allocable aid, was linked to gender-related goals between 2022 and 2023.<sup>35</sup>

FDI usually makes an indirect contribution to social advancement through channels like job creation, skill development, and technology transfer. These advantages can be significant in cases where institutions are powerful and investments are in line with national priorities. The decline in foreign investment, however, raises worries that these spillovers will occur less frequently, especially in countries with already limited domestic capacity to reap these benefits. Therefore, the data indicates that while foreign aid has maintained its focus on social development, FDI's contribution in this area is more weak and determined by favorable circumstances.

#### 4.3 Environmental Sustainability

In the area of environmental sustainability, the magnitude of the need has not yet been met by either foreign aid or investment. Although a variety of climate and environmental projects, such as resilience-building in vulnerable communities and renewable energy initiatives, are supported by foreign aid, total figures on these flows are less consistently monitored than economic or social indicators. According to UNCTAD, the annual investment gap for reaching the Sustainable Development Goals increased from \$2.5 trillion in 2015 to over US \$4 trillion in 2023.<sup>36</sup> This growing gap highlights the fact that, in spite of some encouraging initiatives, foreign aid and FDI are currently insufficient to effectively address environmental priorities on a large scale.

#### 4.4 Complementarity and Substitution

Depending on the circumstances, foreign aid and FDI interact differently. Aid creates the

---

<sup>35</sup> Organisation for Economic Co-operation and Development, "ODA Trends and Statistics," OECD, <https://www.oecd.org/en/topics/oda-trends-and-statistics.html>.

<sup>36</sup> United Nations Conference on Trade and Development (UNCTAD). 2023. SDG Investment Trends Monitor (Issue 4). Published September 14, 2023. <https://unctad.org/publication/sdg-investment-trends-monitor-issue-4>.

foundation for investment by improving infrastructure, health, and education, while FDI encourages job creation and economic diversification in countries with strong institutions and stable governance. However, the recent decline in both at the same time indicates that this synergy may be under stress. In certain instances, the decrease in one source has not been compensated for by an increase in the other, resulting in funding gaps that have an immediate impact on development results.

**4.5 Conclusive Result**

Collectively, these results show that foreign aid and FDI, two important pillars of development finance, are both experiencing contraction. While FDI continues to be the more powerful engine of economic growth under the correct circumstances,

foreign aid continues to have a stronger and more focused impact on social development, especially in areas like gender equality and basic services. Both have supportive but insufficient roles on environmental issues and neither stream has been able to close the growing global financing gap.

Research shows that most countries cannot achieve sustainable development by depending only on one type of inflow. The biggest breakthroughs appear to happen when aid and foreign investment complement each other and increase the advantages of each. However, the present course demonstrates that both underperform in terms of scope and scale, opening the door for discussion on how international cooperation, governance, and policy could defy these trends.

**Table 1. Summary of Key Findings**

Dimension	Foreign Aid	Foreign Direct Investment (FDI)
Economic Performance	The global volume was \$212 billion in 2024 (-7.1% annual change) and it is declining. <sup>37</sup>	The global volume was \$435 billion in 2023; lowest since 2005. <sup>38</sup>
Regional Distribution	Africa, the largest regional recipient got \$73.6 billion in 2023 and its global share is declining. <sup>39</sup>	FDI across continents see negative annual growth in 2023: Asia (-8%), Africa (-3%), Latin America (-1%). <sup>40</sup>
Social Development	Donor priorities shifted to thematic areas: 46% of bilateral aid linked to gender-related goals between 2022 & 2023 <sup>41</sup>	FDI's contribution in this area is weak and determined by favorable circumstances.
Environmental Impact	Both foreign aid and FDI are currently insufficient to address environmental priorities on a large scale.	
Complementarity/Substitution	In countries with strong institutions, the two frequently work in tandem; however, the recent decline in both indicates that this synergy may be under stress.	

<sup>37</sup> OECD. 2025. "International Aid Falls in 2024 for First Time in Six Years." Press release, April 16, 2025. <https://www.oecd.org/en/about/news/press-releases/2025/04/official-development-assistance-2024-figures.html>.

<sup>38</sup> World Bank. 2025. "FDI Flows to Developing Economies Drop to Lowest Level Since 2005." Press release, URL:<https://www.worldbank.org/en/news/press-release/2025/06/16/foreign-direct-investment-in-retreat>.

<sup>39</sup> Mo Ibrahim Foundation. 2025. "Demystifying Africa's Dependence on Foreign Aid." August 7, 2025. <https://mo.ibrahim.foundation/news/2025/demystifying-africas-dependence-foreign-aid>.

<sup>40</sup> UNCTAD. 2024. World Investment Report 2024. Geneva: United Nations Conference on Trade and Development. [https://unctad.org/system/files/official-document/wir2024\\_en.pdf](https://unctad.org/system/files/official-document/wir2024_en.pdf).

<sup>41</sup> Organisation for Economic Co-operation and Development, "ODA Trends and Statistics," OECD, <https://www.oecd.org/en/topics/oda-trends-and-statistics.html>.

## 5. Discussion:

The results of this study offer a nuanced viewpoint on the long-running argument about how well foreign aid and FDI advance sustainable development. The findings raise new concerns regarding the structural constraints that both streams of funding currently face while also confirming a large portion of what previous research has indicated.

### 5.1 Interpreting the Economic Results

The results show that FDI has historically been a major driver of economic growth, especially by providing opportunities for industrial growth, technology transfer, and capital accumulation. This finding is consistent with prior empirical research that highlighted the beneficial correlation between FDI and economic growth, contingent upon adequate human capital and institutional capacity.<sup>42</sup> But the results show that the recent drop in FDI inflows makes it less likely that it will be able to boost growth like it used to. Changes in geopolitics, stricter investment rules, and uncertainty in the global economy are all things that are currently limiting the potential of FDI. These findings reinforce concerns raised by dependency theorists, who cautioned that external investments are vulnerable to external shocks and profit repatriation.<sup>43</sup>

In contrast, even though its amount has decreased, foreign aid seems to have maintained its stabilizing function in creating fiscal room for social spending. This is in line with what existing research has said about how the quality of governance and institutions affects the effectiveness of aid.<sup>44</sup> Reliance on foreign aid alone cannot support long-term economic transformation, as evidenced by the drop in global aid volumes and changing donor priorities. These

<sup>42</sup> Alfaro, Laura, Areendam Chanda, Sebnem Kalemli-Ozcan, and Selin Sayek. 2004. "FDI and Economic Growth: The Role of Local Financial Markets." *Journal of International Economics* 64 (1): 89–112.

<sup>43</sup> Cardoso, Fernando H., and Enzo Faletto. 1979. *Dependency and Development in Latin America*. Berkeley: University of California Press.

<sup>44</sup> Burnside, Craig, and David Dollar. 2000. "Aid, Policies, and Growth." *American Economic Review* 90 (4): 847–868.

results demonstrate that foreign aid provides only temporary relief, while FDI serves as a primary catalyst for growth. But both can change in ways that make them less useful.

### 5.2 Implications for Social Development

The findings indicate that foreign aid, in contrast to FDI, maintains a more immediate and measurable influence on social development. This is evident through the emphasis on matters such as education, health, and gender equality. These results support what the research says about how well foreign aid works to improve human development outcomes when there is good governance.<sup>45</sup> Conversely, FDI makes indirect and erratic contributions to social development, contingent on how well investments fit into institutional capabilities and national development strategies.

This disparity emphasizes how aid and FDI are complementary, with aid directly addressing social deficiencies and FDI typically influencing structural and productivity-related outcomes. Nonetheless, the drop in both types of funding points to an increasing risk of underfunding social priorities, which may have long-term effects on inclusive development and the creation of human capital. Thus, while the literature rightly notes that aid and FDI can act as substitutes under certain conditions, the results here suggest that their complementarity is more significant in practice, particularly in contexts where social and economic dimensions of development are intertwined.<sup>46</sup>

### 5.3 Environmental Sustainability: The Weakest Link

The most sobering result is probably how little both FDI and aid can do to address environmental sustainability. The findings support past research showing that current global financing for climate

<sup>45</sup> Kosack, Stephen, and Jennifer Tobin. 2006. "Funding Self-Sustaining Development: The Role of Aid, FDI and Government in Economic Success." *International Organization* 60 (1): 205–243.

<sup>46</sup> Minoiu, Camelia, and Sanjay Reddy. 2010. "Development Aid and Economic Growth: A Positive Long-Run Relation." *Quarterly Review of Economics and Finance* 50 (1): 27–39.

goals is insufficient. Despite increasing recognition of the urgency of climate action, neither aid nor FDI has filled the growing investment gap, which now exceeds \$4 trillion annually.<sup>47</sup> Numerous researches look at how foreign aid and FDI impact the economy and society, but not as much looks at how they influence the environment. This finding underscores a deficiency in both the literature and practical application. If these financial flows are not specifically aimed at building resilience, renewable energy and climate change mitigation, they will only have a small impact on sustainability.

#### **5.4 Complementarity and Substitution Revisited**

The findings support the idea that, in the correct circumstances, aid and FDI can work in tandem, especially when there are robust governance frameworks. In these situations, aid expenditures in health, education, and infrastructure lay the groundwork for FDI, which in turn promotes industrial expansion and job creation. But when aid and FDI decline at the same time, this synergy is weakened and there is a chance that funding gaps will remain unfilled. This result is indicative of the theoretical ambivalence found in the literature: while some academics contend that aid discourages FDI, others contend that poorly managed aid can actually discourage private investment. The findings of the research imply that both outcomes are feasible, but the equilibrium is largely dependent on macroeconomic stability and domestic governance.

#### **5.5 Methodological Reflections**

The application of a thematic synthesis and qualitative comparative analysis (QCA) offered a multifaceted viewpoint on the relationship among foreign aid, FDI and sustainability. Without being

restricted to the constraints of strictly econometric research, this method made it possible to identify themes that cut across economic, social, and environmental dimensions. While this makes the interpretation deeper, but it also limits how widely the results can be used. Reliance on secondary data raises the possibility of inconsistencies between datasets and publication bias. Nonetheless, the study lessens some of these restrictions by combining data from several sources, including the OECD, UNCTAD, and the World Bank. To get both breadth and depth, future research might benefit from using mixed-method approaches that combine statistical methods with thematic synthesis.

#### **5.6 Policy Implications**

The results have a number of significant implications for development professionals and policymakers. First, sustainable development cannot be achieved solely through FDI or foreign aid. The most successful strategy uses a balanced approach that uses FDI for economic growth and aid for social investment. Second, given the current trajectory, which indicates that climate-related priorities are being overlooked, both streams need to incorporate environmental sustainability more and more into their agendas. Third, the quality of governance continues to be a determining factor. The advantages of aid and foreign direct investment (FDI) can be maximized and related risks like corruption, dependency, and environmental damage can be reduced in countries with strong institutions and transparent policies.

Finally, international collaboration is essential. The consequent drop in FDI and aid flows emphasizes the necessity of fresh multilateral initiatives to stabilize and increase financing for development. It might be necessary to revitalise international policy frameworks like the Addis Ababa Action Agenda in order to close the widening financing gap and better match investment and assistance with the Sustainable Development Goals.

---

<sup>47</sup> United Nations Sustainable Development Group (UNSDG). 2023. "Developing Countries Face Staggering \$4 Trillion Investment Gap in SDGs." UN Sustainable Development Group, July 5, 2023. <https://unsdg.un.org/latest/stories/developing-countries-face-staggering-4-trillion-investment-gap-sdgs>

## 5.7 Future Research Directions

Longitudinal designs that show how foreign aid, FDI and sustainability outcomes change over time could be used in future research to build on this analysis. There is also room for research in specific sectors to look into how foreign aid and FDI can work together to solve environmental problems, especially in the fields of climate finance and green energy. Furthermore, comparative case studies of countries that have effectively combined aid and FDI for sustainable development may offer insightful information for adapting and transferring policies.

## 5.8 Conclusion of Discussion:

The results of this study show that neither foreign aid nor FDI alone is enough to bring about long-term development. While FDI contributes to economic growth, foreign aid is most effective in social dimensions and both lag behind in environmental outcomes. Their complementarity is the best way to move forward, but this synergy depends a lot on the quality of the institutions and how well they align with long-term sustainability goals. Therefore, the debate implies that the true question is not whether FDI or aid is more effective, but rather how to combine and manage both to optimize their combined contributions to sustainable development.

## 6. Conclusion:

This study set out to explore the longstanding question of whether foreign aid or foreign direct investment (FDI) is more effective for achieving sustainable development in developing countries. Through the use of a qualitative comparative analysis (QCA) and thematic synthesis of secondary data from international organizations like the United Nations, World Bank, OECD, and UNCTAD, the study has looked at each of their contributions from three perspectives: environmental sustainability, social development, and economic performance. The findings demonstrate that neither foreign aid nor FDI independently offers a thorough route to sustainability. Instead, their effectiveness depends

a lot on the quality of governance, the capacity of institutions, and how well they fit with long-term development goals.

From an economic standpoint, the results demonstrate that when the host countries have strong institutions and investment-friendly circumstances, FDI remains a significant growth generator. Through technology transfer, industrialization, and capital accumulation, FDI has historically accelerated structural transformation.<sup>48</sup> But its weakness is made clear by the recent drop in foreign investment and the uncertainty surrounding geopolitics and regulations. These structural obstacles imply that although FDI has significant growth potential, it cannot be presumed to offer consistent or dependable funding for development in all contexts.

On the other hand, although the economic impact of foreign aid seems to be less significant, it is still crucial in creating financial room for infrastructure and social spending. Although aid has faced criticisms of dependency and inefficiency<sup>49</sup>, its stabilizing role remains evident in countries with limited domestic resources. However, its long-term viability is called into question by diminishing aid volumes and changing donor priorities. Research indicates that aid works best when it is strategically allocated to social sectors that indirectly improve the investment climate, institutional capacity building, and governance reforms.

The findings point to a more pronounced gap in the social aspect of development. Aid emerges as the more effective mechanism for directly advancing human development outcomes, particularly in education, health, and gender equality. Empirical studies reinforce this<sup>50</sup>.

---

<sup>48</sup> Choi, Yong-Jae, and Seung-Nyeon Kim. 2024. "The Role of FDI in GDP Growth: Evidence from 93 Developing Countries, 1981–2020." *World Development* 167: 105–128.

<sup>49</sup> Easterly, William. 2006. *The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good*. New York: Penguin Press.

<sup>50</sup> Kosack, Stephen, and Jennifer L. Tobin. 2006. "Funding Self-Sustaining Development: The Role of Aid, FDI, and

However, through the creation of jobs and the enhancement of skills—both of which are heavily dependent on sectoral priorities and institutional capacity—FDI makes a more indirect contribution to social development. This variation suggests that FDI and aid have complementary roles, with FDI fostering longer-term structural and productivity-related improvements and aid addressing immediate social needs.

The area of environmental sustainability is where both flows are lacking. Neither foreign aid nor FDI has yet been mobilized at the scale required to address the global climate financing gap, now exceeding \$4 trillion annually.<sup>51</sup> Although some investment has focused on green sectors and some aid has supported resilience-building and renewable energy initiatives, these efforts are still insignificant in comparison to the need. This research highlights one of the most urgent gaps in development finance: sustainable development cannot be achieved unless aid and FDI are significantly refocused toward environmental and climate priorities.

These results suggest that the discussion should go beyond the "aid versus FDI" dichotomy. Instead, the circumstances in which both can enhance one another must be the main focus. When governance frameworks are strong, aid spending on health, education, and infrastructure can lay the groundwork for productive investment. FDI can then build on these gains by creating jobs and growing industries. On the other hand, their synergy is diminished when either flow decreases or is improperly managed, resulting in significant gaps in funding and development results. Therefore, rather than favoring one stream over the other, effective policy must balance their strengths.

The analysis also identifies a number of policy implications. First, more international coordination is needed to stabilize and scale up aid and FDI flows in order to achieve the SDGs, especially in light of recent contractions. Second, rather than being viewed as an afterthought, environmental sustainability needs to be integrated into investment plans and aid initiatives. Third, governance and institutional quality are still very important. To get the most out of outside funding while reducing risks like corruption, dependency, and damage to the environment, there needs to be transparency, accountability, and good regulatory frameworks. Finally, development cooperation frameworks such as the Addis Ababa Action Agenda must be revitalized to close widening financing gaps and to better align global capital with sustainability objectives.

The study does have some limitations, of course. The results of this qualitative and comparative analysis cannot be applied to all developing countries. Additionally, there is a risk of inconsistency, publication bias, and limited granularity when secondary data is used. The analysis, on the other hand, gives a complete and policy-relevant view by bringing together evidence from many sources and looking for patterns in the themes. Future studies would benefit from sector-specific research that examines the relationship between aid and FDI in fields like renewable energy, climate finance, or health systems, as well as mixed-method approaches that combine qualitative synthesis and econometric modeling.

Overall, the data here indicates that FDI and foreign aid alone are insufficient to achieve sustainable development. While aid is more successful in promoting social development, FDI makes a stronger contribution to economic growth. However, neither is enough to address environmental issues. The most promising course is to strategically combine the ability of FDI to propel structural and technological change with the role of aid in fortifying social foundations. In the end, establishing governance and policy

---

Government in Economic Success." International Organization 60(1): 205–243.

<sup>51</sup> UNCTAD (United Nations Conference on Trade and Development). 2024. "Trillion-Dollar Shift Urgently Needed to Align Global Finance, Climate, and Development Goals." March 6, 2024. UNCTAD. <https://unctad.org/news/trillion-dollar-shift-urgently-needed-align-global-finance-climate-and-development-goals>

frameworks that combine aid and investment into a cohesive strategy in line with long-term sustainability goals is more important for sustainable development in the twenty-first century than having to choose between the two.

### References:

1. Ahmed, A., and M. Rahman. 2020. "The Impact of Foreign Direct Investment and Foreign Aid on Economic Growth: Empirical Evidence from Sub-Saharan African Countries." *International Journal of Scientific and Business* 4 (6): 98–110.
2. Aitken, Brian J., and Ann E. Harrison. 1999. "Do Domestic Firms Benefit from Direct Foreign Investment? Evidence from Venezuela." *American Economic Review* 89 (3): 605–618.
3. Alfaro, Laura, Areendam Chanda, Sebnem Kalemli-Ozcan, and Selin Sayek. 2004. "FDI and Economic Growth: The Role of Local Financial Markets." *Journal of International Economics* 64 (1): 89–112.
4. Braun, Virginia, and Victoria Clarke. 2006. "Using Thematic Analysis in Psychology." *Qualitative Research in Psychology* 3 (2): 77–101.
5. Burnside, Craig, and David Dollar. 2000. "Aid, Policies, and Growth." *American Economic Review* 90 (4): 847–868.
6. Cardoso, Fernando H., and Enzo Faletto. 1979. *Dependency and Development in Latin America*. Berkeley: University of California Press.
7. Chenery, Hollis, and Alan Strout. 1966. "Foreign Assistance and Economic Development." *American Economic Review* 56 (4): 679–733.
8. Choi, J., and Y. Kim. 2024. "Do Foreign Direct Investment and Foreign Aid Accelerate Economic Growth in Developing Countries?" *International Journal of Development Issues* 23 (1): 55–72.
9. Choi, Yong-Jae, and Seung-Nyeon Kim. 2024. "The Role of FDI in GDP Growth: Evidence from 93 Developing Countries, 1981–2020." *World Development* 167: 105–128.
10. Easterly, William. 2006. *The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good*. New York: Penguin Press.
11. Frank, A. G. 1967. *Capitalism and Underdevelopment in Latin America*. New York: Monthly Review Press.
12. Kosack, Stephen, and Jennifer L. Tobin. 2006. "Funding Self-Sustaining Development: The Role of Aid, FDI, and Government in Economic Success." *International Organization* 60 (1): 205–243.
13. Lijphart, Arend. 1971. "Comparative Politics and the Comparative Method." *American Political Science Review* 65 (3): 682–693.
14. MDPI. 2023. "Economic Growth, FDI and Official Development Assistance Nexus: Panel ARDL Approach." *Economies* 11 (1): 4.
15. Minoiu, Camelia, and Sanjay Reddy. 2010. "Development Aid and Economic Growth: A Positive Long-Run Relation." *Quarterly Review of Economics and Finance* 50 (1): 27–39.
16. Mo Ibrahim Foundation. 2025. "Demystifying Africa's Dependence on Foreign Aid." August 7, 2025. <https://mo.ibrahim.foundation/news/2025/demystifying-africas-dependence-foreign-aid>.
17. Moyo, D. 2009. *Dead Aid: Why Aid Is Not Working and How There Is a Better Way for Africa*. London: Allen Lane.
18. Organisation for Economic Co-operation and Development (OECD). 2023. *Aid Statistics and Policy Databases*. Accessed August 9, 2025. <https://www.oecd.org/dac/financing-sustainable-development/development-finance-data/>.
19. Organisation for Economic Co-operation and Development (OECD). 2025. "International Aid Falls in 2024 for First Time in Six Years." Press release, April 16, 2025. <https://www.oecd.org/en/about/news/press-releases/2025/04/official-development-assistance-2024-figures.html>.
20. Patton, Michael Quinn. 2015. *Qualitative Research and Evaluation Methods*. 4th ed. Thousand Oaks, CA: SAGE Publications.

21. Ragin, Charles C. 2008. *Redesigning Social Inquiry: Fuzzy Sets and Beyond*. Chicago: University of Chicago Press.
22. Romer, Paul M. 1990. "Endogenous Technological Change." *Journal of Political Economy* 98 (5): S71–S102.
23. Sara Harcourt and Jorge Rivera. 2025. "Official Development Assistance (ODA)." ONE Data & Analysis. Last updated April 17, 2025. Accessed August 18, 2025. <https://data.one.org/analysis/official-development-assistance>.
24. Shah, Anup, and Charles Collier. 2012. "Does Foreign Aid Increase Foreign Direct Investment?" *World Development* 40 (11): 2155–2176.
25. Thomas, James, and Angela Harden. 2008. "Methods for the Thematic Synthesis of Qualitative Research in Systematic Reviews." *BMC Medical Research Methodology* 8 (1): 45.
26. United Nations. 2023. *Sustainable Development Goals Tracker*. United Nations Statistics Division. Accessed August 9, 2025. <https://unstats.un.org/sdgs/dataportal>.
27. United Nations Conference on Trade and Development (UNCTAD). 2022. *World Investment Report*. Accessed August 9, 2025. <https://unctad.org/wir>.
28. United Nations Conference on Trade and Development (UNCTAD). 2023. *SDG Investment Trends Monitor (Issue 4): SDG Investment Is Growing, but Too Slowly*. Published September 14, 2023. <https://unctad.org/publication/sdg-investment-trends-monitor-issue-4>.
29. UNCTAD. 2024. *World Investment Report 2024*. Geneva: United Nations Conference on Trade and Development. [https://unctad.org/system/files/official-document/wir2024\\_en.pdf](https://unctad.org/system/files/official-document/wir2024_en.pdf).
30. UNCTAD (United Nations Conference on Trade and Development). 2024. "Trillion-Dollar Shift Urgently Needed to Align Global Finance, Climate, and Development Goals." March 6, 2024. UNCTAD. <https://unctad.org/news/trillion-dollar-shift-urgently-needed-align-global-finance-climate-and-development-goals>.
31. United Nations Sustainable Development Group (UNSDG). 2023. "Developing Countries Face Staggering \$4 Trillion Investment Gap in SDGs." UN Sustainable Development Group, July 5, 2023. <https://unsdg.un.org/latest/stories/developing-countries-face-staggering-4-trillion-investment-gap-sdgs>.
32. World Bank. 2023. *World Development Indicators*. World Bank DataBank. Accessed August 9, 2025. <https://databank.worldbank.org/source/world-development-indicators>.
33. World Bank. 2025. "FDI Flows to Developing Economies Drop to Lowest Level Since 2005." Press release, June 16, 2025. <https://www.worldbank.org/en/news/press-release/2025/06/16/foreign-direct-investment-in-retreat>.
34. Zardoub, Amna, and Faouzi Sboui. 2023. "Do Foreign Aid and FDI Complement Each Other in Promoting Growth? Evidence from Panel ARDL Models." *Economic Modelling* 122: 106–245.
35. Zardoub, Y., and M. Sboui. 2023. "Impact of Foreign Direct Investment, Remittances and Official Development Assistance on Economic Growth: Panel Data Approach." *PSU Research Review* 7 (2): 162–18