

CHINESE FOREIGN DIRECT INVESTMENT IN VIETNAM IN THE CONTEXT OF SUSTAINABLE DEVELOPMENT

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Abstract: *This paper analyzes Chinese FDI in Vietnam (2014 - 2024), assessing its effects on growth, environment, and labor. While contributing to industrialization and exports, it also poses sustainability and dependency risks. The study suggests policy directions to enhance benefits and reduce harm. Findings support Vietnam's strategic goals in green and inclusive development.*

• Keywords: *Chinese FDI, sustainable development, private economy,...*

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1. Introduction

Foreign Direct Investment (FDI) is pivotal in Vietnam's economic development, contributing over 23% to total social investment and nearly 70% to export turnover (World Bank, 2024). As a key driver of industrialization, FDI facilitates technology transfer, job creation, and deeper global economic integration.

China has emerged as a strategic partner among foreign investors, ranking third in total FDI with over USD 35 billion invested in the past decade (MPI, 2024). Chinese investment is concentrated in manufacturing, renewable energy, electronics, and infrastructure, with a growing focus on high-tech and green sectors, reflecting a strategic shift from low-value industries to those aligned with sustainable development. However, recent dynamics, including geopolitical tensions, the COVID-19 pandemic, and China's domestic economic reforms, have reshaped Chinese FDI flows. Research by VCCI shows that Chinese enterprises are increasingly embedded in Vietnam's economic fabric, engaging in exported production, intra-FDI supply chains, and local partnerships.

Given this evolving context, this study examines Chinese FDI's economic, social, and environmental impacts in Vietnam during 2014 - 2024. It aims to assess opportunities and challenges, offering policy recommendations to enhance benefits while mitigating sustainability risks. The findings provide a timely foundation for shaping selective FDI attraction strategies that balance growth with environmental and social priorities.

2. Theoretical frameworks

2.1. Foreign direct investment (FDI)

Foreign Direct Investment (FDI) refers to cross-border investment where an investor from one country acquires a lasting interest and significant control (typically at least 10% voting rights) in a business entity located in another country (IMF, 2009). Key international institutions, including the IMF, WTO, and UNCTAD, emphasize the long-term nature and managerial control of FDI as distinguishing characteristics from other capital flows.

In Vietnam, the Investment Law No. 61/2020/QH14 defines foreign investment broadly, encompassing capital contributions, share purchases, or project-based investments by foreign individuals or organizations. Although the law does not explicitly differentiate FDI from other foreign capital forms, it aligns with global standards by recognizing foreign-controlled enterprises as part of the foreign-invested sector.

FDI enterprises in Vietnam may be wholly foreign-owned firms, joint ventures, or domestic firms with significant foreign equity. These entities operate under Vietnamese law but are often influenced by the strategies of multinational corporations or their parent companies.

In essence, FDI involves the transfer of capital and management from a home country to a host country, creating sustained economic relationships and influencing industrial structure, productivity, and integration into global value chains.

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2.2. FDI and sustainable development in the new context

Sustainable development has evolved beyond its traditional three-pillar definition (economic, social, environmental) to encompass broader global challenges such as climate change, inequality, and technological disruption (Sachs, 2015). When aligned with sustainability goals, FDI can contribute positively to infrastructure, technology transfer, and employment generation, especially in developing countries. However, if mismanaged, it can also lead to environmental degradation, social inequality, and overexploitation of resources (UNCTAD, 2024).

The global FDI landscape is shifting due to geopolitical tensions, trade protectionism, and COVID-19-induced supply chain disruptions. Investors increasingly consider environmental, social, and governance (ESG) factors, while recipient countries adopt stricter screening policies. China, for instance, has reoriented its outward FDI strategy toward high-tech, green, and sustainable industries, moving away from traditional heavy industry. Social expectations around transparency, community rights, and equitable benefit-sharing also shape FDI dynamics. Global pressure has compelled host countries to adjust legal frameworks, ensuring that FDI supports inclusive and environmentally responsible development.

In this context, the link between FDI and sustainable development is conditional, not automatic. For Vietnam, as a key recipient of Chinese FDI, a robust policy framework that encourages green investment, ensures transparency, and enforces environmental and labor standards is essential to maximize long-term benefits while mitigating risks.

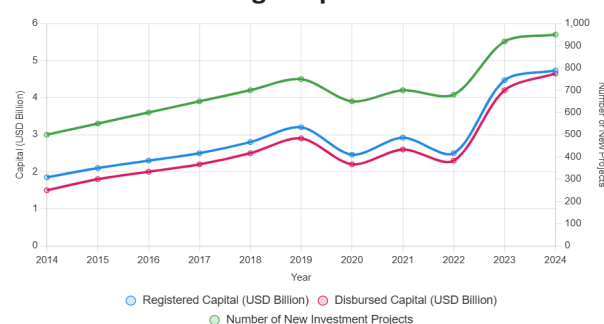
3. Current status of Chinese foreign direct investment (FDI) in Vietnam

In the context of shifting global trade dynamics and post-COVID economic restructuring, Chinese FDI into Vietnam has grown in volume and strategic relevance. Vietnam's geographical location, competitive labor force, and improved investment environment have made it an attractive destination for Chinese investors, particularly amid U.S.-China trade tensions. This capital flow meets production demands and promotes technology transfer and industrial transformation.

Chart 1 shows that, between 2014 and 2024, Chinese FDI flows into Vietnam grew substantially.

In 2024 alone, Vietnam attracted 919 new Chinese-invested projects, totaling USD 4.73 billion, a 3.1% increase from 2023. By Q1 2025, China ranked third among 73 FDI partners, following Singapore and South Korea, with cumulative investment exceeding USD 35 billion. Notable projects include the Vinh Tan 1 Thermal Power Plant, Victory Giant Technology's PCB facility, and Brotex's fiber plant, reflecting a gradual shift from traditional industries to higher-value sectors such as electronics and precision manufacturing.

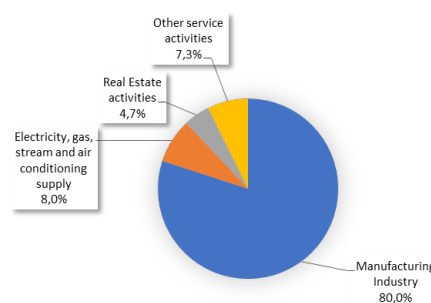
Chart 1. Chinese foreign direct investment (FDI) in Vietnam during the period 2014 - 2024



Source: Compiled by the author from the Ministry of Planning and Investment, General Statistics Office (2024)

Chinese FDI has demonstrated regional concentration, with provinces like Tay Ninh, Bac Giang, and Binh Thuan attracting large capital inflows due to their industrial infrastructure and policy incentives. These provinces alone accounted for over USD 9.6 billion in Chinese FDI as of 2024. Investment also spans 19-21 sectors, with a strong focus on manufacturing and processing (accounting for ~80% of total Chinese FDI projects), particularly in electronics, textiles, and machinery (GSO, 2024).

Chart 2. Sectoral composition of Chinese investment in Vietnam by industry in 2024



Source: Ministry of Planning and Investment, 2024 (now Ministry of Finance)

In recent years, a shift towards renewable energy is evident. Chinese solar, wind, and hydropower investment has grown under frameworks such as the Global Clean Energy Partnership (Y. Dawei &

Weiwei, 2025). Favorable regulatory reforms and national energy strategies have facilitated these flows, supporting Vietnam's low-carbon transition.

Infrastructure development is another focal point. Chinese enterprises have participated in ten industrial parks (over 2,000 hectares) and engaged in public-private transport and seaport development partnerships in provinces like Hai Phong and Quang Ninh. These activities enhance Vietnam's logistics capacity and regional trade integration.

In summary, Chinese FDI into Vietnam is becoming more diversified and strategically aligned with both countries' industrial and energy agendas. While manufacturing remains dominant, emerging renewable energy and infrastructure trends signal a qualitative shift in investment structure, with implications for long-term sustainable development.

4. The impact of Chinese FDI on sustainable development in Vietnam

4.1. Positive impacts

4.1.1. Promoting industrial growth and economic restructuring

Chinese FDI has significantly contributed to Vietnam's industrial expansion and economic restructuring. Manufacturing, electronics, and infrastructure investments have supported the transition from labor-intensive to capital- and technology-intensive industries. According to MPI (2024), Chinese FDI accounts for 18% of total export turnover, substantially contributing to the electronics and mechanical sectors.

In the renewable energy sector, Chinese firms have invested \$1.5-2.3 billion in solar projects from 2020 to 2024, accounting for 10-15% of total FDI in this field (GSO, 2024). Notable projects include Trina Solar's \$420 million plant in Thai Nguyen. According to IRENA (2024), Vietnam's installed solar PV capacity increased from about 16.7 GW in 2020 to 17.1 GW in 2023, with market assessments estimating nearly 17.7 GW by the end of 2024 (Mordor Intelligence, 2025).

Additionally, Chinese FDI contributed 35% of Vietnam's \$2.5 billion solar panel export value in 2024 (UNCTAD, 2024), reduced CO₂ emissions by 18 million tons annually (World Bank, 2024), and created approximately 40,000 jobs. These outcomes directly support Sustainable Development Goals (SDGs) 7 and 13, reflecting the strategic contribution of Chinese investment to green and inclusive growth.

4.1.2. Technology transfer and enhancing production capacity

Chinese FDI has facilitated technology transfer through modern production lines and cooperation in human resources. Firms like Huawei, ZTE, and TCL have introduced technologies that exceed local industry standards and enhance productivity and product quality. According to OECD (2021), technology transfer occurs via intra-firm operations, supply chains, and training mechanisms, all observed in Chinese-invested projects. However, the depth of transfer remains debated.

Notably, Chinese-invested plants in Bac Ninh and Hai Phong have employed domestic engineers and technicians, enabling skill development and exposure to international practices. These linkages, as emphasized by the World Bank (2024), support the growth of the manufacturing sector and enhance Vietnam's export capacity and global competitiveness through improved industrial quality.

4.1.3. Strengthening supply chain linkages

Chinese FDI has promoted the integration of Vietnamese firms into regional and global supply chains, particularly in electronics and textiles. According to GSO (2024), about 35% of domestic enterprises in industrial zones with Chinese investment are second- or third-tier suppliers. Participation in these supply chains has improved quality standards (e.g., ISO 9001 adoption), labor productivity (up 5-7%), and investment in process upgrading (WTO, 2024; GSO, 2024).

4.1.4. Promoting exports

Chinese FDI-led export-oriented production has elevated Vietnam's trade performance. In 2023, Chinese FDI accounted for USD 67 billion in exports, around 18% of the national total (MPI, 2024). Enterprises leveraged FTAs like CPTPP and RCEP, boosting sectors such as textiles and electronics. Each USD 1 billion in electronics exports is estimated to generate 15,000 direct and 25,000 indirect jobs (Dao et al., 2023).

4.1.5. Employment and human resource development

Chinese investment has made a notable contribution to Vietnam's labor market, generating an estimated 320,000 direct jobs as of 2024 (MPI, 2024). These positions are concentrated in provinces such as Bac Giang, Tay Ninh, and Hai

Phong, particularly within the manufacturing, electronics, and machinery industries. Expanding employment opportunities has significantly helped reduce regional unemployment, from 3.2% in 2014 to 2.1% in 2023 (GSO, 2024; World Bank, 2024).

Beyond the quantitative effect, Chinese FDI has also shaped the qualitative dimension of Vietnam's human capital. Enterprises have introduced training programs in machine operation, safety standards, and production management, enhancing productivity and equipping previously unskilled workers with transferable skills (Dao et al., 2023). This dual impact, both in job creation and workforce upskilling, underscores the strategic role of Chinese FDI in promoting human resource development in Vietnam.

4.1.6. Environmental impact and growth quality

Although concerns about environmental standards persist, Chinese FDI is increasingly shifting toward green sectors. In 2022, China accounted for 25% of FDI in Vietnam's renewable energy, especially solar and wind projects in the Central Highlands (GSO, 2024). These investments support the national energy transition and greenhouse gas reduction targets.

In summary, Chinese FDI contributes to Vietnam's sustainable development by enhancing industrial capabilities, enabling technology transfer, strengthening supply chains, and supporting export growth. It also holds potential in green transformation, provided policies align with long-term strategic goals.

4.2. Negative impacts

4.2.1. Environmental impact: Pollution and resource wastage

Chinese FDI has raised major environmental concerns, particularly in resource-intensive and polluting industries like textiles, metallurgy, and chemicals (GSO, 2024; UNCTAD, 2024). These sectors frequently use outdated technologies, consuming 1.3-1.5 times more energy than industry averages (World Bank, 2024). Violations in wastewater disposal and solid waste management are recurrent, with 7.2 million tons of industrial waste annually generated in Chinese-invested zones (GSO, 2024).

This aligns with the Pollution Haven Hypothesis (PHH), which suggests FDI tends to flow to countries with weaker environmental regulation. Chinese-invested factories in Vietnam also consume more water and energy per unit output than Japanese or

Korean equivalents. Inadequate monitoring systems and regulatory enforcement further exacerbate these problems, undermining Vietnam's SDG commitments, especially Goals 6, 7, and 13 (UN, 2023).

4.2.2. Over-reliance on traditional industries

FDI from China remains concentrated in low-value, resource-intensive sectors. In 2023, nearly 72% of total FDI from China was directed to processing and manufacturing (GSO, 2024). This impedes economic diversification and integration into high-value global supply chains. Furthermore, environmental degradation and low technological spillovers burden Vietnam's public health, biodiversity, and long-term competitiveness.

4.2.3. Unfair competition and social impacts

Chinese FDI often benefits from favorable incentives, leading to competitive distortions against domestic SMEs. These firms face capital disadvantages and reduced incentives for innovation. Job quality is also a concern; most positions are low-skilled and underpaid, with only ~9% of workers holding technical or managerial roles, compared to 20-25% in Japanese/Korean FDI (Dao et al., 2023). Moreover, Labor disputes and poor working conditions persist due to cultural clashes, limited training, and a lack of occupational safety standards. Many Chinese firms lack structured upskilling programs or collaboration with vocational institutions, restricting long-term labor development.

4.2.4. Negative impacts on resource management and investment diversification

Vietnam's increasing dependence on Chinese capital, particularly in extractive and labor-intensive sectors, poses risks to resource governance and investment diversification. From 2014 to 2022, 62% of Chinese projects targeted resource-heavy industries. Such concentration heightens exposure to geopolitical risks, including trade tensions and capital flight (UNCTAD, 2024). Moreover, provinces often prioritize quick FDI disbursement over sustainability, distorting investment structure. This undermines long-term development goals, limiting space for high-tech and environmentally responsible industries.

5. Policy recommendations to leverage opportunities and mitigate risks from Chinese FDI in the context of sustainable development in Vietnam

In alignment with Vietnam's Sustainable Development Strategy (2021-2030) and Vision to

2045, a strategic shift in managing Chinese FDI is imperative, moving from passive attraction to proactive governance grounded in sustainability, resilience, and transparency. Six core policy recommendations are proposed:

Firstly, integrating sustainability criteria in FDI appraisal and oversight. Vietnam should revise its investment framework by embedding sustainability indicators, such as energy/resource efficiency, emissions intensity, technology spillover potential, and contribution to skilled employment, into FDI screening and licensing. International experiences (e.g., South Korea, Germany, Chile) demonstrate the effectiveness of applying “green filters” to enhance FDI quality.

Secondly, diversifying investment partners to reduce strategic risk. Vietnam must expand investment cooperation with the EU, the U.S., Japan, and other OECD countries to avoid overdependence on Chinese capital. Partner diversification enhances supply chain resilience, bargaining power, and long-term economic stability.

Thirdly, enhancing local institutional capacity in receiving and supervising FDI. Weak enforcement in environmental and social impact monitoring has allowed regulatory evasion. Thus, Vietnam should: (i) enhance provincial staff training; (ii) mandate environmental audits for high-risk projects; and (iii) improve coordination between investment, environment, and labor agencies.

Fourthly, promoting technology transfer and domestic linkages. Vietnam should condition market access for large Chinese FDI projects on clear commitments to local content, knowledge transfer, and workforce training. Policies should also support domestic firms in upgrading their absorptive capacity to capture spillovers.

Fifthly, advancing green investment standards. Chinese investment should be guided toward clean energy, green infrastructure, and resource-efficient technologies. Licensing should adhere to global standards (ISO 14001, ESG), while policy tools such as tax incentives and green financing can steer capital into sustainable sectors.

Sixthly, institutionalizing bilateral dialogue on sustainable FDI. Vietnam should initiate an institutional dialogue mechanism with China covering transparency, environmental safeguards, grievance redress systems, and a binding Code of Conduct for Chinese investors. Such engagement

fosters trust, predictability, and mutual accountability, while aligning cross-border investment flows with sustainability objectives.

In sum, for Chinese FDI to truly catalyze Vietnam's sustainable development, the country must transcend a “passive attraction” model and adopt a paradigm of “strategic governance,” systematically integrating economic, social, and environmental dimensions to secure long-term resilience and inclusive growth.

6. Conclusion

Chinese FDI has become increasingly significant in Vietnam's development trajectory, contributing to industrialization, employment generation, and technology transfer. However, it also raises complex challenges related to environmental degradation, labor standards, and strategic overdependence. The dual nature of this capital flow necessitates a selective and governance-driven approach. Maximizing the benefits of Chinese FDI requires Vietnam to move from a passive attraction model to an active shaping model anchored in sustainable development principles. This includes integrating ESG standards into investment policy, enhancing local institutional capacity, promoting bilateral dialogue mechanisms, and diversifying investment partners to mitigate geopolitical risks.

Future research should explore the quantitative impacts of Chinese FDI on Vietnam's economic, environmental, and social pillars, particularly at the sectoral and provincial levels, to inform evidence-based, resilient investment policymaking.

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