

Greenfield for Manufacturing, M&A for Services: Sector-Specific FDI Growth Paths

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Abstract. This study examines the distinct impacts of greenfield investment and cross-border mergers and acquisitions (M&A) on host countries' economic growth through case-study approach. Focusing on sectoral differences, it finds that greenfield investment is more effective in manufacturing industries, where it drives capital formation, employment, and technology transfer. In contrast, cross-border M&A better supports service-sector growth by transferring managerial expertise, organizational knowledge, and access to international networks. The case studies also reveal regional patterns: Southeast Asian countries depend heavily on greenfield manufacturing investments, whereas Latin American economies increasingly rely on M&A-service synergies. These findings suggest that FDI strategies should be tailored to national priorities—developing economies focusing on industrialization should attract greenfield investment, while service-oriented and advanced economies should adopt regulatory frameworks to maximize knowledge-intensive M&A benefits.

Keywords: FDI, Greenfield Investment, Cross-border Mergers and Acquisitions, Sectoral Economic Growth

1. Introduction

1.1. Background and context

Foreign direct investment (FDI) plays a leading role in the development of global economies. As the world FDI inflows exceeded 1.4 trillion dollars in 2024, knowledge of how different entry modes have different effects is essential to policymakers and researchers. There are two major ways in which multinational firms can enter a foreign country. The first is called greenfield investment, and the other is through cross-border mergers and acquisitions (M&A). Both modes have different traits and impacts on the host economies. Greenfield investment entails the development of new enterprises, such as the growth of infrastructure and employment. It also requires a huge initial investment and long-term participation. The most conspicuous ones are Samsung Vincentian production, Tesla Gigafactories, and Toyota manufacturing plants in Southeast Asia. Alternatively, cross-border M&A involves the acquisition of ownership of existing companies within a country. The advantage of this entry mode is that it injects a business into the market quickly, develops customer networks, and can exploit local talent immediately. Prominent cases include foreign bank takeovers in Latin America and telecom acquisitions in emerging markets. FDI trends from 2000 to

2022 show that M&A activity dominates during periods of economic growth, comprising 60–70% of total flows. In contrast, greenfield investments have shown more stability during economic downturns, reflecting firms' long-term strategic objectives.

1.2. Literature review

Recent scholarship has increasingly emphasized the importance of distinguishing between different modes of foreign direct investment (FDI) when analyzing their economic impacts, which greenfield investments were found to stimulate economic growth while cross-border mergers and acquisitions (M&A) often crowded out domestic investment [1]. Greenfield investments are particularly effective at enhancing national digital capabilities through direct technology transfer [2]. However, the relationship between FDI modes and economic outcomes is complex that while corruption tends to discourage M&A activity, it may paradoxically encourage greenfield investments in certain regulated sectors [3]. This complexity extends to entrepreneurship that greenfield FDI might actually suppress opportunity-driven entrepreneurship in some contexts [4]. These studies collectively highlight the need for more nuanced analysis of FDI impacts, particularly regarding how different entry modes affect various sectors and institutional environments. The current literature, while valuable, remains limited by its frequent focus on single-country case studies and lack of comprehensive cross-sectoral comparisons. This gap in the research motivates our study's broader examination of how greenfield and M&A investments differentially influence manufacturing versus service sectors across diverse national contexts. Our analysis builds on these existing studies while addressing their limitations through a more comprehensive, multi-country approach that incorporates advanced visualization techniques to reveal previously obscured patterns in FDI effectiveness.

1.3. Research motivation and objectives

Motivation arises from persistent gaps in literature. Many studies treat FDI as a homogenous concept, ignoring entry mode distinctions, which may obscure key policy-relevant insights. Furthermore, most analyses are country-specific and lack comprehensive visualizations that can uncover nuanced patterns. This study explores three critical questions. First, how do greenfield and M&A modes differently influence economic growth, particularly through job creation, technology transfer, and productivity? Second, what policy insights can be drawn to help governments optimize their FDI strategies?

This study contributes by employing comparative case studies to illustrate sectoral and regional differences in FDI impacts. It offers contextualized insights that link academic understanding with practical policy relevance.

2. Theoretical framework

2.1. Mechanisms of greenfield investment

Greenfield investment influences a host country's economic growth through several well-recognized channels, and its impact is particularly strong in manufacturing and resource-intensive industries. The most direct channel is physical capital formation. When multinational corporations build new factories, production plants, or industrial facilities, they expand the host country's capital stock and increase its overall production capacity. This mechanism is most evident in industries such as electronics, automotive manufacturing, textiles, and heavy machinery, where new plants require

significant investments in equipment, assembly lines, and supporting infrastructure. By physically adding to a country's industrial base, these projects not only raise output but also embed modern production technologies within the local economy.

Another important mechanism is employment creation. Greenfield projects tend to generate large numbers of jobs across different skill levels. For example, in electronics or automobile production, a new plant will employ thousands of assembly-line workers while also creating positions for engineers, supervisors, and managers. Beyond direct employment, there are indirect job effects through supplier networks and service industries. Local firms producing components, providing logistics, or supplying raw materials experience increased demand, and local services such as catering, housing, and transportation grow in response to the needs of the new workforce. This multiplier effect is especially strong in labor-intensive manufacturing sectors like textiles, consumer electronics, and food processing. In the long run, technology transfer is perhaps the most critical channel. Greenfield investors often bring advanced production techniques, quality-control systems, and organizational practices that local firms can adopt. This spillover usually occurs when employees trained in foreign-owned plants move to domestic firms or start their own businesses. Industries with complex production processes benefit the most because they require high standards of technical expertise and quality assurance, which foreign investors introduce to the local economy.

2.2. Mechanisms of cross-border M&A

The effects of cross-border M&A work are different and are more pronounced in service-based and knowledge-intensive industries. One key channel is resource optimization, as foreign acquirers often bring better management practices, access to financing, and operational expertise that increase the productivity of existing firms. This is particularly important in banking, insurance, telecommunications, and healthcare services, where efficient management and modern organizational systems are essential.

Another mechanism is resource integration. Foreign buyers often merge their own technologies or organizational capabilities with the acquired firm to create synergies. And the acquisition decisions of domestic firms will affect the predictability of investment conditions in the future [5]. A clear example is a foreign bank acquiring a local financial institution to introduce advanced risk management systems, international banking experience, and connections to global capital markets. These improvements raise the competitiveness of the local service sector. Finally, cross-border M&A expands market access. Acquired companies gain immediate entry to the parent company's global networks, distribution channels, and customer base. This is particularly advantageous in telecommunications, financial services, and retail chains, where brand recognition and international reach are critical. Improved market access often leads to higher exports, greater revenues, and enhanced competition in both domestic and foreign markets. Despite the headline rise in FDI in 2024, global flows remains unbalanced and weak [6]. Therefore, an analysis of the operational mechanisms underlying each type of investment, coupled with relevant case studies, is important to informing more optimal decision-making in the future.

3. Case studies

3.1. Vietnam electronics industry transformation

Vietnam's rise as a global manufacturing hub is closely tied to Samsung's greenfield investment, which began in 2008 and expanded to over \$17 billion, marking one of the largest FDI commitments

in the country's history. Unlike mergers and acquisitions that repurpose existing assets, Samsung built entirely new production complexes, signaling a long-term commitment and the substantial capital outlays typical of greenfield FDI.

The employment effects have been considerable. Samsung directly created more than 160,000 jobs, from assembly-line workers to engineers and managers, while an estimated 400,000 indirect jobs emerged as suppliers and service providers expanded to meet production demands [7]. This multiplier effect shows how greenfield projects stimulate broader economic activity beyond the immediate investment.

There are several sources of induced spillover channels from foreign direct investment [8]. Equally important are the technological spillovers. Samsung developed 51 local suppliers, requiring them to meet international quality standards, effectively upgrading Vietnam's electronics supply chain. Over a decade, the company trained more than 3,000 engineers and technicians, many of whom transferred their expertise to domestic firms or established new ventures, contributing to human capital formation and long-term industrial upgrading.

The impact is evident in trade performance. Vietnam's electrical and electronics exports grew from \$4.2 billion in 2008 to over \$120 billion by 2022, with Samsung responsible for roughly a quarter of this growth. The sector's contribution to GDP growth ranged between 2.1% and 8.7%, illustrating how targeted greenfield FDI can reshape a country's economic structure. Samsung's experience also underscores the institutional effects of large-scale FDI, prompting improvements in infrastructure, regulatory efficiency, and supplier capacity—demonstrating how greenfield investment, when linked to technology transfer and workforce development, can drive structural transformation in emerging economies.

3.2. Brazilian financial sector modernization through M&A

Brazil's experience with foreign acquisitions in the financial sector provides a clear example of how cross-border mergers and acquisitions (M&A) can reshape service industries in developing economies. The country attracted a wave of foreign investment in its banking sector, with major deals such as HSBC's purchase of Banco Bamerindus and Santander's acquisition of Banco Real, along with numerous smaller transactions. Together, these deals amounted to over \$45 billion in foreign investment, marking one of the most significant episodes of financial sector restructuring in Latin America.

The benefits of these acquisitions foreign banks introduced advanced banking technologies and risk management systems that were previously uncommon in the Brazilian market. The adoption of credit scoring systems modernized lending practices, allowing banks to better assess borrowers' creditworthiness and reduce default risks. Similarly, the rollout of electronic payment platforms made financial transactions faster and more secure, promoting efficiency across the sector. The efficiency gains achieved through these improvements were significant. The sector's average cost-to-income ratio fell sharply from 68% in 2000 to 52% in 2020. This decline reflects how foreign acquirers were able to streamline operations, cut costs, and improve resource allocation. Better management practices, combined with the integration of international banking standards, helped optimize processes and make Brazilian banks more competitive both domestically and globally. The social impact of these changes was equally important. Financial inclusion expanded dramatically, with the proportion of adults holding bank accounts increasing from 43% in 2000 to 84% in 2020. Foreign banks played a crucial role in this transformation by offering low-cost banking products targeted at a wider range of customers, including those who had previously been excluded from the formal financial system. This case reveals how cross-border M&A can accelerate service-sector

modernization by transferring not just financial capital, but also organizational knowledge and technical expertise. The Brazilian example highlights how foreign ownership can push domestic markets to adopt international best practices and expand access to financial services. In summary, Brazil's financial sector transformation illustrates the potential of strategic M&A to deliver both economic efficiency and broader developmental benefits.

3.3. Policy and strategy considerations

Countries seeking to strengthen manufacturing industries should prioritize policies that attract greenfield investment because the greenfield FDI substantially enhances growth [9]. Key measures include simplifying industrial project approvals, developing industrial parks with adequate infrastructure, and offering targeted incentives focused on job creation and technology transfer rather than broad tax cuts. Establishing a one-stop investment processing system, improving infrastructure in industrial zones, and providing skills training aligned with foreign investors' needs are critical steps. Vietnam's experience shows that such strategies, when properly implemented, can deliver transformative results. The impacts of these two types of FDI on economic growth may vary across different countries, implying that it is essential to formulate policy recommendations tailored to a country's specific characteristics [10].

For service-oriented economies, particularly advanced ones, policies should carefully manage cross-border M&A to maximize benefits while mitigating risks such as excessive market concentration. Strong competition policies and thorough regulatory reviews are essential to ensure that acquisitions enhance efficiency and innovation rather than reduce competition.

The success of Southeast Asian countries in attracting manufacturing-focused greenfield FDI demonstrates the value of combining labor cost advantages with investments in infrastructure and education. Regional trade agreements can further enhance FDI effectiveness by facilitating the movement of goods and services within integrated markets.

This study faces notable limitations, primarily due to the lack of detailed and consistent data necessary for strict empirical research. The absence of long-term, cross-country, and sector-specific datasets limits the ability to conduct robust econometric analysis and generalize findings. As a result, a case-study approach was adopted to explore mechanisms and contextual differences rather than provide definitive causal evidence. Future research should prioritize building comprehensive datasets, including firm-level production records, technology transfer indicators, and longitudinal FDI flows, to allow more systematic empirical testing and strengthen the external validity of conclusions.

4. Conclusion

This study highlights the divergent impacts of greenfield investment and cross-border M&A on economic growth, with empirical evidence and case analysis revealing distinct sectoral pathways. The findings underscore that greenfield investments, as demonstrated by Samsung's expansion in Vietnam, are particularly effective in driving manufacturing-led growth through capital formation, employment generation, and technology diffusion. In contrast, cross-border M&A—exemplified by foreign bank acquisitions in Brazil—proves more conducive to service-sector development, where knowledge integration and organizational upgrades yield rapid productivity gains.

The cases illustrate how institutional and regional contexts shape FDI outcomes. Vietnam's success with manufacturing FDI reflects the broader trend seen across Southeast Asia, where greenfield projects have spurred industrial clustering. Similarly, Brazil's financial sector

transformation mirrors the service-sector synergies observed in other Latin American economies, where M&A accelerates technology adoption and market sophistication. For policymakers, these findings offer actionable insights. Emerging economies with labor-cost advantages should prioritize greenfield-friendly policies—such as infrastructure development, streamlined regulations, and workforce training—to maximize manufacturing spillovers. Meanwhile, economies transitioning toward service-oriented growth should design regulatory frameworks that facilitate knowledge-intensive M&A, ensuring competitiveness in sectors like finance and technology.

Future research should explore these dynamics in newer industries, such as digital services and green technology, where FDI modes may interact differently with local capabilities. Comparative case studies, particularly across diverse institutional settings, would further refine our understanding of how investment strategies align with developmental goals.

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