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The Role of Foreign Direct Investment in Sustainable Development: Analytic Study of a Selection of Countries

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Abstract

Foreign direct investment plays a vital role in promoting sustainable development by attracting investment to environmentally friendly projects and technologies, as well as to important strategic projects, and by helping create job opportunities, foster innovation, and develop and promote sustainable business practices. From this point of view, the study came to analyze the volume of FDI flows in sustainable development, which focused on the eighth goal (decent work and growth) and the ninth goal (industry, innovation and infrastructure) as variables to measure the economic performance of sustainable development during the period 2000-2022, due to the impact of foreign investment in job creation, the development of industries and innovations, as well as the improvement of infrastructure, and in order to reach the research objective, the descriptive analysis of the foreign direct investment data of the three countries that achieved the research was used The highest performance in the Sustainable Development Goals with the data of the eighth and ninth goals for sustainable development for the year 2022 in addition to the State of Iraq, and a set of conclusions was reached represented in the correlation between the volume of inflows from foreign investments with decent work and growth significantly and instantaneously, while the value of the Industry, Innovation and Infrastructure Index increased despite the fluctuation of incoming investments due to advanced infrastructure.

Keywords:
Foreign direct investment, Sustainable development, SDG VIII, SDG IX.

ورقة بحثية

دور الاستثمار الأجنبي المباشر في التنمية المستدامة – دراسة تحليلية لمجموعة مختارة من البلدان

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المستخلص

يلعب الاستثمار الأجنبي المباشر دورا حاسما في تعزيز التنمية المستدامة من خلال جذب الاستثمارات نحو المشاريع والتقنيات الصديقة للبيئة، بالإضافة الى المشاريع الاستراتيجية المهمة، كما انه يساعد في تعزيز فرص العمل والابتكارات وتطوير وتعزيز ممارسات الأعمال في بيئة مستدامة. ومن هذا المنطلق جاءت الدراسة لتحليل حجم تدفقات الاستثمار الأجنبي المباشر في التنمية المستدامة والتي تم التركيز على الهدف الثامن (العمل اللائق والنمو) والهدف التاسع (الصناعة والابتكار والبنى التحتية) كمتغيرات لقياس الأداء الاقتصادي للتنمية المستدامة خلال المدة 2000 -2022، بسبب تأثير الاستثمار الأجنبي في خلق فرص العمل، وتطوير الصناعات والابتكارات فضلا عن تحسين البنية التحتية، ومن اجل الوصول الى هدف البحث فقد تم استخدام التحليل الوصفي لبيانات الاستثمار الأجنبي المباشر للدول الثلاثة التي حققت الأداء الأعلى في اهداف التنمية المستدامة مع بيانات الهدف الثامن والتاسع للتنمية المستدامة للعام 2022 بالإضافة الى دولة العراق ، وتم التوصل الى مجموعة من الاستنتاجات تمثلت في وجود ارتباط بين حجم التدفقات الواردة من الاستثمارات الأجنبية مع العمل اللائق والنمو بشكل كبير وآني بينما ارتفعت قيمة مؤشر الصناعة والابتكار والبنية التحتية رغم تذبذب الاستثمارات الواردة بسبب البنية التحتية المتطورة.

الكلمات الرئيسة:

الاستثمار الأجنبي المباشر، التنمية المستدامة، الهدف الثامن للتنمية المستدامة، الهدف التاسع للتنمية المستدامة

مجلة

تنمية الرافدين

(TANRA): **مجلة علمية، فصلية، دولية، مفتوحة الوصول، محكمة.**

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1. Introduction

1-1 The concept of foreign direct investment

Foreign direct investment is an important source of financing and a key driver of economic growth, especially for developing economies with low capital. Moreover, FDI serves as a vital channel for technological advancement that many countries strive to achieve (Oliveira and Santos 2023).

1-2 Importance of research

Foreign direct investment plays an important role at the micro, macro, and global levels, and much of the literature has discussed its role at these levels. On the one hand, it contributes to increasing domestic capital, creating jobs, increasing income, promoting technology, transferring skills through foreign technology and knowledge, and strengthening the host countries' economies. It is also an engine of long-term economic growth. However, current trends have shown A shift from economic growth to sustainable development. In addition, another issue has attracted the attention of the scientific community and policymakers: how does foreign direct investment contribute to sustainable development?

1-3 Research problem

Economies need substantial investments to finance projects, especially in areas that require promoting sustainable development. For this reason, they resort to foreign direct investment. This research aims to determine whether these investments affect sustainable development.

1-4 Research objective

This study examines the relationship between foreign direct investment and economic growth and sustainable development, represented by the extent to which the desired objectives are achieved, mainly Goal 8 and Goal 9 (Decent Work and Economic Growth) (Industry, Innovation, and Infrastructure), for the countries that have achieved sustainable development at the global level.

1-5 Research hypothesis

The research assumes that foreign direct investment plays an important and direct role in influencing the economic performance of countries in the field of sustainable development, mainly in terms of employment opportunities and economic growth, as well as industry, innovation, and infrastructure, as evidenced by a study of countries with the best performance in sustainable development.

1-6 Research limitations

In this study, foreign direct investment is examined in relation to sustainable development (Goals 8 and 9) for a sample of countries with the best global performance in sustainable development (Finland, Denmark, and Germany), as well as for Iraq, for the period 2000-2022.

1-7 Research Methodology

In order to verify the research hypothesis, descriptive analysis was used on statistical data on foreign investment and goals of sustainable development expressed in Goals 8 and 9 for the sample countries for the period 2000-2022, which included Finland, Denmark, and Germany as the world's leading countries when it comes to sustainable development, with the addition of Iraq as a comparative case study. The research was divided into two main parts: the first dealt with the theoretical framework and reference studies. In contrast, the second analyzed the relationship between foreign direct investment and the Goals 8 and 9 of Sustainable Development achieved by the sample countries.

2- Theoretical aspect: Foreign direct investment and green investment

2-1 The concept of foreign direct investment and green investment

Foreign direct investment refers to an investment by a company established in one country into another. It is an investment established by an investor residing in another country, with the aim of obtaining long-term benefits there. This investment guarantees a level of control or influence in management (Duce and España 2003). In recent years, green foreign direct investment has become more popular, highlighted by its connection to all the Sustainable Development Goals on the one hand and its reliance on projects that achieve environmental and climate development goals on the other. It also refers to investments in sustainable environmental projects that reduce negative environmental impacts and support the conservation of raw materials. It aims to achieve sustainable development across economic and social dimensions and to preserve the environment (Johnson 2017).

The definition of green foreign direct investment consists of two parts: (a) a definition that goes beyond local environmental standards, i.e., there are additional standards on top of global standards; and (b) producing environmental goods in host countries directly. However, no estimate of its flow is provided (UNCTAD 2008). The report of the Trade and Development Conference (2010) emphasizes low-carbon foreign direct investment, a significant subset of green foreign direct investment, defined as the transfer of technologies, products, or practices from host countries to parent corporations. Over investment in company shares and other forms of investment, through the production operations of their parent companies and related operations, in addition to the use of their products and services, which achieve greenhouse gas emissions reductions that are significantly lower than would have prevailed in the industry under normal production conditions. Low-carbon foreign investment furthermore involves foreign direct investment based on carbon-reducing technologies, products, processes, and strategies. The definition of green FDI specifies dual elements: (a) commodities and services with low-carbon, (b) low-carbon activities (UNCTAD 2008).

Green economic activity is not always linked to a specific good or service but to a specific process or technology, and this process or activity is not adequately captured in statistical data. There may be a vital role for greening foreign direct investment in sectors and industries that are not inherently environmentally. However, these investments aim to reduce pollution, but this does not cover the latter dimension when the definition is restricted to investment in environmental products and services. Thus, the definition of green foreign direct investment consists of two parts to cover both foreign direct investment in green industries and services, as well as investment in the environment (Becker and Shadbegian 2009).

2-2 Literature review

a) The Study **of Leveraging foreign direct investment for sustainability: A sustainable human development approach in Nigeria.** Fagbemi and Osinubi: The research assesses the relationship between human capital development and foreign direct investment in Nigeria during 1981-2018 by examining the data using both the nonlinear distributed lag and the linear cointegration boundary test approaches, as well as the VECM Granger causality technique. The results reveal a minor long-run impact of foreign direct investment on human capital, with a significant short-run effect. It is important for the government to approve policy measures that can generate sustainable human capital development while paying close attention to the barriers underlying structural inefficiencies and the possibility of prolonged insecurity that could deter foreign investors. (Fagbemi 2020)

b) **Facilitating sustainable foreign direct investment for sustainable development within the WTO investment facilitation framework: four concrete proposals** 2021 Gabor & Sauvat: This study focuses on in what way countries can surge levels of foreign direct investment directed towards projects that are Contributes to the sustainable development of countries to the greatest extent possible in light of the ongoing WTO debates on investment easing for development by identifying four relevant issues and implementing concrete proposals could contribute to the achievement of these goals commercially viable investment contributes as much as possible to sustainable development: (1) How could governments boost sustainable foreign direct investment? (2) How could governments foster taking responsibility for the corporation? (3) How can an exclusive classification of "admitted sustainable investors" be created to encourage international investors to put into action their corporate social responsibility obligations and participate in sustainable foreign direct investment? Viewing the objective framework from the outside in, i.e., "for development," which is central because this goal should guide the discussion of this framework (Gabor and Sauvat 2021).

c) Examining **the importance of foreign direct investment for sustainable development. Empirical evidence from the European Union** (Kardos, 2014): The paper explores the contribution of foreign direct investment to sustainable development in EU countries, examining the literature and data despite methodological limitations and a lack of consensus on measuring environmentally relevant investments, ultimately highlighting the potential positive effects of balancing macro and micro factors. (Kardos 2014)

d) Study on "**Sustainable investment" through foreign direct investment for sustainable development** 2012: The paper examines applications of sustainable investment principles in foreign direct investment (FDI) to achieving the goals of sustainable development. The paper provides a framework for applying sustainable investment principles to achieve sustainable growth in India, using the Environmental Sustainability Index (ESI), the Sustainable Development Fund, and the ESG Index, and reports on corporate social responsibility activities on a voluntary basis. Despite the slow response from investors, companies, and the government towards sustainable development, this paper suggests incorporating the international investment regime into regulatory frameworks and policies to enhance foreign direct investment by prioritizing sustainable investment and ESG criteria from the outset (Narula 2012).

e) **A team analysis study of foreign direct investment flows and poverty reduction in BRICS countries: implications for Sustainable Development Goal 1** (Aderemi, Opele, & Olanipekun 2023): This study analyzed the link between poverty decrease and foreign direct investment in the BRICS countries from 1990 to 2019, revealing negative effect on human development in short-term, an inverse long-term impact, and a gradual positive influence on poverty reduction over time, prompting policymakers to pursue strategies to enhance foreign investment in pursuit of sustainable development goals (Aderemi, Opele and Olanipekun 2023).

2-3 The importance of green foreign direct investment

Empirical evidence shows that foreign direct investment has the potential to influence the environment through three channels:

1. Transferring clean technologies to its affiliates (e.g., reducing pollution at the end of the production chain) that are further input-efficient than domestic production (less polluting technology).
2. Foreign direct investment facilitates significant technological advancements by transferring its affiliates' access to technologies in the areas of production and pollution control that are at the forefront of their field. (advanced pollution-free technology).

3. Indirect effects on other businesses, such as local suppliers and competitors, learn about and adopt best practices in environmental management from affiliates.

Green foreign direct investment shows a central position in promoting sustainable development by attracting investment towards environmentally friendly projects and technologies (Gallagher and Zarsky 2007) . This mechanism works through several possible reasons that lead to improvements (Golub, Kauffmann and Yeres 2011) :

- Multinational companies with investments are more technologically dynamic than local companies.
- Because of their home nations' quality and environmental legislation, as well as consumer preferences and non-governmental organizations, multinational corporations are held to stricter environmental standards there. (Gentry 1999).
- Multinational companies operate in accordance with firm-level environmental standards. They may possibly do so because products and processes are designed according to unique criteria in the nations that host them (Zarsky and Gallagher 2008), or for the reason that they hold on to codes of conduct that stipulate such activities (e.g., the OECD Guidelines for International Companies).

Foreign direct investment not only influences the host country's economic growth but can also affect the home country's environment through supply chains and the forward and backward links of products. Therefore, the influence of foreign direct investment will have been on green growth, both in terms of economic growth and in reducing environmental pollution. When assessing the effects of foreign direct investment on the economy, not only should its impact on traditional economic growth be evaluated, but its role in energy consumption and environmental pollution should also be considered (Golub, Kauffmann and Yeres 2011).

Reliance on attracting foreign direct investment should be based on measuring its direct impact on green growth, and foreign direct investment attraction policies should be adjusted accordingly. If foreign direct investment is adverse to green growth, the government should better focus on improving the effectiveness of domestic capital expenditure rather than persist in offering additional incentives and preferential policies for foreign investment, and should continue to attract more foreign investment. If foreign direct investment achieves better green growth, beyond financial and tax tools (Yue 2016).

It can be said that the primary objective of any green foreign direct investment must be precisely defined within the state's economic policy, alongside its objectives of economic growth and environmental improvement, in a way that balances green economic growth, renewable energy-based technologies, and reduced pollution. Most studies have shown that countries with fewer green innovations attract more foreign direct investment in the green sector to enhance their contribution to the green transition (Amendolagine 2023), due to their desire to accelerate this transition by drawing on the experiences of countries that have preceded them in this field.

2-4 The importance of green foreign direct investment in sustainable development

Foreign direct investment is important because it plays a significant role at the micro, macro, and global levels, and many publications have discussed its impact at these levels. On the one hand, it contributes to increasing domestic capital, creating job opportunities and increasing income, promoting technology, transferring skills through foreign technology and knowledge, and strengthening the economies of host countries. It is a machine of long-term economic growth (Herman 2011) . Alternatively, foreign direct investment may create negative effects, such as draining domestic investment, biased competition between foreign and local firms, and a "market capture effect" due to weak absorption capacity, which can lead to market inequality or cause foreign exchange to leave the country. Nonetheless, contemporary trends have precipitated a shift in focus from economic growth and development to green growth and sustainable development. In addition, another issue has attracted the attention of the scientific community and policymakers: the effect of foreign direct investment on the environment and green growth, and, consequently, on sustainable development. However, little is known about the circumstances and elements that could potentially form a reliable, confirmed association between FDI flows and sustainable development (Kardos 2014).

Achieving the Sustainable Development Goals was a priority even before the outbreak of the novel Coronavirus. Estimated to call for investments of US$2.5 trillion per year. There was a 70% increase in this gap, and it will be necessary to triple renewable energy investment by 2030 to meet the Paris Agreement's commitments and curb climate change. 30% of the world's new renewable energy investment comes from foreign direct investment, but more investment is needed. Renewable energy is rapidly replacing fossil fuels as a source of foreign direct investment. About 180,000 jobs are created worldwide each month because of foreign direct investment. In addition to being more productive than local companies, foreign companies pay higher wages and offer more opportunities for women to advance in their careers (OECD 2022) .

Foreign direct investment is an effective means in preparing a supportive setting for financial and societal progress that strengthens the environment, which means its role in providing resident productive rules and abilities, as well as social, institutional, and organizational factors(Zarksy and Gallagher 2003). The balance between Micro and Macro levels depends on the positive or negative effects of foreign direct investment. On the macroeconomic level, in addition to the implementation of environmental procedures, the effects of FDI are determined by its impact on host countries' environments, as reflected in the composition of sectors participating in investment. Pollution-intensive industries also contribute significantly to their presence. On the microeconomic level, the methods of management and their types for technology used in foreign companies affiliated with transnational corporations are the factors that affect environmental issues (Witkowska 2011). Foreign direct investment importance depends on the extent to which it contributes to the achievement of green growth objectives at the local level, although the size of this influence cannot be accurately measured due to the inaccuracy of the indicators that measure its size in relation to the environment, which has a discernible effect on sectors characterized by a substantial scope of indirect ecological ramifications (such as energy efficiency, pollution control or reduction) is significant. UNCTAD refers to this in its World Investment Report (2010) that green foreign direct investment is in goods and services with low carbon, in addition to projects in fields of generating renewable energy, producing environmental technology products (such as solar panels, wind turbines, etc.) (Golub, Kauffmann and Yeres 2011). Green foreign direct investment is mentioned to address all environmental harm caused by economic activities, rather than focusing solely on reducing climate change. However, it is considered in processes that mitigate environmental damage, besides the investments in environmental goods and services. The first element focuses on investment in the gas, water, and energy sectors. In contrast, the second element reflects investment in sectors with greater potential for indirect environmental impacts (such as mining, agriculture, manufacturing, construction, and transport). Witkowska (2011) proposes an alternative perspective on FDI related to pollution-intensive activities. (Kardos 2014) .

Green foreign direct investment is associated with achieving the Sustainable Development Goals, but it is most evident in the Decent Work and Economic Growth Goal and the ninth Goal (Industry, Innovation and Infrastructure). Eighth Goal focuses on inclusion and the sustainability of economic growth. Decent work means facilitating prospects to obtain effective work that generates fair income, ensures workplace safety and social protection for families, and guarantees a better future for self-development and social integration. The persisted absence of decent work opportunities, inadequate investment, and minimal consumption undermines the fundamental social contract on which democratic societies are based: that everyone should share in progress. Creating good jobs continues to be a key question for nearly all economies (United Nations 2024). The decline in job opportunities and rise in unemployment create many problems that affect economic and social stability, leading to severe economic crises that are difficult to address without capital. In 2018, unemployment in the MENA region reached 9.8% of the total labour force (Almula-Dhanoon, et al. 2020). Achieving Goal 8 requires comprehensive improvement of the financial system to address towering debt, economic uncertainty, and trade tensions, while promoting fair wages and decent work for young people. Sustainable and inclusive economic growth will lead to progress, improving living standards, and creating decent jobs for all. Green foreign direct investment could be used to accomplish this objective; with the economic boost and job opportunities it requires. Foreign direct investment has been higher in countries with decent employment rates than in those with low employment rates, according to data. FDI brings other benefits, including the exchange of experience, technology, and skills that would not otherwise be possible. As a result, human capital and education in the host country are increased as workers acquire these skills. This is what the ninth Sustainable Development Goal (Industry, Innovation and Infrastructure) aims to achieve: developing strong infrastructure, advocating comprehensive and sustainable industrialization, and promoting innovation. Investments in infrastructure, technological progress, and sustainable development for industries are the keys to social development, climate action, and economic growth. This is a significant challenge in a rapidly changing global economy with widening income disparities between countries, as sustainable growth must include industrialization that provides opportunities for all people in the first place, and secondly, be supported by innovation and infrastructure.

In recent years, global industrialization – a driver of inclusive economic growth – has been fading year after year due to the deterioration of trade agreements, which has affected the global economy. Rising energy prices, high inflation, ongoing shortages of raw materials and intermediate goods, and the slowdown in the global economy are mainly to blame. For many countries to achieve Goal 9 by 2030, infrastructure investments are essential for sustainable development and community empowerment. In addition to supporting the least developed countries, investing in advanced technologies, reducing carbon emissions, and increasing mobile broadband access is crucial. By combining comprehensive industrialization with innovation and infrastructure, jobs and income can be generated in a dynamic and competitive manner. As well as facilitating international trade and enabling efficient resource use, it also introduces and promotes new technologies. In the future, new industries will benefit many of us by increasing our standard of living. Sustainability will not only protect the environment but also improve the standard of living for many of us. (United Nations 2024). The flow of foreign direct investment is often considered the driving force behind host countries' technological innovation, while environmental pollution is frequently a consequence of these innovations. Nonetheless, green foreign direct investment focuses on initiatives that promote sustainable industries and manufacturing.

3- Analytical aspect: Role of foreign direct investment in sustainable development

3-1 Top-performing countries in sustainable development.

FDI is a crucial source of financing for sustainable development, creating around 200,000 jobs globally every month. Studies have also shown that foreign businesses are more productive than local enterprises (Sözüer 2023) (Arif-Ur-

Rahman and Inaba 2021), Provide higher salaries and expand career advancement opportunities for women. Though Indicators of foreign direct investment quality show that its effects on sustainable development are not uniformly positive, several countries gain additional advantages, while certain groups within countries fall behind. The effects also could vary across various regions of sustainable development goals, as some sustainability goals reinforce each other, while the achievement of some goals comes at the expense of others (OECD 2022).

The top five countries in the world in terms of sustainable development occupy the highest global rankings, as shown in the following graph:

Table (1)> Ranking of countries according to the Sustainable Development Index for 2022

Rank	Country	Sustainable Development Goals Index	Foreign Direct Investment, Net Inflows (million US dollars)	Sustainable Development Goal 8	Sustainable Development Goal 9
1	Finland	86.8	13079.16	86.8	96.0
2	Sweden	86.0	53953.06	85.0	97.6
3	Denmark	85.7	30820.92	87.6	97.0
4	Germany	83.4	62,729	87.0	95.8

Source: Based on data from the Sustainable Development Goals website https://dashboards.sdgindex.org

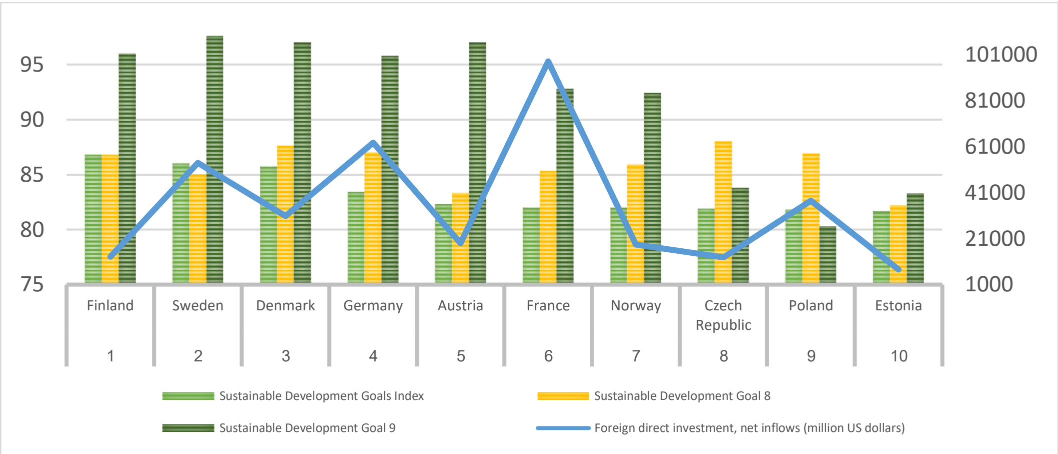

Figure (1). Ranking of countries according to the Sustainable Development Index for 2022

Source: based on data from the Sustainable Development Goals website and the World Bank https://dashboards.sdgindex.org

3-2 Analysis of the role of foreign direct investment inflows in Finland's sustainable development

The graph shows that FDI in Finland is gradually increasing despite a decline in some years (2008, 2009, 2013, 2018, 2020). This decline had a limited impact on the value of Finland's eighth and ninth sustainable development indicators. This is due to the significant inflows in the earlier period. The value of the eighth development indicator was highly responsive to fluctuations in foreign investment inflows. Despite these fluctuations, the increase in the indicator's value was much greater than the decline in the same period (2008-2018). The same applies to the value of the ninth development indicator, which showed a continuous upward trend, except for the decline in both indicators during the period (2016-2017). The fluctuation in foreign direct investment during 2010-2015 led to mixed responses regarding the eighth and ninth goals. While the indicator for the eighth goal declined, the indicator for the ninth goal increased steadily from 2016, with both indicators rising at the same pace until the end of the period. It should be noted that the ninth goal indicator is relatively more stable than the eighth goal.

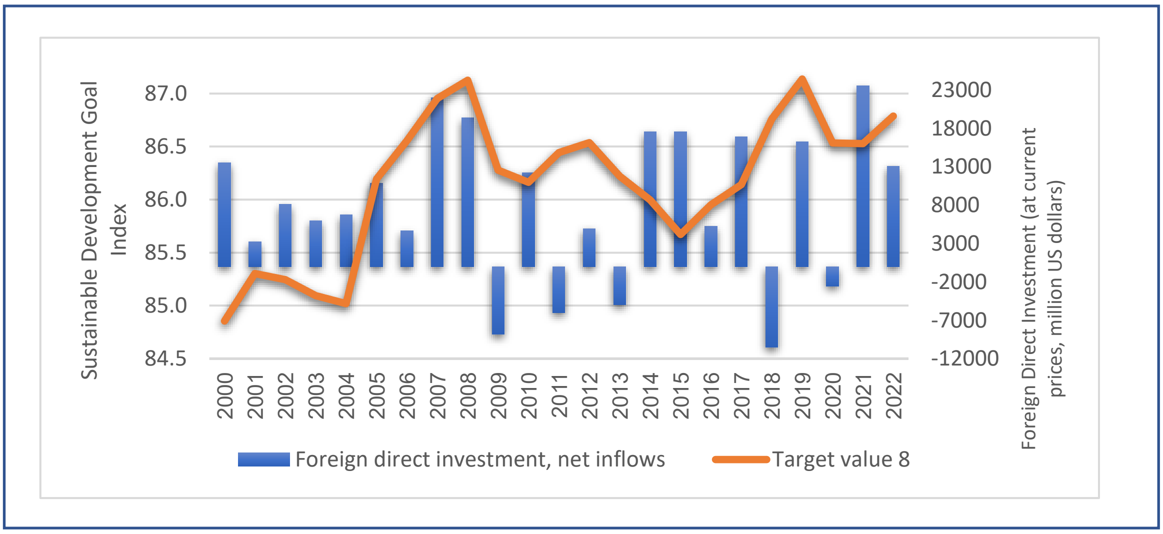

Figure (2). Inflow of FDI and Sustainable Development Goal 8 for Finland for the period 2000-2022

Source: based on data from the Sustainable Development Goals website and the World Bank https://dashboards.sdgindex.org

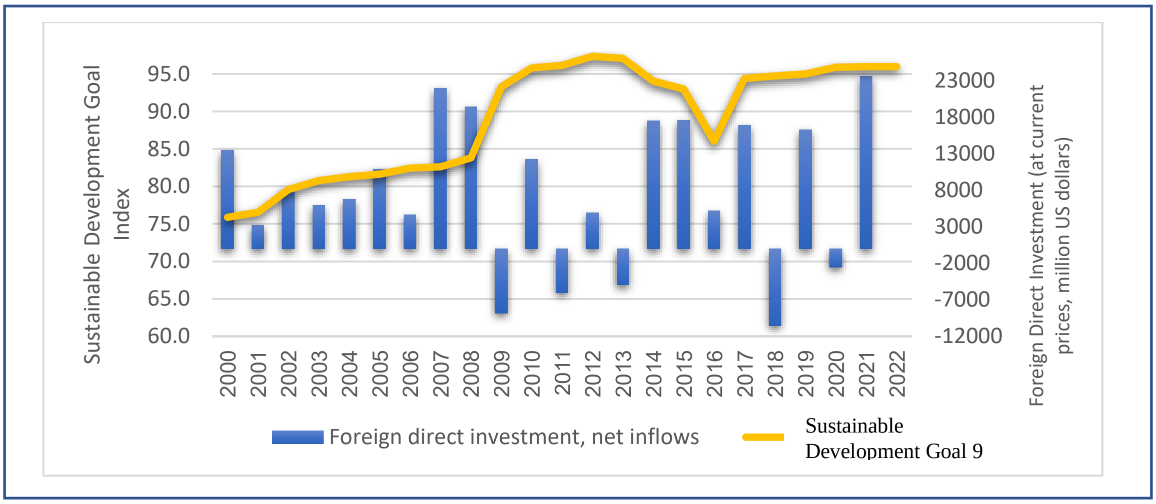

Figure (3). Inward FDI flows and Finland's Sustainable Development Goal 9 for the period 2000-2022

Source: Based on data from the Sustainable Development Goals website and the World Bank https://dashboards.sdgindex.org

3-3 Analysis of the role of foreign direct investment inflows in Denmark's sustainable development

The following two figures show the flow of FDI into Denmark with the sustainable development index for Goal 8 (Decent Work and Economic Growth) and Goal 9 (Industry, Innovation and Infrastructure). as the increase in foreign investment flows was accompanied by a rise in the ninth sustainable development index, and the significant decline in foreign direct investment from $36 million to $9 million did not affect the value of the ninth sustainable development goal, with a slight fluctuation in the eighth goal, whose value declined significantly in 2008 and until 2011, then then began to increase. This is clearer for the ninth goal, which experienced a significant boom in the years following 2008, stabilizing at approximately the same level in the years that followed, as the subsequent period saw a decline in foreign investment flows. How does the fluctuation and stability of foreign investment lead to a similar situation in sustainable development?

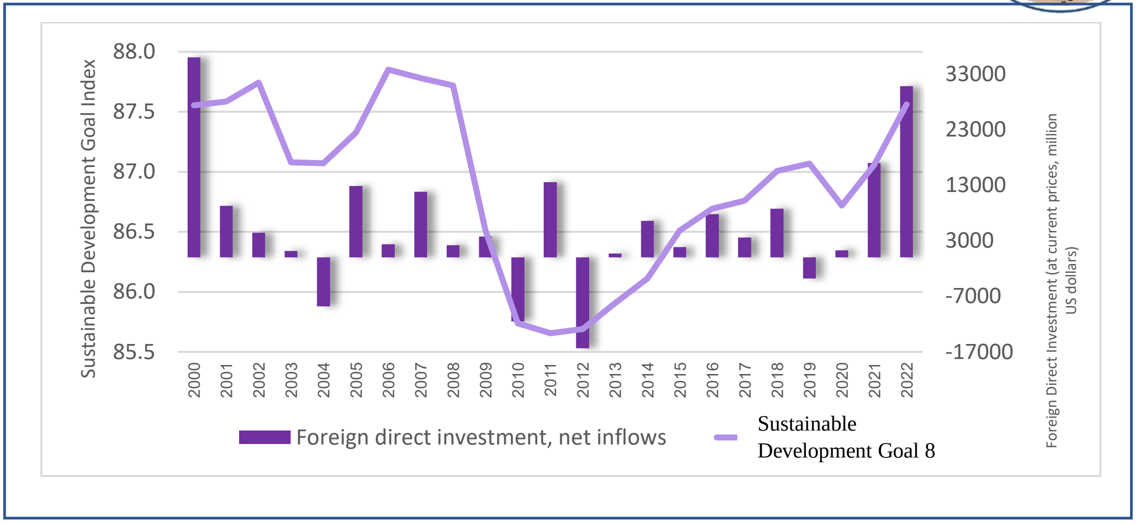

Figure (4). Inflow of FDI and Denmark's sustainable development goal 8 for the period 2000-2022

Source: based on data from the Sustainable Development Goals website and the World Bank https://dashboards.sdgindex.org

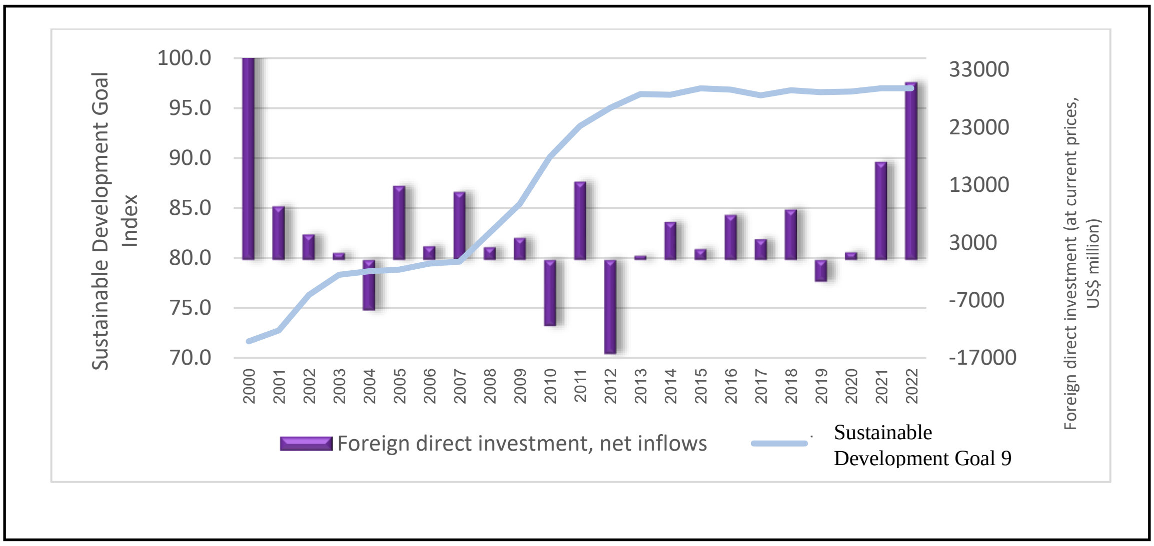

Figure (5). Inward foreign direct investment flows and Denmark's sustainable development goal 9 for the period 2000-2022

Source: Based on data from the Sustainable Development Goals website and the World Bank https://dashboards.sdgindex.org

3-4 Analysis of the role of foreign direct investment inflows in Germany's sustainable development

German economic data show that the value of Sustainable Development Goals 8 and 9 is increasing at a steady, consistent rate (excluding the decline in SDG 8 during

2002-2005). Although foreign investment in Germany was high at the beginning of the period (2000) and declined to less than 23% in a situation similar to Denmark, this did not cause the German economy to decline in its performance in achieving sustainable development, except for a small part of the value of the eighth goal index for the period 2001-2005, after which it began to increase steadily. This situation did not appear in the value of the ninth indicator, which showed stability in the German economy's increasing performance in achieving the industry and innovation infrastructure target, consistent with the relative and sometimes increasing stability of foreign direct investment inflows.

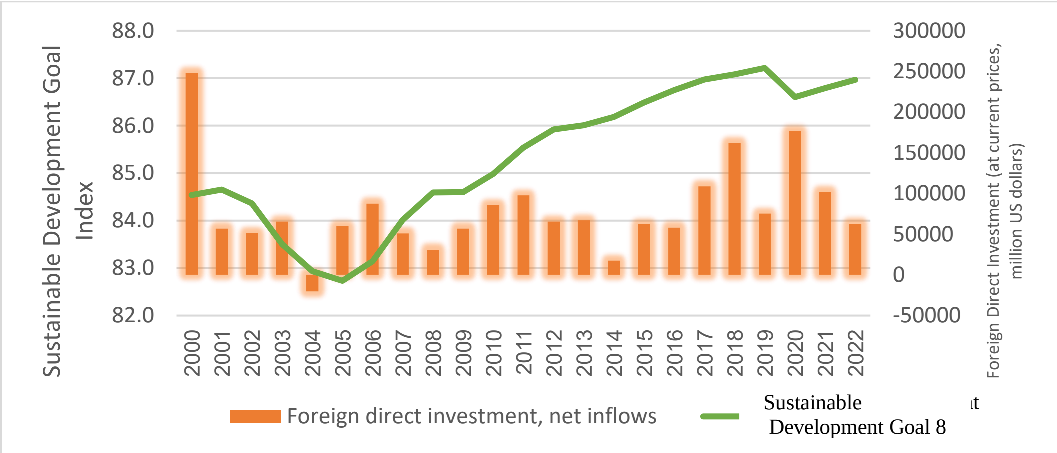

Figure (6). Inflow of FDI and Germany's sustainable development goal 8 for the period 2000-2022

Source: Based on data from the Sustainable Development Goals website and the World Bank https://dashboards.sdgindex.org

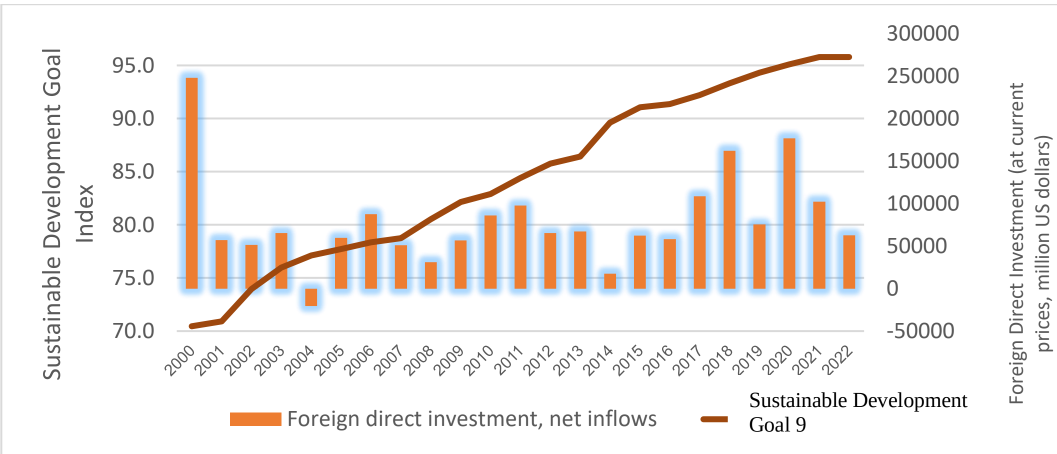

Figure (7). Inflow of FDI and sustainable development goal 9 for Germany for the period 2000-2022

3-5 Analysis of the role of foreign direct investment inflows in Iraq's sustainable development

Data on FDI shows that flows escalated steadily each year, peaking in 2012 ($13,248 million). These flows were accompanied by an increase in the Sustainable Development Index, particularly Sustainable Development Goal 8, and by a continued increase in Sustainable Development Goal 9, despite a significant decline in foreign direct investment to $2,335 million in 2012. Despite the decline in investment after 2012, industry, innovation, and infrastructure continued to grow, as reflected in Sustainable Development Goal 9, while decent work and economic growth declined due to a drop in foreign direct investment flows. Despite fluctuations in its flow, the data show a clear relationship between investment volume and Sustainable Development Goal 8. The opposite is true for Goal 9, due to the job opportunities created by foreign investment, which led to a clear decline in the value of Goal 8.

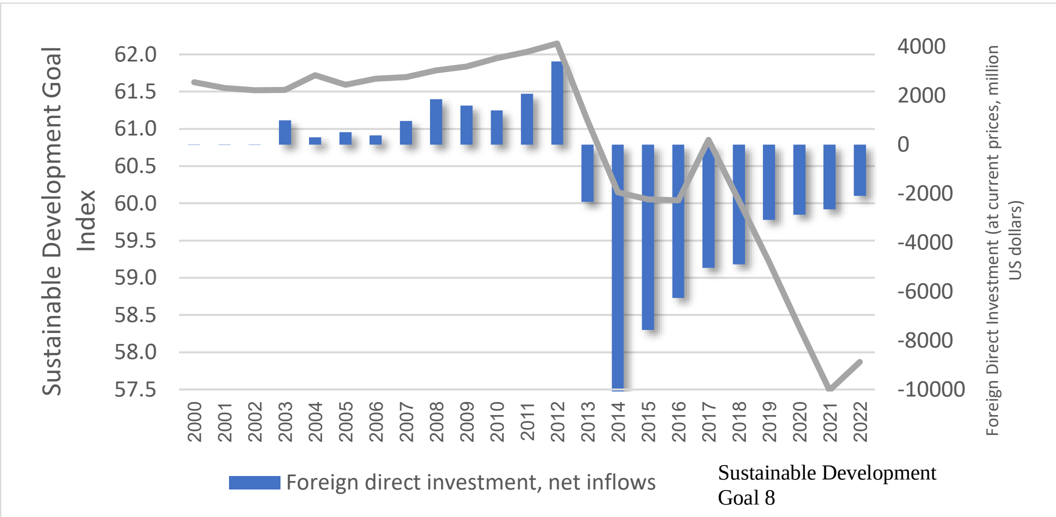

Figure (8). Inflow of FDI and sustainable development goal 8 for Iraq for the period 2000-2022

Source: based on data from the Sustainable Development Goals website and the World Bank https://dashboards.sdgindex.org

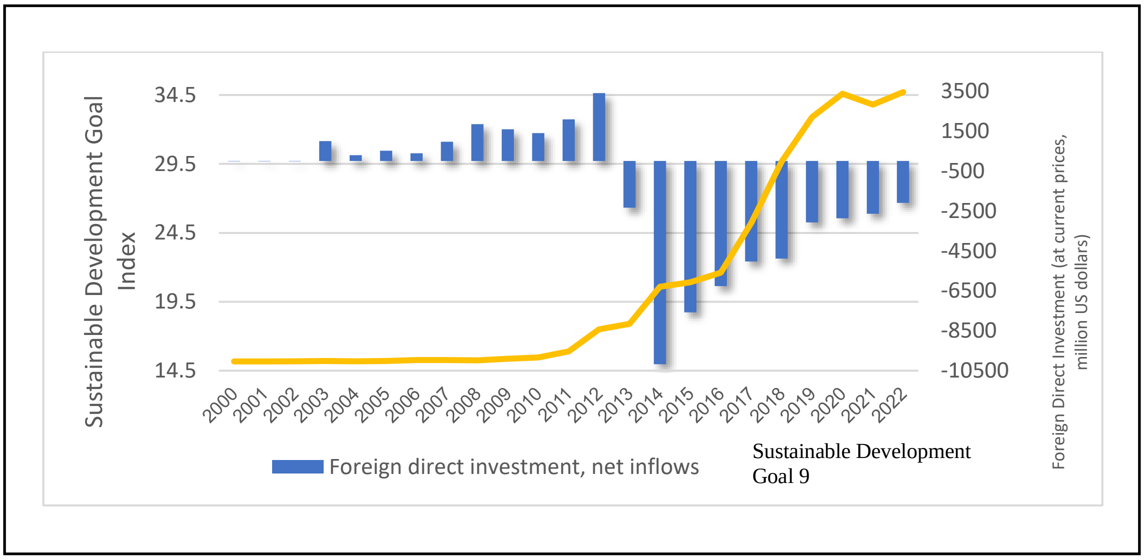

Figure (9). Inward FDI flows and Sustainable Development Goal 9 for Iraq for the period 2000-2022

Source: Based on data from the Sustainable Development Goals website and the World Bank https://dashboards.sdgindex.org

3-6 Policies to attract green foreign direct investment and the challenges and obstacles it faces.

Green foreign direct investment faces several challenges, including regulatory hurdles, unstimulating policies, and a need for skilled labor in green technologies. There are also constraints related to the high initial costs associated with establishing sustainable infrastructure. However, some challenges can be addressed in the context of green foreign investment. Investing companies face challenges in accessing finance and achieving financial sustainability. They may also encounter difficulties in dealing with environmental laws and regulations in host countries, which can be complex and require complicated procedures.

A collection of policy tools for improving the quality of foreign direct investment should be developed to assist governments in prioritizing policy and institutional reforms. These reforms aim to enhance the effects of FDI—or sustainable investment—across four key areas of the Sustainable Development Goals: productivity and innovation, job quality and skills, gender equality, and decarbonization (OECD 2022). Each part offers comprehensive inquiries to evaluate and analyze the policy circumstances that shape its influence on domain-addressing issues aligned with the priorities of countries at varying stages of development. The application process is made easier by the toolkit of the OECD's recommendation on the traits of foreign direct investment for sustainable development, Because it sets investments program context of the OECD which make the governments utilize it in order to evaluate the status of reforms and plan for their implementation, for evaluations of investments for country and regional policies, besides for independent reviews of the quality of FDI (OECD 2022).

To ensure the positive effects of FDI on sustainable development, appropriate policies for foreign direct investment must be planned and developed in order to maximize its benefits, while identifying the objectives that promote the state's goals in sustainable development and the priorities that can be started on a timeline that will yield the fruits of sustainable development without conflicting with economic objectives economic goals with sustainable development goals. Appropriate policies must be developed based on a set of principles (OECD 2022):

1. Governance: The state has a fundamental role in formulating policies that govern sustainable development, and the success of the policy is governed by coordination between achieving sustainable development goals and prioritizing the achievement of goals through these policies, in light of identifying the problems to be eliminated through foreign direct investment.
2. Local and international regulations: Transparent, inclusive, and fair policies form the establishment of an investment environment that supports sustainable development. However, these alone are insufficient to tackle critical social and environmental issues. Sustainable direct foreign investment requires domestic legislation to align with international standards on climate activity, job quality, and gender equality—or to establish national standards that go beyond international benchmarks. It is also important to align investment and trade agreements with sustainable investment goals to strengthen and promote ethical business practices and to adhere to domestic law.
3. Technical and financial assistance: Providing targeted support may be necessary to resolve market inefficiencies that impede sustainable investment, such as research and development expenses, environmental externalities, skill gaps, and workplace gender inequalities. However, such assistance must remain transparent and undergo regular evaluation. Providing technical support, whether directly by governments or facilitated by them, is an efficient way to build local capacity and amplify the potential spillover gains from FDI.
4. Information services and facilities. Investment promotion agencies (IPAs) are vital factors in bridging information gaps and enhancing their impact on sustainable development. Investors with local partners and the connection between them are important to achieving the indirect impacts of FDI.
5. Development cooperation. Collaboration between governments and the contributor community is essential for identifying financial and technical support solutions. These solutions should support policy reform and implementation, align with international standards, protect the environment and reduce social risks, and promote support for the private sector.

Regulatory barriers can hinder the smooth implementation of green FDI initiatives, leading to delays and increased administrative burdens. In addition, there are also challenges in assessing and monitoring the environmental impacts of green FDI. Investing companies must follow strict standards and guidelines to limit negative environmental impacts and ensure sustainable practices.

4- Conclusions and recommendations:

4−1 Conclusions:

1 The research shows that there is a close connection between the flow of foreign direct investment into a country and the achievement of several sustainable development goals, which were analyzed as Sustainable Development Goal 8 and Goal 9. Countries that have experienced a clear trend in foreign investment (continuous increase or decrease) showed a stronger relationship with the eighth goal indicator (e.g., Iraq and Germany). Countries whose foreign investment was characterized by extreme volatility or similar levels did not show a clear and consistent correlation with the indicator (e.g., Finland and Denmark). The pattern of foreign investment flows clearly illustrates the link between decent work and growth.

2 There is a clear difference in the short- and long-term impact of foreign investment for both Sustainable Development Goal 8 and Goal 9. as Goal 8 showed an immediate response to the decline in foreign direct investment for Finland, Denmark, and Iraq. At the same time, the German economy remained largely stable in terms of decent work and growth, although the index showed a gradual decline. The index showed a strong correlation with the volume of foreign investment flows to Iraq, and the decline led to a significant, direct drop in the index, reflecting its heavy reliance on these flows.

3 The analysis showed that there is a clear relationship between the pattern and volume of foreign investment flows and the industry, innovation, and infrastructure index. The greater the fluctuations, the larger the increase in the index value, as in Finland and Denmark, reflecting dependence on domestic financing. If the flow were stable, the index would have a nearly constant trend. In Iraq, however, the situation was different, as a significant surge in the index value offset the decline in foreign investment. This may be due to reliance on domestic capital for investment and infrastructure development.

4 The analysis showed that the three countries of Finland, Denmark and Germany have a stable upward trend in the industry, innovation and infrastructure index, despite sharp fluctuations (ups and downs) have affected the index's trajectory for some years, reflecting progress in this index and the changes that are subject to a return to stability, which is evident in the developed infrastructure.

5 The analysis shows that the period after 2013 in Iraq led to an outflow of foreign investment due to the security conditions at that time, as well as the turbulent and unstable investment environment. Despite this, the value of the ninth target index increased, which may be attributed to domestic projects, government funding, and reconstruction programs for liberated areas.

6 Economic policy plays a leading role in determining the priorities for foreign direct investment, which is employed in projects that support infrastructure.

4-2 Recommendations:

1. Work to activate sustainable development goals and achieve objectives through a timetable and within the available capabilities and priorities of each of the seventeen goals.
2. Provide incentives to foreign investors, especially in projects that are a priority for the economy.
3. Link foreign direct investment projects with local projects to create interconnections at the national economic level and benefit from expertise in the field of infrastructure development.
4. Activate the achievement of objectives through a network of channels linking the objectives, particularly in the field of innovation and industrial development.

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