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GREEN INVESTMENT IN THE WORK OF INTERNATIONAL COMPANIES

In the conditions of the modern development of productive forces, research on the subject of corporate green investments (CGI) in the work of international companies, which in turn promotes the concept of environmental sustainability in the implementation of the Sustainable Development Goals, needs more and more actualization. The article aims to provide a comprehensive understanding of the factors that facilitate or hinder CGI practices in the work of international companies. The fundamental and problems within the paradigm of green investments are noted. An analysis of green investments in the activities of international companies was carried out, which includes an assessment of motivational factors, costs and profits from the implementation of green investments. The current trends in green investment and the impact on the countries that are their recipients are studied. The inflow of investments into the sectors of the economy of Ukraine was analyzed. The results of this study have practical significance, serving as a basis for formulating strategies related to green investments in international companies.

Keywords: green investment, international companies, management, approach, sustainable development.

JEL classification: E44, F36, G10, G18, G20

ЗЕЛЕНЕ ІНВЕСТИВАННЯ В РОБОТІ МІЖНАРОДНИХ КОМПАНІЙ

Актуальність дослідження полягає в тому, що в умовах сучасного розвитку продуктивних сил все більше уваги потребує дослідження тематики корпоративних зелених інвестицій (CGI) у роботі міжнародних компаній, що в свою чергу просуває концепцію екологічної стійкості в системі виконання Цілей сталого розвитку. Мета дослідження полягає в забезпеченні розуміння факторів, які сприяють або перешкоджають CGI-практикам інвестування у роботі міжнародних компаній, впроваджуючи інструментарій зеленого інвестування, який забезпечує економічні ефекти в діяльності компаній на світових ринках та підвищує значення корпоративних зелених інвестицій у роботі глобальних корпорацій. Щодо методів даного дослідження, то застосовано аналітичний та емпіричний підхід, який містить порівняльний аналіз практичних прикладів міжнародних компаній та їхні практики екологічного інвестування. Критично досліджуючи різні точки зору, що супроводжують ці інвестиційні рішення, досліджуються мотиви, бар'єри та потенційні компроміси, з якими стикаються компанії, що працюють у глобалізованій економіці. Також дослідження базується на мультидисциплінарному підході, використовуючи стохастичний аналіз наукових досліджень, аналіз спеціалізованих періодичних видань та дослідження учасників проектів зеленого інвестування. Збір даних базувався на використанні інструментів Google Scholar. Крім того, були використані кількісні методи збору даних зі статистичних баз та звітів органів міжнародного співробітництва. Відзначено фундаментальні та проблеми в рамках парадигми зелених інвестицій. Проведено аналіз зелених інвестицій у діяльність міжнародних компаній, який містить оцінку мотиваційних чинників, витрат та прибутків від здійснення зеленого інвестування. Досліджено сучасні тенденції зеленого інвестування та вплив на країни, які є їх реципієнтами. Проаналізовано надходження інвестицій у сектори економіки України. Результати цього дослідження мають практичне значення, слугуючи основою для формулювання стратегій, пов'язаних із зеленими інвестиціями в міжнародних компаніях, що зумовлює до прийняття керівництвом підприємств обґрунтованих рішень, сприяючи сталому розвитку та формування балансу між економічним зростанням і збереженням навколишнього середовища в ході реалізації проектів зеленого інвестування.

Ключові слова: зелене інвестування, міжнародні компанії, управління, підхід, сталий розвиток.

Statement of the problem. Throughout the centuries, the global landscape has been dominated by the prevalence of an economic model, often referred to as the "brown" economy. This model has been associated with the depletion of natural capital and energy resources, the proliferation of poverty in numerous countries, the scarcity of fresh water and food, the widening economic and social disparities between nations and regions, and the exacerbation of environmental challenges on a global level [1]. In the early 1990s, countries across Europe and Central Asia (ECA) embarked on an economic transformation, transitioning from centrally planned economies to market-oriented systems.

During the first decade of the new millennium, these nations made significant progress in fostering social unity by enhancing public services, education, and social safety nets. As we enter the current decade, these countries are now on the brink of another transformative phase: shifting from a "brown" growth model to a "green" growth model [2].

It is evident that the world has recognized the pressing need to tackle environmental issues on a global scale. With mounting concerns over climate change, dwindling resources, and ecological damage, the responsibility of businesses, especially those operating internationally, to support sustainable development has come under close scrutiny. To address these challenges, the idea of green investment, which involves investing financial resources in eco-friendly projects and practices, has gained momentum as a possible way to reduce the negative impact of economic activities on our planet.

Analysis of recent research and publications. The initial upsurge in the literature happened during the period of 1970–1980, with numerous studies being conducted to explore the future of energy and resources. In 1972, Meadows D. and a team of researchers [3] examined the long-term implications of population growth, resource consumption, industrial production, and environmental pollution. Their findings suggested that by the mid-21st century, global resources would be depleted. To avert this scenario, a shift from the "growth" strategy to a "development" strategy was proposed. This approach would integrate economic and environmental objectives into a unified process, enabling the attainment of a synergistic effect and facilitating the transition from a resource-intensive and energy-consuming economy to a more sustainable and energy-efficient one.

Since then, numerous Western scholars have significantly contributed to the development of green investment theory. For instance, Jeffrey Sachs has emphasized the importance of sustainable development and the role of green investment in achieving global environmental goals [4]. Rockström J. has made notable contributions to understanding the environmental limits that must not be exceeded for a stable planet [5]. Within the Ukrainian academy, Vasylchuk I. has examined relationships between ecological investment and financial indicators for Ukrainian companies [6]. Pimonenko's research made a valuable contribution to the understanding of the main determinants and experiences of green investment, and how to adopt western experience to the context of developing countries and Ukraine [7]. Researchers Feng Y., Xiao Z., Zhou J., Ni G. [8] conducted an asymmetric analysis of the impact of green financing and renewable energy consumption on environmental degradation and renewable energy investment during the COVID-19 outbreak on the Chinese economy. Researchers Patel R., Kumar S., Bouri E., Iqbal N. [9] researched spillovers between green and dirty

cryptocurrencies and socially responsible investments around the war in Ukraine.

Regarding the unresolved problems in the article, it is necessary to recognize the inadequacy of the justification of the economic toolkit of green investment in the work of international companies. This refers to the analysis of motivational factors, costs and profits from green investment, as well as a comparative approach to the investment opportunities of companies of the world's countries regarding the implementation of green investment programs.

The purpose of the article is to analyze the motivations, challenges, and outcomes of green investments in international companies. In today's globalized world, these companies have a significant impact on environmental sustainability efforts, making it crucial to understand their role in promoting green investment. This topic is especially relevant now as businesses face growing pressure to adopt more sustainable practices due to climate change and increasing public awareness. The United Nations Sustainable Development Goals [10] and the Paris Agreement [11] have set ambitious targets for countries and corporations to transition to a low-carbon and sustainable future, making it important to explore the extent to which international companies are contributing to these global initiatives.

Summary of the main results of the study. It is now widely acknowledged that the phenomenon of climate change is occurring as a result of human activities, particularly the emission of greenhouse gases from the burning of fossil fuels and land use modifications. The potential consequences of climate change are substantial and can have significant macroeconomic impacts [12].

The first important shortcoming of the current state-of-the-art is its reductionist framing. The Green Investment Paradigm (GIP) oversimplifies the multidimensional ecological crisis by narrowing it down to a singular objective of limiting temperature rise, disregarding the intricate interconnectedness of environmental issues.

Second important drawback of theory of Green Investment is the uncertainty of the term "green" itself. The literature does not provide an answer to that, which naturally creates problems. The exclusive emphasis on reducing CO₂ emissions disregards the broader aspects of sustainability and overlooks the potential adverse effects of so-called green technologies when considering their entire life cycle [13].

Motivations. The institutional approach finds support in stakeholder theory, which recognizes the growing expectations of stakeholders, including shareholders, employees, and customers, for companies to embrace sustainability practices. Meeting these expectations is crucial for maintaining trust and fostering long-term relationships [14].

Regarding the Risk Mitigation, green investments help companies to suppress risks associated with climate change and environmental regulations [15].

Costs. From an investment perspective, there are, naturally, some costs associated with corporate green investments and socially responsible investing (SRI). When company is considering to be an investor, financial assets aligned with SRI principles may forgo business opportunities that do not meet socially responsible criteria, potentially sacrificing profitable outcomes [15].

Benefits. Companies that navigate the risks associated with green investments can expect several beneficial payoffs. Financial benefits, companies engaging in green investments also enjoy improved reputation and brand

image. A study by Gond J. et al. [16] shows that consumers increasingly prefer brands that demonstrate environmental responsibility and sustainability practices.

With the development of globalization and the increasing influence of Transnational Corporations (TNCs), the focus on sustainable development has shifted from national economies to the corporate level. According to the green-field investment monitor of the Financial Times, FDI Markets, international investors revealed over 16,000 foreign direct investment (FDI) projects in 2022, showcasing an estimated value of \$1.155tn and contributing to the creation of more than 2.2 million jobs [17].

Based on the Table 1 it can observe significant growth rates in the number of FDI projects for certain countries in the CGI sector. The United States remains the leader with 2,034 projects in 2022, marking a 26% increase compared to 2020. Very notably, India recorded a remarkable surge in FDI projects, reaching 994 projects in 2022, a staggering 167% increase from 2020. Similarly, the UAE witnessed substantial growth, with 879 projects in 2022, reflecting a remarkable 169% increase compared to 2020.

Table 1

Top10 countries recipients of CGI in 2022 by the amount of projects

Country	2022, Projects	2020, Projects	Δ, %
USA	2034	1614	26%
UK	1119	868	29%
India	994	372	167%
UAE	879	327	169%
Germany	820	733	12%
Spain	702	448	57%
France	536	385	39%
Poland	493	378	30%
Mexico	433	273	59%
Australia	420	295	42%

Source: [17]

As for top companies that contributed to CGI past year, Switzerland-based office provider International Workplace Group (IWG) emerged as the most active foreign investor in terms of corporate green investments. The company experienced significant growth, recording a total of 160 foreign direct investment (FDI) projects, which represented a 36% increase compared to the previous year. IWG invested an estimated \$324 million in green initiatives during 2022.

Among the automotive firms, Germany-based Volkswagen and Netherlands-based Stellantis stood out as the

joint-ninth-most active overseas investors in 2022. Both companies announced 25 FDI projects each and made significant investments in the green sector. Volkswagen invested \$9.1 billion, while Stellantis invested \$5.4 billion. Notably, Stellantis announced a \$4.1 billion investment in an electric vehicle battery manufacturing facility in Windsor, Canada, while Volkswagen revealed plans to create a new £2.5 billion facility in Crewe, UK, dedicated exclusively to electric vehicle production.

Furthermore, several companies within the top 20 investors in 2022 had a strong focus on renewable energy. Total Energies, Energias de Portugal, EniSpA, and Acme Group were among the notable players that announced capital-intensive CGI projects, particularly in the green hydrogen sector. In total, these companies invested an impressive \$343.6 billion across 527 projects in the renewable energy sector, reflecting their commitment to sustainable and environmentally friendly initiatives.

Looking at Figure 1, it would also like to note the sectors of the economy of Ukraine in which investors most often invest capital.

There are namely: industry (39%), professional, scientific and technical activities (8%), information and telecommunications (8%), financial and insurance activities (13%), real estate transactions (14%), wholesale and retail trade (18%). At the same time, most of the investments that come to Ukraine are directed to the banking sector, in particular to Ukrainian branches of foreign banks and financial companies. For example, Raiffeisen Bank Aval JSC receives capital from Austria, and OTP Bank JSC – from Hungary. However, these investments have a smaller impact on the economy of Ukraine, as they do not create physical products and long-term capital investments.

Conclusions. In conclusion, our research shows that Corporate Green Investment has become a significant source of financing, particularly for developing countries, and has the potential to facilitate the transfer of "clean" technologies and practices that contribute to environmental progress. However, realizing the true potential of "green" FDI requires a clear and standardized definition of "green" and stronger commitments from government and private sector entities to address current environmental challenges. Furthermore, it is important to emphasize that the definition of "green" FDI should not be static but should evolve over time. As technology advances and new environmental challenges emerge, the definition must adapt to incorporate emerging sectors and innovative solutions. This flexibility allows for the continuous integration of evolving environmental priorities into investment strategies, ensuring that FDI remains a powerful force for sustainable development.

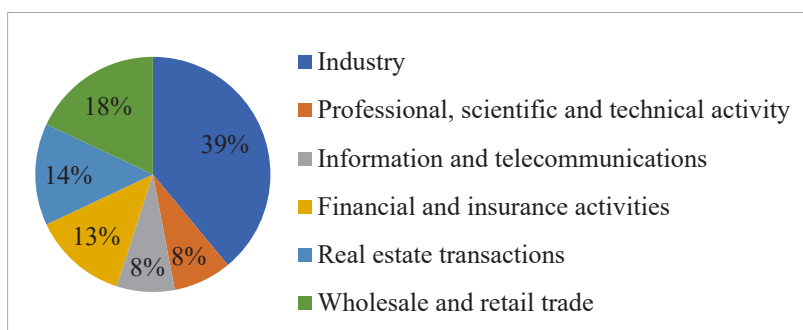


Figure 1. Inflow of investments into sectors of Ukraine for 2021

Source: [17]

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