



Confederation of Indian Industry

Report
on
India's Outward Foreign
Direct Investment

*Trends, Direction and Way Forward with
Policy Suggestions*

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&
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Table of Contents

Executive Summary	12
1. Introduction	16
1.1 Introduction	16
1.2 Research Questions and Objectives	18
1.3 Data and Methodology	18
1.4 Key Findings	20
1.5 Contribution and Novelty	23
2. Analysing Trends and Structural Patterns in Outward FDI	26
2.1 Introduction	26
2.2 Global Trends of OFDI	27
2.3 India's Outward FDI: Sectoral and Destination-wise Insights	33
3. Firm-Level Strategies and Typologies in India's Outward FDI: Patterns by Investment Scale, Sector, and Destination	23
3.1 Introduction	53
3.2 Data and Methodology	55
3.3 Which Firms Drive India's OFDI? Patterns of Concentration and Scale	56
3.4 Evolution of India's Top OFDI Firms: Sectoral Shifts Over Time	58
3.5 How Do Firms Differ by Investment Scale? Strategy & Structure in 2023	61
3.6. Sectoral clustering and firms' investment networks	70
4. Sectoral Matching: How Competitive is India's OFDI in Key Markets?	79
4.1 Introduction	79
4.2 Data	80
4.3 Methodology: Sectoral Matching and Strategic Alignment Assessment	81
4.4. India's OFDI with Partner Countries' Inward FDI	83
5. Determinants of India's Outward FDI	102
5.1 Introduction	102
5.2 Literature Review	103
5.3 Empirical Model	106
5.4 Findings from ARDL estimation	108
5.5 Conclusion and Policy Implications	110
6. Aligning India's OFDI with Free Trade Agreements (FTAs)	112
6.1 Introduction	112
6.2 Singapore	113
6.3 Mauritius	116



6.4	United States of America	117
6.5	Switzerland	119
6.6	Japan	120
6.7	United Kingdom	112
6.8	Australia	124
7.	Conclusion and Policy Recommendations	126
7.1	Conclusion	126
7.2	Policy Recommendations for Strengthening India's OFDI	128
	REFERENCES	133

List of Figures

- Figure 2.1: Global OFDI Trends: Aggregate Flows (2007–2023)
- Figure 2.2: Annual Inward FDI and percentage contribution to global total (2007–2023)
- Figure 2.3: Outward FDI by economy and percentage contribution to global total (2007–2023)
- Figure 2.4: Regional Share of OFDI – Comparing 2007–2009 and 2021–2023
- Figure 2.5: OFDI Patterns in Major Developing Economies (2007–2023)
- Figure 2.6: India’s FDI Inflows and Outflows (2007–2023), USD Billion
- Figure 2.7: India’s FDI Inflows and Outflows as a Percentage of GDP (2007–2023)
- Figure 2.8: India’s Share in Global and Developing Economy OFDI (%), 2007–2023
- Figure 2.9: Share of Financial Commitment, Loans, and Guarantees in India’s OFDI (2007-2024)
- Figure 2.10. India’s TOP OFDI Destinations – 2007 to 2023
- Figure 2.11: Top 30 Host Economies of India’s OFDI, 2007–2023 (Cumulative Shares)
- Figure 2.12: Percentage share of Joint Ventures and Wholly Owned Subsidiaries in Total OFDI, 2007-2023
- Figure 2.13: Sectoral and Geographic distribution of Wholly Owned subsidiary- ODI from India
- Figure 2.14: Sectoral and Geographic distribution of Joint Venture ODI from India
- Figure 3.1: Firm-Level Concentration in India’s OFDI (2007–2023)
- Figure 3.2: Top 10 firms by Total OFDI (2007-2023)
- Figure 3.3: Phases of India’s OFDI: Sectoral Dominance and Lead Firms (2007–2023)
- Figure 3.4: Top Indian Outward Investing Firms by Period (2007–2023)
- Figure 3.5: Scatter Plot of Indian Firms’ OFDI Investments –indicative 2023
- Figure 3.6: Distribution of Firms and Investment Value Across OFDI Brackets (2023)
- Figure 3.7: Cluster Graph: OFDI Network – 2008
- Figure 3.8: Cluster Graph: India’s OFDI Network – 2015
- Figure 3.9 Cluster Graph: India’s OFDI Network – 2023
- Figure 4.1. Strategic Quadrant — Singapore
- Figure 4.2. Strategic Quadrant-United States of America
- Figure 4.3 Strategic Quadrant — United Kingdom
- Figure 4.4 Strategic Quadrant — Mauritius
- Figure 4.5. Strategic Quadrant — Netherlands
- Figure 4.6. Strategic Quadrant — Switzerland
- Figure 4.7. Strategic Quadrant — Australia
- Figure 4.8. Strategic Quadrant — Japan



List of Tables

- Table 2.1: India's FDI Inflows and Outflows—Annual Values and Growth Rates (2007–2023)
- Table 2.2: Sectoral Composition of India's Outward FDI (2007–2023)
- Table 2.3: India's Top OFDI Destinations – Regional analysis
- Table 3.1: Annual Outward Foreign Direct Investment (OFDI) by Indian Firms: 2007–2024
- Table 3.2: Sectoral Shifts in India's OFDI Leaders: 2007–2023
- Table 3.3: Top Firms in the 0–1 million US \$ Investment Range (2023)
- Table 3.4: Top Firms in the 1–10 million US \$ Investment Range (2023)
- Table 3.5: Typology of Indian OFDI Firms in the 10–100 million USD Bracket (2023)
- Table 3.6: Top Firms in the 100–500 million US \$ Investment Range (2023)
- Table 3.7: Top firms in the 500-1000 million
- Table 3.8: Network Structure Shifts: 2008 to 2023
- Table 4.1: Sectoral Alignment Quadrant Framework
- Table 5.1: Summary of Key Long-Run Determinants of OFDI by Sector (ARDL Estimates)
- Table 6.1: Foreign Direct Investment in Singapore by Source Economy and Major Industry (Stock As At Year-End), Annual Values in Millions of Singapore dollars
- Table 6.2: Inward Foreign Direct Investment in Mauritius: Country-Wise Trends (Value in Rs Million)
- Table 6.3: Foreign Direct Investment in the USA by Source Economy and Major Industry, 2023 (Values in Millions of US Dollars)
- Table 6.4: Inward Foreign Direct Investment in Switzerland: Country-Wise Trends (Values in USD Million)
- Table 6.5: Foreign Direct Investment in Japan by Source Economy and Major Industry in 2023 (Value in 100 Million Yen)
- Table 6.6: Foreign Direct Investment in the United Kingdom by Source Economy and Major Industry (Stock As At Year-End), Annual (All Values in £ million)
- Table 6.7: Inward Foreign Direct Investment in Australia: Country-Wise Trends (All Values in Australian \$ Billion)

List of Appendices

- Appendix 3A: Methodology: Network-Based Sectoral Clustering of OFDI Firms
- Appendix 3B: Lorenz Curve Analysis of India's OFDI by Firm Size
- Appendix 4A: Methodology for Sectoral Matching and Structural Similarity Analysis
- Appendix 4B: Country-Specific Tables
 - Appendix 4B.1: USA FDI Inwards
 - Appendix 4B.2: UK FDI Inwards
 - Appendix 4B.3: Singapore FDI Inwards
 - Appendix 4B.4: Japan FDI Inwards
 - Appendix 4B.5: Australia FDI Inwards
 - Appendix 4B.6: Netherlands FDI Inwards
 - Appendix 4B.7: Switzerland FDI Inwards
 - Appendix 4B.8: Mauritius FDI Inwards
- Appendix 5A.1: Variables, Measurement, and Data Sources (Determinants)
- Appendix 5A.2: ARDL estimation framework and Error correction specification
- Appendix 5A.3: Unit Root Test Results (ADF)
- Appendix 5A.4: ARDL Bounds Test for cointegration
- Appendix 5A.5: Long Run Coefficient Estimates of Aggregate OFDI
- Appendix 5A.6: Long Run Coefficient Estimates of Manufacturing OFDI
- Appendix 5A.7: Long Run Coefficient Estimates of Services OFDI

List of Boxes

- BOX 1: Methodology & key findings of India's OFDI Study (2007-2023)
- BOX 2: India's OFDI Policy Framework and Regulatory Changes (2010–2025)
- BOX 3: FDI Inflow
- BOX 4: FDI outflow (OFDI)
- BOX 5: Key Sectoral Insights from India's OFDI (2007–2023)
- BOX 6: Key takeaways – WOS
- BOX 7: Key takeaways – JVs
- BOX 8: Chapter 2 Summary: Key Questions and Core Findings
- BOX.9: Key Takeaways-OFDI Networks
- BOX 10: Chapter 3-Summary: Key questions and core findings
- BOX 11: Key Takeaways- Singapore
- BOX 12: Key Takeaways- United States
- BOX 13: Key Takeaways- United Kingdom
- BOX 14: Key Takeaways- Mauritius
- BOX 15: Key Takeaways- Netherlands
- BOX 16: Key Takeaways- Switzerland
- BOX 17: Key Takeaways- Australia
- BOX 18: Key Takeaways- Japan

List of Abbreviations

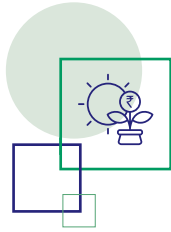
ADIA	Abu Dhabi Investment Authority
ARDL	Autoregressive Distributed Lag
ASEAN	Association of Southeast Asian Nations
BOP	Balance of Payments
BRI	Belt and Road Initiative
COVID-19	Coronavirus Disease 2019
FDI	Foreign Direct Investment
FEMA	Foreign Exchange Management Act
FIRMS	Foreign Investment Reporting and Management System
FTA	Free Trade Agreement
GAIL	Gas Authority of India Limited
GDP	Gross Domestic Product
GFC	Global Financial Crisis
GVC	Global Value Chain
IMF	International Monetary Fund
IOCL	Indian Oil Corporation Limited
JSW	Jindal South West Steel
JV	Joint Venture
LRS	Liberalised Remittance Scheme
M&A	Mergers and Acquisitions
MNE	Multinational Enterprise
OECD	Organisation for Economic Co-operation and Development
OFDI	Outward Foreign Direct Investment
ONGC	Oil and Natural Gas Corporation
OYO	Own Your Own
R&D	Research and Development
RBI	Reserve Bank of India
RTA	Regional Trade Agreement
SPV	Special Purpose Vehicle
SWF	Sovereign Wealth Fund
UNCTAD	United Nations Conference on Trade and Development
USD	United States Dollar
VC	Venture Capital
WOS	Wholly Owned Subsidiary
WTO	World Trade Organization





Executive Summary

Outward Foreign Direct Investment (OFDI) plays an increasingly important role in enabling countries to integrate with global value chains, secure access to strategic assets, and enhance the competitiveness of domestic enterprises. For India, OFDI has become a relevant component of its economic engagement with the world, particularly as Indian firms seek to expand their presence in overseas markets through acquisitions, joint ventures, and greenfield projects. With structural shifts in global trade, supply chains, and investment patterns, India needs to assess how its firms are investing abroad, which sectors and geographies they are targeting, and how national policy frameworks and business strategies can better support outward investment as part of India's broader growth and competitiveness strategy.



This report aims to provide a clear and evidence-based understanding of India's OFDI landscape, focusing on how Indian firms are participating in global markets and what factors are shaping their investment strategies. The study is motivated by the need to better align India's OFDI patterns with its economic goals, improve sectoral competitiveness, and strengthen the role of policy in enabling outward investments. It addresses five core objectives: (1) to examine the evolution of India's OFDI in terms of scale, sectoral distribution, and geographical spread; (2) to analyse the strategies adopted by Indian firms based on investment size, sector, and international diversification; (3) to assess how well India's OFDI aligns with the sectoral priorities of key host countries, and where investment gaps or over-concentrations exist; (4) to identify the macroeconomic, financial, and institutional factors influencing OFDI, including access to credit, exchange rate trends, and innovation capacity; and (5) to evaluate the relationship between India's OFDI flows and its bilateral and regional trade agreements, and identify ways to improve coherence between trade and investment policy.

This report is based on a multi-layered analytical approach combining firm-level data analysis, sectoral benchmarking, macroeconomic evaluation, and trade policy review. It uses data published by the Reserve Bank of India (RBI) covering India's OFDI from 2007 to 2023, enabling a long-term view of outbound investment trends by sector, destination, and scale. This approach provides a structured, evidence-based understanding of India's OFDI landscape and its evolving strategic direction.

India's OFDI has grown in scale, with cumulative outflows exceeding USD 209 billion between 2007 and 2023. However, annual flows remain modest relative to global peers and are marked by volatility, ranging between USD 5–13 billion per year. Outflows are concentrated in a limited set of countries—primarily Singapore, Mauritius, the Netherlands, the United States, and the United Kingdom. Sectorally, financial and business services continue to dominate, while manufacturing investments, despite growth in segments like pharmaceuticals and automobiles, have not yet reached sufficient scale or diversification.

The profile of Indian investors reveals a high degree of concentration. A small group of large conglomerates account for the majority of outward investment and operates across multiple sectors and countries. In contrast, mid-sized firms are emerging as important contributors, particularly in newer sectors, but face systemic constraints such as limited access to finance, weak risk-sharing mechanisms, and policy uncertainty. Smaller firms, though more numerous, are largely engaged in low-value or early-stage international activity. As a result, OFDI remains driven by firm-level scale, strategy, and capability rather than being broadly distributed across the enterprise base.



The analysis also indicates a gradual shift in the nature of India's outward investments. Indian firms are moving away from isolated transactions toward more integrated, ecosystem-based global strategies that connect finance, logistics, manufacturing, and digital services. However, this transition is uneven. While there is better alignment between India's OFDI and host-country priorities in service-oriented markets like Singapore, the U.S., and the U.K., Indian investment is underrepresented in key sectors such as advanced manufacturing, clean energy, and technology in countries like Japan, Australia, and Switzerland.

Sector-specific drivers also differ. Manufacturing-led OFDI is influenced by credit availability, trade openness, and foreign exchange reserves, while services-led investment is more responsive to income growth, innovation capacity, and financial sector development. Exchange rate stability and institutional quality are enabling factors across both categories. This suggests that India's outward investment is increasingly led by firms with innovation capacity and global operational readiness, rather than those relying primarily on cost advantages.

The study further finds that India's trade agreements provide formal market access but are underutilised, especially in terms of commercial presence (Mode 3) provisions in services. The lack of a free trade agreement (FTA) with the United States remains a notable limitation. More broadly, the findings point to a need for improved coordination between trade policy, investment incentives, and sectoral support strategies to ensure that Indian firms can effectively leverage negotiated access in overseas markets.

The findings of this study highlight both the growing potential and persistent structural limitations in India's OFDI landscape. While large firms are expanding their global presence, smaller and mid-sized firms face distinct barriers to scaling. Sectoral misalignments, underutilisation of trade agreements, and limited institutional support further constrain India's ability to fully leverage OFDI as a strategic economic tool. To address these gaps and strengthen India's role as a capital-exporting

economy, the report proposes four policy directions:

1. Formulate a National Strategy for Outward Investment

There is a need for a clear, coordinated strategy to guide India's global investment ambitions. This includes identifying priority regions and sectors—particularly in emerging areas such as clean energy, healthcare, and digital services—and supporting long-term, capability-building investments. A national roadmap should be developed to align India's OFDI with both global opportunities and domestic strengths.

2. Establish a Single-Window Outward Investment Facilitation Platform

Many mid-sized and first-time investors face high transaction costs and fragmented guidance. A dedicated digital platform should be created to consolidate regulatory information, approval procedures, market intelligence, and compliance support. This would simplify access to overseas markets and enhance investor preparedness through advisory services, mentoring, and tailored sectoral insights.

3. Adopt a Tiered Policy Framework Based on Firm Size and Investment Scale

Indian firms differ widely in their capacity to invest abroad. A differentiated support approach is needed: large firms may require high-level diplomatic and financial facilitation, while mid-cap firms benefit more from targeted advisory, co-financing, and risk mitigation tools. Smaller firms and experimental investors need soft-landing mechanisms, simplified compliance, and co-funded feasibility support to lower entry barriers.

4. Align OFDI Policy with Trade Agreements and Sectoral Access

India's FTAs offer untapped potential for facilitating outward investment, particularly in services such as Information and communication

tools (ICT), finance, and professional advisory. However, OFDI gains from FTAs remain unrealised due to limited policy coordination and suboptimal sectoral access compared to competing countries.

To address this, greater integration is required between trade and investment policies—both during the negotiation of FTAs and their implementation. This includes embedding investment protection provisions directly within FTAs, rather than treating them as standalone agreements, and actively negotiating stronger commitments in sectors aligned with India's OFDI strengths. Maintaining competitive parity with peer economies in key partner markets is also essential.

To complement these policy-level interventions, firms must adopt strategic actions that leverage FTA-linked access:

- ⊙ **Use Joint Ventures and Co-Investment Platforms:** Indian firms, particularly in regulated sectors such as healthcare, fintech, or telecom, should form joint ventures with local partners in FTA markets. These partnerships can help navigate local compliance, reduce entry costs, and anchor

operations in line with sectoral openings provided under FTAs.

- ⊙ **Target Value Chain Niches in FTA-Aligned Sectors:** Firms should focus on select positions within global value chains—particularly in sectors where India has negotiated improved market access through FTAs (e.g., digital services in Australia under India- Australia Economic Cooperation and Trade Agreement(ECTA)). Mapping these opportunities against FTA schedules enables firms to better align investment strategies with negotiated sectoral advantages.

By embedding such firm-level strategies alongside trade policy reforms, India can more effectively operationalise its FTAs as platforms for outbound investment growth.

Together, these recommendations provide a practical framework for improving the scale, quality, and strategic alignment of India's OFDI. They are aimed at expanding the base of globally capable firms, improving sectoral competitiveness, and ensuring that institutional mechanisms are equipped to support India's next phase of outward investment.





Chapter

01

Introduction

1.1. Introduction

Over the past two decades, OFDI has become an increasingly significant component of global economic integration. As multinational production networks expand and firms seek access to markets, technology, and strategic assets, OFDI has emerged as an important channel through which countries participate in international value chains and reshape their competitive position. Many emerging economies—particularly in Asia and Latin America—have experienced a marked rise in outward investment as their firms internationalise operations, diversify production locations, and respond to shifts in the global trade and investment landscape.



India's engagement with global OFDI has evolved within this broader context. Since the mid-2000s, successive phases of domestic liberalisation, financial deepening, and regulatory refinement have enabled Indian enterprises across manufacturing and services to explore overseas opportunities. Indian firms have invested abroad for a variety of reasons, including market expansion, resource access, technology acquisition, and the need to integrate with global production and innovation ecosystems. The expansion of India's economic ties—through trade agreements, sectoral cooperation frameworks, and participation in global value chains—has also created new channels through which outward investment can complement the country's external economic strategy.

Within this broader global context, India's outward OFDI has expanded over the past two decades but remains modest in scale and uneven in structure relative to the size of the Indian economy and its growing role in global trade. Between 2007 and 2023, India's OFDI averaged USD 5–13 billion annually, with cumulative flows of about USD 209 billion, accounting for less than 1.5 per cent of global OFDI in most years. When measured relative to economic size, India's outward investment effort remains limited, with OFDI consistently below 0.5 per cent of Gross Domestic Product (GDP), a level well below that observed in several peer emerging economies.

At the same time, the global environment in which India's OFDI is taking shape has undergone significant shifts. Geopolitical fragmentation, pandemic-induced supply-chain restructuring, and the reconfiguration of investment flows among major economies have altered the patterns, destinations, and motivations of cross-border investment. Emerging regulatory trends—such as investment screening, digital economy rules, and sustainability-driven capital allocation—are further influencing how countries and firms position themselves in international markets. These developments underscore the importance of understanding how India's outward investment is evolving, which sectors and destinations are gaining significance, and how domestic capabilities interact with global opportunities and constraints.

Against this backdrop, this report undertakes a systematic examination of India's OFDI with the objective of providing a comprehensive, evidence-based assessment relevant for both policymakers and industry stakeholders. The study analyses the evolution of India's OFDI in terms of scale, sectoral composition, and destination patterns, and examines how these have changed over time. It further investigates firm-level OFDI strategies, focusing on differences across investment size, sectoral specialisation, and clustering behaviour.



In addition, the report assesses the alignment between India's OFDI and host-country sectoral priorities across key partner economies, identifying areas of convergence, over-concentration, and missed opportunities relative to major global peers. To understand the drivers shaping these patterns, the study examines the macroeconomic, financial, and institutional determinants of India's outward investment. Finally, it evaluates the extent to which India's OFDI is aligned with its bilateral and Regional Trade Agreements (RTAs) and identifies policy gaps and reforms needed to improve coherence between trade, investment, and regulatory frameworks in supporting India's outward investment strategy.

1.2 Research Questions and Objectives

This report seeks to provide industry and policymakers with a comprehensive picture of India's OFDI, highlighting both opportunities and challenges. Specifically, it examines:

- i) **Patterns and Trends** – How have India's OFDI flows evolved in terms of scale, sectoral distribution, and destination markets over the past decade?
- ii) **Firm-Level Strategies** – How do Indian firms engage in OFDI, and what patterns emerge when their investments are examined across different brackets of size, specialisation, and sectoral clusters?
- iii) **Alignment & Market Priorities** – How well does India's OFDI match host-country sector priorities across key destinations—relative to major partners—and where should India scale up, rebalance, or enter next?
- iv) **Determinants** – What macroeconomic, financial, and institutional factors in the home country enable OFDI at the aggregate and sectoral level?
- v) **Policy Alignment** – How well are India's OFDI flows aligned with its bilateral and RTAs, and what reforms are needed to improve coherence between trade and investment policy?

The overall objective is to identify sectoral opportunities, market priorities, and policy reforms that can strengthen India's position as a global capital exporter and enhance the competitiveness of Indian firms abroad.

1.3. Data & Methodology

Data

The primary dataset is drawn from the RBI, which publishes firm-level monthly data on India's OFDI. For the purpose of this study, the data have been aggregated annually for the period 2007–2023, enabling a longitudinal assessment of India's OFDI flows by sector, destination, and investment scale.

In Chapter 2, the analysis relies on the same RBI firm-level outward FDI dataset, aggregated annually for the period 2007–2023. The data are used to construct aggregate trends, sectoral composition, destination-wise distribution, ownership structures (Wholly Owned Subsidiary (WOS) and Joint Ventures (JV)), and the composition of financial instruments (equity, loans, and guarantees), while global and regional comparative data are drawn from the United Nations Conference on Trade and Development (UNCTAD)-FDI database.

In Chapter 3, firm-level investments are classified into five size brackets: 0–1 million USD, 1–10 million USD, 10–100 million USD, 100–500 million USD, and 500–1000 million USD. This segmentation allows for comparative analysis across scales of investment and firm behaviour.

In Chapter 4, the sectoral orientation of India's OFDI is benchmarked against the inward FDI profiles of eight major host economies—Singapore, the United States, the United Kingdom, the Netherlands, Switzerland, Australia, Japan, and Mauritius. Sectoral shares are computed based on a uniform nine-sector concordance, using average OFDI data from 2019 to 2023. Host-country inward FDI sectoral shares were obtained from national investment promotion agencies or official FDI statistics portals.

For Chapter 5, annual aggregate OFDI data across the total, manufacturing, and services sectors (2007–2023) are also sourced from the RBI. Additional macroeconomic and financial variables—such as GDP per capita, exchange rate, trade openness, financial depth indicators, R&D spending, patent filings, and institutional quality—are drawn from databases of the World Bank, International Monetary Fund (IMF), and the KOF Globalisation Index¹.

In Chapter 6, the analysis focuses on India's FTAs with the same eight host economies listed above and of the host economies with India's main competitors in their markets for FDI. Sector-wise Mode 3 (commercial presence) commitments under each FTA were collected from the official services schedules of the agreements. Comparative data on FTA commitments extended by the host economies to India's competitor countries were also extracted from the World Trade Organisation (WTO) RTA database and national trade ministry resources, where available.

Methodology

This study adopts a multi-layered methodological framework to analyse the structure, drivers, and strategic orientation of India's OFDI. It integrates firm-level data analysis, econometric modelling, sectoral clustering, and policy benchmarking to provide a comprehensive understanding of India's evolving OFDI landscape.

In Chapter 2, a descriptive and comparative analytical framework is adopted to examine the evolution of India's outward FDI between 2007 and 2023. The analysis employs time-series trend examination, sectoral and destination-wise mapping, ownership-structure assessment, and global benchmarking to situate India's OFDI within broader international and developing-economy investment patterns.

In Chapter 3, the methodology follows a three-layered approach to analyse firm-level OFDI behaviour. First, using RBI data (2007–2023), firms with annual outward investment above USD 100 million are identified to track sectoral leadership and investment concentration over time. Second, the 2023 dataset is segmented

by investment brackets (0–1M, 1–10M, 10–100M, etc.), and firms are classified by country diversification, sectoral spread, and internationalisation strategy (e.g., experimental, incremental, globalising) to capture strategic variations by scale. Third, a network-based Louvain clustering algorithm is applied, treating firms as nodes in an investment similarity network based on sectoral co-investment patterns. This reveals the emergence of sectoral and cross-sectoral clusters—such as finance, retail, and hybrid ecosystems like fintech-logistics—offering insights into the evolving structure and strategic alignment of India's globalising firms.

In Chapter 4, the alignment between India's OFDI sectoral composition and host country sectoral priorities is assessed using a quadrant-based mapping framework. Based on predefined thresholds (Host $\geq 10\%$, India $\geq 5\%$), sectors are categorised into: Quadrant I (Aligned), Quadrant II (Over-weighted), Quadrant III (Marginal) and Quadrant IV (Missed Opportunity)

Two indices used to measure structural similarity are the Overlap Index (measuring sectoral presence common to both India and the host) and the Cosine Similarity Index (measuring the angle of divergence in sectoral profiles). Output matrices, quadrant charts, and summary tables allow visual and quantitative identification of alignment or misalignment across host economies.

In Chapter 5, the determinants of OFDI are examined using the Autoregressive Distributed Lag (ARDL) model, a time-series econometric approach well-suited to small samples and variables integrated of mixed orders [I(0) and I(1)]. Separate models are estimated for total OFDI, manufacturing OFDI and services OFDI. Key explanatory variables include: GDP per capita, exchange rate, trade openness, capital account openness, current account balance, credit to the private sector, stock market capitalisation, Research and Development (R&D) expenditure, patent applications, foreign exchange reserves, and regulatory quality. The ARDL bounds testing approach is used to confirm the existence of long-run cointegrating relationships.

¹ The KOF Globalisation Index (KOF Swiss Economic Institute, ETH Zurich) is a composite indicator capturing economic, social, and political globalization through de facto flows and de jure policy measures (Gygli et.al 2019) for details.



In Chapter 6, the analysis assesses the alignment between India's OFDI flows and its access under bilateral and regional FTAs. India's sectoral OFDI presence is benchmarked against the Mode 3 (commercial presence) commitments made by host countries. To evaluate relative treatment, these commitments are compared with those extended to competitor countries under the same FTAs. This assessment helps determine whether India's access has been equitable or less favourable. Where competitor countries have received more liberal access, this is identified as one of the potential explanatory factors for differential OFDI outcomes. The analysis provides critical policy insight into how FTA design and negotiation outcomes may influence India's investment performance and where corrective steps could enhance future FDI competitiveness.

By integrating micro-level firm analysis, macro-level econometrics, and FTA policy benchmarking, this methodology produces insights that are both analytically robust and actionable. The findings offer direction for policy reforms, sectoral investment strategies, and future FTA negotiations that can strengthen India's position as a competitive global investor.

1.4. Key Findings

This study provides the most updated and comprehensive assessment of India's OFDI between 2007-2023. The findings highlight both opportunities and structural gaps in India's global investment footprint.

Findings from Trends and Patterns of India's OFDI

- ⊙ Between 2007 and 2023, India's cumulative OFDI amounted to USD 209.48 billion, reflecting a growing internationalisation of Indian enterprises.
- ⊙ India's OFDI remained modest, averaging USD 5–13 billion annually.
- ⊙ Outflows were highly volatile, with sharp contractions in 2013 (–80%) and repeated post-crisis fluctuations.

- ⊙ Services are dominated, especially IT/ITES, financial, and business services.
- ⊙ Manufacturing showed episodic spikes (pharma, auto, metals), but lacked sustained momentum.
- ⊙ Over 60% of cumulative flows went to five countries: Singapore, Mauritius, the Netherlands, the U.S., and the U.K.
- ⊙ Wholly Owned Subsidiaries (WOS) remained the dominant structure, though Joint Ventures (JVs) grew in recent years.
- ⊙ Guarantees became the main financial instrument, especially in periods of volatility, while equity commitments declined.

Firm-Level internationalisation & Clustering (2022–2024)

- ⊙ India's OFDI is services-led, anchored in finance/business services with selective tradables (manufacturing, trade/logistics), and is concentrated in a few hubs (USA, Singapore, Netherlands, UK).
- ⊙ A small cohort of large investors contributes most of the value, while many firms make low-ticket, exploratory investments; mid-caps (USD 10–100M) are emerging as the main incremental engine.
- ⊙ Firms are shifting from single-sector bets to multi-sector platform plays, expanding into adjacent value chains and using JVs/Mergers and Acquisitions (M&A) to accelerate entry and learning.
- ⊙ Core clusters remain finance/business services, manufacturing, and wholesale/retail, with pharmaceuticals rising in prominence; construction and community services recede toward the periphery.
- ⊙ The firm network is moving from siloed clusters to more connected ecosystems (2022-2024), signalling a maturing OFDI base with stronger cross-sector linkages.

Global Benchmarking & Matching

- ⊙ India's OFDI is anchored in finance and business services; alignment is strongest

where this is paired with a tradables pillar (manufacturing or trade/logistics)—seen most clearly in the USA and Singapore.

- ⊙ India's footprint is concentrated in a few hubs (USA, Singapore, Netherlands, UK) and uneven in Australia, Japan, Mauritius, and Switzerland—signalling scope to deepen in host-priority sectors rather than add more destinations.
- ⊙ Host-specific gaps are actionable: critical minerals (Australia); trade/logistics (Netherlands); advanced manufacturing niches (Japan); tourism/real assets & agro-processing (Mauritius); and focus within financial/professional-services and selected high-tech (Switzerland).
- ⊙ India carries path-dependent over-weights in sectors that many hosts de-prioritise (e.g., transport, utilities, community services), which dilutes structural fit even when headline flows look healthy.
- ⊙ The firm base is broad, but capital is concentrated: a small cohort of large investors drives the majority of OFDI, while thousands of smaller firms make low-value, exploratory plays—underscoring the need to scale mid-caps and de-risk larger, ecosystem-anchored projects.

Determinants of OFDI

- ⊙ Positive drivers: GDP growth, credit availability, and R&D expenditure significantly encourage outward flows.






- ⊙ Constraints: Exchange rate volatility and poor institutional quality remain key barriers to sustainable expansion.

Policy Alignment with FTAs

- ⊙ Overall, India is not at a significant competitive disadvantage in its major OFDI destination markets, with market access conditions broadly comparable to those offered to key competitors, indicating that India's outward investment has not been constrained by lower access.
- ⊙ However, India has not fully capitalised on the opportunities created through existing trade agreements, indicating a gap between negotiated access and actual utilisation.
- ⊙ India faces some selective disadvantages in key markets where competitor countries have secured more liberal market access, such as financial & ICT services in Singapore, retail in Mauritius, resulting in relatively tighter conditions for Indian investors.
- ⊙ While many restrictions apply to India in sectors like insurance and banking in Switzerland and health and social services in Japan, they are broadly consistent with treatment offered to other partners in these sectors.
- ⊙ For the US, the 2005 WTO Revised Offer provides a highly liberal and comprehensive benchmark that India can refer to while negotiating with the US.



BOX 1: Methodology & key findings of India's OFDI Study (2007-2023)

METHOD	FINDINGS
<p>Trends and Patterns</p> 	<ul style="list-style-type: none"> India's OFDI modest and highly volatile (USD 5–13 bn annually; <0.5% of GDP) Persistent net capital importer; global OFDI share below 1.5% Strong concentration in services (IT, finance, business services); episodic manufacturing spikes Geographic concentration in Singapore, Mauritius, Netherlands, U.S., and U.K. WOS dominate; rising reliance on guarantees over equity Developing economies (especially Asia) gaining global OFDI share, but developed economies still lead
<p>Firm-Level Clustering</p> 	<ul style="list-style-type: none"> High concentration: <5% of firms account for the majority of OFDI value Mid-sized firms (USD 10–100m) emerging as the primary scaling cohort Small firms numerous but low-value, exploratory investors Shift from single-sector investments to multi-sector and ecosystem-based strategies Core clusters: finance & business services, manufacturing (incl. pharma), and wholesale/retail Increasing cross-sector linkages (fintech–logistics–services) indicating maturing global networks
<p>Global Benchmarking & Matching</p> 	<ul style="list-style-type: none"> Strong alignment in finance & business services in USA and Singapore Structural over-concentration in financial services limited sectoral diversification Underrepresentation in advanced manufacturing, clean energy, and high-technology sectors (Japan, Australia, Switzerland) Trade/logistics gap in Netherlands; critical minerals opportunity in Australia Moderate cosine similarity in major hubs; weak structural overlap in select partners Need to shift from hub-based OFDI to sector-linked, ecosystem-anchored investment strategies
<p>Determinants of OFDI</p> 	<ul style="list-style-type: none"> Long-run cointegration confirmed between OFDI and macro-financial variables Positive drivers: GDP per capita growth, credit to private sector, R&D expenditure, and foreign exchange reserves Manufacturing OFDI more responsive to trade openness and exchange rate movements Services OFDI more sensitive to innovation capacity and financial depth Exchange rate volatility negatively affects OFDI stability Institutional quality and regulatory strength act as enabling structural factors
<p>Policy Alignment with FTAS</p> 	<ul style="list-style-type: none"> Market access conditions broadly comparable to key competitors; no systemic disadvantage India underutilises Mode 3 (commercial presence) provisions in existing FTAs Select relative disadvantages in finance & ICT (Singapore) and retail (Mauritius) Regulatory restrictions in banking, insurance (Switzerland) and social services (Japan) largely paritybased Absence of FTA with the US remains a structural limitation Need stronger integration of FTA commitments with sector-specific OFDI strategy

1.5. Contribution And Novelty

This report offers one of the most comprehensive empirical assessments of India's OFDI to date. It advances the discourse in five key ways:

1. It links firm-level investment strategies with macroeconomic patterns through integrated analysis.
2. It applies novel clustering techniques to map the sectoral structure and investment logic of Indian globalising firms.
3. It provides a detailed analytical benchmarking of India's OFDI presence in partner countries against major global investors. To the best of our knowledge, this is the first study to undertake a sector-wise matching of outward FDI across countries in this manner.

4. It connects India's OFDI flows with the content of FTAs, revealing gaps in investment protection and strategic sectoral engagement.

The report is organised as the following Chapters: Chapter 1 introduces the report. Chapter 2 portrays the OFDI trends, sectoral patterns, and destination mapping, and Chapter 3 analyses in detail the Firm-level classifications based on internationalisation and sectoral clustering analysis, whereas Chapter 4 discusses India's outward FDI with inward FDI of its leading partners, both basic and analytical discussions. Chapter 5 analyses the Econometric modelling of macroeconomic and institutional determinants of OFDI in India. Chapter 6 provides a competitor analysis by analysing FTAs with leading partner countries. Finally, Chapter 7 concludes the report with Policy recommendations.

BOX 2: India's OFDI Policy Framework and Regulatory Changes (2010–2025)

“

India's OFDI policy has evolved significantly from a discretionary framework to a codified, rule-based system over the past fifteen years. This shift reflects the country's broader approach toward liberalising capital flows while maintaining macroeconomic prudence. The transformation from 2010 to 2025 can be understood in four broad phases, each marked by distinct regulatory developments and policy orientations.

”

Phase I: Continuation of Liberal Framework (2010–2013)

This period extended the liberalised structure introduced under the Foreign Exchange Management (Transfer or Issue of Any Foreign Security) Regulations, 2004 (FEMA 120). Indian entities could invest up to 400% of their net worth under the automatic route. Financial commitments included equity, loans, and guarantees, while sectors like real estate and banking, and jurisdictions designated as non-cooperative by the Financial Action Task Force (FATF)², remained restricted. However, the regulatory framework remained administratively fragmented, primarily governed by annual Master Circulars and ad hoc clarifications, leading to procedural opacity. As Joseph (2009) noted, despite the increasingly facilitative nature of the policy, execution challenges persisted due to compliance complexity and the absence of a consolidated legal framework

² The day-to-day operational clarity was provided through the Reserve Bank of India's annual Master Circulars on Overseas Direct Investment, which consolidated notifications, FAQs, and clarifications into a single reference document for corporates and authorized dealers. Together, these instruments created the regulatory basis for Indian firms to invest up to 400% of their net worth under the automatic route, while maintaining restrictions on sensitive sectors and FATF-designated jurisdictions, RB-2004, RBI Master Circulars



Phase II: Macroeconomic Stress and Temporary Capital Controls (2013–2014)

In 2013, amidst external sector volatility caused by a widening current account deficit, rupee depreciation, and capital outflows, the RBI imposed temporary restrictions to manage macroeconomic risks.

Key measures included:

- ⦿ Reduction of OFDI limits under the automatic route from 400% to 100% of net worth
- ⦿ Lowering of the Liberalised Remittance Scheme (LRS) ceiling for individuals from USD 200,000 to USD 75,000.
- ⦿ Prohibition of corporate guarantees without corresponding equity participation. These counter-cyclical steps, although short-term, highlighted the flexibility of India's capital account management, allowing tactical tightening without reversing the liberalisation trend (Joseph, 2019).

Phase III: Regulatory Restoration, Digitisation, and Risk Management (2015–2021)³

With macroeconomic stability restored, the RBI reverted the OFDI ceiling to 400% and restored the LRS limit to USD 250,000. However, policy focus moved toward digitisation, compliance streamlining, and prudential safeguards rather than further liberalisation.

Key initiatives during this period included:

- ⦿ Launch of the FIRMS Portal (2018), automating Unique Identification Number (UIN) generation and digitising submissions,
- ⦿ Expansion of financial commitment definitions to include equity, debt, pledges, guarantees, and deferred consideration (up to 18 months),
- ⦿ Enabling start-up outbound investments through share swaps and M&A
- ⦿ Clarification on round-tripping, restricting reinvestment in India by foreign subsidiaries without prior approval.
- ⦿ This phase represented a transition toward a digitally enabled, risk-sensitive regulatory regime that retained flexibility but improved procedural clarity (Palit, 2007)

Phase IV: Structural Codification – Overseas Investment Framework (2022–2025)

A major policy shift occurred in August 2022, when the government replaced the long-standing FEMA 120 regime with a codified framework comprising:

- ⦿ Overseas Investment Rules, 2022 (notified by the Department of Economic Affairs),

³ The OFDI limit under the automatic route was reduced from 400% to 100% of net worth, the Liberalised Remittance Scheme (LRS) ceiling for individuals was lowered from USD 200,000 to USD 75,000, and the issuance of corporate guarantees without underlying equity participation was prohibited. These measures were short term, aimed at stabilizing the rupee and preserving foreign exchange reserves. They underscored the counter-cyclical flexibility of India's capital account framework, which allows for policy tightening during external shocks without dismantling the underlying liberal architecture (RBI, 2013, Aug 14).

⁴ The scope of financial commitment was formally expanded to include equity, debt instruments, guarantees, pledges, and deferred consideration (up to 18 months). Provisions were introduced for start-up facilitation, such as outbound

- ⦿ Overseas Investment Regulations, 2022 (under FEMA Notification No. 400/RB-2022)
- ⦿ RBI's Master Direction No. 15/2022-23

These instruments established a clear legal and procedural foundation. Notable reforms included:

- ⦿ A formal distinction between Overseas Direct Investment (ODI) and Overseas Portfolio Investment (OPI), based on control and ownership thresholds,
- ⦿ Expansion of financial commitment to include debt, equity, guarantees, pledges, and deferred consideration
- ⦿ Unified reporting through the Overseas Investment Return (OIR).
- ⦿ Extension of OFDI eligibility to LLPs, trusts, start-ups, and resident individuals.
- ⦿ Alignment with global standards such as the IMF's Balance of Payments and International Investment Position Manual, Sixth Edition (BPM6), Financial Action Task Force (FATF) anti-money laundering standards, and the Organisation for Economic Co-operation and Development (OECD's) Base Erosion and Profit Shifting (BEPS) norms.

These reforms represented the culmination of India's gradual shift toward a consolidated, modernised, and globally harmonised outward investment policy architecture.





Chapter

02

Analysing Trends & Structural Patterns in Outward FDI

2.1 Introduction

Over the past two decades, the outward investments globally have undergone profound transformations, driven by economic shocks, policy shifts, and evolving corporate strategies. As firms increasingly seek to globalise operations, access new markets, and secure strategic assets, OFDI has emerged as a critical channel of international economic engagement. This section examines the overarching global patterns in OFDI between 2007 and 2023, highlighting the ebb and flow of capital mobility through key periods—pre and post-global financial crisis, the M&As-driven surge of the mid-2010s, the COVID-19 disruption, and the post-pandemic recalibration. It also explores regional and income-based disparities in OFDI activity, underscoring the growing role of developing economies, especially in Asia, and the divergent trajectories among emerging market players.



By situating India’s experience within these broader global trends, this chapter provides essential context for understanding the comparative scale, direction, and constraints of India’s outward investment journey.

2.2 Global Trends of OFDI

Figure 2.1 presents a comparative overview of global inward and outward FDI flows from 2007 to 2023, highlighting the evolving dynamics of international capital movements. The figure uses two distinct line series to trace annual inward FDI and outward FDI, capturing the cyclical fluctuations associated with global financial shocks, recovery phases, and structural realignments in investment behaviour.

Overall, the figure visually demonstrates how global OFDI responded to major disruptions and surges in 6 phases Global Financial Crisis (GFC) (2007–09), the pandemic shock (2018–20), and the subsequent post-pandemic recovery, while also highlighting distinct episodes of outward investment surges and retrenchment.

Figure 2.1: Global OFDI Trends: Aggregate Flows (2007–2023)

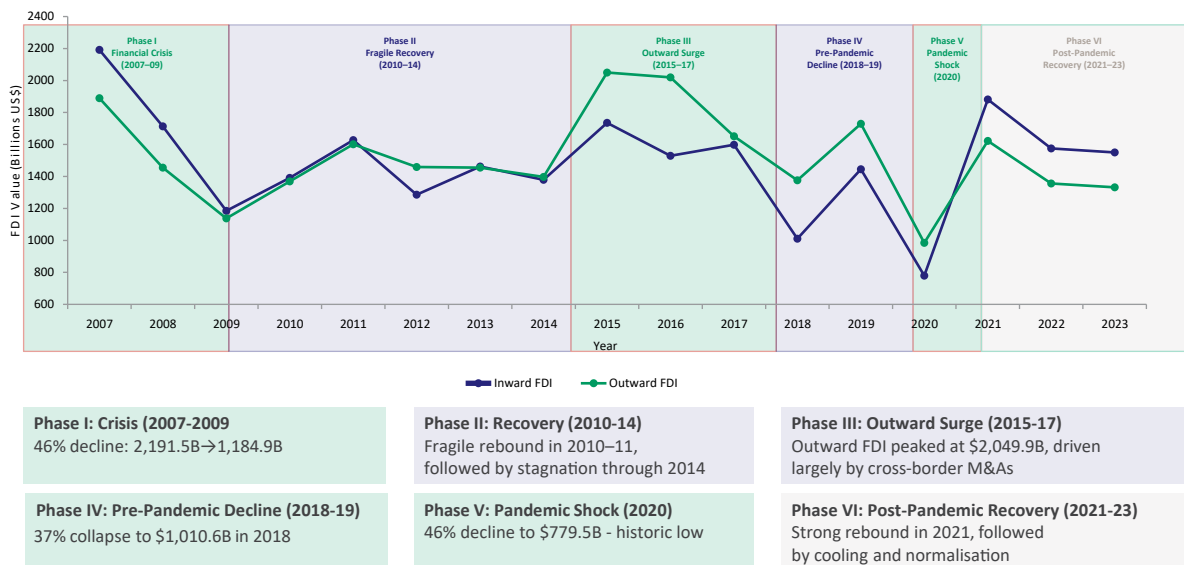


Figure 2.1: The figure shows six distinct phases in global FDI trends—inward flows outward flows from 2007 to 2023. The period is divided into six phases to capture major shifts: crisis (2007-09), fragile recovery (2010-14), outward surge (2015-17), pre-pandemic decline (2018-19), pandemic shock (2020), and post-pandemic recovery (2021-23). Source: Author’s calculation using UNCTAD Database.



Phase I: Crisis (2007–2009)

The period begins with a robust pre-crisis expansion, peaking in 2007 when inward FDI reached approximately USD 2.2 trillion and outward FDI stood at around USD 1.89 trillion. However, the onset of the GFC in 2008 triggered a synchronised and steep collapse in investment flows. Outward FDI plummeted to just over USD 1.1 trillion in 2009. This collapse is due to the sharp decline across all components of FDI—particularly the collapse of cross-border M&As, reduced reinvested earnings due to lower foreign affiliate profitability, and constrained intra-company financing—leading multinational enterprises to postpone the overseas expansion (UNCTAD, 2010).

Phase II: Fragile Recovery (2010–2014)

Between 2010 and 2014, global FDI flows—both inward and outward—exhibited only a fragile and uneven recovery following the financial crisis. The rebound remained constrained by weak global demand, financial sector deleveraging, and subdued corporate profitability, which limited the pace of cross-border investment expansion (UNCTAD, 2010; UNCTAD, 2013).

Phase III: Outward Surge (2015–2017)

A distinct surge in global outward FDI occurred during 2015–2017, with outflows peaking in 2015 (USD 2,049.9 billion) and temporarily exceeding inward investment. This surge was largely driven by mega cross-border M&As. Outward FDI from developed-economy multinationals—particularly European firms—rose sharply as companies pursued strategic consolidation, asset repositioning, and acquisitions in technology- and services-intensive sectors (UNCTAD, 2016).

Phase IV–V: Pre-Pandemic Decline and Pandemic Shock (2018–2020)

Global FDI flows weakened markedly during 2018–2019, reflecting rising trade and policy uncertainty, before collapsing sharply in 2020 due to the COVID-19 pandemic. Inward FDI fell steeply in 2018, signalling a pre-pandemic

slowdown, while outward FDI remained volatile but elevated. The pandemic year marked an unprecedented shock: global inward FDI declined to USD 779.5 billion, its lowest level since the early 2000s, alongside a sharp contraction in outward flows. This collapse was driven by a freeze in cross-border mergers and acquisitions, a sharp fall in new greenfield investment announcements, and reduced reinvested earnings amid weakened multinational enterprise profitability (UNCTAD, 2020; 2021). While overall investment activity contracted severely, a limited number of multinational enterprises with established overseas operations continued outward engagement, resulting in uneven investment patterns during the shock year.

Phase VI: Post-Pandemic Recovery (2021–2023)

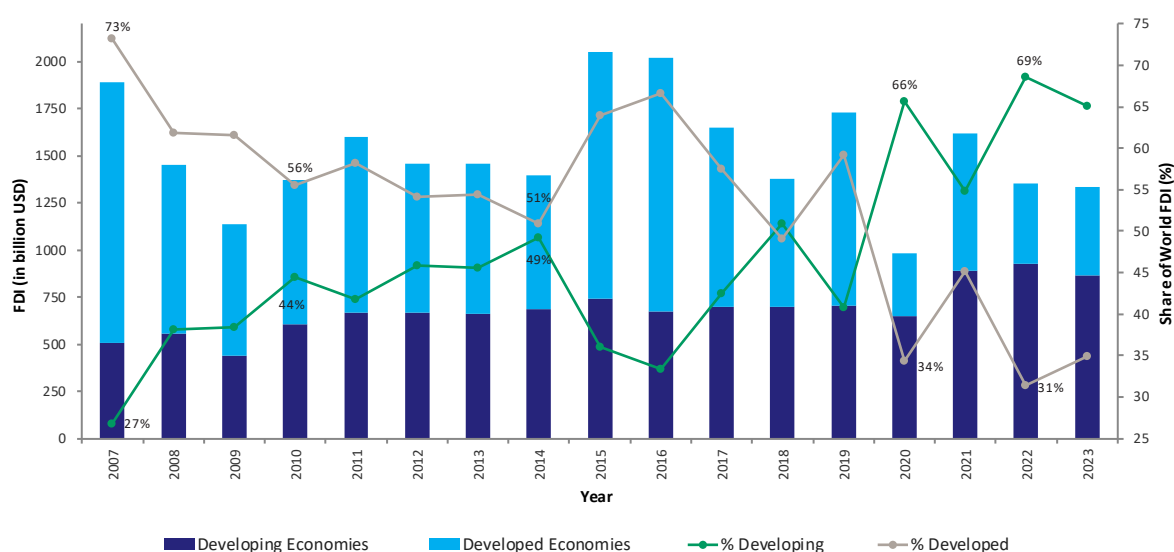
Following the pandemic-induced contraction, global FDI flows rebounded strongly in 2021, with total FDI reaching approximately USD 1,881.9 billion as postponed investment decisions were executed and multinational enterprises resumed cross-border activities. This rebound was driven largely by the restart of delayed projects and increased investment in digital infrastructure, healthcare, logistics, and renewable energy, particularly in advanced economies with strong fiscal support and technological capacity (UNCTAD, 2022; World Bank, 2023). However, this upswing proved short-lived: global FDI contracted in 2022, falling by around 12% to an estimated USD 1.3 trillion, and remained weak in 2023, with flows decreasing further amid slowing investment momentum and heightened uncertainty. The rising geopolitical tensions, inflationary pressures, and tighter monetary policies constrained investment decisions, contributing to slower cross-border capital flows (UNCTAD, 2023). At the same time, firms increasingly adjusted their international investment strategies toward regionalisation and “friend-shoring”, prioritising supply-chain resilience and geopolitical alignment over cost-based efficiency, contributing to a more cautious and balanced global FDI landscape (Stamm & Vorisek, 2023; World Bank, 2023).

2.2.1: Regional Dimensions of Changing Global FDI Patterns

If we compare the developed and developing economies in terms of their annual FDI inflows and respective shares in global totals, it becomes evident that developed economies have historically commanded a dominant position (See Figure 2.2). In 2007, for instance, developed economies absorbed over USD 1500 billion, accounting for approximately 73% of total global FDI, compared to just 27% (~USD

550 billion) received by developing economies. This structural asymmetry reflected deep-rooted differences in institutional maturity, market depth, capital access, and investor confidence. However, the onset of the GFC in 2008 marked a major inflexion point. Developed markets saw a sharp contraction in inflows, while developing economies demonstrated greater resilience. Over the next decade, their share in global FDI rose steadily, reaching 44% in 2010 and peaking at 56% in 2012—nearly at par with developed economies.

Figure 2.2: Annual Inward FDI and percentage contribution to global total (2007–2023)



Source: Author's calculation based on UNCTAD database.

Note: The bar chart represents the annual FDI inflows (in billion USD) to developing and developed economies, respectively, from 2007 to 2023. The bars correspond to developing and developed economies (USD bill). The lines overlaid on the bars indicate the share of global FDI (%) received by each group. The red line tracks the share of developing economies, while the blue line shows the share of developed economies in total global FDI.

Post-2014, this trend evolved further. Developed economies briefly regained dominance in 2015–2016, largely driven by a surge in large-scale cross-border M&A, particularly in pharmaceuticals, technology, and business services, which inflated inflows despite weak greenfield investment activity (UNCTAD, 2016; UNCTAD, 2017). However, the investment landscape shifted decisively after 2020. The COVID-19 pandemic triggered a sharp reversal, with inflows to developed economies collapsing to USD 337.6 billion, while developing economies attracted a record USD 647 billion, accounting for 65.7% of global FDI inflows. During this

time, the divergence to the relative resilience of developing economies, continued investment in digital infrastructure and manufacturing, and a sharper contraction of profit-driven and M&A-led investment in advanced economies (UNCTAD, 2021). This momentum continued post-pandemic, with developing countries capturing 68.6% of global FDI in 2022 and 65.1% in 2023. These shifts underscore the rising weight of the Global South in global capital flows—driven by robust digitalization, energy transitions, and regional infrastructure investments. According to UNCTAD (2023), this realignment reflects not only economic convergence but also strategic

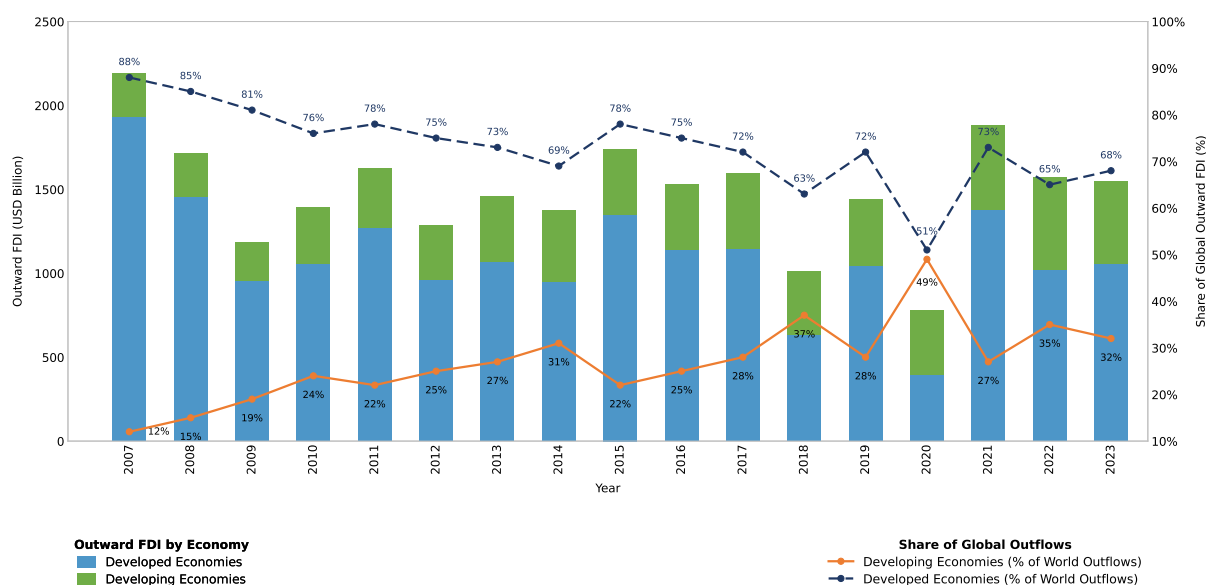


policy efforts by developing economies to enhance investment climates and integrate into global value chains more effectively. While developing economies have rapidly emerged as leading recipients of global FDI, their evolution as outward investors has followed a slower and more uneven trajectory.

Figure 2.3 illustrates that OFDI remains heavily concentrated among developed economies, though the gap has been narrowing over

time. In 2007, developed countries accounted for a commanding 88% of total global OFDI, reflecting their long-standing dominance through multinational enterprises with strong cross-border capacities, while developing economies contributed just 12%. This imbalance mirrors bigger structural differences, including disparities in institutional strength, firm maturity, capital access, and international competitiveness (UNCTAD, 2023).

Figure 2.3: Outward FDI by economy & percentage contribution to global total (2007–2023)



Source: Author’s calculation based on UNCTAD database

Note: The bar chart displays outward FDI flows (in billion USD) from developed and developing economies over the 2007–2023 period. The line graphs indicate each group’s share in total global outward FDI (%), with the orange line showing developing economies’ share and the blue dashed line showing that of developed economies. The figure captures the gradual rise in the global share of outward FDI from developing economies, despite fluctuations across global financial cycles.

Over the past decade and a half, however, developing economies, particularly in Asia, have progressively strengthened their global investment presence. Their share of global OFDI climbed steadily, reaching a high of 49% in 2020, marking a significant shift in global capital geography. This growth has been driven by several factors: the international expansion of firms from China, Singapore, and the United Arab Emirates (UAE); the rise of sovereign wealth funds; and targeted investments in strategic sectors such as logistics, energy, telecom, and digital infrastructure. (UNCTAD,2021). Even

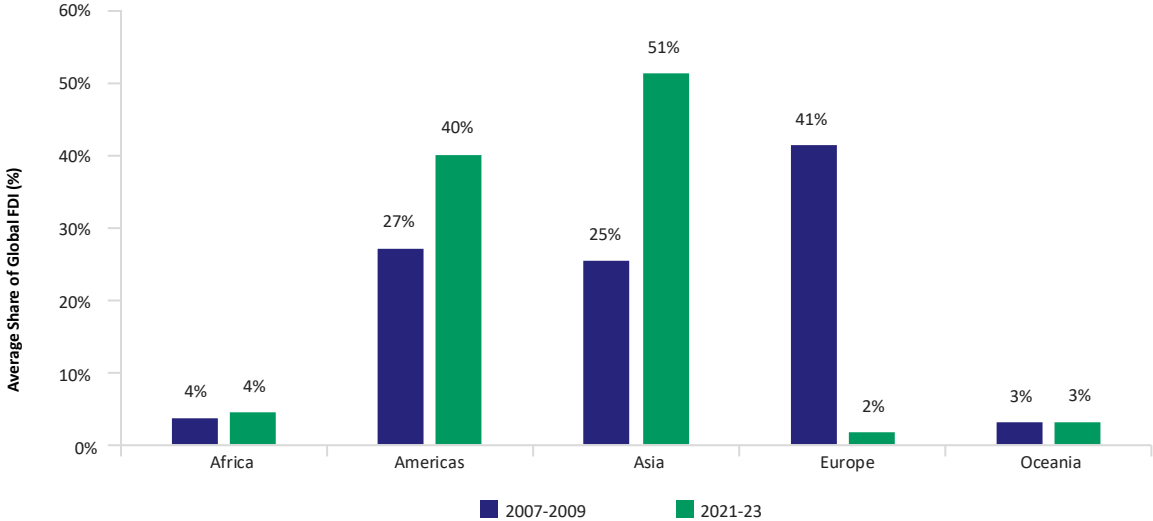
though the pandemic temporarily disrupted this trajectory, causing developing economies’ share to fall to 27% in 2021, the recovery has been swift. By 2023, developing countries again accounted for 32% of global outward flows, amounting to over USD 450 billion. This trend reflects a broader shift in global value chain participation and corporate internationalisation strategies among emerging economies, which are no longer confined to regional investments but are actively acquiring assets in both developing and developed markets (UNCTAD,2023).

A region-wise breakdown of global OFDI further accentuates the dominance of Asia, which consistently accounts for the largest share of outward investment among developing regions (Fig. 2.4). Asian economies, particularly East and Southeast Asia, have led OFDI growth due to a combination of industrial upgrading, strategic economic diplomacy, and deep regional integration. Countries such as China, Singapore, Hong Kong, South Korea, and India has increasingly leveraged regional trade frameworks and investment treaties to scale their corporate internationalisation.

Africa continues to lag as an OFDI source, contributing a negligible share despite intra-

African investments growing modestly. The continent’s outward investment remains fragmented and driven by a handful of large firms in South Africa and select North African economies. Factors such as weak capital markets, limited multinational presence, and underdeveloped institutional capacity continue to constrain the region’s global investment footprint. West Asia (Middle East) presents a unique case where OFDI flows are highly concentrated in a few oil-exporting countries like the UAE, Qatar, and Saudi Arabia, which channel sovereign wealth and surplus capital into global real estate, logistics, and financial services.

Figure 2.4: Regional Share of OFDI – Comparing 2007–2009 and 2021–2023



Source: Author’s calculation based on UNCTAD database.

Note: The figure shows regional shares in global OFDI. Regions include Africa, the Americas, Asia, Europe, and Oceania. The left bar (2007–2009 average) and right bar (2021–2023 average) compare changes. Asia’s share rose sharply from 25.2% to 50.9%, while Europe’s declined significantly. The Americas gained, and Africa and Oceania remained marginal.

A country-level comparison of leading OFDI contributors within the developing world (e.g., China, India, Brazil, Singapore, UAE, Malaysia) shows differentiated trajectories shaped by policy ambition, financial depth, and corporate globalisation strategies (See Fig.2.5).

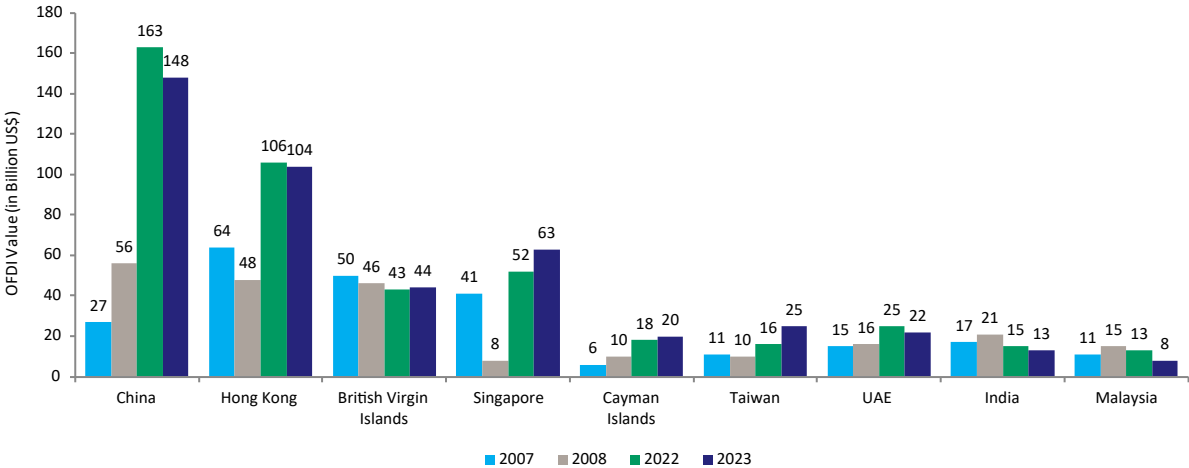
China remains the dominant outward investor among developing economies. Outward FDI from China rose sharply from USD 27 billion in 2007 to USD 148 billion in 2023, reflecting the scale and maturity of Chinese Multinational Enterprises (MNEs) and their deep integration



into the global production networks. The persistence of large outward flows reflects the continued internationalisation of Chinese MNEs, including both state-owned and large private firms, and their sustained engagement in infrastructure, energy, manufacturing, and technology-intensive sectors across multiple

regions (Buckley et al., 2018; Kolstad & Wiig, 2012). Despite a decline in outward flows during the post-pandemic period, China remained the largest source of outward FDI among developing economies, highlighting its entrenched position in the global investment landscape (UNCTAD, 2023).

Figure 2.5: OFDI Patterns in Major Developing Economies (2007–2023)



Source: Author’s calculation based on UNCTAD database

Note: Figure shows OFDI values (USD billion) for major developing economies across four selected years—2007, 2008, 2022, and 2023. China, Hong Kong, and Singapore consistently lead, reflecting their roles as both capital exporters and financial intermediation hubs. Taiwan has exhibited a steady rise in OFDI, driven by regional value chain integration and strategic investments in electronics and semiconductors. OFDI from India and Malaysia remains modest, reflecting structural and institutional constraints. British Virgin Islands, UAE, and Cayman Islands display stable or offshore-driven investment patterns, influenced by tax and financial positioning. Country classification follows UNCTAD’s methodology based on development status and income levels.

Hong Kong, with outward FDI of around USD 104 billion in 2023, continues to function primarily as a global financial intermediation hub. A significant share of its outward FDI reflects pass-through, and conduit investment routed via MNEs and special purpose entities, rather than direct overseas expansion by domestic production-based firms. As a result, headline OFDI figures tend to overstate Hong Kong’s role as a source of productive capital, instead highlighting its importance in facilitating regional and global investment routing (UNCTAD, 2023; Damgaard, Elkjaer & Johannesen, 2019).

Singapore follows a similar, though less pronounced, pattern, with outward FDI flows of around USD 63 billion in 2023. Its OFDI profile is shaped by its role as a regional headquarters and financial centre for Southeast Asia, hosting a large concentration of multinational enterprises

and investment holding structures. A significant share of Singapore’s OFDI is channelled through special purpose entities and regional investment vehicles, which amplifies recorded OFDI volumes, particularly in finance, real estate, logistics, and business services, rather than reflecting solely the overseas expansion of domestically rooted production firms (UNCTAD, 2023; Damgaard, Elkjaer & Johannesen, 2019).

The British Virgin Islands (BVI), while classified among developing economies in international investment statistics, exhibits outward FDI patterns that are primarily shaped by its role as an offshore financial centre rather than by productive overseas expansion. Outward FDI from BVI—recorded at around USD 44 billion in 2023—largely reflects investment flows routed through holding companies and special purpose entities, serving global capital structuring and

financial intermediation functions. These pass-through flows have limited linkage to domestic production or firm-level internationalisation, and therefore tend to inflate headline OFDI figures without representing genuine outward investment capacity (Damgaard et al., 2019).

Taiwan has shown a steady rise in OFDI, from USD 11 billion in 2007 to USD 25 billion in 2023, with intermediate levels of USD 10 billion in 2008 and USD 16 billion in 2022. This reflects increased regional value chain participation and diversification of manufacturing bases in response to rising cross-strait tensions. Taiwanese firms, particularly in electronics and semiconductors, have made strategic investments in Southeast Asia and the United States (UNCTAD, 2024; DBS Group Research, 2024). These investments are both efficiency-seeking and risk-mitigating, aligned with broader supply chain realignments.

The UAE recorded OFDI of USD 22 billion in 2023, driven predominantly by sovereign wealth fund investments. The UAE holds 16.9% of global sovereign wealth fund assets, with Abu Dhabi's funds managing approximately USD 1.7 trillion (TheCityUK, 2024). The Abu Dhabi Investment Authority (ADIA), established in 1976, deploys capital across infrastructure, real estate, private equity, and alternatives, with a recent focus on logistics, digital infrastructure, and renewable energy sectors (Asia Asset Management, 2024).

Cayman Islands—similar to BVI—shows OFDI values of USD 20 billion in 2023, indicative of its continued function as an offshore financial hub. These flows are primarily linked to fund structures, holding companies, and

investment vehicles operating under favourable tax regimes, rather than domestic corporate internationalisation.

India presents a more modest OFDI profile, with USD 13 billion in 2023, down from USD 17 billion in 2007. The trajectory has been volatile, shaped by regulatory constraints, a limited base of globally active firms, and sectoral concentration in pharmaceuticals, IT services, business services, and fintech.

Malaysia, with OFDI of USD 8 billion in 2023, reflects a stagnating trend. Structural challenges, limited scale of global operations among domestic firms, and political economy considerations have contributed to subdued outward investment. Malaysian OFDI remains focused on select ASEAN markets, particularly in oil & gas, palm oil, and infrastructure-linked sectors.

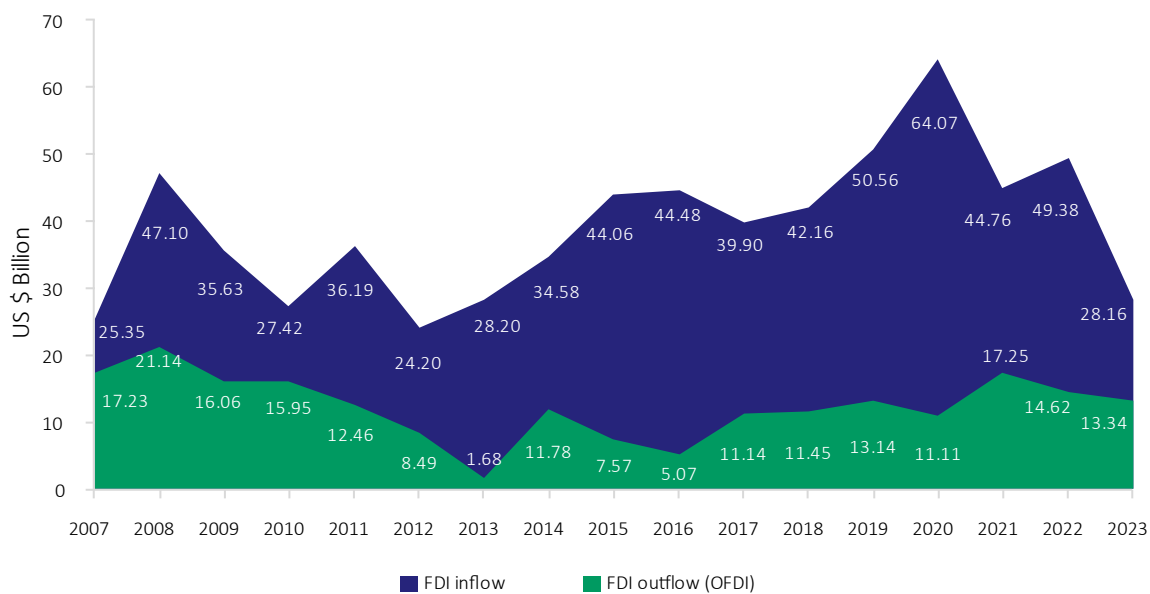
2.3. India's Outward FDI: Sectoral and Destination-Wise Insights

2.3.1 India's FDI and OFDI: Comparative Overview

India's role in global capital flows over the past two decades has been characterised by its consistent status as a net capital importer, with foreign direct investment (FDI) inflows exceeding OFDI in nearly all years. As shown in Figure 2.6, FDI inflows stood at USD 25.35 billion in 2007, and peaked at USD 64.07 billion in 2020, reflecting growing investor confidence in India's market potential, structural reforms, and the country's positioning as a digital and services hub.



Figure 2.6: India's FDI Inflows and Outflows (2007–2023), USD Billion



Source: Author's calculation based on UNCTAD.

Note: The Figure shows annual values of India's inward and outward FDI. The values marked above; the shaded area represents FDI inflows in billion USD. The values marked below, green shaded, are FDI outflows. The visible gap blue between the two lines implies India's net capital import position, with inflows consistently exceeding OFDI across the period.

In contrast, India's OFDI began at USD 17.23 billion in 2007, but displayed a far more volatile pattern across the years. Outflows surged briefly in 2008 to over USD 21 billion, driven by pre-GFC optimism and aggressive cross-

border acquisitions. However, by 2013, OFDI dropped sharply to just USD 1.68 billion, amid Rupee volatility, fiscal tightening, and regulatory restrictions imposed by the RBI to manage external account stress (RBI, 2014).

Table 2.1: India's FDI Inflows and Outflows – Annual Values and Growth Rates (2007–2023)

Year	FDI inflow (USD Billion)	FDI outflow (USD Billion)	Y-O-Y FDI	Y-O-Y OFDI
2007	25.35	17.23		
2008	47.10	21.14	85.81	22.68
2009	35.63	16.06	-24.35	-24.05
2010	27.42	15.95	-23.06	-0.69
2011	36.19	12.46	32	-21.89
2012	24.20	8.49	-33.14	-31.87
2013	28.20	1.68	16.54	-80.21
2014	34.58	11.78	22.64	601.79
2015	44.06	7.57	27.42	-35.74
2016	44.48	5.07	0.95	-33.02
2017	39.90	11.14	-10.29	119.66
2018	42.16	11.45	5.64	2.75
2019	50.56	13.14	19.93	14.82
2020	64.07	11.11	26.73	-15.48
2021	44.76	17.25	-30.14	55.31

Year	FDI inflow (USD Billion)	FDI outflow (USD Billion)	Y-O-Y FDI	Y-O-Y OFDI
2022	49.38	14.62	10.31	-15.27
2023	28.16	13.34	-42.97	-8.74
Cumulative (2007-2023)	666.21	209.48		

Source: Author’s calculation based on the UNCTAD database

Note: This Table shows year-wise FDI inflow and OFDI values in USD Billion along with their annual percentage changes. Compared to inflows, OFDI exhibited greater volatility, reflecting macroeconomic and policy sensitivities.

BOX 3: FDI Inflow



- ⦿ FDI inflows showed strong growth in select years, such as 2008 (+85.8%), 2011 (+32%), and 2020 (+26.7%), the latter driven by large digital infrastructure investments (e.g., Google and Facebook’s stake in Jio Platforms).
- ⦿ However, they also witnessed sharp declines in 2012 (–33.1%), 2021 (–30.1%), and 2023 (–43%), reflecting cyclical downturns, global monetary tightening, and weakening investor sentiment.



BOX 4: FDI Outflow (OFDI)



- ⦿ OFDI was highly volatile, marked by extreme fluctuations such as –80.2% in 2013 (sharp contraction) and +601.8% in 2014 (exceptional surge), with other swings like +119.7% in 2017 and +55.3% in 2021.
- ⦿ Unlike inflows, outflows do not follow consistent economic cycles; instead, they reflect sporadic, deal-driven movements tied to large corporate investments or withdrawals abroad.



OFDI, by contrast, was highly erratic—most notably, it fell sharply by –80.2% in 2013, declining from USD 8.49 billion in 2012 to just USD 1.68 billion. This dramatic contraction was the result of a convergence of macroeconomic pressures. First, the Indian rupee depreciated by over 20% against the U.S. dollar in mid-2013, intensifying concerns about external sector stability (GoI, 2013). Second, the current account deficit widened significantly, reaching 4.8% of GDP in FY2012–13, driven by high gold imports and weak export growth (IMF, 2014). Third, the

announcement of the U.S. Federal Reserve’s tapering of quantitative easing triggered fears of capital flight from emerging markets, including India, a phenomenon widely referred to as the “taper tantrum” (Kapur & Mohan, 2014). Finally, the RBI imposed temporary regulatory restrictions in August 2013, including reducing the overseas direct investment limit for Indian corporations from 400% to 100% of net worth (RBI, 2013a) and a reduction in the outward remittance limit under the LRS from USD 200,000 to USD 75,000 (RBI, 2013b).



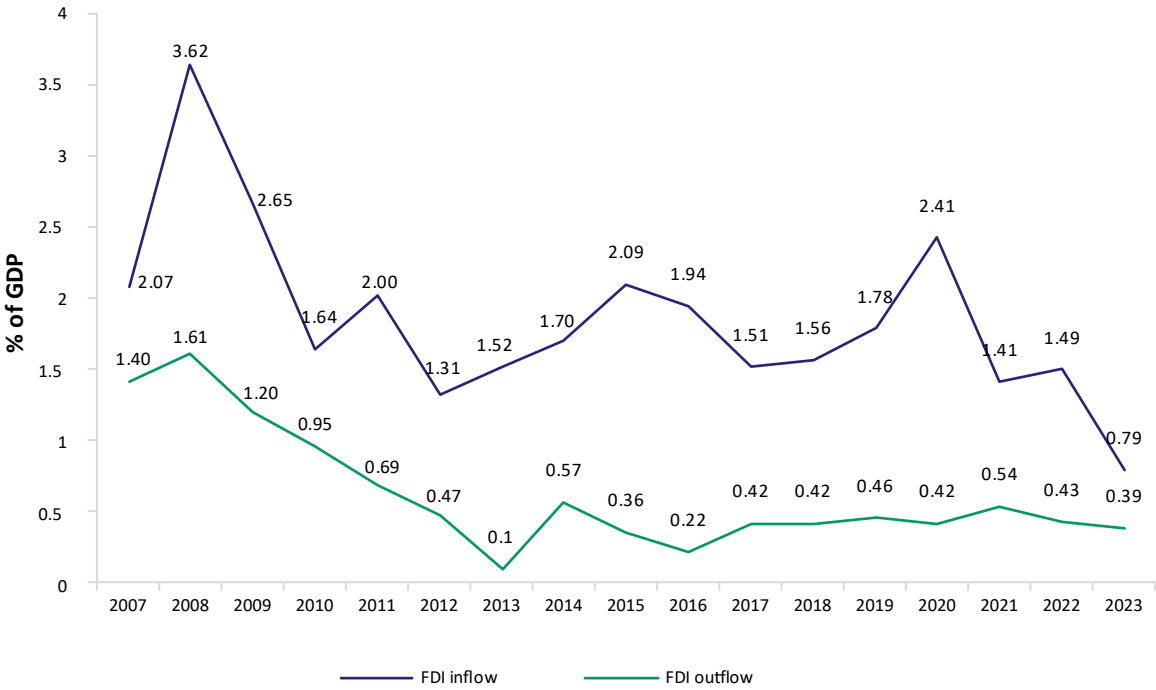
The volatile nature of India’s OFDI, as illustrated in Figure 2.6 and Table 2.1, stands in contrast to the relatively more stable and policy-influenced trajectory of FDI inflows. This divergence stems from the structural differences in the drivers of these two flows. OFDI is primarily firm-led and discretionary, making it highly sensitive to fluctuations in global financing conditions, domestic macroeconomic constraints, and investment sentiment at the firm level (Athreya et al., 2023; Sasidharan and Padmaja (2018). In contrast, inward FDI is largely policy-enabled—supported by sustained efforts to improve India’s ease of doing business, as well as government-led sectoral liberalisation and incentives in telecommunications, digital infrastructure, and manufacturing (UNCTAD, 2023). Moreover, episodic regulatory interventions, such as the 2013 capital controls, along with currency pressures and banking sector vulnerabilities, have periodically disrupted OFDI outflows during periods of macroeconomic stress (Pandey et al., 2021)

While India’s outward FDI recovered from its 2013 low of USD 1.68 billion to over USD 13

billion in 2023, it remains modest compared to global peers.

Figure 2.7 shows that India’s OFDI as a percentage of GDP has consistently remained below 0.5% throughout the period, with volatility in this ratio reinforcing the structural nature of India’s outbound investment limitations. This asymmetry between inward and outward FDI, with India remaining a net recipient of foreign capital, reflects its status as a capital-scarce emerging economy and the incomplete liberalisation of the capital account. Despite progressive relaxation of overseas investment rules since the 2000s—including the shift from blanket ceilings to net worth-linked investment limits (Joseph, 2019)—outward FDI continues to be constrained by capital controls, shallow domestic financial development, and regulatory frictions that raise the cost and risk of deploying capital abroad (Aggarwal et al., 2022; Sahoo & Bishnoi, 2021). These structural features explain why India’s OFDI–GDP ratio has remained low and volatile relative to peer emerging economies.

Figure 2.7: India’s FDI Inflows and Outflows as a Percentage of GDP (2007–2023)



Source: Author’s calculation based on UNCTAD FDI statistics

Note: The Figure shows annual inward and outward FDI flows as a share of GDP. Inflows peaked in 2008 at 3.62% of GDP, while OFDI remained consistently below 0.5% across the period, reflecting capital account conservatism and institutional limitations.

While the absolute values of OFDI offer a sense of investment volume, Figure 2.7 highlights India's relatively cautious external investment posture when adjusted for economic size. In 2007, FDI inflows accounted for 2.07% of GDP, reflecting the robust investor sentiment during India's high-growth phase and a globally favourable investment climate. This surged to a high peak of 3.62% in 2008, strengthened by India's strong macro fundamentals, aggressive liberalisation of FDI caps across sectors, and heightened global liquidity during the pre-crisis boom. However, with the onset of GFC, inflows fell to 2.65% in 2009 and continued to decline through 2010–2012, reaching 1.31% in 2012, a period marked by global uncertainty and domestic policy inertia. However, the FDI inflows recovered moderately to 1.70% of GDP in 2014, driven by renewed investor confidence under a new reform-oriented government, and further improved to 2.09% in 2015 following the launch of the "Make in India" initiative. From 2016 to 2020, inflows hovered between 1.5% and 2.4%, peaking again at 2.41% in 2020 as global digital and strategic investors capitalised on India's consumer base, particularly through high-value technology deals (e.g., investments into Jio Platforms) during the COVID-19 pandemic recovery phase. However, 2021–2023 witnessed a tapering of inflows, declining from 1.41% (2021) to 0.79% in 2023, reflecting both global capital tightening and investor caution amid rising geopolitical and macroeconomic headwinds.

India's OFDI remained above 1% of GDP in the initial years, at 1.40% in 2007 and 1.20% in 2009, but declined sharply thereafter, consistently staying below 0.5% from 2010 onward. It fell precipitously to 0.10% in 2013 during the taper tantrum, driven by a convergence of macroeconomic stresses—a depreciating

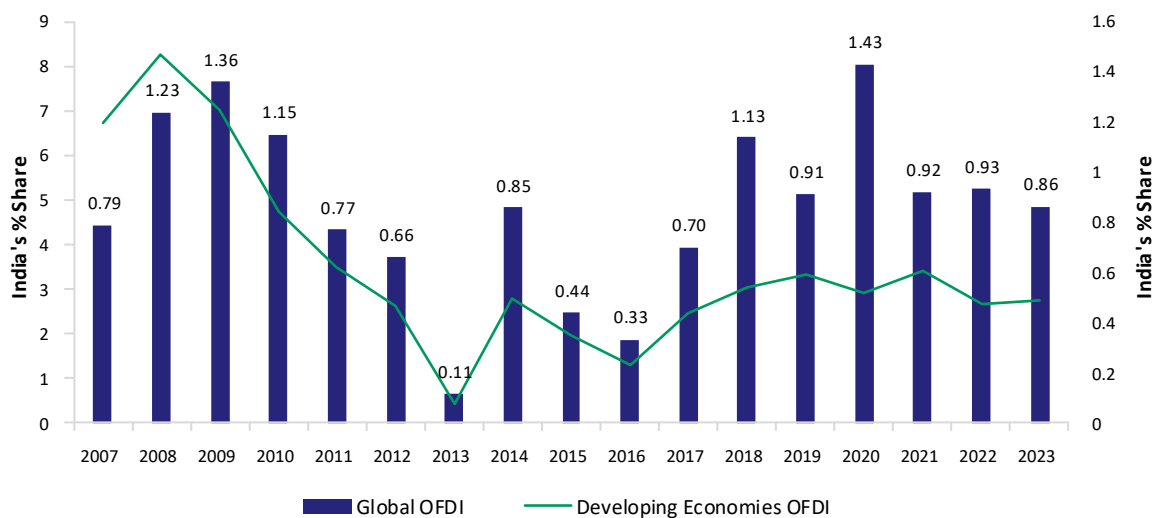
rupee, widening current account deficit, and RBI-imposed capital controls to protect India's external balance—reflecting both the country's vulnerability as part of the "fragile five" emerging economies and the episodic tightening that has characterized its capital account management during external crises (Pandey et al., Aggarwal et al., 2024).

A modest recovery followed, reaching 0.57% in 2014, but outflows again moderated over the next several years, staying between 0.22% and 0.46% of GDP. In 2020, outward flows inched up to 0.54%, reflecting renewed outbound investments by large conglomerates in sectors such as pharmaceuticals, IT services, and energy. However, similar to inflows, India's OFDI as a share of GDP fell again in the subsequent years, 0.43% in 2022 and 0.39% in 2023, pointing to capital access constraints, exchange rate volatility, and ongoing global uncertainty.

While India's OFDI has expanded episodically in absolute terms, its share in global OFDI has remained modest, consistently below 1.5% over 2007–2023 (Fig. 2.8). The peak of 1.43% in 2021, driven by large outward deals by Indian conglomerates, proved temporary, underscoring India's structural constraints in cross-border capital deployment relative to dominant players such as China, Singapore, and Hong Kong. Within the developing economy cohort, India's OFDI share exhibited greater volatility—exceeding 7% in 2008 and 2011 but declining sharply post-2013 to stabilize near 2% by 2023. This erosion reflects the rise of competing regional capital exporters (UAE, Vietnam, Malaysia) and China's dominance, but more fundamentally stems from India's late-stage internationalization, concentrated sectoral exposure, and firm-level concentration, which together constrain sustained global investment presence (UNCTAD, 2023).



Figure 2.8: India's Share in Global and Developing Economy OFDI (%), 2007–2023



Source: Author's calculation based on the UNCTAD database

Note: The Figure shows India's share in global OFDI (bars, left axis) and its share in developing economies' OFDI (line, right axis). The bar heights indicate India's global position, while the line traces its relative standing among developing countries.

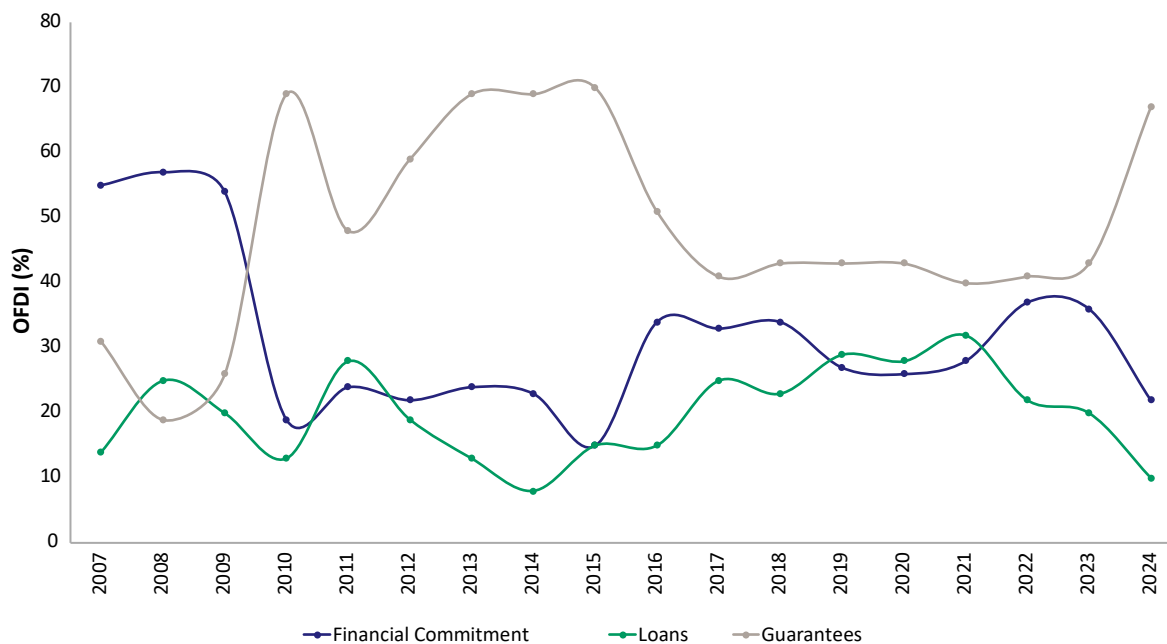
Beyond aggregate volumes and destinations, the evolving composition of India's outward direct investment reflects the financial instruments recognized under the Reserve Bank of India's ODI framework. India's outward investment is reported under three principal components—financial commitments, loans, and guarantees⁵. Financial commitments primarily represent equity participation by the Indian entity in its overseas joint venture (JV) or wholly owned subsidiary (WOS). Loans refer to debt extended by the Indian entity to its foreign affiliate. Guarantees comprise corporate, performance, and bank guarantees issued on behalf of the overseas entity, representing contingent financial exposure. The relative share of these

components indicates the changing structure of India's overseas investment commitments and associated risk profile.

Figure 2.9 provides a disaggregated view of the relative share of these three forms in India's OFDI from 2007 to 2024. This compositional breakdown reveals a transition away from equity-linked financial commitments toward a growing reliance on guarantees and loans, particularly during periods of external volatility. The changing distribution not only signals shifts in investor risk appetite and financing structures but also reflects deeper regulatory and institutional features that influence the nature of India's global investment trends.

⁵ Under the RBI's ODI reporting framework, Financial Commitment represents the total outward investment exposure, comprising: (i) equity contribution; (ii) loans to the overseas JV/WOS; (iii) 100% of corporate guarantees; (iv) 50% of performance guarantees; and (v) 100% of bank guarantees backed by counter-guarantee or collateral. For analytical clarity, RBI's monthly ODI data tables disaggregate these into three separate components: Financial Commitment (equity), Loans, and Guarantees.

Figure 2.9: Share of Financial Commitment, Loans, and Guarantees in India's OFDI (2007-2024)



Source: Author's compilation from Reserve Bank of India, Monthly Press Releases (2007–2024).

Note: Annual shares represent the composition of India's OFDI by form—financial commitment, loans, and guarantees.

An analysis of India's OFDI composition from 2007 to 2024 reveals a structural shift away from equity-based financial commitments toward guarantees and loans. Financial commitments, which dominated before 2009 have declined consistently, remaining below 40% since 2010. In contrast, guarantees surged post-global financial crisis, becoming the dominant form with shares above 50% during 2010-2016 and resurging to 67% in 2024. Loans have also gained prominence, rising from under 20% pre-2016 to approximately 30% during 2020–2021.

This compositional rebalancing reflects India's strategic pivot toward less capital-intensive and more flexible investment instruments during periods of external volatility. Guarantees serve as contingent exposures that preserve parent firm liquidity while facilitating overseas operations, while intra-firm loans enable tax-efficient capital deployment and retain greater control over repatriation (Kunroo & Ahmad, 2023).

2.3.2 Sectoral Composition of India's Outward FDI

An examination of India's OFDI over the period 2007–2023 reveals a clear structural reorientation in sectoral priorities, reflecting both changes in India's domestic growth model and shifts in global investment opportunities. As illustrated by Table 2.2, India's sectoral contribution of OFDI (2007-2023) can be broadly characterised by an early phase dominated by manufacturing-led internationalisation, followed by a progressive transition towards services-driven outward investment, particularly in financial and business services.

Manufacturing-led OFDI in the early phase (2007–2011)

In the initial years of the sample period, India's OFDI was predominantly led by the manufacturing sector. Between 2007 and 2011,



manufacturing consistently accounted for more than one-third of total OFDI, peaking at nearly 52 per cent in 2009. This phase coincided with an accelerated overseas expansion by large Indian firms in pharmaceuticals, automobiles, steel, chemicals, and basic engineering, supported by strong domestic growth and improved access to global capital markets.

Overseas acquisitions and greenfield investments during this period were primarily motivated by market-seeking and asset-seeking considerations, including access to advanced consumer markets, acquisition of technology and brand assets, proximity to final demand, and deeper integration into global value chains (GVCs). This outward push was further enabled by progressive liberalisation of India's outward investment framework following the post-1991 reforms, which relaxed capital account restrictions for firms with established balance sheets and international ambitions. As noted in the broader reform literature, including Panagariya (2010), this period marked a phase in which Indian manufacturing firms—having consolidated their domestic positions—began to internationalise more aggressively, leveraging scale economies, cost competitiveness, and access to global finance. The resulting OFDI surge reflects a classic early-stage internationalisation pattern of emerging-market multinational enterprises, characterised by asset-seeking and market-seeking strategies (Narula & Dunning, 2010).

The subsequent moderation in manufacturing-led OFDI after 2011 reflects structural and institutional constraints rather than a reversal of industrial internationalisation. India-focused reform studies have highlighted persistent bottlenecks in infrastructure, logistics, land acquisition, and labour regulation, which constrained the scalability and sustained global competitiveness of large-scale manufacturing relative to peer emerging economies (Kochhar et al., 2006; Ahluwalia, 2011). In parallel, the post-GFC environment—marked by heightened uncertainty and tighter financing conditions—reduced the attractiveness of capital-intensive overseas manufacturing investments, leading firms to consolidate earlier positions rather than pursue aggressive new expansion.

In contrast, services were structurally better positioned to scale internationally. India's post-reform growth trajectory has been characterised by an unusually strong services orientation, driven by human capital intensity, entrepreneurship, and integration into global knowledge and business networks rather than labour-intensive manufacturing (Bosworth, Collins & Virmani, 2007; Eichengreen & Gupta, 2011). These characteristics translated more readily into outward investment in financial, business, IT, and professional services, where entry barriers were lower, reliance on physical infrastructure was limited, and global demand expanded rapidly. As manufacturing OFDI plateaued, services investment gained momentum, setting the stage for the structural shift observed in the subsequent period.

Table 2.2: Sectoral Composition of India's Outward FDI (2007–2023)

Year	Agriculture & Mining	Manufacturing	Electricity, gas&water	Construction	Financial, Real Est, Insurance &Business	Transport, storage& Communication	Whole-sale, Retail & Hotels	Community, Social & Personal	Miscellaneous
2007	3.77	37.75	0.07	0.86	20.15	17.10	17.38	0.64	2.29
2008	4.64	44.98	0.81	5.13	25.39	5.18	8.81	3.30	1.75
2009	3.99	51.88	4.71	6.34	15.54	4.99	9.07	2.47	1.01
2010	3.59	32.76	0.19	1.10	14.04	40.54	5.31	1.64	0.82
2011	12.04	27.76	1.07	10.49	21.58	12.70	12.50	1.35	0.53
2012	3.89	38.31	0.59	6.66	20.46	16.86	9.07	3.33	0.83
2013	10.98	30.06	0.14	6.14	12.59	23.45	11.86	4.70	0.09
2014	22.81	22.49	0.10	4.20	11.69	28.93	6.97	2.43	0.39
2015	12.96	30.62	0.77	5.17	23.96	8.55	14.38	3.27	0.31
2016	18.69	19.63	2.12	3.81	31.28	4.90	16.67	2.41	0.50
2017	13.70	23.35	3.04	3.71	26.32	11.94	12.91	4.54	0.48
2018	10.77	26.71	3.22	8.25	23.17	12.45	13.04	1.94	0.45
2019	6.96	26.97	3.19	13.83	28.02	5.87	12.92	1.87	0.36
2020	10.90	27.89	2.87	4.23	29.85	7.96	15.00	1.10	0.21
2021	14.90	22.08	0.81	3.08	36.94	3.93	13.96	4.18	0.13
2022	6.61	33.07	0.47	5.08	27.31	7.25	18.87	1.02	0.32
2023	6.59	23.19	1.00	5.81	37.44	6.37	16.83	2.60	0.18

Source: Author's calculation based on RBI ODI monthly database



Maturation of Manufacturing-Led OFDI (2012-2018)

From around 2012 onwards, manufacturing's share in India's OFDI declined gradually, falling below 20% by 2023. This moderation reflects the maturation and consolidation of earlier industrial investments amid intensifying global competition and rising capital requirements. As overseas operations stabilized, many Indian manufacturers shifted from equity-based expansion toward alternative modes of international engagement—including contract manufacturing, licensing arrangements, and export-oriented strategies.

This pattern aligns with structural constraints documented in India's manufacturing literature: persistent infrastructure deficits, labor market rigidities, limited economies of scale, and high costs of doing business that constrained scalability relative to services (Dougherty et al., 2009 ; Joumard et al., 2015). The post-GFC environment further reduced the attractiveness of capital-intensive overseas manufacturing investments through tighter financing conditions and heightened uncertainty (Athreye et al., 2021). Indian manufacturers also faced intensified competition from China and other East Asian exporters who maintained cost advantages in scale-intensive production (Joumard et al., 2015). The observed moderation in manufacturing OFDI thus reflects both India's domestic structural limitations and adverse global financing conditions during this period.

Services-led OFDI (2019–2023)

In contrast to the maturation of manufacturing-led outward investment, the most striking feature of India's OFDI evolution is the rapid and sustained rise of services-sector investment, particularly in financial, insurance, business, and professional services. Financial and Business Services emerged as the dominant driver of India's OFDI accounting for 37.44% of total outflows by 2023, up from 20.15% in 2007. This shift reflects India's structural evolution toward a knowledge-based economy in which pharmaceuticals, IT, telecommunications,

software, and professional services have increasingly shaped its internationalization strategy (Kaushal, 2018). This progressively mirrored its domestic comparative advantages in human capital, managerial expertise, and service-sector productivity.

The growing prominence of financial services OFDI also coincides with broader post-liberalization reforms that strengthened India's financial sector and deepened capital markets. Acharya (2023) highlights how financial sector restructuring, regulatory strengthening, improved credit allocation, and equity market expansion have enhanced the resilience and global orientation of formal-sector firms. These reforms increased the capacity of Indian firms—particularly listed and technology-intensive enterprises—to mobilize capital and scale internationally. Complementing this perspective, Migozzi et al. (2024) conceptualize India's transformation as a “Tech-Fin-State” ecosystem in which institutional reforms and financial modernization reinforce the international competitiveness of service-sector firms. While these studies do not directly quantify OFDI flows, they demonstrate how financial deepening, regulatory evolution, and entrepreneurial dynamism have strengthened outward expansion in financial and business services.

Other service sub-sectors display more differentiated trajectories. Wholesale, retail, and hospitality activities have maintained a relatively stable share—generally between 12% and 19%—reflecting incremental market-seeking expansion by consumer-facing firms and diaspora-linked business networks. In contrast, transport, storage, and communication experienced episodic surges—most notably in 2010 when the sector briefly exceeded 40% of total OFDI—driven by large, transaction-specific overseas telecom and logistics investments. However, this surge was not sustained, and the sector's share declined to single-digit levels after 2015, suggesting that such investments were episodic rather than indicative of a long-term structural shift.

Agriculture, Mining, and Resource-Oriented OFDI (2007-2023)

Agriculture and mining, while remaining modest in absolute terms, show a gradual increase in their share of India's outward FDI—from below 4 per cent in 2007 to around 6–7 per cent by 2023. This trend reflects India's selective engagement in resource- and food-security oriented investments, particularly in farmland acquisition and extractive activities in Africa, Latin America, and Southeast Asia. Other sectors—including construction, electricity,

gas and water, and community and personal services—have persistently remained peripheral to India's OFDI profile throughout the period. Their limited representation suggests a continued reliance on project-based exports, public-private partnerships, or contractual arrangements, rather than equity-based overseas investment. This pattern also points to regulatory, institutional, and political-economy constraints in host economies that restrict foreign ownership or reduce the commercial viability of large-scale equity participation in these sectors.

BOX 5: Key Sectoral Insights from India's OFDI (2007–2023)



- ⦿ Manufacturing was the dominant sector in the early years, peaking in 2009 at 51.88%, but witnessed a steady decline over the years, reaching 23.19% in 2023, indicating a diversification of OFDI targets.
- ⦿ Financial, insurance, and business services gained significant momentum after 2012, rising from 15.54% in 2009 to become the largest recipient by 2023 with 37.44%, marking a shift toward service-led global expansion.
- ⦿ Transport, storage, and communication saw a sharp but short-lived spike in 2010 (40.54%), primarily due to large telecom deals, followed by a sustained decline to 6.37% in 2023.
- ⦿ Retail, wholesale, and hospitality maintained a relatively stable share throughout, fluctuating between 8.81% (2008) and 18.87% (2022), showing consistent interest in diaspora-driven retail footprints and hospitality ventures.
- ⦿ Construction and real estate contributed modestly, ranging mostly between 3–6%, with a notable rise in 2019 (13.83%), often associated with Engineering, Procurement and Construction (EPC) projects in emerging markets like Africa and Southeast Asia.
- ⦿ Agriculture and mining saw a gradual but inconsistent rise, from 3.77% in 2007 to a peak of 13.70% in 2017, before stabilising at 6.59% in 2023, reflecting selective investments in agri-inputs and resource extraction.
- ⦿ Electricity, gas, and water services remained marginal throughout the period, consistently under 5%, except for 2009 (4.71%), 2018 (3.22%), and 2019 (3.19%), likely reflecting minor ventures in renewables and energy partnerships.
- ⦿ Community, social, and personal services retained a minor but steady presence, fluctuating between 0.64% (2007) and 4.70% (2013), reflecting India's expanding educational, cultural, and health-related global outreach.
- ⦿ Miscellaneous investments remained negligible over the entire period, steadily declining from 2.29% (2007) to 0.18% (2023).



2.3.3. India's OFDI Destination Patterns (as per region)

Building on the sectoral structure of India's OFDI, examining the geographic distribution reveals India's strategic alignments and regional economic integration patterns. Table 2.3 presents outward FDI flows across five regional groupings—Asia, Europe, Africa, the Americas, and Oceania—from 2007 to 2023. Asia consistently dominates as the primary destination, accounting for the largest share throughout the period, driven by proximity, tax-efficient financial hubs (Singapore, Mauritius), and expanding commercial presence in Gulf economies through finance, energy, logistics, and healthcare investments. Europe constitutes the second major destination, characterized by asset-seeking acquisitions in the UK, Netherlands, Germany, and Switzerland targeting brand ownership, R&D capabilities,

and advanced technologies, though flows exhibit significant volatility shaped by macroeconomic conditions, Brexit, and evolving EU investment screening frameworks. Africa experienced a peak in 2010 but remains underinvested relative to potential, with Indian engagement concentrated in natural resources, agriculture, solar energy, and healthcare aligned with development cooperation objectives. The Americas, particularly the United States, represent a steadily growing destination for IT services, pharmaceuticals, and auto components, supported by strategic acquisitions, R&D center establishments, and diaspora networks, while Latin American markets attract selective investments in mining and renewable energy. Oceania, led by Australia, maintains modest but stable flows focused on education services, IT, and mining, with potential for expansion under the India-Australia ECTA framework.

Table 2.3: India's Top OFDI Destinations – Regional analysis

Value in Billion US \$					
Year	Africa	America	Asia	Europe	Oceania
2007	1.04	1.00	1.92	1.99	0.01
2008	3.22	2.78	7.57	3.89	0.05
2009	2.69	2.44	8.92	3.28	0.12
2010	10.90	2.57	15.24	9.29	0.18
2011	7.98	6.17	11.21	6.17	2.41
2012	5.77	4.66	7.05	6.85	1.27
2013	4.12	5.71	9.21	10.41	0.14
2014	8.33	5.33	9.41	15.11	0.06
2015	4.03	4.24	8.67	5.44	0.11
2016	5.56	3.49	8.01	7.58	0.06
2017	2.77	4.62	8.02	5.64	0.07
2018	2.97	3.59	5.70	6.09	0.06
2019	1.81	2.64	7.94	6.21	0.06
2020	3.63	5.94	5.66	5.53	0.04
2021	3.77	5.05	10.02	5.31	0.07
2022	1.58	3.61	9.53	8.74	0.03
2023	1.04	4.18	8.70	6.47	0.06

Source: Author's calculation based on RBI OFDI Monthly data.

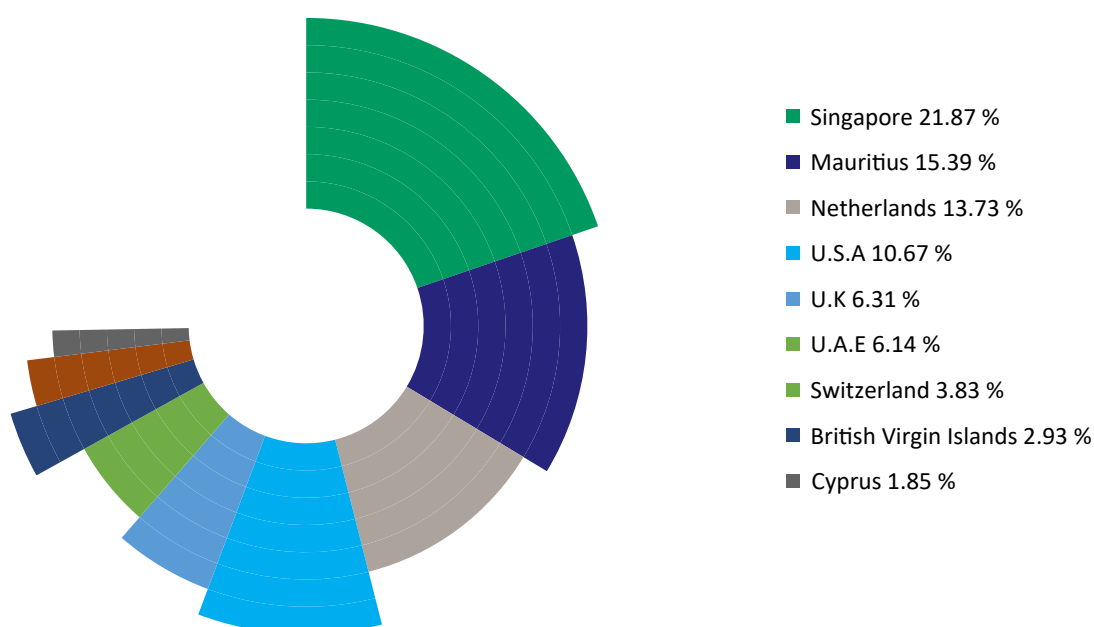
Note: The table shows India's outward FDI by region. Asia has remained the top destination throughout the period, followed by Europe and America. Africa saw periodic spikes driven by resource-oriented investments, while Oceania consistently received a minimal share of flows.

2.3.4 India's Top Country Destinations for OFDI (2007–2023)

Complementing the regional overview, Figure 2.10 presents India's top OFDI destinations at the country level between 2007 and 2023, offering deeper insights into bilateral investment preferences and the role of jurisdiction-specific enablers. The data reveal a high concentration of OFDI in a few strategic economies—Singapore (21.87%), Mauritius (15.39%), the Netherlands (13.73%), and the United States (10.67%)—which together account for over 60% of total cumulative outward flows. This pattern reflects a combination of tax-efficiency (e.g.,

Mauritius, Singapore), financial infrastructure and investment gateways (Netherlands, UAE), and technology and market access motivations (U.S., UK). The prominence of financial centres and treaty-linked jurisdictions further underlines the importance of regulatory arbitrage and capital-routing strategies in shaping India's global investment network. Over time, shifts in tax treaties (such as the GAAR framework with Mauritius and Singapore) and the rise of new destinations (e.g., UAE, Netherlands) suggest a gradual realignment of India's OFDI geography in response to changing global tax norms and strategic diversification imperatives.

Figure 2.10: India's TOP OFDI Destinations – 2007 to 2023



Source: Author's calculation based on RBI OFDI Monthly data

Note: The figure presents India's top outward FDI destinations in cumulative terms. Singapore, Mauritius, the Netherlands, and the U.S. together accounted for over 60% of total OFDI during 2007–2023, reflecting the importance of tax-efficient jurisdictions, financial hubs, and strategic markets.

India's outward FDI over the period 2007–2023 has shown a high degree of geographic concentration, with over 75% of total flows directed towards just eight jurisdictions. As illustrated in Figure 2.13, these include a mix of tax-advantaged financial centres, developed markets, and strategic commercial hubs. The leading destinations— Singapore (21.87%), Mauritius (15.39%), the Netherlands (13.73%),

and the United States (10.67%)—together account for over 60% of cumulative OFDI.

The United States and United Kingdom, which together received over 16.9% of India's cumulative OFDI, represent direct, strategic investments into advanced consumer and technology markets. Indian firms in IT (Infosys, Wipro), pharmaceuticals (Dr Reddy's, Lupin), and automotive (Tata Motors) have used

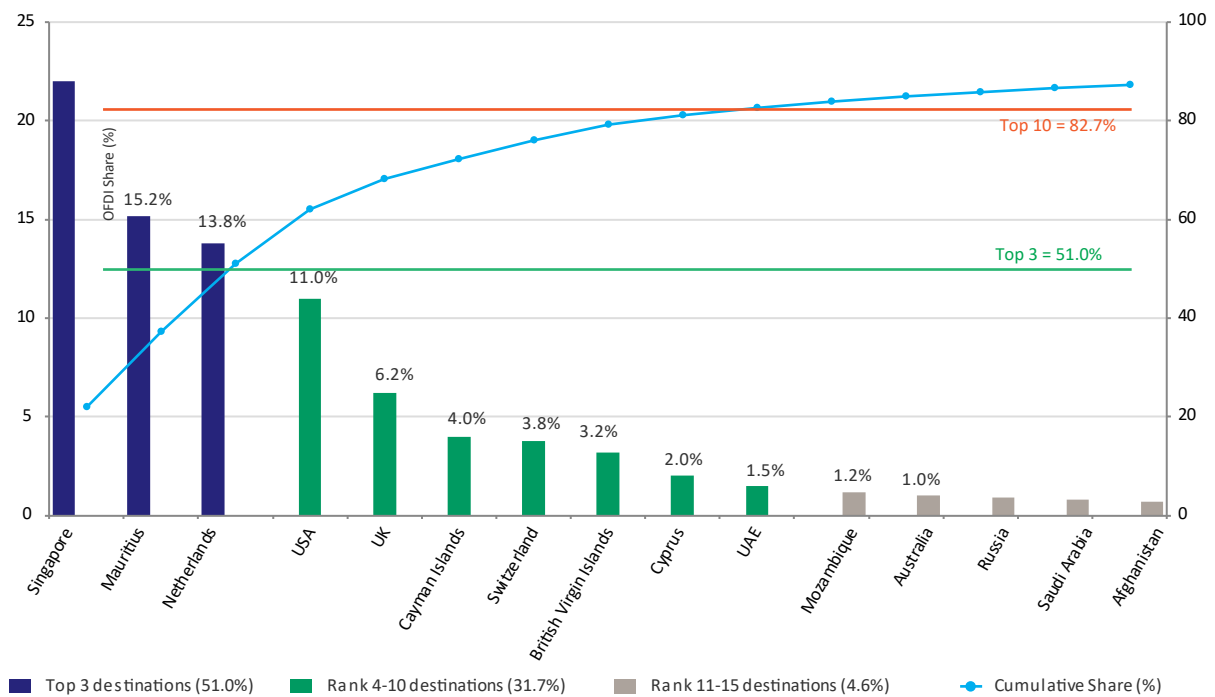


both greenfield and M&A channels in these economies to secure long-term competitive positions. This aligns with India’s broader objective to enhance firm-level competitiveness and diversify global presence (IMF, 2021). The UAE (6.14%) has emerged as a critical regional partner, reflecting diaspora linkages, high consumer engagement, and energy and retail sector collaborations. Similarly, Switzerland and the British Virgin Islands, though lower in ranking, serve specialised purposes—private equity intermediation, holding companies, and legacy investments.

Finally, Cyprus, despite its small share (1.85%), was a notable recipient in earlier years due to its former inclusion in India’s tax-favoured investment jurisdictions. Post-treaty revisions, OFDI to Cyprus has significantly reduced (RBI, 2024).

This concentrated distribution of India’s OFDI highlights a sustained reliance on a limited group of financial centres and strategic partner economies. As illustrated in Figure 2.11, the top 30 host economies collectively account for over 95% of India’s OFDI between 2007 and 2023. Notably, just the top three destinations—Singapore, Mauritius, and the Netherlands—absorb approximately 50.99% of total OFDI flows, while the top ten countries collectively account for 84.26%, and the top fifteen for nearly 89.59%. This long-tail pattern underscores significant path dependence in destination choices, influenced by factors such as tax optimisation strategies, regulatory familiarity, historical business ties, and risk mitigation priorities (RBI, 2024).

Figure 2.11: Top 30 Host Economies of India’s OFDI, 2007–2023 (Cumulative Shares)



Source: Author’s calculation based on Reserve Bank of India firm-level OFDI data (2007–2023).

Note: Shares are grouped by rank among the top host economies (Top 3, Next 7, Rest 20), based on 2007–2023 totals of financial commitments, loans, and guarantees. The top 3 account for 50.99%, the next 7 for 33.27%, and the remaining 20 for 11.05%—together 95.31% of India’s OFDI.

The decision to present the cumulative concentration beyond the top eight jurisdictions (Figure 2.11) provides additional insight into the limited geographic diversification of

India’s outward investment strategy. While the leading destinations—dominated by financial centres such as Singapore, Mauritius, and the Netherlands—capture a disproportionately large

share of flows, the lower-ranked host economies, including several in Africa and Southeast Asia, continue to attract only marginal investments. This pronounced skew not only reflects strategic conservatism but also points to institutional, informational, and regulatory barriers that constrain firm-level expansion into newer and potentially higher-risk markets. As highlighted in recent academic and policy literature, such concentration in OFDI portfolios can heighten vulnerability to adverse policy, tax, or geopolitical shifts in a few key host countries, underscoring the need for more proactive diversification efforts in India’s internationalisation strategy.

2.3.5 Ownership Structures in India’s OFDI: Trends in WOS and JV

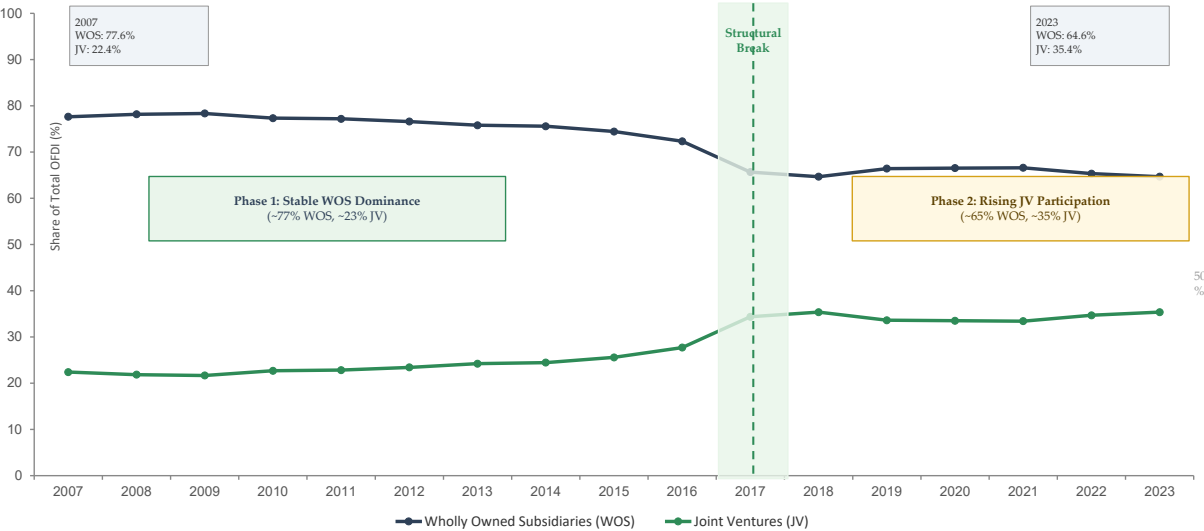
India’s OFDI is primarily undertaken through two ownership structures: wholly owned subsidiaries (WOS) and joint ventures (JVs). A WOS involves full equity ownership and managerial control by the Indian parent firm, allowing greater autonomy over operations, technology deployment, and strategic decisions. In contrast, a JV entails shared ownership with local or foreign partners, enabling risk-sharing and

access to host-country knowledge and networks (Anderson & Gatignon, 1986).

The choice between WOS and JVs is shaped by firm-specific advantages, host-country institutional conditions, and internalisation considerations. Under the Ownership–Location–Internalisation (OLI) paradigm, firms prefer WOS when they possess strong ownership advantages—such as proprietary technology, brand assets, or managerial capabilities—and when internalising foreign operations enhances efficiency (Dunning, 1988; Dunning & Lundan, 2008). Conversely, JVs are more likely in environments characterised by regulatory restrictions or institutional uncertainty, where collaboration with local partners reduces entry risks and facilitates legitimacy (Meyer, Estrin, Beamish & Lupton, 2009).

Empirically, WOS have historically dominated India’s OFDI, accounting for more than 75 per cent of OFDI during 2007–2015. However, their share moderated to 64.6 per cent by 2023, accompanied by a rise in JVs to 35.4 per cent. This gradual rebalancing suggests strategic adaptation as Indian multinational enterprises expand into more diverse and institutionally heterogeneous markets.

Figure 2.12: Percentage share of JVs and WOS in Total OFDI, 2007-2023



Source: Author’s calculation based on RBI, Monthly Data

Note: The figure shows annual percentage shares of India’s outward FDI undertaken through Wholly Owned Subsidiaries (WOS) and Joint Ventures (JVs) over 2007–2023. Shares are computed from RBI monthly outward investment data and aggregated annually. WOS and JV shares sum to 100 per cent in each year.

A closer examination of India's WOS –based OFDI in 2007 and 2023 (see Figure 2.13) reveals a pronounced sectoral and geographical concentration, reflecting both the historical patterns of Indian firms' internationalisation and the evolving structure of the global economy. A comparative disaggregation of WOS-led outward investment over this period indicates a process of sectoral consolidation and geographical realignment, consistent with the increasing maturity of Indian MNEs and shifts in global capital allocation across regions and industries.

As illustrated in Figure 2.13, the sectoral profile of WOS investments has tilted sharply in favour of services over the last decade and a half. In 2007, the services sector already led with 60.3%, but manufacturing held a substantial 35.7% share, reflecting India's earlier thrust in globalising industrial operations, particularly in pharmaceuticals, automotive components, and infrastructure-linked sectors. However, by 2023, services had expanded to 77.2%, while manufacturing contracted to 19.2%. Agriculture remained marginal in both years (3.6% in 2023 vs 4.0% in 2007). This trend highlights a growing alignment between India's WOS strategy and its comparative advantage in knowledge- and skill-intensive sectors. Industries such as IT services, fintech, telecommunications, and professional consulting now dominate the WOS landscape, driven by the need for control, IP protection, and direct customer engagement. For Indian firms, WOS structures in these sectors allow greater flexibility in retaining control over

strategic assets, maintaining brand coherence, and ensuring profit repatriation. This also underscores the shift in India's OFDI from cost-driven motives to strategic asset-seeking and market integration strategies, as predicted by the OLI paradigm.

The destination profile of WOS investment has undergone notable reshaping (Charts 2 and 3): During the year 2007, the WOS flows were concentrated in tax-efficient and treaty-friendly jurisdictions like the Netherlands (21.2%), Mauritius (16.1%), and Cyprus (12.9%). These locations offered Indian firms structural advantages related to tax arbitration, treaty benefits, and holding company structures. Developed markets such as the US (10.2%), Singapore, and the UK had modest shares, indicating early-stage entry. Whereas, by 2023, the US surged to 24.6%, followed closely by the UAE (22.7%) and Singapore (12.0%), reflecting a decisive shift toward rule-based, high-income economies. Countries like the UK, Canada, Germany, and the emerging IFSC GIFT City in India also gained prominence. Traditional tax havens such as Mauritius and Cyprus declined significantly, marking a broader compliance shift aligned with global anti-BEPS norms. The new WOS geography reflects a strategic preference for markets with strong legal protections, high consumer demand, robust IP regimes, and established Indian diaspora networks. It also signals India's gradual exit from treaty-based routing toward substance-based operational internationalisation.

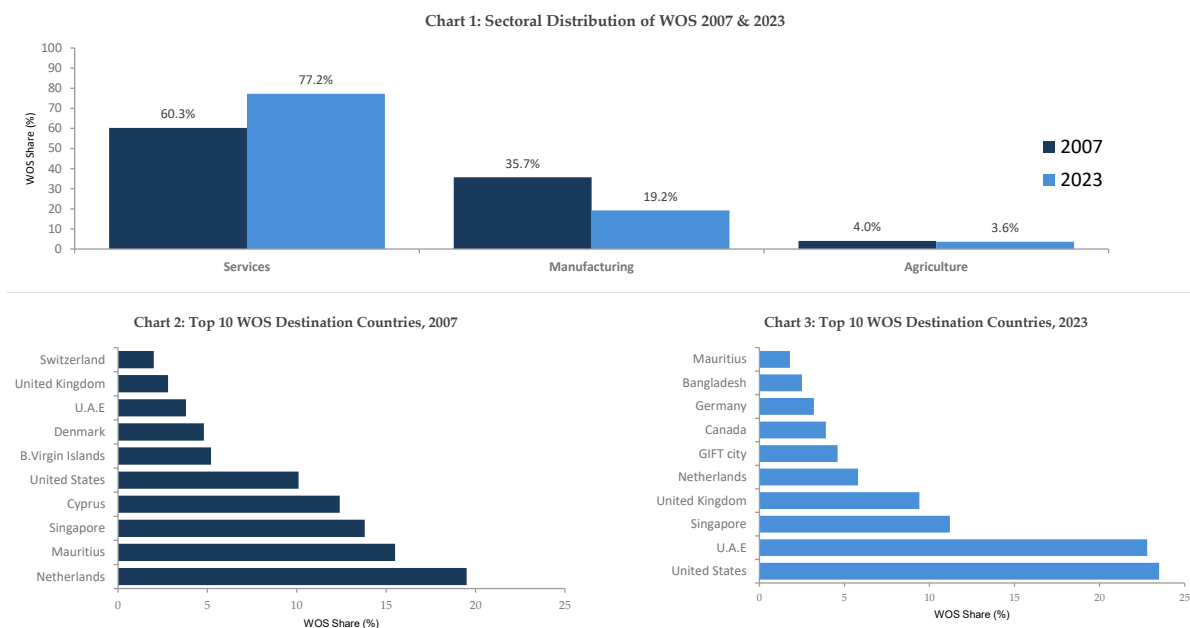
BOX 6: Key takeaways - WOS



- ⦿ Indian MNEs now favour direct control models in service-intensive sectors and target advanced economies where regulatory predictability, customer proximity, and tech innovation are central.
- ⦿ The decline in manufacturing-led WOS could also reflect a relocation of low-cost production to other regional hubs, while Indian firms
- ⦿ The fall in WOS investment to tax havens underscores compliance with evolving OECD tax guidelines and India's domestic investment policy reforms



Figure 2.13: Sectoral and Geographic distribution of Wholly Owned subsidiary- ODI from India

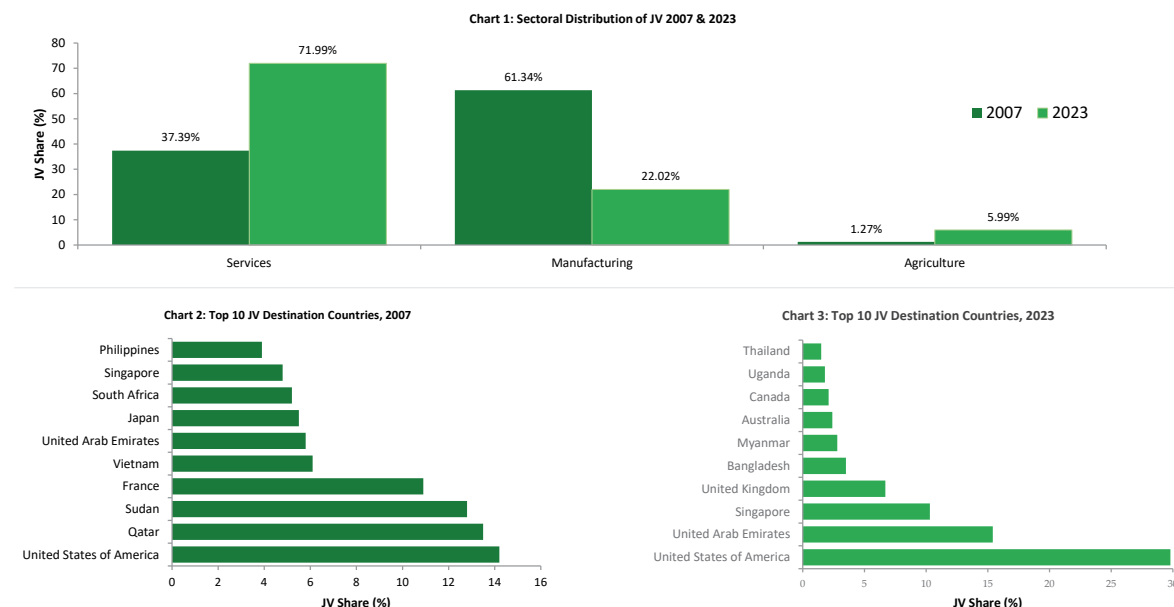


Source: Author’s calculation based on RBI, Monthly Data

In tandem with India’s expanding WOS-led investment footprint, JVs continue to play a distinct and increasingly diversified role in the country’s OFDI portfolio. As per RBI’s framework,

JVs involve equity and operational collaboration between Indian entities and local or foreign partners in host markets.

Figure 2.14: Sectoral and Geographic distribution of Joint Venture ODI from India



Source: Author’s calculation based on RBI, Monthly Data

The sectoral landscape of Indian JVs has undergone a remarkable transformation over the past 15 years. In 2007, over 61% of JV-led

OFDI was directed towards manufacturing, while services accounted for just 37%. This manufacturing-heavy profile aligned with



India's focus on infrastructure, construction, and industrial goods and sectors that often necessitated partnerships due to local licensing norms, land access issues, or import-substitution policies.

However, by 2023, this pattern had reversed decisively. Services now constitute nearly 72% of all JV flows, while manufacturing has dropped to 22%, and agriculture, which is still a minor segment, has increased to nearly 6% (Chart 1, Figure 2,14). This realignment reflects India's comparative advantage in knowledge-intensive services (e.g., IT, consulting, fintech), but also signals a strategic use of JVs to enter regulated service markets where full ownership is either restricted or commercially sub-optimal. This implies there is a growing preference for shared-control entry modes in service sectors where local compliance, relationships, and customisation are critical. And also shift in the role of JVs from production support to market access enablers, especially in digitally enabled economies.

The geographic profile of JV investments has diversified. In 2007, Indian JVs were concentrated in resource-rich or institutionalised economies, including Qatar, Sudan, France, South Africa, and the United States, with the latter holding a modest lead at 13.6% (Chart 2, Figure 2.14). Whereas, by 2023, the majority of the JV investments were directed towards the U.S, UAE,

Singapore and UK, etc. As per the detailed results (as given in firm-level analysis), the U.S now commands 30% of India's JV flows, underscoring sustained collaboration in pharmaceuticals, digital health, and IP-sensitive sectors. Similarly, the UAE and Singapore follow closely, reflecting their roles as regional business hubs with strong Indian diaspora links. Critically, new destinations like Bangladesh, Myanmar, Uganda, and Thailand have emerged as JV hotspots (Chart 3, Figure 2.14), highlighting a risk-sharing strategy in lower-income or politically complex markets.

The increased reliance on JVs is not only strategic but also institutional. Key regulatory and treaty developments influencing JV selection include:

- ⦿ RBI's ODI framework (2022), which permits outbound investment via either WOS or JV, but allows flexibility based on host-country rules.
- ⦿ India's Model Bilateral Investment Treaty (2016) introduced a more conservative stance on investor protections, making joint models more attractive in markets with renegotiated or missing BITs.
- ⦿ Double Taxation Avoidance Agreements (DTAAs) have historically encouraged JV formation in treaty-aligned jurisdictions, where profit repatriation and tax efficiency are critical.

BOX 7: Key Takeaways – JVs

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- ⦿ Indian MNEs increasingly use JVs as a market-entry and risk-sharing strategy, especially in regulated and institutionally complex service sectors.
- ⦿ The shift towards services-led JVs reflects India's comparative advantage in knowledge-intensive activities and the need for local partnerships where full ownership is constrained
- ⦿ The diversification of JV destinations indicates adaptive internationalisation, combining collaboration in advanced economies with partnership-based entry into emerging and high-risk markets.

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1. How has India's outward FDI evolved relative to global OFDI trends since 2007?

Finding:

India's OFDI trajectory has been volatile and modest in scale relative to global peers, shaped by global financial cycles and domestic macroeconomic constraints. While developing economies—particularly in Asia—have expanded their global investment footprint, India's OFDI has remained below 0.5% of GDP and under 1.5% of global OFDI, reflecting capital account conservatism, episodic regulatory tightening, and a narrow base of globally active firms. India remains a net capital importer, with outward investment driven by discrete firm-level strategies rather than sustained economy-wide internationalisation.

2. Which regions and countries dominate India's OFDI, and what explains this concentration?

Finding:

India's OFDI is highly geographically concentrated, with over 95% of flows directed to the top 30 host economies and more than 50% absorbed by just three jurisdictions—Singapore, Mauritius, and the Netherlands. This reflects a dual strategy: (i) reliance on financial and treaty-linked hubs for capital routing and holding structures, and (ii) direct strategic investment in advanced economies such as the United States and the United Kingdom for market access, technology, and brand acquisition. The gradual decline of traditional tax havens indicates adjustment to OECD-BEPS norms and India's evolving treaty framework.

3. How has the sectoral composition of India's OFDI changed over time?

Finding:

India's OFDI has undergone a structural shift from manufacturing-led to services-dominated internationalisation. Manufacturing drove early expansion (2007–2011), peaking at over 50% of OFDI, supported by asset-seeking and market-seeking strategies of large industrial firms. Post-2012, manufacturing OFDI moderated as earlier investments matured and capital-intensive expansion became less attractive. By 2019–2023, financial, business, and professional services emerged as the dominant sectors, reflecting India's comparative advantage in knowledge-intensive activities and lower barriers to cross-border scaling.

4. What role do episodic investments and non-core sectors play in India's OFDI profile?

Finding:

Certain sectors—particularly transport, storage, and communication—exhibit sharp but episodic spikes, driven by a small number of large telecom or logistics deals rather than sustained expansion. Retail, wholesale, and hospitality show moderate persistence, largely linked to diaspora-driven and consumer-facing strategies. Resource-based and infrastructure sectors remain peripheral, reflecting selective engagement driven by energy and food security considerations, regulatory constraints, and a continued reliance on project-based or contractual modes rather than equity-led overseas investment.



5. How do ownership structures (WOS vs JVs) reflect India's evolving OFDI strategy?

Finding:

India's OFDI has historically favoured Wholly Owned Subsidiaries (WOS), with over 75% share during 2007–2015, indicating strong preference for control and internalisation. Since 2016, a gradual rise in Joint Ventures (JVs)—now accounting for over 35%—signals strategic adaptation. WOS increasingly dominate services-led investments in advanced economies, where IP protection, customer proximity, and regulatory predictability matter. JVs, in contrast, have evolved into market-access and risk-sharing instruments, especially in regulated services and institutionally complex or emerging markets.

6. What do sectoral and geographic patterns of WOS and JVs reveal about firm strategies?

Finding:

WOS investments show increasing sectoral consolidation in services and a geographic shift toward rule-based, high-income economies, reflecting mature, control-intensive internationalisation. JVs display greater sectoral and geographic diversification, transitioning from manufacturing-heavy partnerships to services-led collaborations and expanding into both advanced hubs and higher-risk emerging markets. Together, these patterns reveal a dual-track OFDI strategy, combining control-driven expansion with collaborative entry where local knowledge, compliance, or political economy considerations are critical.

7. What are the overarching structural insights from India's OFDI experience?

Finding:

India's outward investment reflects a gradual maturation rather than large-scale global dominance. OFDI remains concentrated among a small set of firms, sectors, and destinations, but is increasingly aligned with India's comparative advantages in services, digital capabilities, and knowledge-intensive activities. The evidence points to strategic recalibration—away from treaty arbitrage and capital-intensive manufacturing, and toward substance-based, services-led, and institutionally adaptive global engagement.

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Chapter

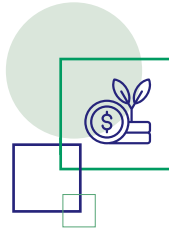
03

Firm Level Strategies and Typologies in India's Outward FDI: Patterns by Investment Scale, Sector, and Firm Destination

3.1 Introduction

India's OFDI has undergone a marked transformation over the past two decades. What began as sporadic, high-profile overseas acquisitions by a small number of large industrial conglomerates has evolved into a more diversified, structured, and multi-layered pattern of international engagement involving firms across a wide spectrum of sectors and investment scales. While aggregate OFDI trends and sector-level flows provide useful insights into India's global investment trajectory, such macro perspectives often obscure the heterogeneity in firm behaviour, strategic intent, and modes of internationalisation that underpin these capital flows. A firm-level analysis is therefore necessary to examine the structure of India's OFDI, including which types of firms invest abroad, the scale and configuration of their investments, their evolving sectoral





orientations, and the organisational and strategic patterns that shape their internationalisation.

This chapter undertakes a detailed empirical assessment of India's globalising firms by examining outward investment behaviour across firm size, sectoral orientation, ownership structure, and diversification strategy. It seeks to address three interrelated questions of direct relevance to both policy design and corporate strategy.

- ⦿ Which types of Indian firms dominate OFDI flows, and how have their sectoral orientations evolved?
- ⦿ How do firms differ by investment scale in terms of organisational structure, internationalisation strategy, and diversification—ranging from small, specialised investors to large, diversified multinational groups?
- ⦿ How do firms cluster into sectoral and cross-sectoral investment networks, and what do these emerging investment communities imply for industrial policy, investment facilitation, and international economic engagement?

The motivation for this analysis is twofold. From a policy perspective, understanding firm-level OFDI behaviour is critical for designing targeted investment promotion strategies, strengthening export–investment linkages, and aligning India's bilateral and regional investment frameworks with the capabilities and constraints of different categories of firms. From an analytical standpoint, tracing how firms group into investment clusters—through co-investment patterns, sectoral complementarities, and cross-sectoral linkages—provides insight into the emergence of ecosystem-level dynamics in India's outward investment landscape. These dynamics are particularly relevant for supporting mid-sized firms, incentivising strategically important sectors, and anticipating structural transitions in India's external economic engagement.

Empirically, the analysis draws on the RBI's monthly firm-level OFDI transaction data and integrates three complementary analytical layers. First, it presents a longitudinal examination of the largest outward-investing firms over the period 2007–2023 to capture shifts in sectoral leadership and investment concentration. Second, it develops a typology of firms based on investment brackets and internationalisation strategies using 2023 data, highlighting differences in scale, strategic posture, and diversification behaviour. Third, it applies a network-based clustering approach—using the Louvain community detection method—to identify sectoral and cross-sectoral investment communities over the period 2022–2024.

Taken together, these layers provide a multidimensional profile of India's global investment actors, revealing both the expanding breadth of the country's OFDI base and the persistent concentration of strategic capital among a relatively small cohort of internationally mature firms. The analysis thus offers a nuanced understanding of how firm-level heterogeneity shapes the structure, direction, and future trajectory of India's outward investment.

3.2 Data and Methodology

The firm-level analysis is based on disaggregated monthly OFDI data drawn from the RBI, which have been aggregated to annual firm-level totals for the period 2007 to 2023. To capture the investment pattern, we focus on firms whose total annual outward investment exceeded USD 100 million, using this threshold to identify large-ticket investors with significant international footprints.

The data were systematically cleaned and organised by firm name, sector, investment year, and disbursement value. Firms meeting the investment threshold were then classified by sector, enabling a year-wise assessment of how dominant sectors and firms evolved over time. This approach allows us to trace the shifting sectoral weight of India's globalising firms—e.g., from energy and telecom pre-2010 to pharmaceuticals, digital services, and clean energy in recent years.

Complementing this, a second layer of analysis is carried out by segmenting the comprehensive 2023 OFDI firm-level dataset into investment brackets (0–1M, 1–10M, 10–100M, etc.), and classifying firms by country diversification, sector spread, and internationalisation type (e.g., experimental, incremental, globalising). A third layer applies network clustering techniques, where firms are treated as nodes in an investment similarity network, and their sectoral patterns are mapped using the algorithm technique, revealing how firms form natural groupings by sectoral affiliation, scale, and strategic alignment.

To analyse firm-level investment strategies and structural interlinkages in India's OFDI, the study

employs a network-based clustering approach using the Louvain community detection algorithm (See Appendix 3A for detailed methodology). This method groups firms based on co-investment behaviour across sectors and destinations, allowing the identification of dominant investment communities and the degree of interconnectedness within India's OFDI ecosystem. The approach highlights both sector-specific clusters—such as finance, manufacturing, and retail—and the emergence of multi-sector investment ecosystems where firms operate across complementary activities. These insights help uncover patterns of strategic alignment, co-location, and ecosystem formation, informing sectoral and cluster-based investment promotion strategies.

To examine the evolution of these clustering patterns over time, firm-level OFDI data were analysed for three benchmark years: 2008, 2015, and 2023. These years were selected to capture key phases in India's outward investment trajectory—early internationalisation, post-global financial crisis consolidation, and the recent phase of diversified global engagement.

The network construction incorporates the following firm-level attributes:

- ⦿ Sectoral classification of investing firms (e.g., manufacturing, finance, retail, infrastructure)
- ⦿ Financial commitments, capturing the scale of equity investment
- ⦿ Loans and guarantees, reflecting financing structures and risk-sharing mechanisms
- ⦿ Destination countries, indicating geographic diversification and market orientation

By mapping firms and sectors as nodes connected through shared investment relationships, the Louvain algorithm identifies clusters that maximise within-group connectivity while minimising cross-group links. This enables a dynamic comparison of how India's OFDI networks have evolved—from relatively siloed, sector-specific structures to increasingly integrated, cross-sectoral investment ecosystems—shedding light on



the changing nature of firm strategies and the growing importance of ecosystem-based internationalisation. The detailed methodology of network-based clustering model is given in Appendix 3A.

3.3: Which Firms Drive India's OFDI? Patterns of Concentration and Scale

An analysis of firm-level OFDI over 2007–2023 highlights a significant concentration of outward investments among a small number of Indian firms. As shown in Figure 3.1, although the total number of firms undertaking OFDI increased dramatically—from 713 in 2007 to 5,273 in 2023,—the share of large firms (those investing over USD 100 million annually) remained remarkably low, averaging just 2.1% throughout the period. Despite representing this minimal fraction of total participants, these large investors have consistently accounted for a disproportionately large share of India's OFDI, averaging 65.5% of total outward investment over the period.

The concentration pattern reveals three distinct phases. During the initial phase (2007–2011), large firms' dominance intensified, peaking at 78.8% in 2010 during the post-global financial crisis recovery, when established conglomerates with access to counter-cyclical capital led India's outward expansion. The middle phase

(2012–2019) exhibited relative stabilisation, with concentration fluctuating between 58% and 72%, reflecting a maturing OFDI landscape where both large multinationals and mid-sized firms participated actively. The recent phase (2020–2023) demonstrates an emerging diversification trend, with large firms' share declining to 55.9% by 2023—the lowest level observed in the entire period—despite the pandemic-induced reduction in overall firm participation. This suggests that while large corporations maintained resilience through the COVID-19 disruption, smaller and medium-sized enterprises are gradually claiming a larger share of India's outward investment pie.

This persistent concentration underscores the structural dominance of a small cohort of internationally ambitious conglomerates—typically large business houses with diversified portfolios, established global networks, and privileged access to international capital markets (Joseph, 2019). However, the declining concentration trend post-2020, coinciding with rising firm participation, indicates a potential democratisation of India's OFDI landscape, wherein policy liberalisation and digital transformation may be enabling broader-based internationalisation beyond traditional large corporate players.

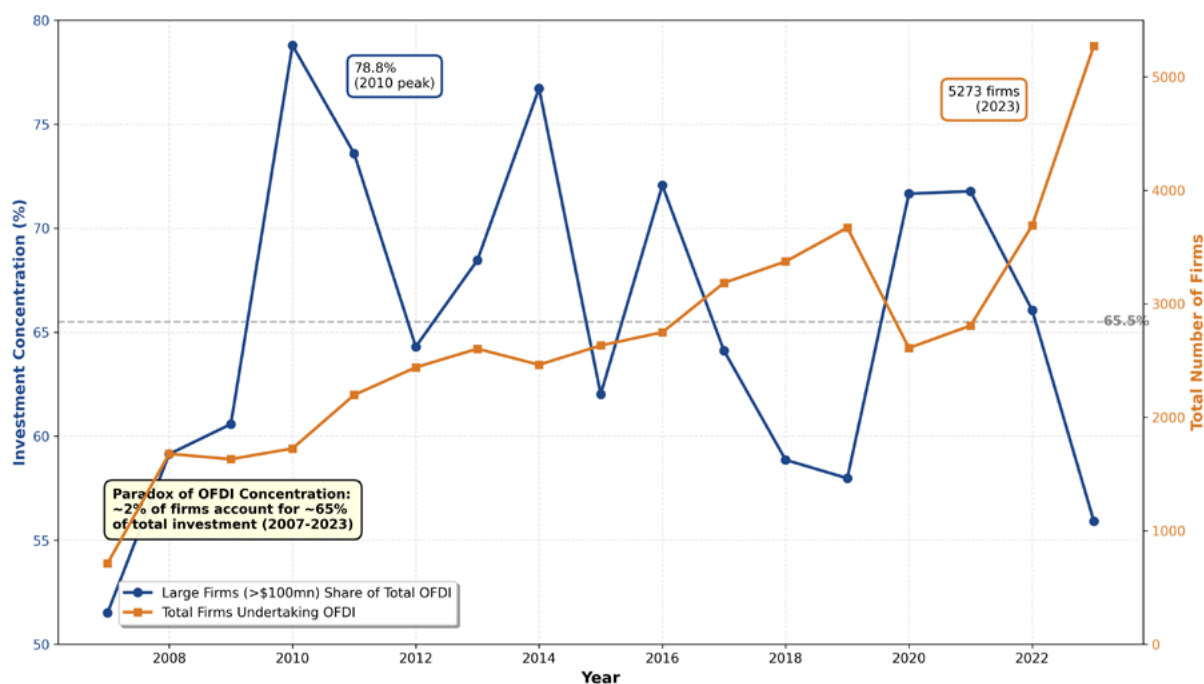
Table 3.1: Annual Outward Foreign Direct Investment (OFDI) by Indian Firms: 2007–2024

Year	No of firms	Number of Firms with Investments > \$100 Million	Share of Firms with > USD 100 Million (%)	Total OFDI Investment (in Million USD)	Investment by Firms > \$100 Million (in Million USD)	Percentage Contribution by Firms > \$100 Million
2007	713	10	1.40	5958.837	3069.462	51.51
2008	1678	43	2.56	17515.05	10358.18	59.14
2009	1631	28	1.72	17453.98	10574.24	60.58
2010	1725	37	2.14	38180.57	30083.57	78.79
2011	2197	58	2.64	33937.93	24974.5	73.59
2012	2440	53	2.17	25601.38	16461.41	64.30
2013	2604	59	2.27	29588.88	20257	68.46
2014	2463	48	1.95	38246.54	29343.77	76.72

Year	No of firms	Number of Firms with Investments > \$100 Million	Share of Firms with > USD 100 Million (%)	Total OFDI (in Million USD)	Investment by Firms > \$100 Million (in Million USD)	Percentage Contribution by Firms > \$100 Million
2015	2633	54	2.05	22496.28	13953.27	62.02
2016	2749	38	1.38	24701.57	17799.53	72.06
2017	3185	40	1.26	21120.93	13540.26	64.11
2018	3373	41	1.22	18410.54	10836.25	58.86
2019	3671	31	0.84	18656.55	10817.33	57.98
2020	2611	43	1.65	20795.13	14901.24	71.66
2021	2808	42	1.50	24220.29	17382.73	71.77
2022	3692	48	1.30	23497.86	15521.1	66.05
2023	5273	46	0.87	20445.21	11430.8	55.91

Source: Compiled from monthly statistics, ODI, RBI

Figure 3.1: Firm-Level Concentration in India's OFDI (2007–2023)



Source: Authors' calculation based on RBI data.

Note: This figure illustrates the concentration of India's outward FDI at the firm level. Large firms are defined as those with annual outward investment exceeding USD 100 million. The line (left axis) represents the share of total OFDI contributed by large firms, while the line (right axis) shows the total number of firms undertaking OFDI in each year. Despite a significant increase in the number of participating firms—from 713 in 2007 to 5,273 in 2023—large firms consistently account for approximately 65% of total investment, though this share declined to 55.9% in 2023, indicating gradual diversification. The dashed line indicates the mean concentration level (65.5%) over the period.

3.4: Evolution of India's Top OFDI Firms: Sectoral Shifts Over Time

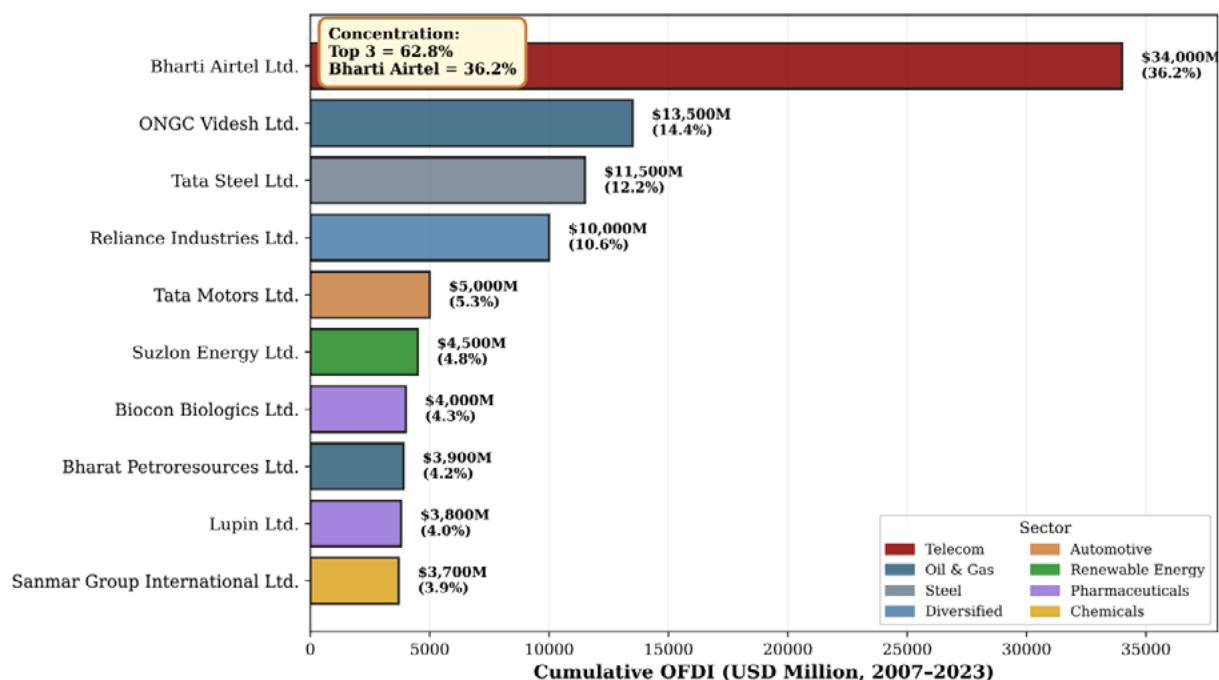
Building on the evidence of firm-level concentration and scale presented in the preceding section, this section shifts focus from the distribution of India's outward investment to the identity and evolution of the firms driving these flows. While Table 3.1 and Figure 3.1 establish that a small set of large firms accounts for a disproportionate share of India's OFDI, they do not reveal how the sectoral composition and strategic orientation of these leading investors have changed over time.

Accordingly, this section examines the evolution of India's top outward-investing firms across four distinct periods—2007–2010, 2011–2015, 2016–2020, and 2021–2023—to identify shifts in sectoral dominance and investment strategy. By tracking the leading firms in each phase, the analysis captures how India's global investment footprint has progressively diversified beyond

traditional anchors such as energy and telecommunications into emerging domains, including pharmaceuticals, digital infrastructure, advanced manufacturing, and clean energy.

This periodised perspective provides insight into the changing nature of India's outward investment leadership and sets the stage for a more granular examination of firm heterogeneity and strategic behaviour in subsequent sections. Figure 3.2 illustrates the top 10 Indian firms by cumulative OFDI over the period 2007–2023. Telecommunication giant Bharti Airtel emerges as the most prominent investor, followed by ONGC Videsh, Tata Steel, Reliance Industries, Tata Motors, Suzlon Energy, Biocon Biologics, Bharat Petroleum Resources, Lupin, and Sanmar Group. These firms represent a cross-section of sectors, including energy, manufacturing, telecom, pharma, and biotech—pointing to the increasingly diversified nature of India's OFDI leadership.

Figure 3.2: Top 10 firms by Total OFDI (2007-2023)



Source: Author's calculations based on firm-level OFDI data drawn from the RBI, 2007–2023.

Note: Firms are ranked by total cumulative OFDI during 2007–2023. Bars are colour-coded by primary sector of operation. Bharti Airtel Ltd. alone accounts for 36.2% of the top 10 firms' combined OFDI, while the top three firms collectively represent 62.8% of this total, highlighting extreme concentration at the firm level.

The sectoral patterns outlined in Table 3.2 are explored in greater detail below, using a period-wise breakdown to highlight how India’s leading outward investors have evolved across different phases. This shift in firm-level leadership and

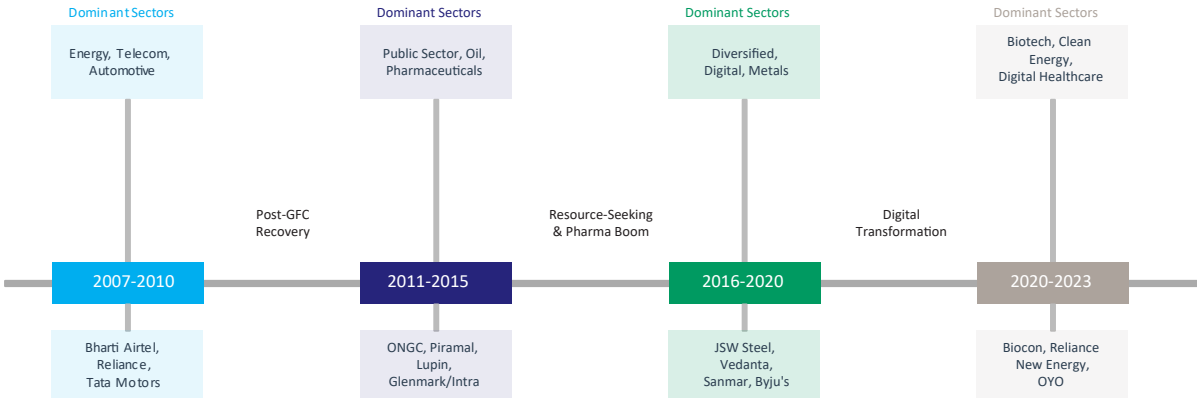
sectoral orientation is further illustrated in Figure 3.3, which presents the top investing firms by cumulative OFDI during each of the four time periods.

Table 3.2: Sectoral Shifts in India’s OFDI Leaders: 2007–2023

Period	Dominant Sectors	Representative Firms / OFDI Leaders
2007–2010	Energy, Telecommunications, Automotive	Bharti Airtel, Reliance Industries, Tata Motors
2011–2015	Public Sector Enterprises, Pharmaceuticals, Infrastructure	ONGC, Oil India, Piramal, Lupin, Gammon Infra
2016–2020	Diversified Conglomerates, Digital Platforms, Metals & Manufacturing	JSW Steel, Vedanta, Sanmar Group, Byju’s
2021–2023	Biotechnology, Clean Energy, Digital Services	Biocon, Reliance New Energy, OYO

Source: Author’s compilation based on firm-level OFDI data from the RBI, 2007–2023.

Figure 3.3: Phases of India’s OFDI: Sectoral Dominance and Lead Firms (2007–2023)



Source: Author’s compilation based on firm-level OFDI data from the RBI, 2007–2023.

(A) Phase I (2007–2010): Dominance of Energy, Telecom, and Conglomerates

This period marked the early wave of India’s large-scale outward investments, dominated by conglomerates and capital-intensive sectors such as energy, telecommunications, and automotive. Indian conglomerates took the lead in overseas expansion during this phase, often through landmark acquisitions. Firms like Suzlon Energy, Reliance Communications, Tata Motors,

and Bharti Airtel dominated the top investment ranks. This period also saw significant overseas acquisitions—such as Tata Motors’ acquisition of Jaguar Land Rover in 2008—reflecting a “big bang” globalisation approach by firms. Investments were highly concentrated in a few large firms and sectors, driven by asset-seeking motivations to acquire global brands, distribution networks, and advanced technologies in developed markets.



(B) Phase II (2011–2015): Expansion of Pharmaceuticals and Public Sector Energy Players

This phase witnessed a broadening of India’s OFDI landscape, marked by increased sectoral diversification. Pharmaceutical firms such as Lupin Ltd. and Piramal Healthcare emerged as significant outward investors, alongside the continued dominance of public sector oil and gas enterprises like ONGC Videsh Ltd., Oil India, and Bharat Petroresources Ltd. The period reflects a strategic pivot toward securing overseas resources and accessing new markets, particularly in Africa and Latin America. While IT and telecom firms maintained a global presence, their expansion efforts during this phase were more selective compared to the high growth seen in the preceding period.

(C) Phase III (2016–2020): Rise of Diversified Players and Digital Transition

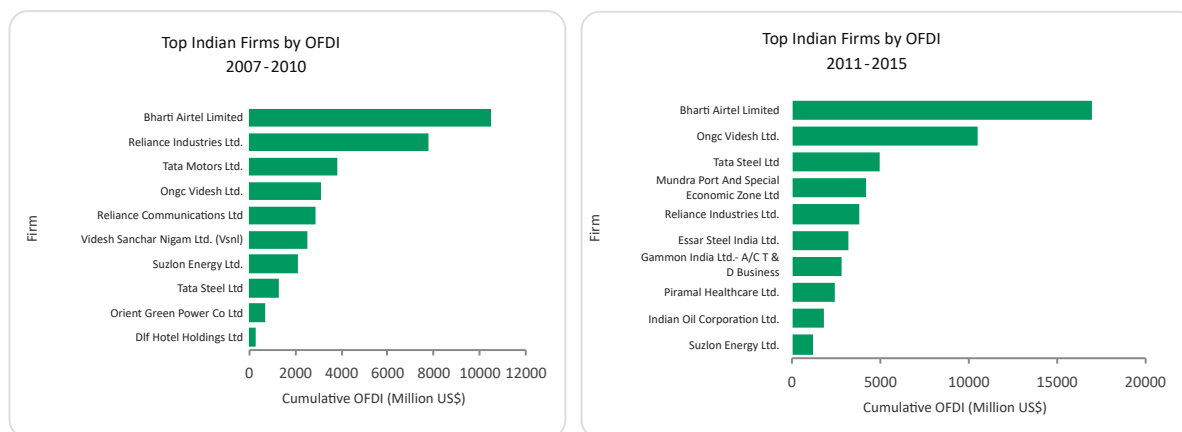
During this period, India’s OFDI profile became more diverse, with prominent investments by firms across digital services, infrastructure, and metals. Players such as JSW Steel, Sanmar Group,

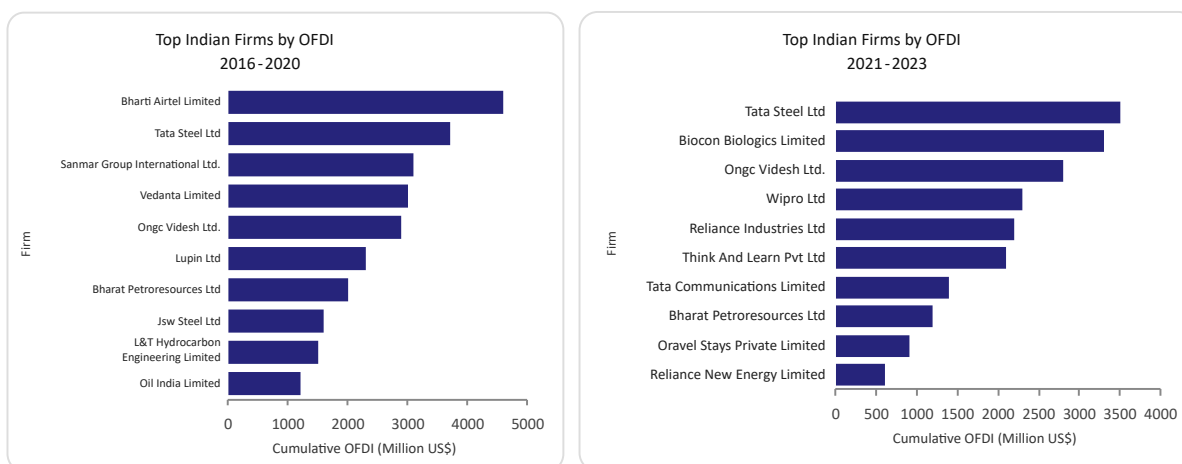
and Vedanta expanded their global footprints, while digital-first firms like Think & Learn Pvt Ltd (Byju’s) signalled the growing importance of asset-light, tech-driven internationalisation strategies. This phase marks the beginning of a structural transition toward innovation-led and services-oriented OFDI, reflecting India’s changing competitive advantages and firm capabilities.

(D) Phase IV (2021–2023): Biotech, Clean Energy, and Continued Diversification

In the most recent phase, a noticeable shift occurred toward knowledge-intensive and sustainability-linked sectors. Companies like Biocon Biologics, Reliance New Energy, and OYO became leading outward investors, representing a new generation of agile, Venture Capital (VC)-backed firms with global aspirations. These actors increasingly target innovation ecosystems abroad. At the same time, established players such as Tata Steel, Reliance, and Wipro continued to maintain outward investment momentum, contributing to a more hybrid OFDI landscape that blends legacy industrial strength with emerging sectoral frontiers.

Figure 3.4: Top Indian Outward Investing Firms by Period (2007–2023)





Source: Author’s compilation based on firm-level OFDI data from the RBI, 2007–2023.

Note: The figure presents the top Indian firms by cumulative OFDI across four time periods—2007–2010, 2011–2015, 2016–2020, and 2021–2023.

3.5 How Do Firms Differ by Investment Scale? Strategy & Structure 2023

India’s OFDI pattern exhibits considerable heterogeneity in the scale and scope of outward investments by domestic firms. To analyse this, firms have been classified into distinct investment brackets based on their total annual outward investment in 2023. This categorisation allows for a comparative lens on not only the scale of capital deployment but also the strategic orientations and sectoral patterns associated with different firm types.

3.5.1 Distribution of Firms Across Investment Brackets

Figure 3.5 presents a scatter plot of Indian firms’ OFDI activity in 2023. Each dot in the figure represents an individual firm. Firms are placed along the horizontal axis in an arbitrary order, while the vertical axis shows the total value of outward investment made by each firm (in USD million). Different colours indicate firms belonging to different investment brackets, ranging from very small investors (USD 0–1 million) to very large investors (above USD 1 billion).

Figure 3.5 clearly shows that the majority of Indian firms investing abroad operate at very small scales. A dense cluster of firms appears near the bottom of the chart, corresponding

to the USD 0–1 million and USD 1–10 million brackets. These firms invest modest amounts overseas and together form the broad base of India’s outward-investing population. A smaller but visible group of firms occupies the USD 10–100 million range, representing mid-scale investors with more established international operations. At the top end of the distribution, only a handful of firms invest more than USD 100 million, and just a few exceed USD 1 billion. These firms stand out as clear outliers, highlighting the dominant role played by a very small number of large firms in India’s OFDI landscape.

To better understand this uneven pattern, two complementary analytical approaches are used. Figure 3.6 further illustrates the concentration pattern by comparing the number of firms and the total value of investments across different OFDI brackets. It shows that nearly 84 per cent of firms invest less than USD 1 million, yet together they account for only about 2 per cent of total investment value. In contrast, a very small group of large firms dominates the higher investment brackets, contributing the bulk of India’s outward capital flows.

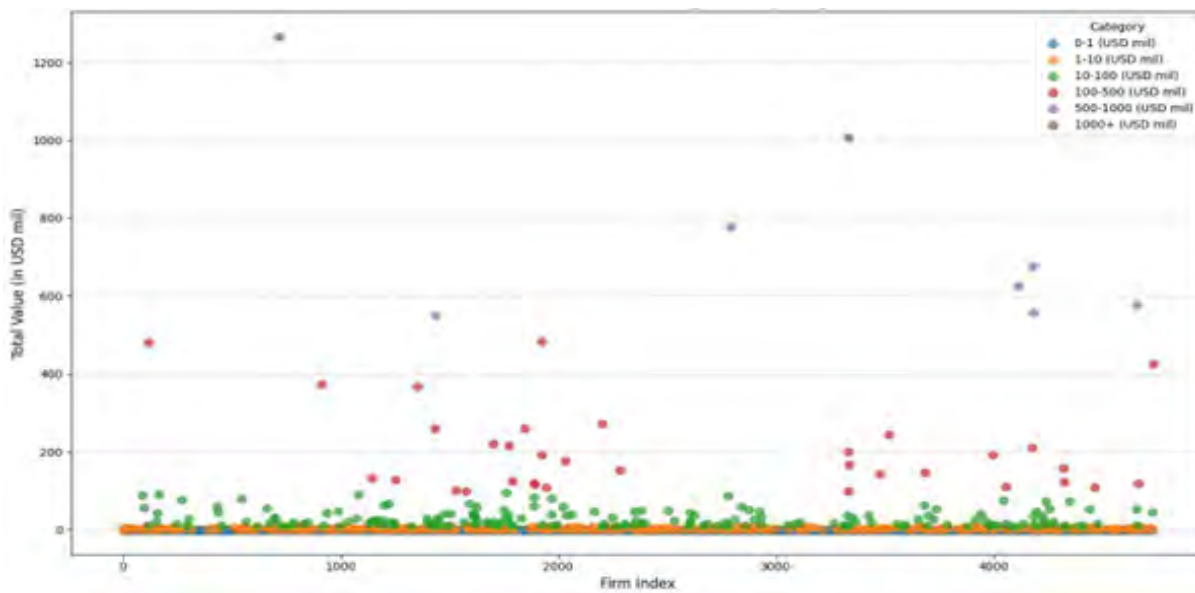
First, a Pareto-style distributional analysis is applied to assess the degree of concentration in outward investment. This approach reveals that a small number of firms account for a disproportionately large share of total OFDI, while most firms participate at relatively low



investment levels. Such skewed distributions are common in international trade and investment, where differences in scale, experience, and

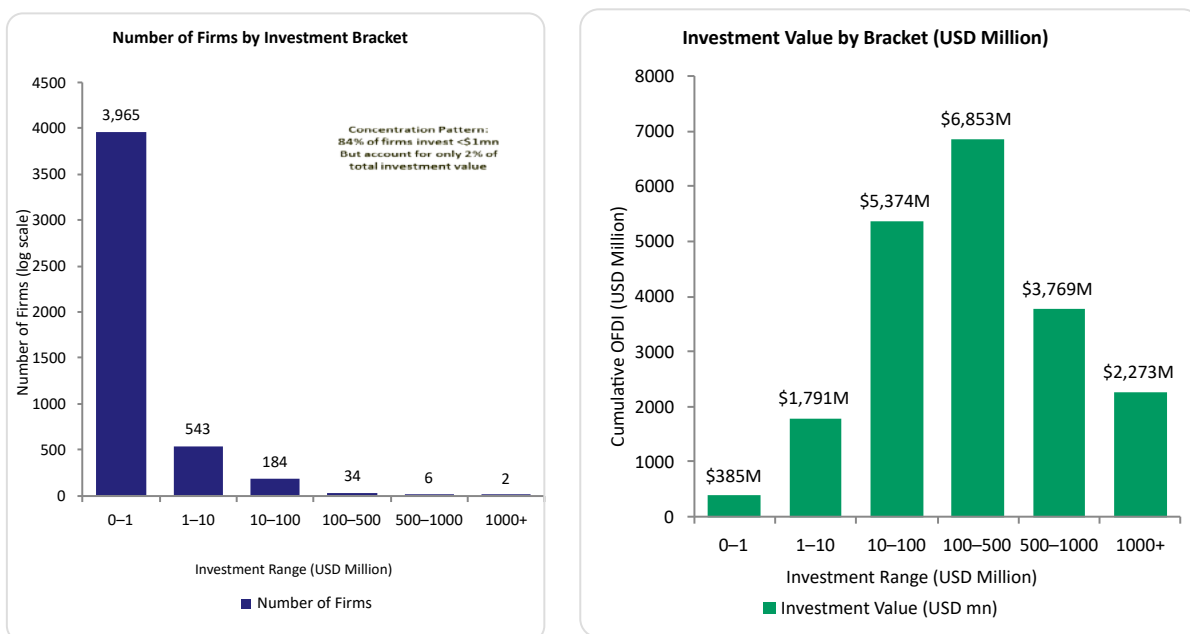
access to capital enable a few firms to expand rapidly abroad, while others internationalise more gradually.

Figure 3.5: Scatter Plot of Indian Firms’ OFDI Investments –indicative 2023



Source: Author’s calculations based on monthly OFDI data from the RBI.

Figure 3.6: Distribution of Firms and Investment Value Across OFDI Brackets (2023)



Source: Author’s calculations based on monthly OFDI data from the RBI.

Second, a classification framework is used to examine how firms differ in their internationalisation strategies, sectoral focus, geographic reach, and diversification patterns.

In this framework, firm-level diversification—measured by the number of sectors and destination countries entered—serves as an indicator of the complexity and ambition of

international engagement. Together, these two approaches allow the analysis to move beyond investment size alone and provide insight into the structural and strategic differences among Indian outward-investing firms.

To formally assess the extent of concentration in firm-level outward investment, a Lorenz curve analysis is presented in Appendix 3B. The results confirm extreme inequality in India's OFDI distribution: nearly 84 per cent of outward-investing firms—those investing less than USD 1 million—account for only about 2 per cent of total OFDI value, while the top 1 per cent of firm's command almost 63 per cent. This sharp deviation from the line of equality reinforces the evidence from Figures 3.5 and 3.6 and underscores the oligopolistic structure of India's outward investment landscape.

Taken together, these findings show that India's OFDI is characterised by a broad base of small investors and a narrow apex of large, globally active firms. While a few firms drive the bulk of outward investment value, most firms are at earlier or more cautious stages of internationalisation.

3.5.2 Firm Typologies by Investment Bracket (2023)

The distributional analysis in the previous section highlights a defining feature of India's outward foreign direct investment: a large number of firms participate in overseas investment, but they do so at very different scales and with markedly different levels of strategic commitment. While Figures 3.5 and 3.6 demonstrate the extent of concentration in investment values, they do not reveal how firms at different investment levels approach internationalisation in practice. Understanding these differences requires moving beyond aggregate distributions to examine firms as distinct strategic actors.

Accordingly, this section develops a firm typology based on investment brackets, focusing on how firms differ in organisational structure, internationalisation strategy, sectoral orientation, and diversification behaviour in 2023. By distinguishing between small, medium,

and large outward investors, the analysis captures the progression from experimental and incremental internationalisation among smaller firms to more integrated and diversified global strategies among larger investors.

3.5.2.1 USD 0–1 million Bracket: Experimental & Incremental Internationalisers

A closer examination of firms in the USD 0–1 million investment bracket reveals distinct internationalisation strategies that are closely linked to sectoral characteristics and firm capabilities. These firms typically pursue low-commitment overseas entry, reflecting cautious experimentation, learning-by-doing, and limited exposure to foreign market risks (Table 3.3).

At one end of this bracket are firms such as Moonshine Technology Pvt Ltd and Mahindra Intertrade Ltd, which can be characterised as experimental internationalizers. Operating in focused sectors such as manufacturing and trade, these firms enter foreign markets through single-country, single-sector investments, often using outward investment as a testing mechanism rather than a long-term strategic commitment. Their international presence is narrow and exploratory, consistent with early-stage learning models of global expansion.

In contrast, firms such as Amritha Consulting Services LLP, Venus Petrochemicals Pvt Ltd, and Oagri Farm Pvt Ltd exhibit a pattern of incremental diversification within specific host markets. These firms typically operate in services, light manufacturing, or resource-linked activities, where overseas expansion is facilitated through gradual product extension or client-based servicing rather than large capital deployment. Their strategy reflects deeper engagement within a single country while cautiously broadening sectoral exposure.

Zoho Corporation Pvt Ltd represents a more advanced profile within this bracket and may be classified as an emerging globalizer. With operations spanning two destination countries, Zoho's outward investment aligns with India's comparative strengths in technology-driven and digitally deliverable services. Its internationalisation path illustrates how capital-



light firms in IT and fintech can scale globally at relatively low investment thresholds, leveraging knowledge intensity rather than physical assets.

Similarly, firms such as Aren Industries Pvt Ltd and Jagmadhur Realty Pvt Ltd fall into the

category of exploratory investors, cautiously entering foreign markets—often in low-risk service or real estate segments—to assess commercial viability and regulatory conditions before scaling up.

Table 3.3: Top Firms in the 0–1 million US \$ Investment Range (2023)

Firm Name	Investment (USD Mn)	Countries	Sectors	Internationalization Strategy	Strategic Posture	Diversification Type
Amritha Consulting Services LLP	0.9946	1	3	Incremental Diversifier	Product Extender	Medium
Moonshine Technology Pvt Ltd	0.9868	1	1	Experimental Internationalizer	Focused Export Supporter	Low
Venus Petrochemicals Pvt Ltd	0.983	1	3	Incremental Diversifier	Product Extender	Medium
Mahindra Intertrade Ltd	0.9756	1	1	Experimental Internationalizer	Market Penetrator	Low
Aren Industries Pvt Ltd	0.9735	1	3	Incremental Diversifier	Exploratory Investor	Medium
Oagri Farm Pvt Ltd	0.9731	1	3	Incremental Diversifier	Product Extender	Medium
ABPC Evergreen	0.96	1	1	Experimental Internationalizer	Focused Export Supporter	Low
Karnita Ventures Pvt Ltd	0.9493	1	1	Experimental Internationalizer	Exploratory Investor	Low
Jagmadhur Realty Pvt Ltd	0.9493	1	1	Experimental Internationalizer	Exploratory Investor	Low
Zoho Corporation Pvt Ltd	0.9439	2	1	Emerging Globalizer	Market Penetrator	Medium

Source: Author’s compilation based on firm-level OFDI data from the RBI

Note: The table provides a representative sample of Indian firms within the USD 0-1 million OFDI bracket in 2023. It captures firm-level characteristics such as destination countries, sectors, and strategic posture, classified using a hybrid framework combining internationalisation strategy, diversification type, and investment intent.

Taken together, the USD 0–1 million bracket reflects a broad base of early-stage internationalizers whose strategies are shaped by limited capital exposure, sectoral scalability, and gradual learning. Across this bracket, Financial, Insurance, and Business Services

dominate outward investment, owing to their low capital intensity and ease of cross-border deployment, followed by Wholesale and Retail trade and Manufacturing, which leverage India’s competitiveness in pharmaceuticals, consumer goods, and engineering exports. These patterns

underscore that small-scale OFDI is less about immediate scale and more about strategic positioning, experimentation, and capability building for future global expansion.

3.5.2.2 USD 1–10 million Bracket: Transitional Globalizers

Table 3.4 profiles Indian firms whose outward investment commitments ranged from USD 1 million to USD 10 million in 2023. This bracket comprises 543 firms, with a combined OFDI value of approximately USD 1.79 billion, making it a meaningful “middle layer” in India’s outward investment ecosystem. Compared to the USD 0–1 million group, firms in this bracket exhibit higher investment intensity, more deliberate international engagement, and early signs of organisational capacity to operate abroad—though their strategies remain less complex than those of large multinational investors.

Several firms in this bracket can be characterised as emerging globalizers, marked by investments spanning multiple destination countries and, in some cases, more than one sector. This pattern is consistent with a learning-based internationalisation pathway, where firms gradually broaden geographic reach as they accumulate market knowledge and operational experience. A notable feature of this bracket is the prominence of asset-light and services-

linked activities—including travel and tourism services, payments and digital platforms, business services, and trading networks—where international expansion can be achieved at moderate investment levels and scaled through commercial presence, client-following, or platform-based models.

At the same time, the bracket also includes incremental diversifiers, whose outward investments remain concentrated in a single host economy but expand across related activities. Such firms typically deepen market presence through product extension or adjacent service lines before committing to wider geographic expansion. Alongside these are specialised experimental internationalizers investing in targeted overseas ventures—often to secure specific capabilities, distribution channels, or resource access—reflecting focused strategies rather than broad diversification.

Overall, the USD 1–10 million bracket represents a transition zone in India’s OFDI landscape: firms are no longer merely testing international markets, yet they have not fully evolved into highly diversified global players. Their outward investment behaviour reflects a shift from exploratory entry toward structured scaling, particularly in sectors where India possesses comparative strengths in knowledge-based services, trading networks, and export-linked commercial presence.

Table 3.4: Top Firms in the 1–10 million US \$ Investment Range (2023)

Firm Name	Investment (USD Mn)	Countries	Sectors	Internationalization Strategy	Strategic Posture	Diversification Type
Gujarat Fluorochemicals Ltd	9.8669	2	2	Emerging Globalizer	Product Extender	Medium
Writer Business Services Pvt Ltd	9.8667	1	1	Experimental Internationalizer	Focused Export Supporter	Low
Prize Petroleum Co. Ltd	9.84	1	1	Experimental Internationalizer	Market Penetrator	Low
Greenway Grameen Infra Pvt Ltd	9.75	1	1	Experimental Internationalizer	Product Extender	Low
HCC Infrastructure Co. Ltd	9.7317	1	1	Experimental Internationalizer	Market Penetrator	Low



Firm Name	Investment (USD Mn)	Countries	Sectors	Internationalization Strategy	Strategic Posture	Diversification Type
Senores Pharmaceuticals Pvt Ltd	9.5917	1	4	Incremental Diversifier	Product Extender	Medium
Penguin Trading and Agencies Ltd	9.5545	2	3	Emerging Globalizer	Product Extender	Medium
Acme Cleantech Solutions Pvt Ltd	9.4	1	1	Experimental Internationalizer	Focused Export Supporter	Low
PayU Payments Pvt Ltd	9.2244	1	1	Experimental Internationalizer	Market Penetrator	Low
Thomas Cook (India) Ltd	9.1654	3	2	Emerging Globalizer	Market Penetrator	Medium

Source: Author's compilation based on firm-level OFDI data from the RBI

Note: The table provides a representative sample of Indian firms within the USD 1–10 million OFDI bracket in 2023. It captures firm-level characteristics such as destination countries, sectors, and strategic posture, classified using a hybrid framework combining internationalisation strategy, diversification type, and investment intent.

3.5.2.3 USD 10–100 Million Bracket: Strategically Active Mid-Caps

Indian firms investing between USD 10–100 million abroad represent a vital segment of mid-cap internationalizers. In 2023, 184 firms fell into this category, contributing a substantial USD 5.37 billion in OFDI—surpassing the combined investment of the 0–1M and 1–10M brackets. While they account for just 3.7% of all OFDI-reporting firms, their share of capital positions them as a strategic tier of globally active businesses (Table 3.5)

This group reveals two dominant patterns of internationalisation:

- ☉ Sector-Specialised Firms such as Dghydra Tech, Access Healthcare, Ashok Leyland, and Jindal Poly Films typically operate in a single country and sector. These firms pursue focused expansion—either by replicating successful domestic models or deepening presence in specific international markets.
- ☉ Partially Diversified Firms such as Oil India Ltd, Interglobe Enterprises, and Kalpataru Power Transmission operate across multiple sectors or geographies. Their diversified footprint signals greater institutional capability and long-term global intent.

Sectorally, firms in the USD 10–100 million range are active across energy, infrastructure, healthcare, manufacturing, cement, and speciality chemicals, sectors closely aligned with India's expanding role in regional and global production networks. Many firms in this bracket use OFDI to support resource access, vertical integration, export-oriented expansion, or project-based international engagement. For instance, firms in cement and materials seek proximity to regional markets and inputs, while infrastructure-oriented firms expand through cross-border power, transport, and construction projects that also complement India's broader trade and connectivity objectives.

Overall, the USD 10–100 million bracket represents a pivotal strategic tier in India's outward investment ecosystem. These firms have moved beyond exploratory internationalisation but have not yet attained the scale or geographic reach of large multinational conglomerates. While many are globally competitive within their niches, further scaling is often constrained by financing capacity, regulatory complexity, and host-country institutional barriers, making this group particularly relevant for targeted policy support and investment facilitation.

Table 3.5: Typology of Indian OFDI Firms in the 10–100 million USD Bracket (2023)

Firm Name	Investment (USD Mn)	Countries	Sectors	Internationalization Strategy	Strategic Posture	Diversification Type
Interglobe Enterprises Pvt. Ltd.	95.63	2	4	Emerging Globalizer	Product Extender	Medium
Dghydra Tech Pvt. Ltd.	92.30	1	1	Experimental Internationalizer	Market Penetrator	Low
Agratas Energy Storage Solutions Pvt. Ltd.	92.15	1	1	Experimental Internationalizer	Market Penetrator	Low
Access Healthcare Services Pvt. Ltd.	89.57	1	1	Experimental Internationalizer	Focused Export Supporter	Low
Oil India Ltd.	87.91	5	2	Emerging Globalizer	Resource-Seeking Leader	Medium
Jindal Poly Films Ltd.	83.83	1	1	Experimental Internationalizer	Product Extender	Low
Kalpataru Power Transmission Ltd.	82.43	3	1	Emerging Globalizer	Regional Expander	Medium
Ashok Leyland Ltd.	79.36	1	1	Experimental Internationalizer	Market Penetrator	Low
Ambuja Cements Ltd.	76.75	1	2	Incremental Diversifier	Vertical Integrator	Medium
Suminter India Organics Pvt. Ltd.	75.13	1	3	Incremental Diversifier	Product Extender	Medium

Source: Author’s compilation based on firm-level OFDI data from the RBI

Note: The table provides a representative sample of Indian firms within the USD 10–100 million OFDI bracket in 2023. It captures firm-level characteristics such as destination countries, sectors, and strategic posture, classified using a hybrid framework combining internationalisation strategy, diversification type, and investment intent.

3.5.2.4 USD 100–500 million Bracket: Large-Scale Globalizers and Sector Leaders

The USD 100–500 million bracket includes 34 Indian firms that collectively contribute over USD 6.8 billion in OFDI—accounting for more than one-third of total investment value despite their small number. These firms represent the apex tier of India’s globally engaged businesses, displaying a clear transition from incremental global forays to large-scale, structured internationalisation (Table 3.6).

Two major profiles emerge from this group:

- ⦿ Highly Globalised Leaders such as JSW Steel and Zydus Lifesciences operate across 4–5 countries and sectors, signifying advanced international maturity and robust global operations. These firms embody high diversification and large capital deployment strategies—whether for global manufacturing capacity, R&D expansion, or integrated value-chains



⊙ Emerging Globalizers and Specialists, including Adani Ports, Cipla, Lupin, and GAIL (India), reflect sectoral concentration with expanding geographic presence. Their internationalisation strategies emphasise market penetration, infrastructure integration, and energy/resource security, particularly in pharmaceuticals, logistics, and energy.

Additionally, single-country, single-sector specialists like Gland Pharma and Jasub Property Holdings pursue focused but large-scale international plays—often leveraging niche capabilities or high-value assets abroad. Some firms, such as Sambhavnath Infrabuild and Farms, exhibit exploratory patterns at scale, suggesting hybrid or transitional strategies.

Sectorally, this bracket is dominated by Pharmaceuticals (Zydus, Cipla, Lupin, Gland); Infrastructure and Energy (Adani Ports, GAIL, IOCL), and Steel and manufacturing (JSW Steel). These sectors align with India’s comparative advantages and strategic priorities, particularly in supply chain resilience, health security, and energy access.

In short, this group represents India’s most internationally confident firms—those deploying capital not just for presence, but for global leadership. Their patterns suggest that policy support for scaling and de-risking large, long-term projects can consolidate India’s standing in global markets.

Table 3.6: Top Firms in the 100–500 million US \$ Investment Range (2023)

Firm Name	Investment (USD Mn)	Countries	Sectors	Internationalization Strategy	Strategic Posture	Diversification Type
JSW Steel Ltd	484.2406	5	4	Highly Globalized	Global Capacity Builder	High
Adani Port and SEZ Ltd	481.0439	2	4	Emerging Globalizer	Infrastructure Integrator	Medium
Zydus Lifesciences Ltd	426.7588	5	5	Highly Globalized	Product Extender	High
Cipla Ltd	373.1306	3	4	Emerging Globalizer	Market Penetrator	Medium
GAIL (India) Ltd	367.442	3	4	Emerging Globalizer	Energy Security Seeker	Medium
Lupin Ltd	272.6203	3	4	Emerging Globalizer	Product Extender	Medium
Gland Pharma Ltd	261.4857	1	1	Large-Scale Specialist	Focused Export Supporter	Low
Jasub Property Holdings LLP	261	1	1	Large-Scale Specialist	Asset Anchor	Low
Sambhavnath Infrabuild and Farms Pvt Ltd	244.3977	1	2	Incremental Diversifier	Exploratory Developer	Medium
Indian Oil Corporation Ltd	221.0706	3	2	Partially Globalized	Strategic Resource Seeker	Medium

Source: Author’s compilation based on firm-level OFDI data from the RBI

Note: The table provides a representative sample of Indian firms within the USD 100–500 million OFDI bracket in 2023. It captures firm-level characteristics such as destination countries, sectors, and strategic posture, classified using a hybrid framework combining internationalisation strategy, diversification type, and investment intent.

3.5.2.5 USD 500 Million+ Bracket: India's OFDI Apex – Multinational Strategists and Capital-Intensive Firms

At the top of India's OFDI pyramid are a small but powerful group of firms—just eight in total—that each invested more than USD 500 million abroad in 2023. Despite their limited numbers, these firms collectively deployed nearly USD 5.5 billion, representing a disproportionately large share of total OFDI. Their internationalisation strategies reflect deliberate and structured expansion models, distinguishing them as India's most globally mature and capital-intensive enterprises. (see Table 3.7)

These firms fall into two distinct strategic profiles:

- ⊙ Large-Scale Specialists such as Wipro, Suzlon Energy, Glenmark, and Tata Steel follow focused internationalisation strategies within a single sector and limited geographies. Their strategic posture is anchored in deep technical expertise, long-term export relationships, and efficiency-driven operations. These firms exhibit low diversification types, yet they occupy critical positions in global value chains—particularly in IT services, pharmaceuticals, renewable energy, and steel.
- ⊙ Strategic Diversifiers and Infrastructure leaders like Reliance Industries, ONGC Videsh, and Tata Communications operate

with broader diversification types, spanning multiple sectors and countries. Their internationalisation strategies are ecosystem-oriented or resource-driven, and their strategic posture mirrors that of mature global multinationals—aligning with India's national objectives in energy security, digital infrastructure, and global market integration.

ONGC Videsh, present in 13 countries, underscores India's upstream energy ambitions. Reliance Industries exhibits high diversification, with investments across six sectors and five countries—including energy, telecom, retail, and financial services. Tata Communications anchors India's digital infrastructure diplomacy. In contrast, Bharat Petro resources, despite investing over USD 1 billion, remains concentrated in a single country and sector, showing that high capital intensity does not always imply strategic breadth.

Sectorally, this bracket covers a wide spectrum—including energy, telecom, digital services, high-end manufacturing, financial and business services, and resource-based sectors like mining. Notably, agriculture and mining appear only in this upper tier, reflecting India's targeted OFDI in food security, resource acquisition, and strategic land use abroad. Meanwhile, financial services—with their capital-light nature—continue to play a strong role across the spectrum but are increasingly part of larger corporate ecosystems in this bracket.

Table 3.7: Top firms in the 500-1000 million

Firm Name	Investment (USD Mn)	Countries	Sectors	Internationalization Strategy	Strategic Posture	Diversification Type
ONGC Videsh Ltd.	778.6609	13	2	Highly Globalized	Strategic Resource Seeker	Medium
Tata Communications Ltd.	677.3584	2	4	Emerging Globalizer	Digital Infrastructure Leader	Medium
Suzlon Energy Ltd.	627.2115	1	1	Large-Scale Specialist	Renewable Exporter	Low
Wipro Ltd	576.8752	2	1	Large-Scale Specialist	Global Service Provider	Low



Firm Name	Investment (USD Mn)	Countries	Sectors	Internationalization Strategy	Strategic Posture	Diversification Type
Tata Steel Ltd	556.535	1	1	Large-Scale Specialist	Vertical Integrator	Low
Glenmark Pharmaceuticals Ltd.	552	1	1	Large-Scale Specialist	Pharma Exporter	Low
Bharat Petroresources Ltd	1265.5	1	1	Capital-Intensive Specialist	Hydrocarbon Consolidator	Low
Reliance Industries Ltd	1007.089	5	6	Highly Globalized	Global Ecosystem Builder	High

Source: Author's compilation based on firm-level OFDI data from the RBI

Note: Table provides a representative sample of Indian firms within the USD 500-1000 million OFDI bracket in 2023. It captures firm-level characteristics such as destination countries, sectors, and strategic posture, classified using a hybrid framework combining internationalization strategy, diversification type, and investment intent.

3.6 Sectoral Clustering and Firms' Investment Networks

To better understand how Indian companies are expanding internationally, we moved beyond just listing firms or tracking investment numbers. Instead, we explored how companies tend to group to form clusters based on common investment patterns. This approach gives us a clearer picture of how India's OFDI has matured over time.

Rather than analysing firms in isolation, we looked at their collective behaviour: (a) Are firms investing in the same sectors? Are they targeting similar geographies? (b) Are their financing methods and timelines aligned? Through this lens, we observed that firms often operate as part of broader patterns not only shaped by their sector (such as manufacturing or financial services), but also by their internationalisation strategies, including timing, destination choice, and affiliation with business groups.

To capture how these patterns have evolved, we focused on three key years: 2008, 2015, and 2023. These years were selected deliberately to reflect three distinct phases in India's OFDI journey (see Table 3.8)

The reason for choosing the year 2008 represents the early phase of OFDI expansion.

At this time, India's international investments were relatively modest and concentrated in a few traditional sectors. Firms generally acted conservatively, replicating domestic business models abroad. The network map for this year reflects isolated sectoral clusters, with limited interaction between them — a picture of siloed global expansion. By the year 2015, we took a transitional benchmark. By this time, India had experienced a decade of liberalisation and global integration. New sectors — such as agriculture, logistics, and community services — began to emerge in the OFDI landscape. Firms started to move beyond traditional silos and began exploring partnerships and synergies across sectors. The investment network in 2015 reveals early signs of cross-sector linkages, marking the beginning of a more collaborative and diversified global strategy. The year 2023 represents the maturity phase of India's OFDI ecosystem. By this point, the international investment landscape had significantly expanded. Most major sectors were active globally, and firms increasingly engaged in complex, multi-sector investment strategies. The network structure shows a dense and highly interconnected system, reflecting the rise of integrated business ecosystems (e.g., retail-fintech-logistics combinations). This period illustrates a strategic shift from stand-alone international ventures to holistic and ecosystem-driven global expansion.

Table 3.8: Network Structure Shifts: 2008 to 2023

Period	Network Structure	Key Traits
2008	Isolated Sector Silos	Firms operate independently; investment is anchored in core industries
2015	Transitional Linkages	Sector overlaps begin; early signs of integration through services/logistics
2023	Integrated Ecosystem	Dense inter-sector links; firms adopt multi-sector strategies for expansion

By selecting these three years, we are able to trace the structural transformation of India’s OFDI — from its sectoral beginnings, through a period of experimentation and diversification, to a more sophisticated, networked investment environment. This time-based comparison helps answer vital questions:

- ⊙ Which sectors are consistently leading the charge?
- ⊙ How are firms adapting their international strategies?
- ⊙ Where is India’s global investment headed next?

To uncover deeper structural patterns in India’s OFDI, we employed a visual network mapping approach. Rather than analysing firms in isolation, this method allows us to examine how firms cluster around common sectoral investments, providing insight into collective behaviour and strategic alignment.

In these maps, each firm is linked to the sectors it has invested in, and the strength of this link corresponds to the size of the investment made. The resulting visual networks display which sectors are most central, how firms group based on investment choices, and how these groupings evolve over time.

This network-based perspective enables us to move beyond static sectoral analysis and instead focus on the interconnectedness and emerging investment ecosystems. These visualisations provide intuitive yet powerful illustrations of the dynamic structure of India’s OFDI, helping both researchers and practitioners understand sectoral interlinkages, diversification trends, and the growing complexity of internationalisation

strategies. The detailed methodology is given in Appendix 3A.

3.6.1 India’s OFDI Network: 2008

Understanding India’s OFDI requires more than just tracking investment volumes; it demands a look at how firms behave collectively. To do this, we constructed yearly firm–sector networks using firm-level OFDI data for three key years: 2008, 2015, and 2023. Each network visualises how companies group based on shared sectoral investments, giving us insight into emerging patterns of globalisation, collaboration, and strategic diversification.

In 2008, the OFDI network was dominated by a few large sectoral communities with clear boundaries and very limited overlap. The Louvain partition and the 2008 sector table show that: The largest clusters correspond to Financial, Insurance, Real Estate and Business Services, Manufacturing, and Wholesale, Retail Trade, Restaurants and Hotels. These sectors attract both the highest number of firms and the largest volumes of outward investment.

Smaller clusters appear for Transport, Storage and Communication Services, Construction, Agriculture and Mining, Electricity, Gas and Water, Community, Social and Personal Services, and Miscellaneous, with much lower firm counts and investment totals.

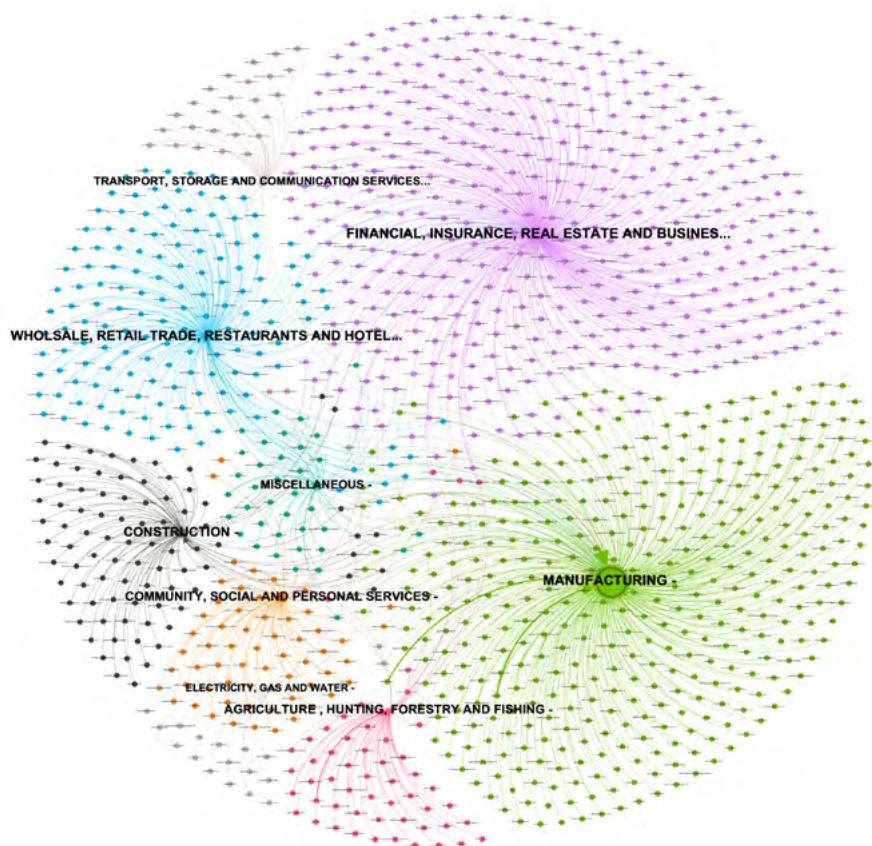
In the map visualisation (Figure 3.7), firms in each of the three leading sectors form dense, almost self-contained clouds around their sector node, while links between sectors are rare. The 2008 network, therefore, looks highly segmented, with most firms connected to a single Major Activity and very few acting as bridges across



sectors. This pattern suggests that large OFDI decisions were still organised around traditional,

single-sector strategies rather than multi-sector or ecosystem-style expansions.

Figure 3.7: India’s OFDI Network – 2008



Source: author’s calculation based on RBI OFDI database

Notes: This diagram shows how Indian firms investing abroad are connected to different sectors. Each dot represents a firm, and each coloured group represents a sector in which firms invest. Lines indicate investment links between firms and sectors, with denser clusters showing sectors that attract more firms and investment. Firms connected to multiple clusters indicate multi-sector strategies. Overall, the figure illustrates how India’s outward investment has evolved from isolated sectoral investments to a more interconnected, ecosystem-based global expansion.

For current readers, 2008 serves as a baseline year. It captures a phase where India’s globalising firms were beginning to invest abroad at scale, but the overall OFDI system remained weakly connected across sectors and structurally closer to a set of parallel sectoral silos than to an integrated investment network.

3.6.2 India’s OFDI Network – 2015

By 2015, the structure of India’s OFDI network had begun to evolve beyond the rigid sectoral silos observed in 2008. While dominant clusters such as Financial, Insurance and Business Services, Manufacturing, and Wholesale, Retail Trade, Restaurants and Hotels continued

to anchor the network in terms of both firm participation and outward investment volume, a notable transformation was underway. (see figure 3. 8)

Several medium-sized sectors gained prominence during this period, including Transport, Storage and Communication Services, Agriculture and Mining, Electricity, Gas and Water, and Community, Social and Personal Services. These sectors saw a rise in the number of participating firms and higher levels of outbound investment, indicating a diversification of India’s international business interests.

What distinguishes the 2015 network is the emergence of inter-sector connectivity. The

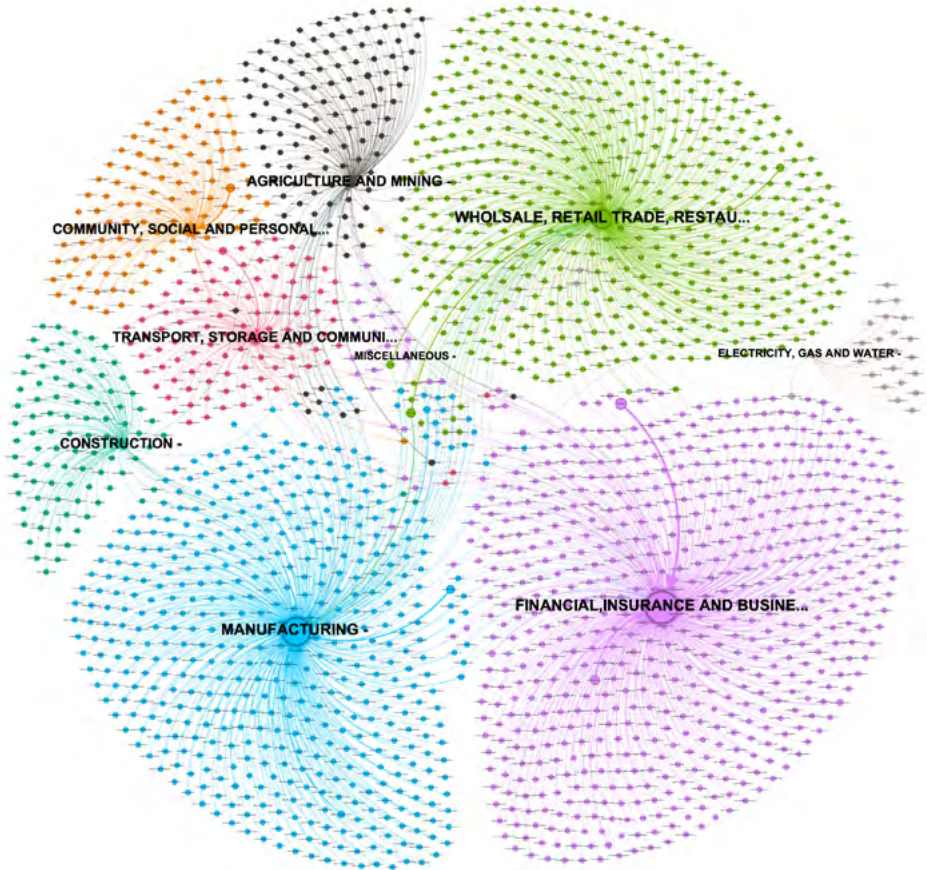
clustering map shows that while sectoral communities remain visible, there are now more cross-links between them. Firms increasingly appear as bridges across previously disconnected sectors—for example, linking Manufacturing with Transport and Construction, or connecting Financial Services with Retail and Community Services. These links suggest a shift in strategy: rather than operating in isolation, firms were beginning to structure their overseas investments around integrated, cross-sector value chains.

This period also marks the rise of hybrid investment behaviour, where companies no longer confined themselves to a single core activity but began combining capabilities—

for instance, manufacturing goods while simultaneously investing in logistics infrastructure or financial services to support operations abroad.

The 2015 network reflects a transitional phase in India’s OFDI trajectory. It captures a moment where sector boundaries begin to blur, ecosystem-style expansion starts to take shape, and the network as a whole becomes more interconnected. Although still centred around dominant industries, the system displays early signs of structural integration, suggesting that Indian firms were gradually adopting more sophisticated and collaborative approaches to global expansion.

Figure 3.8: Cluster Graph: India’s OFDI Network – 2015



Source: author’s calculation based on RBI OFDI database

Notes: This diagram shows how Indian firms investing abroad are connected to different sectors. Each dot represents a firm, and each coloured group represents a sector in which firms invest. Lines indicate investment links between firms and sectors, with denser clusters showing sectors that attract more firms and investment. Firms connected to multiple clusters indicate multi-sector strategies. Overall, the figure illustrates how India’s outward investment has evolved from isolated sectoral investments to a more interconnected, ecosystem-based global expansion.



3.6.3 India's OFDI Network - 2023

The OFDI network in 2023 presents a distinctly evolved and mature structure, characterised by deep interconnections and integrated investment strategies. While large sectoral communities such as Financial, Insurance and Business Services, Manufacturing, and Wholesale and Retail Trade continue to dominate in size and investment volume, what sets this phase apart is the increased cohesion across the entire network.

The clustering map for 2023 (Figure 3.9) displays multiple dense bridges and overlaps between sectors, suggesting that firms are no longer operating in isolation within their primary industry. Instead, they are participating in multi-sector investment models, combining capabilities and leveraging synergies across domains such as finance, logistics, digital services, and core operations. The boundaries between sectors have become significantly more porous, and shared investment patterns point to a strategic convergence.

Smaller sectors such as Construction, Electricity, Gas and Water, and Community and Social Services, which were previously peripheral, now appear much more embedded within the main network, reflecting their growing relevance in enabling international business operations. These sectors often serve as critical enablers—providing infrastructure, regulatory services, or utilities that support more complex outward investment models.

Moreover, many firms are now visible as multi-nodal connectors, linking two or more sectors. These firms function as bridges, forming dense network intersections that are vital to the integrated architecture of India's OFDI. For instance:

- ⦿ A retail firm expanding abroad may now engage with financial institutions for capital and fintech partnerships, while also investing in logistics and warehousing infrastructure to streamline operations.
- ⦿ Manufacturing firms often partner with digital service providers or community service firms, allowing for smarter, service-enabled production chains overseas.

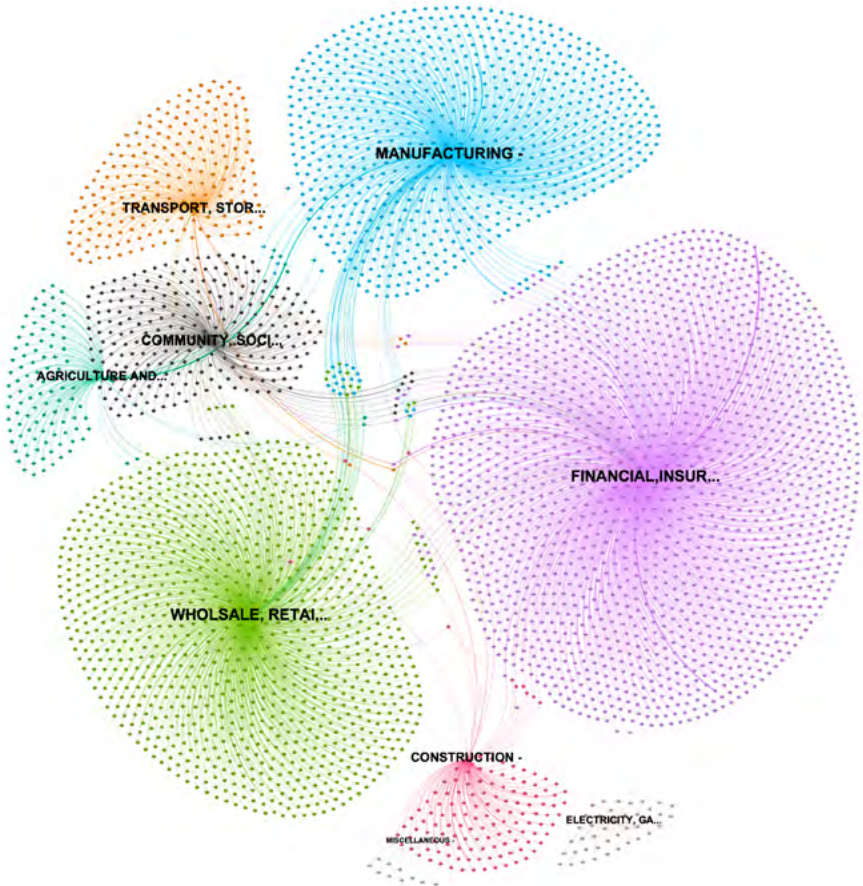
This pattern signals a mature phase in India's OFDI evolution, where outward investment is no longer just about replicating domestic models abroad, but about designing strategically layered ecosystems that can adapt to diverse international contexts. The network has moved from being sectoral to being systemic, where the value of a firm's investment is not just in its size, but in its ability to connect and collaborate across sectors.

From a policy and strategic standpoint, the 2023 configuration points to the importance of adopting a whole-of-ecosystem approach to support outbound investment. It suggests that successful internationalisation now hinges on a coordinated framework that integrates:

- ⦿ Financial facilitation
- ⦿ Infrastructure support
- ⦿ Digital capability
- ⦿ Regulatory and institutional alignment

Overall, 2023 reflects the culmination of a 15-year transition—from isolated, sector-driven OFDI strategies to a highly networked, collaborative, and ecosystem-oriented global investment architecture.

Figure 3.9: Cluster Graph: India’s OFDI Network – 2023



Source: author’s calculation based on RBI OFDI database

Notes: This diagram shows how Indian firms investing abroad are connected to different sectors. Each dot represents a firm, and each coloured group represents a sector in which firms invest. Lines indicate investment links between firms and sectors, with denser clusters showing sectors that attract more firms and investment. Firms connected to multiple clusters indicate multi-sector strategies. Overall, the figure illustrates how India’s outward investment has evolved from isolated sectoral investments to a more interconnected, ecosystem-based global expansion.

BOX 9: Key Takeaways -OFDI Networks



- ⦿ In 2008, India’s OFDI landscape was marked by sectoral silos, with firms operating within rigid industry boundaries like manufacturing, finance, and retail, with minimal inter-sectoral collaboration.
- ⦿ By 2015, the network showed a transitional phase, where cross-sector linkages began to form, especially between sectors like manufacturing, logistics, construction, and finance. Firms started to adopt hybrid investment strategies.
- ⦿ In 2023, the investment network transformed into a mature, integrated ecosystem. Firms no longer operated in isolation but collaborated across multiple sectors, forming complex value chain-based investment models (e.g., fintech-retail, pharma-logistics).
- ⦿ The rise of bridge firms — companies investing across sectors — became a critical feature. These firms connected previously isolated parts of the network, increasing system-wide integration.



- ⦿ Sectors that were peripheral in 2008, such as community services, agriculture, and electricity, became core components of the investment ecosystem by 2023, showing broader economic diversification.
- ⦿ The clustering analysis reveals that India’s OFDI is no longer defined by sectoral strength alone, but by how firms position themselves across global value chains, ecosystems, and strategic partnerships.



BOX 10: Chapter 3 Summary: Key Questions and Core Findings



1. Which firms drive India’s outward FDI, and how concentrated is OFDI at the firm level?

Finding:

India’s outward FDI is highly concentrated among a very small group of large firms, despite a rapid expansion in the number of firms participating in overseas investment. Between 2007 and 2023, the number of OFDI-reporting firms increased nearly eightfold, yet firms investing more than USD 100 million consistently constituted only about 2% of participants. This small cohort accounted, on average, for nearly two-thirds of total OFDI, underscoring a structurally skewed investment landscape. Although concentration has eased modestly since 2020—falling to about 56% in 2023—the dominance of large conglomerates remains a defining feature of India’s outward investment architecture.

2. How has the sectoral composition of India’s leading outward-investing firms evolved over time?

Finding:

The sectoral leadership of India’s top OFDI firms has undergone a clear structural transition. The initial phase (2007–2010) was dominated by capital-intensive conglomerates in energy, telecom, and automotive sectors, often driven by large, acquisition-led internationalisation. During 2011–2015, pharmaceuticals and public-sector energy firms gained prominence, reflecting resource-seeking and market-access strategies. The period 2016–2020 marked growing diversification into metals, infrastructure, and digital services, while the most recent phase (2021–2023) shows a pronounced shift toward knowledge-intensive, innovation-driven, and sustainability-linked sectors such as biotech, clean energy, digital platforms, and tech-enabled hospitality. This evolution reflects both the maturation of Indian multinationals and a reorientation of comparative advantage toward services and technology-led global engagement.

3. How uneven is the distribution of OFDI across firms, and what does this imply about participation in globalisation?

Finding:

Firm-level OFDI in India follows an extremely unequal, “heavy-tailed” distribution. Lorenz curve and Pareto-style analyses reveal that in 2023, nearly 84% of Indian firms investing abroad—those committing less than USD 1 million—accounted for only about 2% of total OFDI, while

the top 1% of firms controlled over 60% of outward investment value. This pattern resembles oligopolistic or power-law distributions observed in trade and income economics, indicating that India's outward investment is driven by a narrow apex of highly capable firms rather than broad-based enterprise participation. The findings point to a significant capability and scale gap between large conglomerates and the vast majority of smaller internationalising firms.

4. How do firms differ by investment scale in terms of internationalisation strategy and structure?

Findings:

Clear strategic differentiation emerges across investment brackets. Firms in the USD 0–1 million bracket are predominantly experimental or incremental internationalizers, engaging in low-risk, single-country or single-sector investments, especially in capital-light services and trading activities. The USD 1–10 million bracket represents a transitional tier, where firms move from experimentation toward structured scaling, often in services, platforms, and export-linked activities. Mid-cap firms in the USD 10–100 million range exhibit more deliberate global strategies, including sector specialisation and partial diversification, particularly in energy, infrastructure, healthcare, and manufacturing. Firms investing above USD 100 million operate as mature global players, deploying capital for strategic objectives such as resource security, supply-chain integration, infrastructure development, and ecosystem building.

linked to strategic breadth, resilience, and the ability to manage complex cross-border operations.

5. What distinguishes India's largest outward investors from smaller and mid-sized firms?

Finding:

Large OFDI investors—especially those exceeding USD 500 million—display advanced institutional capacity, long planning horizons, and alignment with national strategic priorities. These firms either operate as large-scale specialists with deep sectoral focus (e.g., IT services, pharmaceuticals, steel, renewables) or as diversified ecosystem builders spanning multiple sectors and geographies (e.g., energy, telecom, logistics, finance). In contrast, smaller firms rely on learning-by-doing, client-following, or niche market entry strategies and face binding constraints related to finance, regulation, and global operational capability. The contrast highlights that scale is closely linked to strategic breadth, resilience, and the ability to manage complex cross-border operations.

6. Do Indian firms internationalise in isolation, or do they form strategic investment communities?

Finding:

Network-based clustering analysis reveals a clear evolution from sectoral silos to integrated investment ecosystems. In 2008, India's OFDI network was characterised by isolated, industry-specific clusters with minimal cross-sector interaction. By 2015, early linkages emerged between manufacturing, logistics, finance, and services, indicating a transitional phase of collaboration. By 2023, the network had matured into a dense, cross-sectoral ecosystem, with finance acting as a key connector and firms increasingly combining manufacturing, services, digital platforms, and logistics in their global strategies. This shift reflects the rise of hybrid internationalisation models and ecosystem-based expansion rather than standalone sectoral ventures.



7. What are the policy implications of firm-level heterogeneity and clustering in India's OFDI?

Finding:

The analysis suggests that a “one-size-fits-all” OFDI policy framework is inadequate. Small and mid-sized firms require support mechanisms focused on capability building, risk mitigation, and access to finance to move beyond experimental internationalisation. Mid-cap firms represent a critical leverage point for scaling India’s global presence and would benefit from targeted facilitation, credit support, and regulatory coordination. For large firms, policy alignment with strategic sectors—energy, digital infrastructure, healthcare, and clean technologies—can amplify national objectives through outward investment. Finally, the emergence of cross-sector investment ecosystems calls for policy approaches that move beyond sectoral silos toward cluster-based industrial diplomacy, integrated export–investment strategies, and ecosystem-oriented bilateral engagement.

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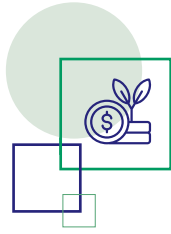
Chapter

04

Sectoral Matching: How Competitive is India's OFDI in Key Markets?

4.1 Introduction

As India deepens its economic partnerships through FTAs and strategic initiatives, the success of its outward investment strategy depends not only on how much is invested but also on where and in what sectors those investments are placed. India's OFDI has become an increasingly important instrument of its global economic engagement. Over the past two decades, Indian firms have expanded their presence abroad, both to access new markets and to integrate into global value chains. Yet, the real test of competitiveness lies not simply in the volume of investment but in how well these investments align with the sectoral priorities of partner economies.



This chapter focuses on eight key destinations—Singapore, the United States, the United Kingdom, Mauritius, Netherlands, Switzerland, Australia, and Japan—which together account for the majority of India’s OFDI stock. These economies are not only major recipients of Indian capital but also represent diverse models of growth: financial hubs, advanced manufacturing centres, resource-rich economies, and innovation-driven markets.

The analysis compares India’s sectoral footprint in these countries with the structure of their inward FDI flows. In doing so, it seeks to answer a central policy question:

Is India directing its outward investment into the sectors that host economies value most—such as advanced manufacturing, modern services, logistics, or clean energy—or is its presence concentrated in a narrower set of traditional services?

To address this, the chapter applies a harmonised sectoral framework and builds alignment matrices for each country. These allow us to map, in a comparable manner, the relationship between India’s OFDI allocation and the host country’s leading inward FDI sectors. The results highlight three aspects of competitiveness: areas where India’s investment presence is aligned with host priorities, areas where India’s participation is limited, and areas that indicate untapped opportunities for deeper engagement.

By systematically identifying where India’s OFDI coincides with, or diverges from, global investor patterns, this chapter provides a diagnostic lens for policymakers. The findings intend to guide outward investment promotion, strengthen bilateral investment strategies, and support Indian firms in positioning themselves within the sectors that deliver the greatest long-term returns in partner economies.

4.2 Data

This study draws on sectoral-level FDI data for both India’s OFDI and host countries’ inward FDI across a consistent nine-sector classification. The data sources, coverage, and harmonisation approach are outlined below.

India’s OFDI Data:

Data on India’s outward FDI by sector and destination country are obtained from the RBI, covering annual investment values from 2019 to 2023. For each of the eight selected host countries (USA, UK, Singapore, Japan, Australia, Netherlands, Switzerland, and Mauritius), we compute the average sectoral distribution of OFDI over the five years, expressed as a percentage share of total OFDI to the respective country.

Host Countries' Inward FDI Data:

Sectoral inward FDI stock data are collected from official national sources, including central banks and statistical authorities of each host country. These reflect the total stock of foreign capital present in each sector, as of 2023 (or the most recent available year). These data represent the revealed sectoral priorities of host countries in attracting global capital. All data are converted to U.S. dollars (USD) and expressed as percentage shares of total inward FDI stock. The data sources by each country are as follows: Bureau of Economic Analysis (BEA) for the USA, Office for National Statistics (ONS) for the UK, Department of Statistics Singapore (SingStat) for Singapore, Bank of Japan/Japan External Trade Organization (JETRO) for Japan, The Australian Bureau of Statistics (ABS) for Australia, De Nederlandsche Bank (DNB) for Netherlands, Swiss National Bank (SNB) for Switzerland, and The Bank of Mauritius/Statistics Mauritius for Mauritius.

To ensure comparability, all national sectoral classifications are mapped into the following nine standardised sectors:

- ⦿ Manufacturing;
- ⦿ Financial, Insurance & professional services (Includes banking, insurance, professional, scientific, technical, administrative and support services);
- ⦿ Wholesale and retail trade and restaurants & hotels (includes wholesale and retail distribution, food & accommodation services)
- ⦿ Transport, storage and communication services (including land, air and sea transport, logistics, postal and telecommunications);
- ⦿ Construction;
- ⦿ Electricity, gas and water supply (includes utilities, power generation, energy & water)
- ⦿ Agriculture and mining (covering agriculture, forestry, fishing and extractive industries like mining and oil/gas);

- ⦿ Community, social and personal services (Includes education, health care, cultural services, NGOs, and other personal services);
- ⦿ Miscellaneous and other services (Residual category for unclassified, overlapping, or country-specific services not mapped elsewhere)

These standardised, percentage-based sectoral profiles for each country—one for India's OFDI and one for the host country's inward FDI—provide the empirical foundation for assessing strategic alignment between India's sectoral investment patterns and host countries' sectoral openness.

Full tabulated data across all eight countries are provided in **Appendix 4B** (Table 4B.1 to Table 4B.8)

4.3 Methodology: Sectoral Matching and Strategic Alignment Assessment

To assess the alignment between India's OFDI patterns and the sectoral structures of inward FDI in key partner economies, we employ a structured, three-step methodological approach. This framework integrates standardised sectoral harmonisation with both sector-specific diagnostics (via quadrant mapping) and structural similarity metrics (via Overlap and Cosine indices), offering insights at multiple levels of analysis. A detailed explanation of both indicators and their application is provided in **Appendix 4A**.

4.3.1 Constructing the Alignment Matrix

The first step involves the creation of an Alignment Matrix for each of the eight partner countries. This matrix serves as the foundational analytical tool and provides a side-by-side comparison of the sectoral distribution of foreign investment.



For each country, we extract two sets of sectoral shares:

- ⦿ **Host's Share (Host %):** This refers to the percentage share of each sector in the host country's total inward FDI stock. These data typically pertain to the most recent available year, generally 2023, and represent the sectoral composition of foreign capital received by the host economy. The Host % thus reflects the relative importance or revealed priority of each sector in the country's inward investment profile.
- ⦿ **India's Share (India %):** This captures the proportion of India's OFDI directed to each sector within the host country. To ensure stability and remove year-specific anomalies, this measure is calculated as a five-year average from 2019 to 2023. The India % thus represents India's sustained investment interest in the host economy's sectors over time.

By juxtaposing these two metrics, the Alignment Matrix allows us to evaluate whether India's sectoral investment profile corresponds to the sectors that are most prominent or strategically emphasised in the host country's FDI structure.

Each sectoral pair (Host %, India %) is then analysed in light of predefined materiality thresholds. These thresholds serve as common benchmarks to distinguish strategic sectors from peripheral or incidental ones and ensure consistency across countries:

- ⦿ A 10 per cent threshold is applied to the host country's inward FDI distribution. Any sector accounting for 10% or more of the host's total inward FDI is treated as a priority sector for that country.
- ⦿ A 5 per cent threshold is applied to India's OFDI shares. Sectors receiving 5% or more of India's total OFDI to that host are regarded as material sectors for India.

These thresholds are essential for filtering out statistical noise and minor flows, ensuring that the analysis focuses on meaningful strategic alignments rather than marginal overlaps.

In the next step, these sectoral observations are translated into quadrant-based classifications to provide a structured understanding of strategic alignment between India and its investment partners.

4.3.2 Quadrant-Based Classification of Strategic Alignment

Building upon the Alignment Matrix, the second step in our methodology involves translating sectoral observations into a structured quadrant-based classification system. This step enables a more intuitive understanding of how India's sectoral investment priorities correspond—or fail to correspond—to the host country's FDI structure.

To distinguish strategically significant sectors from those of limited policy interest, we apply two fixed thresholds that serve as reference points for classification. These thresholds remain consistent across all eight countries, ensuring comparability of results:

- ⦿ The host-country threshold, set at 10%, is applied along the horizontal (X) axis. If a sector accounts for 10% or more of the host's total inward FDI stock, it is considered a priority sector within that economy's foreign investment landscape.
- ⦿ The India threshold, set at 5%, is applied along the vertical (Y) axis. If a sector receives 5% or more of India's total OFDI to that particular country, it is classified as a material sector from India's investment perspective.

This quadrant classification framework (Refer Table 4.1) helps interpret the nature of alignment between India's OFDI and the host country's FDI priorities. **Quadrant I** represents strong mutual alignment, where both India and the host economy emphasise the same sectors, suggesting policy coherence and long-term synergy. **Quadrant II** highlights India's relatively high investment in sectors that are not central to the host's FDI landscape, often driven by firm-specific or strategic considerations. **Quadrant III** reflects sectors of limited relevance to both sides, and **Quadrant IV** identifies sectors that are

important to the host but underrepresented by India—signalling potential areas for expansion and policy engagement. This classification thus

offers a practical diagnostic tool for evaluating investment fit and identifying opportunities or imbalances across sectors.

Table 4.1: Sectoral Alignment Quadrant Framework

Quadrant	Criteria	Interpretation
Q-I: Aligned	Host $\geq 10\%$, India $\geq 5\%$	Strategic alignment: Sectors prioritized by both host country and India- mutual FDI interests
Q-II: Overweight	Host $< 10\%$, India $\geq 5\%$	Indian over-concentration: India invests heavily in sectors that are not host country priorities- potential mismatch
Q-III: Marginal	Host $< 10\%$, India $< 5\%$	Low priority for both: Sectors with minimal FDI activity from both perspectives- limited bilateral interests
Q-IV: Missed Opportunity	Host $\geq 10\%$, India $< 5\%$	Untapped potential: Host country prioritizes these sectors but India has minimal presence- expansion opportunities

4.3.3. Quantifying Sectoral Similarity

While the quadrant-based classification provides a useful diagnostic tool for interpreting sector-specific alignment between India and its investment partners, it does not fully capture the broader structural resemblance between their overall FDI profiles. To address this, we apply two complementary summary indicators: the Overlap Index and the Cosine Similarity Index. The Overlap Index measures the extent to which both distributions share investment across the same sectors, offering a simple, intuitive view of level similarity. In contrast, the Cosine Similarity Index captures the structural resemblance in how investments are distributed across sectors, regardless of scale differences. A higher cosine score indicates that India and the host country emphasise similar sectors proportionally, even if investment volumes differ. Together, these metrics provide a fuller understanding of alignment—highlighting not only visible convergence but also underlying strategic coherence.

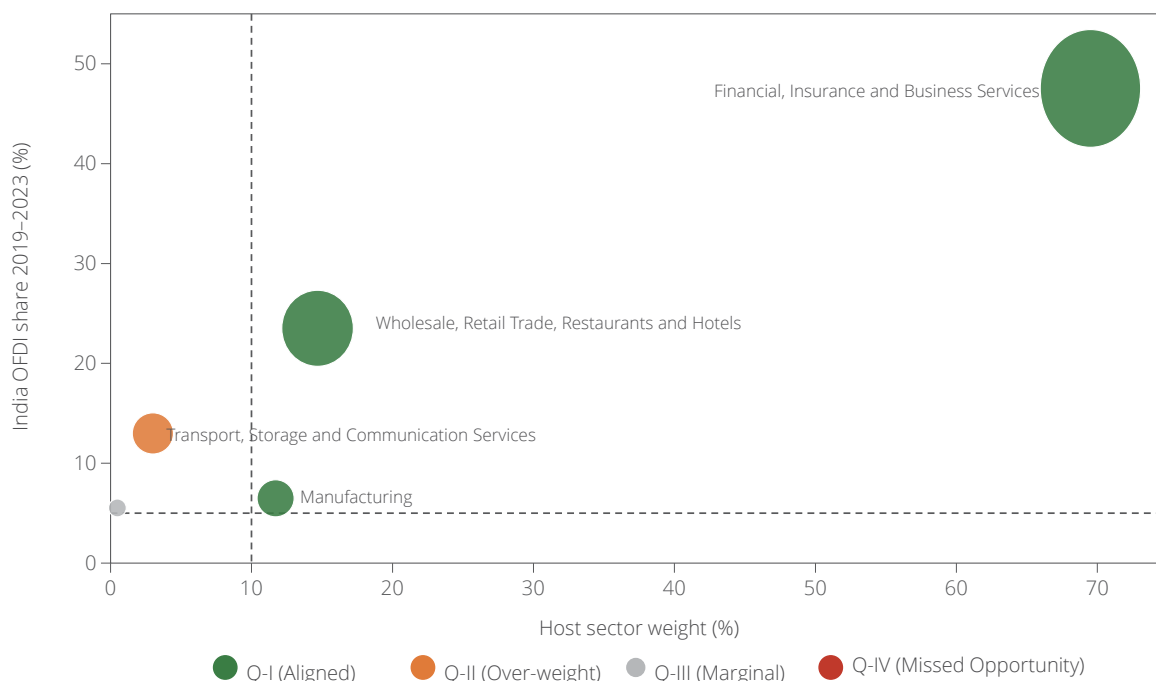
4.4. India's OFDI with Partner Countries' Inward FDI

4.4.1 Singapore

India's OFDI relationship with Singapore exhibits one of the highest levels of sectoral and institutional alignment among all partner economies. This is underscored by the Overlap Index and Cosine Similarity scores, both of which are the highest across the countries analysed. The quadrant mapping presented in **Figure 4.1** further illustrates this structural alignment, revealing strong convergence in key sectors including financial, insurance and business services, wholesale and retail trade, and manufacturing. This alignment highlights the extent to which India's capital deployment is closely aligned with Singapore's sectoral strengths and investment priorities, reflecting a mature and well-integrated bilateral investment relationship.



Figure 4.1: Strategic Quadrant—Singapore



● Quadrant I (Aligned Sectors): Deep Complementarities

The three sectors falling within Quadrant I signify areas of high mutual emphasis and strong alignment in sectoral priorities and business environments between India and Singapore. Among these, Finance, Insurance and Business Services stand out with significant sectoral shares in both economies (Host: 69.6%; India: 52.9%), indicating not only strategic alignment but also deep operational integration. Singapore’s role as a global financial centre—underpinned by a robust regulatory regime, tax competitiveness, and capital market depth—has positioned it as a strategic gateway for Indian firms pursuing fund management, treasury operations, and corporate structuring activities. This sectoral affinity reflects India’s institutional trust in Singapore’s legal-financial architecture, further reinforced by a functional complementarity wherein Indian enterprises embed themselves within Singapore’s high-value service ecosystem to access global markets and manage capital flows efficiently (Yeung (2008)).

Wholesale, retail trade, restaurants and hotels (Host: 15.4%; India: 23.2%): This sectoral alignment underscores India’s strategic engagement with Singapore’s role as a regional trade and logistics hub. Indian investments in this domain leverage Singapore’s advanced port infrastructure, efficient re-export mechanisms, and deep integration within ASEAN trade networks. The comparatively higher Indian share (23.2%) suggests active involvement in regional value-chain intermediation, wherein Indian firms utilise Singapore’s globally connected distribution and supply platforms to enhance their commercial outreach across Asia.

Manufacturing (Host: 11.7%; India: 6.5%): While smaller in proportional terms, the manufacturing sector reflects a growing area of strategic alignment. Indian investments in this domain are increasingly in step with Singapore’s industrial focus on precision engineering, clean technologies, and advanced manufacturing. This convergence suggests room for deeper Indian engagement in high-tech and capital-intensive segments; OFDI goals align with Singapore’s innovation-driven industrial framework.

● **Quadrant II: Over-weight Sectors: India-driven Extensions**

Transport, Storage and Communication Services (Host: 3.0%; India: 13.0%)—This sector illustrates a clear asymmetry in investment priorities, with Indian capital significantly exceeding the sector’s relative importance in the host economy. The placement in Quadrant II reflects a strategic extension of India’s regional ambitions, positioning Singapore not primarily as a destination market but as a critical operational base for logistics, communication infrastructure, and digital network management across ASEAN and East Asia.

Indian firms appear to be leveraging Singapore’s geographic centrality and trade connectivity to support broader regional operations, rather than embedding deeply within the local ecosystem. This overweighting aligns with India’s goals of enhancing cross-border connectivity and digital reach. However, the relatively modest share of this sector in Singapore’s own investment profile points to limited domestic anchoring, as the host economy remains more service- and finance-oriented than infrastructure-focused.

● **Quadrant III (Marginal Sectors): Peripheral and Low Priority**

Sectors such as Construction, Agriculture and Mining, Community and Personal Services, Real Estate, and miscellaneous activities occupy

marginal positions for both countries. These areas collectively account for negligible shares of either India’s OFDI or Singapore’s inward FDI and therefore hold limited strategic or policy relevance. Their low presence reaffirms the selective and efficiency-oriented character of India’s engagement with Singapore—focused on value-added, service-led sectors rather than low-return traditional domains

● **Quadrant IV (Missed Opportunity): Host-Priority, Low Indian Presence**

Notably, India’s OFDI shows limited engagement in several high-potential sectors that feature prominently in Singapore’s inward investment profile. These include information and communication technology (ICT), professional and technical services, and green or clean energy, where the host economy has substantial global strengths but Indian investments remain minimal. This relative under-representation signals untapped opportunities for deeper integration. Strengthening India’s presence in these areas could leverage Singapore’s advanced innovation ecosystem, regulatory efficiency, and R&D infrastructure to accelerate Indian firms’ technological upgrading and participation in new-age industries. Expanding collaboration in such sectors would enhance the long-term complementarity between the two economies and align with India’s broader objective of positioning itself as a key player in future-oriented global value chains.

BOX 11: Key takeaways- Singapore

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- ⊙ Strong alignment is observed in financial services, trade, and manufacturing sectors that reflect both countries’ economic specialisations and priorities.
- ⊙ Singapore serves as a financial and regional trading hub for Indian firms, facilitating fund flows, corporate structuring, and ASEAN market access.
- ⊙ Manufacturing, though smaller in share, is an emerging area of alignment, especially in high-tech and innovation-driven segments.
- ⊙ India’s higher investment share in logistics and communication indicates the use of Singapore as a regional coordination point, rather than for domestic market integration.
- ⊙ Low investment presence in traditional and low-yield sectors (e.g., agriculture, construction) reflects a selective, efficiency-driven outward FDI strategy by India.

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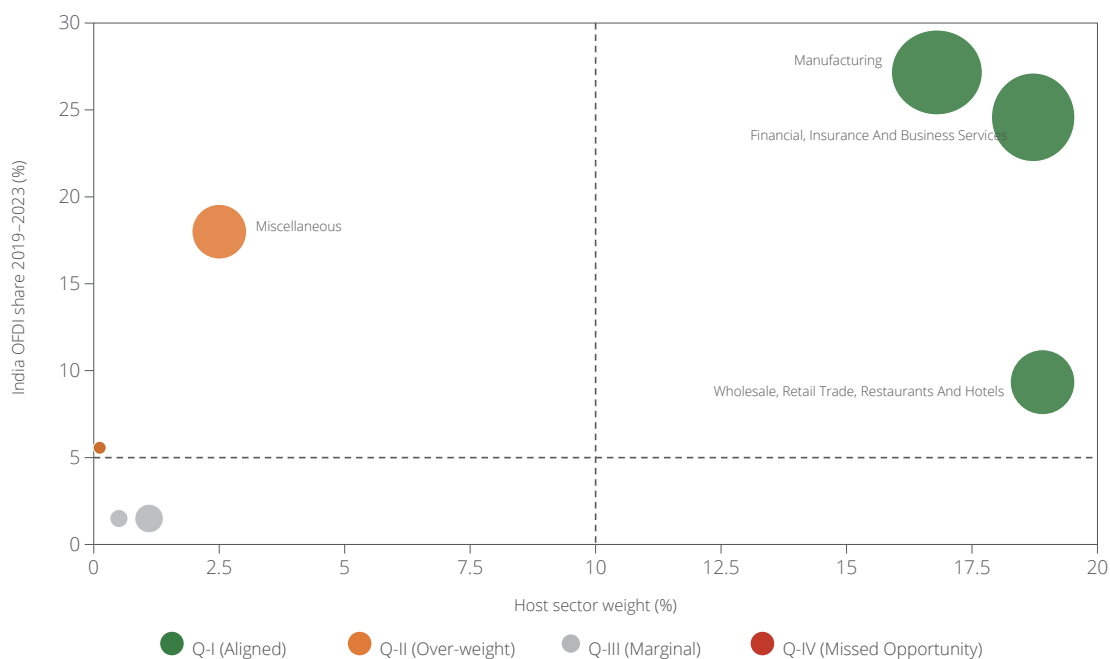


4.4.2. United States of America

India's OFDI linkages with the United States reflect a high degree of sectoral correspondence and economic integration, supported by substantial structural similarity (Cosine Similarity: 86.22%). The Overlap Index (46.16%) suggests that while India's sectoral composition of OFDI is not identical to that of the U.S. inward FDI, there exists a broad convergence in investment

priorities within advanced manufacturing, financial and business services, and wholesale and retail trade. The quadrant mapping (Figure 4.2) indicates that India's outward investments are largely positioned in sectors that align with the U.S.'s innovation-driven and high-value service economy. This alignment underscores India's growing integration into the global production and knowledge networks centred in the United States.

Figure 4.2: Strategic Quadrant—United States of America



● Quadrant I (Aligned Sectors): Strategic Convergence in Core Industries

The three major sectors falling into Quadrant I mark the zones of strongest bilateral complementarity between India and the U.S.

Financial, Insurance and Business Services (Host: 17.7%; India: 27.1%)

This sector forms the backbone of the bilateral investment relationship. Indian firms have established significant operations in the U.S. through IT-enabled services, consulting, fintech, and global delivery centres. The United States' role as a hub for capital markets, insurance, and innovation-driven financial intermediation complements India's strengths in back-end technology, data analytics, and digital solutions.

The alignment reflects a deepening integration of services and technology, where Indian OFDI acts as both a conduit and a complement to U.S. financial ecosystems.

Manufacturing (Host: 16.3%; India: 28.5%): Manufacturing forms another pillar of alignment, with India's OFDI directed toward automotive components, pharmaceuticals, chemicals, and precision engineering. These investments align closely with the U.S.'s diversified industrial base and advanced manufacturing capabilities. The mutual emphasis reflects co-specialisation—Indian firms seek access to technology, R&D, and skilled labour, while U.S. ecosystems gain production flexibility and cost efficiencies through Indian linkages.

Wholesale, Retail Trade, Restaurants and Hotels (Host: 17.6%; India: 8.3%): This sector, though smaller in India's OFDI portfolio, reinforces India's engagement with the U.S. consumer and distribution network. The alignment demonstrates India's participation in supply chain and market intermediation functions within one of the world's most integrated consumption economies.

Together, these three sectors account for the majority of India's investment exposure in the United States and collectively capture the dual nature of this relationship—services-led but increasingly production- and market-oriented.

● **Quadrant II (Over-weight Sectors) — India-Driven or Tactical Positions**

Two sectors—Miscellaneous Services (India: 18.0%; Host: 3.4%) and Community, Social and Personal Services (India: 6.0%; Host: 0.0%)—fall within Quadrant II, representing India-driven extensions beyond U.S. FDI priorities.

The Miscellaneous category, dominated by professional, information technology, and business-related subsidiaries, highlights India's reliance on the U.S. as a strategic operating base for global service exports, corporate structuring, and tax optimisation.

The Community, Social, and Personal Services segment, though small, reflects the growing presence of Indian educational, cultural, and philanthropic entities in the United States, signalling soft-power expansion rather than purely commercial motives. While these sectors reinforce India's corporate globalisation, they are not core to the U.S. FDI policy landscape, implying that such exposures are largely firm-

driven, tactical, and operationally useful, rather than ecosystem-aligned.

● **Quadrant III (Marginal Sectors) — Limited Relevance for Both Sides**

Sectors such as Transport, Storage and Communication (Host: 1.8%; India: 0.5%) and Real Estate & Rental (Host: 0.8%; India: 0.0%) occupy peripheral positions. These areas account for negligible investment shares for both countries and lack strategic depth or bilateral policy significance. Their limited importance confirms that the India–U.S. OFDI corridor remains driven by knowledge-intensive and technology-linked activities, rather than traditional infrastructure or resource-based sectors.

● **Quadrant IV (Missed Opportunity) — High Host Potential, Low Indian Presence**

Sectors such as Information and Communication Technology (ICT) (Host: 9.6%; India: 1.2%) and Professional, Scientific and Technical Services (Host: 8.4%; India: 0.9%) fall within this quadrant, reflecting areas where the United States attracts substantial inward FDI, but India's OFDI presence remains limited. These high-value, innovation-intensive sectors are central to the U.S. economic structure, characterised by advanced research ecosystems, digital infrastructure, and R&D-led productivity. India's relatively low participation in these segments indicates underutilised potential for deeper engagement—particularly in technology partnerships, co-innovation, and service-oriented manufacturing linkages. Strengthening India's footprint in these domains could enhance the strategic depth and future readiness of the India–U.S. OFDI corridor.



BOX 12: Key Takeaways – United States of America



- ⦿ The India–U.S. OFDI-high structural similarity (reflecting strong convergence in sectoral priorities and deep integration within advanced services and manufacturing).
- ⦿ Financial, Insurance & Business Services and Manufacturing form the twin pillars of alignment, highlighting India’s embedded presence in technology-enabled services, fintech, pharmaceuticals, automotive components, and precision engineering within the U.S. economy.
- ⦿ Wholesale and Retail Trade reinforce India’s engagement with the U.S. consumer market and distribution networks, supporting market-seeking and supply chain intermediation objectives.
- ⦿ India’s over-weight exposure in Miscellaneous and Community Services reflects firm-driven and soft-power oriented investments, rather than alignment with core U.S. inward FDI priorities.
- ⦿ ICT and Professional, Scientific & Technical Services represent key missed opportunities, where the U.S. exhibits strong inward FDI strength but India’s OFDI presence remains limited—indicating scope for deeper engagement in innovation-led, R&D-intensive, and digital transformation sectors.
- ⦿ Overall, the India–U.S. OFDI corridor is structurally aligned, services-led, and increasingly production-oriented, with strong ecosystem integration and significant potential for expansion in frontier technology domains.



4.4.3 United Kingdom

India’s OFDI relationship with the United Kingdom reflects a high level of sectoral and structural alignment, built on long-standing economic linkages and institutional complementarities. This is evidenced by a high Overlap Index (66.3%), Cosine Similarity (84.71%), and a strong positive correlation (78.1), together indicating one of the most balanced and coherent investment relationships among India’s partner economies. The quadrant mapping in Figure 4.3 demonstrates a pronounced degree of structural alignment between India’s OFDI composition and the UK’s inward FDI profile, particularly in financial, insurance, and business

services; manufacturing; and wholesale and retail trade. These sectors dominate both economies’ investment portfolios, underscoring shared strengths in service-based growth, business intermediation, and innovation-led manufacturing.

This convergence reflects India’s growing integration into the UK’s diversified and globally networked economy, supported by deep institutional ties, legal familiarity, and financial sector linkages. The relationship highlights the mutual reinforcement of capital mobility and knowledge transfer, positioning the UK as a strategic gateway for Indian firms expanding into Europe’s advanced markets and financial hubs.



Figure 4.3: Strategic Quadrant—United Kingdom



● Quadrant I (Aligned Sectors) — Deep Structural and Ecosystem Convergence

Two major sectors — Financial, Insurance & Business Services and Manufacturing — lie firmly within Quadrant I (High Host, High India), illustrating mutual strategic emphasis and shared economic depth. The Financial, Insurance & Business Services sector (Host: 57.4%; India: 32.5%) forms the cornerstone of the India–UK investment relationship. The UK remains one of the world’s leading global financial centres, and India’s significant presence reflects its use of London and related hubs for treasury operations, corporate headquarters, and fund management. Indian firms have leveraged the UK’s financial and legal infrastructure to access European and transatlantic markets. This alignment extends to fintech, consulting, and professional services, underscoring bilateral synergy in high-value, services-based industries.

Similarly, Manufacturing (Host: 22.6%; India: 36.2%) represents another area of strong convergence. Indian firms’ investments in automotive, pharmaceuticals, and advanced engineering closely match the UK’s industrial priorities around innovation, sustainability, and

green transition. India’s higher relative share indicates leadership in sub-segments such as electric vehicles, speciality chemicals, and biopharma, reflecting R&D complementarities and joint value creation.

Together, these sectors account for over two-thirds of India’s total OFDI exposure to the UK, reflecting a mature, innovation-linked partnership built on institutional and industrial compatibility.

● Quadrant II (Over-weight Sectors)

The Wholesale, Retail Trade, Restaurants & Hotels sector (Host: 8.6%; India: 24.7%) lies in Quadrant II (Low Host, High India), indicating an India-driven concentration. India’s substantial exposure in this segment highlights the commercial and operational focus of its investments in the UK—particularly in retail chains, hospitality, and trade facilitation.

Many of these ventures leverage the UK’s position as a gateway to European markets, even post-Brexit. However, as the host economy places limited policy emphasis on this sector, the over-weight reflects market-led rather than policy-led motives, often driven by diaspora



demand and brand establishment. While commercially significant, this concentration entails limited ecosystem integration and underscores the need for diversification toward high-tech and green sectors.

● **Quadrant III (Marginal Sectors) — Limited Strategic Relevance**

Sectors such as Transport & Storage (Host: 4.5%; India: 1.8%), Construction (Host: 0.0%), Agriculture and Mining (Host: 0.1%), and Real Estate & Rental (Host: 0.0%) occupy Quadrant III (Low-Low). These areas remain structurally peripheral for both economies and contribute negligibly to bilateral investment flows. Their limited significance reaffirms that the India–UK OFDI relationship is driven by services, trade, and high-value manufacturing, rather than resource-based or traditional infrastructure sectors.

● **Quadrant IV (Missed Opportunity) — High Host Potential, Low Indian Presence**

Sectors such as Information and Communication Technology (ICT) (Host: 5.8%; India: 0.9%) and Professional, Scientific & Technical Services (Host: 4.2%; India: 0.5%) fall within Quadrant IV, representing areas of strong host specialisation but limited Indian engagement. These sectors form the backbone of the UK’s innovation economy, anchored in digital infrastructure, advanced research, and R&D-intensive services. India’s under-representation in these segments points to missed opportunities for technological collaboration and innovation-led investment. Expanding OFDI in ICT, R&D, and green-tech ventures could enhance India’s integration into the UK’s advanced innovation ecosystems and strengthen long-term strategic complementarities.

BOX 13: Key Takeaways – United Kingdom

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- ⦿ High structural alignment between India’s OFDI and UK’s inward FDI (strong overlap and similarity).
- ⦿ Financial Services and Manufacturing are the main aligned pillars, reflecting deep institutional and industrial integration.
- ⦿ The UK functions as a financial hub and gateway to European markets for Indian firms.
- ⦿ Wholesale & Retail is India-led and over-weighted, driven by commercial and diaspora-linked expansion.
- ⦿ Traditional sectors (transport, construction, agriculture, real estate) remain marginal for both sides.
- ⦿ ICT and Professional & Technical Services are underrepresented by India despite strong UK capabilities.
- ⦿ Overall: A mature, innovation-oriented partnership with scope to expand in digital, R&D, and green sectors.

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4.4.4 Mauritius

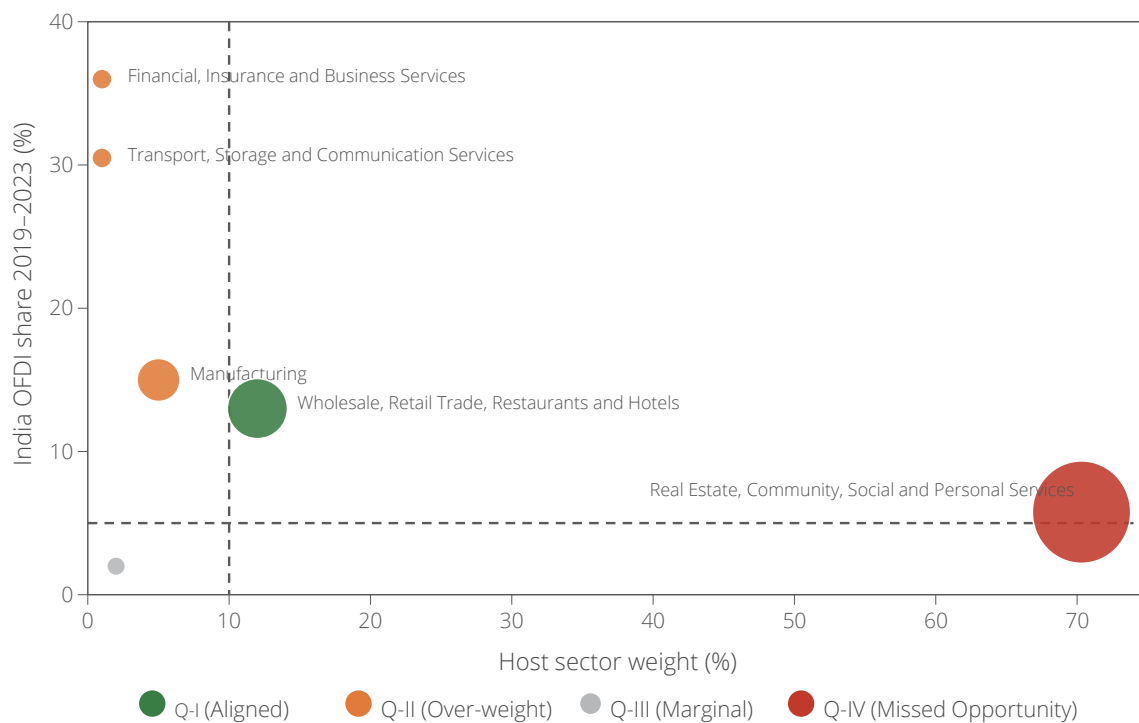
Mauritius continues to occupy a distinctive yet evolving position in India’s OFDI landscape, shaped by longstanding financial linkages and a favourable bilateral investment framework.

Historically, Mauritius has served as a key conduit jurisdiction for India’s outward investment, owing to its stable regulatory environment, extensive double taxation avoidance agreement (DTAA), and strong institutional compatibility.

However, the current sectoral pattern indicates limited structural alignment between India's OFDI composition and Mauritius's inward FDI profile. The Cosine Similarity (6.92%) and Overlap Index (19.34%) together highlight a narrow and specialised investment structure, where Indian investments are concentrated in select sectors rather than evenly distributed across the host economy.

The quadrant mapping (Figure 4.4) reveals a pattern of targeted, functionally driven investment activity, emphasising Mauritius's continuing role as a financial and coordination hub within India's global investment network rather than as a broad-based host economy.

Figure 4.4: Strategic Quadrant—Mauritius



● Quadrant I (Aligned Sectors) — Absence of Strong Structural Alignment

Notably, no sector falls within Quadrant I for Mauritius. This indicates the absence of sectors where India's OFDI priorities align closely with Mauritius's inward FDI structure at a material level. Despite Mauritius's long-standing role as a key destination for Indian outward investment, the lack of aligned sectors underscores the functional rather than production- or market-oriented nature of this investment relationship. Indian OFDI to Mauritius is therefore driven less by convergence in sectoral development priorities and more by jurisdictional, financial, and coordination considerations.

● Quadrant II (Over-weight Sectors) — Functional Extensions with Strategic Utility

India's investment profile in Financial, Insurance and Business Services (Host: 0.0%; India: 36.6%) is significantly higher relative to Mauritius's inward FDI composition, positioning it firmly in Quadrant II. This reflects Mauritius's role as a platform for fund structuring, offshore financing, and financial intermediation, serving India's wider global investment and corporate strategies. These flows, though limited in domestic economic integration, are functionally critical for managing tax efficiency, compliance, and cross-border investment vehicles. A similar pattern is evident in Transport, Storage and



Communication Services (Host: 0.0%; India: 30.2%), where investments primarily serve as regional coordination nodes for Indian firms operating across Africa and the Indian Ocean region. These are likely operational extensions, leveraging Mauritius's stable business environment and connectivity advantages. In Manufacturing (Host: 5.3%; India: 15.0%), India's overweight presence signals an emerging interest in industrial or light processing activities, using Mauritius as a gateway to African and Indian Ocean markets. Although modest, such initiatives demonstrate potential for future value-added partnerships, particularly in niche segments such as agro-processing, pharmaceuticals, and export assembly.

● **Quadrant III (Marginal Sectors) — Areas of Limited Bilateral Investment**

Sectors such as Agriculture and Mining, Construction, and Community, Social and Personal Services fall within Quadrant III, reflecting low bilateral engagement. These sectors hold limited current significance

but could offer future opportunities as India's OFDI diversifies toward sustainability, renewable energy, and social infrastructure, where Mauritius's governance capacity and regional positioning could complement India's investment capabilities.

● **Quadrant IV (Missed Opportunity) — Real Estate and Social Infrastructure**

The Real Estate, Community and Social Services sector (Host: 70.1%; India: 0.0%) represents a major missed opportunity. Given Mauritius's strong emphasis on tourism infrastructure, urban renewal, and sustainable real estate development, this gap indicates unexploited potential for Indian participation. Indian firms possess competitive advantages in construction, affordable housing, hospitality management, and project financing, all of which could support Mauritius's long-term development strategy. Enhanced collaboration in real estate investment trusts (REITs), green building projects, and tourism-linked infrastructure could strengthen mutual economic engagement.

BOX 14: Key Findings- Mauritius



- ⊙ Mauritius continues to serve as a strategic financial and investment conduit for India's OFDI, supported by long-standing institutional, legal, and tax advantages.
- ⊙ The relationship shows low structural alignment (Cosine Similarity: 6.92%; Overlap Index: 19.34%), indicating narrow, function-specific engagement rather than diversified sectoral integration.
- ⊙ India's OFDI is heavily concentrated in financial, insurance & business services and transport & communication, reflecting the functional utility of Mauritius as a jurisdiction for fund routing, coordination, and offshore operations.
- ⊙ Manufacturing investments, though limited, suggest emerging interest in value-added and processing activities, leveraging Mauritius's trade access to African and Indian Ocean markets.

- ⦿ Marginal sectors such as agriculture, construction, and social services show minimal bilateral relevance, underscoring the specialised nature of the investment corridor.
- ⦿ The Real Estate and Social Infrastructure sector (Host: 70.1%; India: 0.0%) represents a missed opportunity, where Indian expertise in construction, hospitality, and real estate financing could be leveraged for deeper engagement.
- ⦿ Overall, India’s OFDI to Mauritius reflects a strategic, finance-oriented partnership, with potential to evolve into a broader, sustainability- and innovation-linked collaboration through co-investment and sectoral diversification.

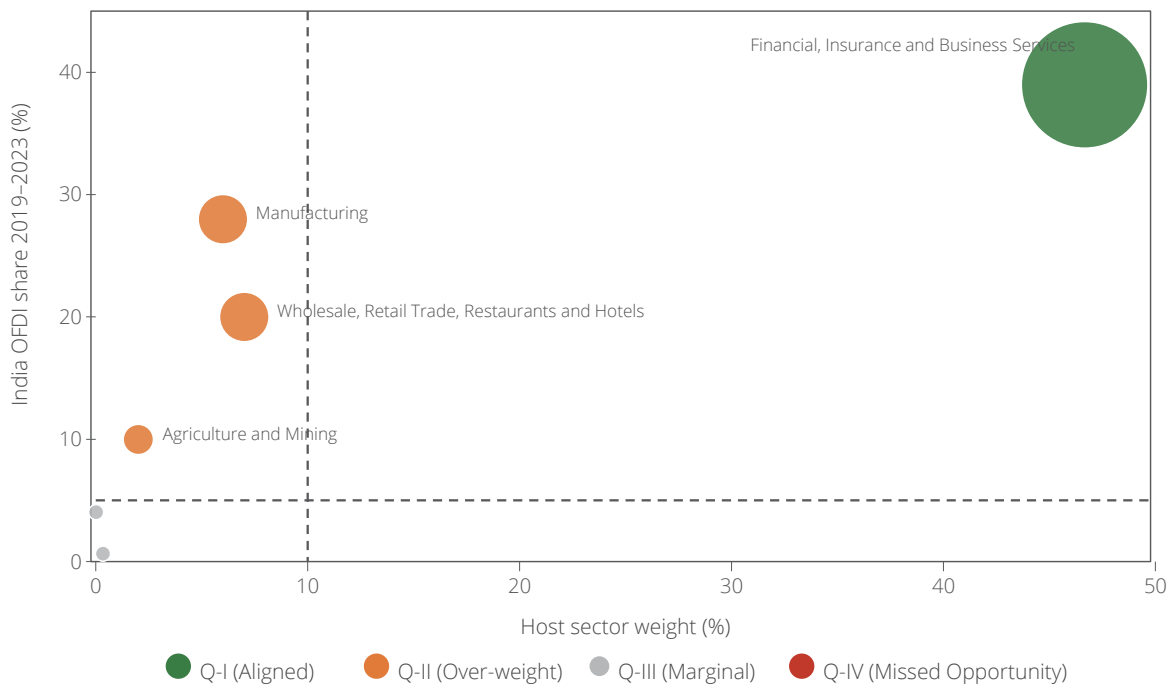


4.4.5 Netherlands

India’s OFDI relationship with the Netherlands demonstrates high sectoral complementarity and strong structural coherence, underpinned by the Netherlands’ role as a major investment gateway to Europe. The relationship is characterised by a high Overlap Index (51.39%), Cosine Similarity (85.28%), and a strong

positive correlation (84.65), indicating close correspondence between India’s outward FDI structure and the Netherlands’ inward FDI profile. The quadrant mapping (Figure 4.4) highlights a broad alignment across key sectors, reflecting the Netherlands’ dual role as both a financial conduit and high-value production base for Indian multinationals.

Figure 4.5: Strategic Quadrant—Netherlands



● **Quadrant I (Aligned Sectors) — Strong Sectoral Convergence**

The sectors Financial, Insurance & Business Services (Host: 45.6%; India: 29.8%) and Manufacturing (Host: 28.4%; India: 34.6%) dominate this quadrant, underscoring robust alignment between the two economies. The Netherlands' advanced financial infrastructure and corporate tax advantages have positioned it as a preferred holding and treasury centre for Indian firms managing European operations. Simultaneously, manufacturing ties—spanning chemicals, pharmaceuticals, electronics, and precision engineering—mirror shared strengths in high-technology and export-oriented production. The synergy across these sectors indicates that India's OFDI in the Netherlands is driven by efficiency-seeking motives and value chain integration, rather than mere tax arbitrage.

● **Quadrant II (Over-weight Sectors) — India-Led Concentration**

The Wholesale, Retail Trade, Restaurants & Hotels sector (Host: 9.2%; India: 23.7%) lies in this quadrant, reflecting India's higher relative exposure in commercial and trade-related activities. Indian firms use the Netherlands' central location and superior logistics infrastructure to coordinate trade and distribution operations across the EU. While this overweight presence strengthens connectivity and regional access, it indicates a tactical rather than host-driven alignment, as the Dutch

economy prioritises technology and industry-intensive sectors over retail and hospitality.

● **Quadrant III (Marginal Sectors) — Low Mutual Relevance**

Sectors such as Transport & Storage (Host: 4.1%; India: 1.5%), Construction (Host: 0.2%), and Real Estate & Rental (Host: 0.4%) fall within Quadrant III (Low-Low), highlighting limited bilateral significance. Their peripheral role suggests that the India–Netherlands OFDI relationship remains primarily anchored in services and manufacturing, not traditional infrastructure or low-value activities.

● **Quadrant IV (Missed Opportunity) — Underexploited High-Value Sectors**

Sectors such as Information and Communication Technology (ICT) (Host: 6.8%; India: 1.2%) and Professional, Scientific & Technical Services (Host: 5.9%; India: 0.8%) fall within Quadrant IV, representing areas where the Netherlands has strong inward FDI attraction, but India's presence remains limited. These sectors form the core of the Dutch innovation ecosystem, linked to digitalisation, automation, and applied R&D.

India's under-representation here signals a missed opportunity to participate in high-technology, research-led collaborations, especially in green innovation, clean energy systems, and digital manufacturing, where Dutch firms maintain a leadership position.

BOX 15: Key Findings – Netherlands



- ⊙ Strong structural alignment exists in financial, insurance & business services and manufacturing, reflecting deep institutional and production linkages.
- ⊙ The Netherlands functions as a financial gateway and operational hub for Indian firms, facilitating tax-efficient corporate structuring and EU-wide investment management.
- ⊙ High presence in manufacturing points to India's growing role in technology-intensive and value-chain-integrated production systems within Europe.

- ◉ Wholesale and retail trade remain overweighted, highlighting India’s logistics- and distribution-driven exposure rather than host-led industrial integration.
- ◉ Marginal participation in transport, construction, and real estate reflects the selective, efficiency-oriented nature of bilateral investments.
- ◉ Low representation in ICT and professional, scientific & technical services reveals missed opportunities for technological collaboration in innovation and R&D
- ◉ Overall, the India–Netherlands OFDI corridor reflects a strategic, efficiency-seeking, and structurally aligned partnership, with scope for deepening engagement in digital and green transformation sectors.



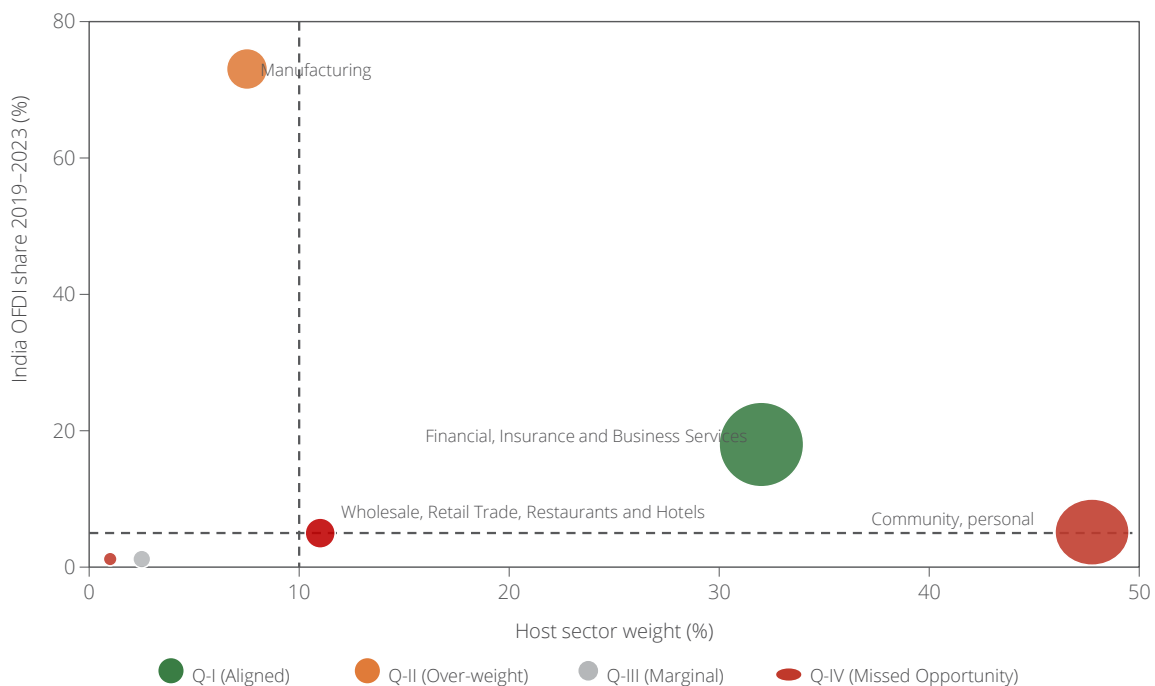
4.4.6 Switzerland

Switzerland represents a distinctive yet structurally divergent partner in India’s OFDI landscape. Despite its global reputation as a hub for wealth management, life sciences, and precision manufacturing, the India–Switzerland investment relationship remains narrow and selectively integrated.

This structural divergence is reflected in a low Overlap Index (29.01%), Cosine Similarity

(25.86%), and a negative correlation (–16.26), indicating limited alignment in sectoral composition and investment priorities. The quadrant mapping (Figure 4.6) reveals that only one sector—Financial and Business Services—falls within the Aligned Quadrant (Q-I), while a larger proportion of sectors are concentrated in the Marginal (Q-III) and Missed Opportunity (Q-IV) categories, underscoring the selective and asymmetrical nature of India’s OFDI engagement with Switzerland.

Figure 4.6: Strategic Quadrant—Switzerland



● **Quadrant I: Aligned Sector -Anchoring Financial & Business Services**

Despite overall divergence, this sector reflects the strongest point of convergence between India and Switzerland. Indian investments are aligned with Switzerland's well-established financial ecosystem, which offers political stability, strong regulatory oversight, and a robust infrastructure for wealth and fund management. According to Ziltener and Müller (2020), Switzerland's prominence in global private banking and asset management attracts niche OFDI streams from emerging economies like India. Indian firms leverage this ecosystem for fund routing, asset protection, and treasury functions. Additionally, Switzerland's fintech initiatives under the Swiss Financial Market Supervisory Authority (FINMA) provide a conducive environment for digital financial collaboration (FINMA Report, 2022).

● **Quadrant II: Over-weight Sectors — India-led Sectoral Expansion**

India's OFDI in manufacturing, particularly pharmaceuticals and fine chemicals, significantly outweighs Switzerland's host-sector weight in this domain. This reflects a strategic motive to access specialised capabilities in biopharma, precision machinery, and GMP-certified facilities. As per Bamber, Gereffi, & Fernandez-Stark (2013), Indian pharma firms often pursue acquisitions in Switzerland to access regulatory approvals (e.g., EU GMP), advanced production systems, and proximity to EU markets. This overweighting suggests sectoral complementarity, even if not yet structurally embedded in the Swiss economy.

● **Quadrant III (Marginal Sectors)**

India's outward investment presence in sectors such as agriculture, mining, and communication services remains limited, reflecting relatively low priority from both India's OFDI perspective and the host country's sectoral investment structure. These sectors account for a small share of India's overseas investment and do not feature prominently in the host economy's inward investment profile. The host economy is predominantly oriented toward modern services such as high-technology activities, and specialised manufacturing, where investment opportunities are typically skill-, technology-, or innovation-intensive. Such characteristics offer fewer natural entry points for Indian firms, whose overseas investments are more concentrated in scale-driven manufacturing, services, and market-seeking activities. Accordingly, sectors in Quadrant III represent areas of limited bilateral investment interaction, where subdued investment reflects structural alignment rather than policy or market constraints.

● **Quadrant IV: Missed Opportunities**

Despite Switzerland's significant domestic activity in construction, real estate, and personal services, Indian OFDI presence remains negligible. While structural entry barriers—such as high compliance thresholds and limited market scale—may play a role, these sectors represent areas of potential expansion through service outsourcing, sustainable infrastructure partnerships, or wellness tourism investments. The absence of Indian capital here could reflect risk aversion or insufficient institutional pathways, rather than a lack of opportunity.

BOX 16: Key findings: Switzerland



- ⦿ The India–Switzerland OFDI relationship remains narrow but strategically focused, reflecting selective engagement in high-value sectors rather than broad-based structural integration.
- ⦿ Financial, Insurance & Business Services constitute the only major aligned sector, anchored in Switzerland's global financial and wealth management ecosystem.

- ◉ India’s pharmaceutical and advanced manufacturing investments represent an over-weight exposure, driven by technology access, regulatory advantages, and proximity to EU markets
- ◉ Minimal participation across agriculture, mining, and communication sectors highlights limited ecosystem anchoring, constrained by Switzerland’s specialisation in precision and high-technology industries.
- ◉ Construction and community services emerge as missed opportunities, where Indian expertise in construction, hospitality, and real estate financing could align with Switzerland’s sustainability and infrastructure goals
- ◉ Low Cosine Similarity (25.86%) and negative correlation confirm structural divergence in investment patterns, despite high potential for complementarity.
- ◉ Overall, the relationship reflects selective sectoral integration—anchored in finance and manufacturing—with untapped potential in digital finance, green technology, and infrastructure collaboration.



4.4.7 Australia

The India–Australia OFDI relationship reflects asymmetric sectoral engagement and limited structural convergence, despite strengthening bilateral economic cooperation in recent years. This divergence is evident from a low Overlap Index (34.82%), Cosine Similarity (37.59%), and

a negative correlation (–35.77), indicating that while Indian investments are active in certain sectors, they diverge from Australia’s inward FDI priorities. The quadrant mapping (Figure 4.7) further highlights a concentration of Indian investments in the Over-weight (Q-II) and Missed Opportunity (Q-IV) quadrants, with relatively few sectors showing balanced alignment.

Figure 4.7: Strategic Quadrant — Australia



● **Quadrant I (Aligned Sector) — Emerging Industrial Convergence**

Manufacturing (Host: 6.12%; India: 6.57%) represents the only major area of alignment between India's OFDI composition and Australia's FDI profile. Indian firms—particularly in pharmaceuticals, automotive components, and food processing—have aligned with Australia's renewed focus on domestic value addition, clean-tech innovation, and supply chain diversification (Austrade, 2021). This alignment is reinforced by Australia's Modern Manufacturing Strategy, which promotes cross-border partnerships in R&D and advanced manufacturing.

Indian firms' participation reflects complementary capabilities—leveraging India's cost-efficient production strengths and Australia's innovation ecosystem. Together, they mark a gradual convergence in high-value, sustainability-linked manufacturing domains

● **Quadrant II (Overweight Sectors)—India-Led Commercial Expansion**

India's OFDI is disproportionately concentrated in service-oriented and consumer-facing sectors, reflecting tactical and opportunity-driven engagement rather than structural integration. Financial, Insurance & Business Services (Host: 2.42%; India: 26.59%) — Indian firms utilize Australia as a base for IT-enabled services, consulting, and business process outsourcing, targeting regional markets across the Asia-Pacific. While Australia offers institutional stability, its financial sector's domestic orientation limits deeper alignment (KPMG, 2020). Wholesale, Retail Trade, Restaurants & Hotels (Host: 5.92%; India: 17.11%) — Indian presence in this sector is driven by diaspora demand and consumer retail ventures, including food chains and franchise outlets. However, as this sector is not a host FDI priority, the engagement is niche-oriented rather than systemic. Transport, Storage & Communication Services (Host: 2.65%; India: 7.92%) — India's participation here indicates efforts to use Australia as a regional logistics and connectivity hub, though without significant

policy or institutional anchoring within the host economy. Construction (Host: 2.89%; India: 5.91%) — Indian EPC and infrastructure firms exhibit presence through contract-based projects and technical collaborations, yet high compliance thresholds and localized entry barriers constrain deeper market integration.

● **Quadrant III (Marginal Sectors)—Low Priority and Limited Relevance**

Sectors such as Education, Health, and Miscellaneous Services record negligible shares in both India's OFDI and Australia's inward FDI, placing them in Quadrant III. These areas remain peripheral to bilateral investment flows and reflect limited complementarities or policy focus. The minimal cross-border activity here largely stems from structural differences—India's firms remain domestically oriented in social services, while Australia's regulatory environment and public-sector dominance restrict significant foreign participation. Although small in scale, emerging collaboration in education and skill mobility could gradually elevate this space from marginal to strategic relevance in the coming decade.

● **Quadrant IV (Missed Opportunities)—High Host Relevance, Low Indian Presence**

India's absence in several key Australian sectors signals missed opportunities for strategic diversification. Agriculture & Mining (Host: 30.82%; India: 0.00%)—Despite Australia's global strength in critical minerals, agri-tech, and food processing, Indian investments are negligible. This gap is significant given both nations' complementarities in clean energy transitions, food security, and resource sustainability. Institutional and regulatory hurdles have constrained entry, yet bilateral frameworks could bridge this through targeted cooperation (Jain & Kolan, 2021). Real Estate, Community, Social & Personal Services (Host: 10.27%; India: 0.00%)—Indian investors have yet to explore opportunities in property, hospitality, and aged care infrastructure, areas where policy facilitation and joint investment mechanisms

could create new synergies. Other/Unallocated Sectors (Host: 9.67%; India: 0.00%)—This residual segment, covering digital innovation and

clean energy, presents emerging opportunities for future collaboration in green technology and knowledge-based services.

BOX 17: Key findings: Australia



- ⊙ The India–Australia OFDI relationship shows limited structural alignment, as reflected in low similarity and overlap indices, indicating that India’s investment profile diverges from Australia’s inward FDI priorities.
- ⊙ Manufacturing is the only aligned sector, reflecting emerging convergence in pharmaceuticals, automotive components, food processing, and clean-technology manufacturing, supported by Australia’s industrial policy focus and India’s production capabilities.
- ⊙ India’s OFDI is over-concentrated in service-oriented sectors such as financial services, retail, logistics, and construction, which are not core priorities within Australia’s inward FDI structure and therefore represent India-led, tactical expansions rather than ecosystem integration.
- ⊙ Several host-priority sectors remain underrepresented by Indian investors, most notably agriculture and mining, real estate and social infrastructure, and emerging clean-energy and digital segments, highlighting significant missed opportunities for diversification.
- ⊙ Overall, India’s OFDI in Australia remains selective and opportunistic, anchored in manufacturing alignment but constrained by regulatory barriers and limited sectoral convergence, suggesting scope for deeper engagement in resource-linked, sustainability-oriented, and technology-driven sectors.



4.4.8 Japan

Japan stands out as one of India’s most structurally consistent and strategically synergistic OFDI destinations. The bilateral investment relationship demonstrates deep sectoral alignment, supported by institutional trust, transparent regulation, and technological complementarity. This synergy is reflected in a moderate Overlap Index (48.9%), Cosine Similarity (52.8%), and negative correlation (–13.02), indicating complementarity rather than duplication—a hallmark of mature, innovation-oriented integration. The quadrant mapping (Figure 4.8) highlights that those three major sectors fall within Quadrant I (Aligned), underscoring strong bilateral congruence across key economic pillars. Notably, Japan is among the few partner economies with no sectors in Quadrant IV (Missed Opportunities), reflecting precision in India’s OFDI allocation and strategic adaptation to Japan’s domestic priorities.

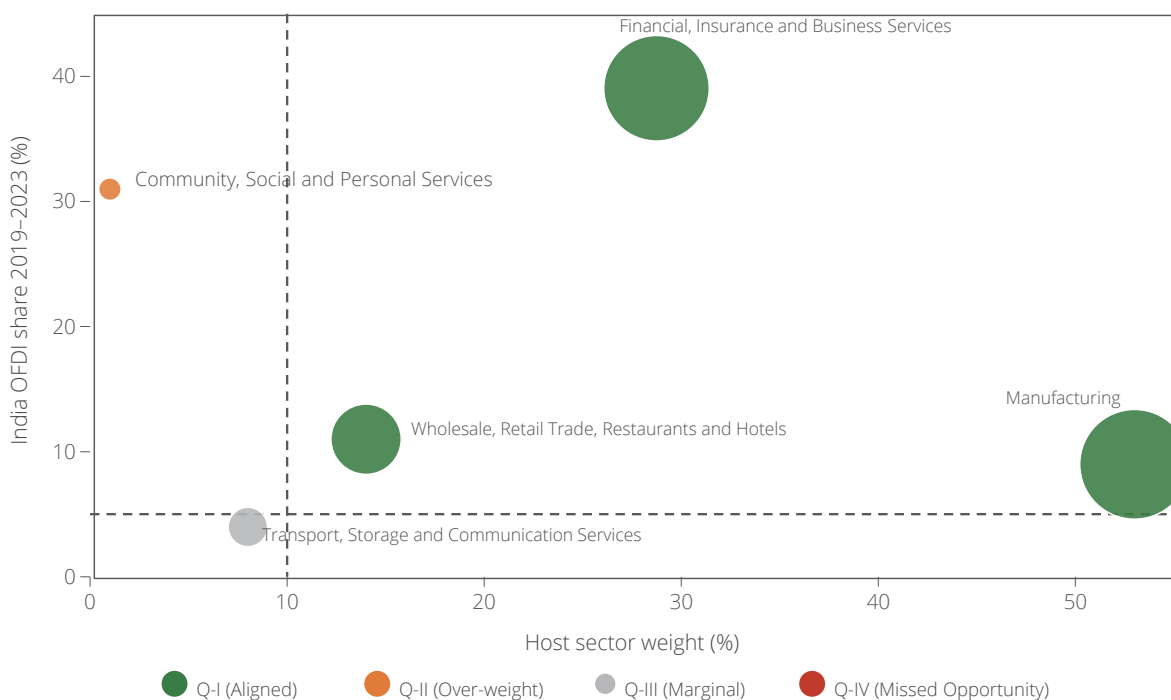
● Quadrant I (Aligned Sectors)—Deep Bilateral Synergy in Core Economic Pillars

India’s OFDI profile in Japan reveals strong structural alignment with the host economy’s strengths, particularly in Financial, Insurance and Business Services, Manufacturing, and Wholesale, Retail Trade, Restaurants and Hotels. These three sectors, central to Japan’s industrial and services ecosystem, attract the bulk of India’s outward investments, reflecting co-specialisation.

Financial, Insurance and Business Services (Host: 34.1%; India: 30.4%). High alignment in this sector reflects India’s recognition of Japan’s stable, innovation-led financial environment. Indian firms have embedded themselves within Japan’s fintech, digital finance, and risk management networks, leveraging regulatory openness and technology-driven systems. Policy



Figure 4.8: Strategic Quadrant — Japan



enablers like the India–Japan Comprehensive Economic Partnership Agreement (CEPA) (JETRO, 2021) and fintech-friendly frameworks under Japan’s Financial Services Agency support deep institutional cooperation (ADB, 2020).

Manufacturing (Host: 27.3%; India: 28.6%): Manufacturing constitutes the backbone of the bilateral economic partnership. Japan’s global leadership in automotive, precision machinery, and robotics aligns closely with India’s OFDI goals in technology acquisition, capability building, and supply chain integration. Indian firms invest strategically to access lean production systems and embed themselves within Japan-led regional and global value chains (Sato, 2019).

Wholesale, Retail Trade, Restaurants and Hotels (Host: 14.6%; India: 18.6%): This sector highlights India’s market-seeking investments, particularly in consumer goods, textiles, processed foods, and pharmaceuticals. Japan’s urban retail infrastructure and sophisticated consumer base provide Indian firms a platform for brand testing and high-standard market access, particularly

in hospitality and niche product segments. The convergence across these three pillars is anchored in long-term institutional frameworks such as the India–Japan CEPA and the Japan–India Industrial Competitiveness Partnership (JIICP), which have institutionalised cooperation in technology diffusion, capacity building, and MSME linkages (METI, 2022).

● Quadrant II (Over-weight Sectors)—Selective Indian Exposure Amid Structural Divergence

Construction (Host: 1.6%; India: 9.3%) India’s higher investment share in construction indicates an India-led strategic exposure targeting niche infrastructure domains rather than large-scale domestic works. Indian EPC firms focus on smart cities, modular infrastructure, and green urban renewal, leveraging Japan’s expertise in urban planning and technology.

However, Japan’s shrinking construction demand, driven by demographic trends and ageing infrastructure, limits deeper integration

(OECD, 2023). Thus, Indian OFDI here is speculative but forward-looking, positioning firms for urban regeneration and transnational infrastructure collaboration in Asia and beyond.

● **Quadrant III (Marginal Sectors)—Structural Gaps, Not Strategic Omissions**

Two sectors—Transport, Storage and Communication and Agriculture and Mining—fall within this quadrant, reflecting limited bilateral integration driven by structural and regulatory constraints rather than policy neglect.

Transport, Storage and Communication (Host: 12.3%; India: 2.3%). Despite Japan’s centrality in regional logistics, high capital intensity, tight regulatory frameworks, and the dominance of incumbent players, Indian participation (METI, 2022). Indian investments remain tactical,

focusing on selective partnerships rather than deep ecosystem entry. Agriculture and Mining (Host: 10.1%; India: 0.7%) Limited engagement stems from Japan’s high-tech, small-scale, and heavily subsidised agriculture combined with strict sanitary and phytosanitary (SPS) regimes. Structural incongruence, rather than disinterest, explains the marginal OFDI presence in these sectors.

● **Quadrant IV (Missed Opportunities) — None Identified**

Japan remains one of the few OFDI destinations with no identified missed opportunities, reflecting strategic precision in India’s investment allocation. Indian firms have effectively aligned with Japan’s sectoral configuration, innovation focus, and regulatory landscape, ensuring minimal underinvestment in high-value areas.

BOX 18: Key Findings – Japan

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- ⊙ Japan represents one of India’s most strategically aligned and institutionally stable OFDI destinations, underpinned by deep technological and financial complementarities.
- ⊙ High alignment across financial, manufacturing, and wholesale trade sectors reflects strong ecosystemal synergy and long-term co-specialisation.
- ⊙ The India–Japan CEPA and JIICP have institutionalised cooperation in services, manufacturing, MSMEs, and innovation, ensuring sustained bilateral depth.
- ⊙ India’s construction sector investments represent selective diversification toward smart infrastructure and green urban projects, though with limited host-side absorption.
- ⊙ Marginal participation in transport and agriculture reflects structural barriers rather than strategic neglect.
- ⊙ The absence of Quadrant IV sectors highlights efficient capital allocation and strategic focus, marking Japan as a mature, high-trust partner in India’s global OFDI network.
- ⊙ Overall, the relationship exemplifies technology-driven complementarity, institutional depth, and policy alignment, reinforcing Japan’s role as a cornerstone destination in India’s outward investment landscape.

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Chapter

05

Determinants of India's Outward FDI

5.1 Introduction

Over the past two decades, India's OFDI has transitioned from a marginal feature of its international economic engagement to a strategic channel of growth, competitiveness, and global positioning. No longer limited to a few conglomerates, India's OFDI now spans mid-cap enterprises, diversified sectors, and high-value destinations. This transformation holds vital implications for economic policy, as OFDI is increasingly leveraged for technology acquisition, market access, resource security, and firm-level learning.

Given this strategic shift, it becomes imperative to understand the macroeconomic, financial, technological, and institutional drivers of OFDI. Moreover, sectoral nuances matter: what drives OFDI in manufacturing may differ sharply from services.



Recognising this heterogeneity is essential for crafting targeted policies and investment promotion strategies.

This chapter investigates four critical questions:

1. What macroeconomic and structural conditions shape India's OFDI flows?
2. Do these determinants vary across manufacturing and services sectors?
3. How do financial development and innovation capabilities influence OFDI?
4. What institutional and global integration factors are most policy-relevant?

The findings of this chapter offer actionable inputs for aligning India's investment promotion and capital account policies with sectoral and destination-specific OFDI strategies.

5.2 Literature Review

Theoretical Review

The theoretical literature on OFDI offers multiple perspectives to understand the motivations, drivers, and patterns of firms' cross-border expansion. For analytical clarity and to align with the conceptual framework and variables employed in this study, the literature is organised into five interrelated strands: (i) Product Life Cycle and Macroeconomic Foundations, (ii) The Eclectic Paradigm and the Push–Pull Framework, (iii) Macroeconomic and Financial Theories of Capital Flows, (iv) Technological Accumulation and Innovation-Driven OFDI, and (v) Trade Openness, Global Integration, and Institutional Context. While these strands represent distinct lenses, they often intersect and complement each other, collectively providing a multidimensional foundation for analysing India's OFDI determinants.

Strand 1: Product Life Cycle and Macroeconomic Foundations

The origins of OFDI theory are traced to Vernon's (1966) Product Life Cycle Theory, which conceptualises internationalisation as a dynamic process linked to product evolution and market development. Firms initially produce domestically, leveraging proximity to consumers, skilled labour, and technological capabilities. As products mature and standardise, firms pursue cost efficiencies and market expansion by establishing foreign production, transitioning from export-led to investment-led internationalisation. Consistent with this theory, sustained GDP growth in the home economy catalyses OFDI by strengthening firms' production capacity, capital availability, and competitiveness (Narula &



Kodiyat, 2013). The Investment Development Path framework (Dunning & Narula, 1996) further posits that economic advancement and market saturation incentivise firms to leverage accumulated resources to penetrate foreign markets. Macroeconomic stability—including exchange rate conditions and external sector balances—forms a critical structural foundation underlying outward investment decisions. Empirical studies corroborate the role of these variables in shaping OFDI flows, especially from emerging economies (Pradhan, 2004; Kumar & Chadha, 2009; Aggarwal, Arora, & Sengupta, 2022; Sahoo & Bishnoi, 2023). Accordingly, this study operationalises GDP per capita, exchange rate dynamics, and external balances as core macroeconomic determinants.

Strand 2: The Eclectic Paradigm and the Push–Pull Framework

Dunning’s (1988) Eclectic Paradigm, or Ownership-Location-Internalisation (OLI) framework, integrates firm-specific ownership advantages, host country location factors, and internalisation incentives to explain OFDI. The push–pull model complements this lens by distinguishing home-country “push” pressures and host-country “pull” attractions. Push factors include proprietary technologies, managerial expertise, financial access, macroeconomic stability, and deeper financial markets that enable firms to internalise operations abroad. Notably, exchange rate volatility may instigate geographic diversification as a risk mitigation strategy. Pull factors encompass governance quality, regulatory transparency, and trade openness in host countries that lower investment risk and transaction costs—key to attracting Indian OFDI (Dunning & Lundan, 2008). Empirical studies emphasise that both push and pull factors jointly shape investment patterns, necessitating a nuanced policy approach.

Strand 3: Macroeconomic and Financial Theories of Capital Flows

Classical models of capital mobility (Aliber, 1970; Kindleberger, 1988) explain OFDI through differential rates of return; firms allocate investments toward countries offering superior expected returns or cost advantages. The

presence of deep, well-functioning financial markets at home—indicated by stock market capitalization and domestic credit to the private sector—lowers financing costs, facilitating large-scale international projects (Beck, Demirgüç-Kunt, & Levine, 2000). Capital account (KA) openness and foreign exchange reserves contribute to macroeconomic resilience, allowing firms to maintain outward investment despite global volatility. These factors collectively underscore the interplay between financial capacity, macroeconomic stability, and firm-level internationalisation potential. This strand justifies the inclusion of financial depth indicators and external buffers in the current empirical analysis.

Strand 4: Technological Accumulation and Innovation-Driven OFDI

Endogenous growth theories emphasise innovation, human capital, and knowledge spillovers as key to sustained competitiveness (Romer, 1986; Lucas, 1988). OFDI serves as both a channel for exploiting existing technological advantages and acquiring new capabilities abroad. Proxies such as R&D expenditure and patent applications reflect innovation intensity and absorptive capacity, indicating firms’ preparedness to compete in high-value global segments. Strategic asset-seeking behaviours, where firms invest overseas to access advanced technologies or intellectual property, support capability upgrading domestically (Cantwell, 1995; Blomström & Kokko, 1998). For Indian multinational enterprises, such innovation-driven investments are critical for catching up with global competitors and embedding within higher echelons of global value chains. Empirical literature highlights these dynamics as significant drivers in technology-intensive sectors.

Strand 5: Trade Openness, Global Integration, and Institutional Context

Theories of trade liberalization and globalization (Helpman, Melitz, & Yeaple, 2004) emphasize how openness reduces barriers and transaction costs, enabling firms to integrate into global value chains and optimise production and market access (Markusen, 2002; UNCTAD, 2024). Simultaneously, the institution-based view (Peng

et al., 2009) posits that institutional quality in home and host countries—defined as “rules of the game” (North, 1990)—including regulatory frameworks, legal protections, and governance effectiveness, critically shapes the feasibility and cost of international expansion. Institutional differences affect transaction costs, contract enforcement, and investment risk (Williamson, 1995; Beugelsdijk et al., 2018). In India’s case, OFDI toward developed, high-governance economies often reflects asset-seeking motives, while flows to less-developed institutional environments frequently target market entry or resource access, requiring adaptive strategies. This strand validates the use of regulatory quality, trade openness indices, and foreign reserve levels as proxies for institutional and integration contexts in the empirical model.

Empirical Review

The empirical literature on OFDI from emerging economies, including India, is extensive and multifaceted, reflecting the complex interplay of economic capacity, financial structures, innovation systems, and institutional environments. For analytical clarity, this review is organised into three main strands: (1) Economic and Macroeconomic Determinants, (2) Financial Development and Innovation, and (3) Institutional Quality and Governance. This structure facilitates a focused examination of the key drivers empirically validated in the context of India and comparable economies.

Strand 1: Economic and Macroeconomic Determinants

Macroeconomic fundamentals consistently emerge as significant determinants of OFDI. GDP per capita is widely employed as a proxy for economic development, productive capacity, and domestic market scale, which collectively influence firms’ ability and incentive to invest abroad. According to the Investment Development Path (IDP) hypothesis, increasing income levels foster outward investment propensity as firms accumulate resources and seek growth opportunities beyond saturated home markets.

Empirical evidence robustly supports this relationship. Nayyar and Mukherjee (2020) demonstrate that higher GDP per capita significantly elevates India’s OFDI flows, reflecting enhanced firm-level resources, economies of scale, and strategic readiness for international expansion. Brooks and Jongwanich (2011) identify similar patterns in Asian economies, underscoring market size and purchasing power as pivotal OFDI drivers. Cross-country analyses by Ayinde et al. (2024) further confirm that income growth bolsters both capital base and managerial capabilities critical for internationalisation.

Exchange rate dynamics also play a crucial role. Currency appreciation increases firms’ purchasing power abroad, reducing the relative cost of foreign assets, whereas depreciation has the opposite effect. Studies by Nayyar and Mukherjee (2020); Chiappini and Viaud (2021), and Tolentino (2010) reveal that exchange rate volatility and trends substantially shape OFDI timing and magnitude, as firms strategically exploit favourable currency conditions in emerging markets.

Strand 2: Financial Development and Innovation

Financial sector development is vital in empowering firms from emerging markets, including India, to undertake OFDI. A well-developed financial system facilitates capital access, reduces transaction costs, and enables resource mobilisation for international projects. Stock market capitalisation as a percentage of GDP—a standard proxy for financial depth—has been positively and significantly linked to OFDI. Brooks and Jongwanich (2011) illustrate that deeper capital markets enhance firms’ fundraising capacity for foreign expansion.

Similarly, domestic credit availability to the private sector supports outward investment by mitigating liquidity constraints and financing cross-border acquisitions and greenfield ventures. Empirical findings indicate that credit expansion fosters internationalisation by extending firms’ financial capacity and reducing operational risks abroad (Brooks & Jongwanich, 2011; Manova (2013).



Innovation is a complementary driver, especially reflecting strategic asset-seeking behaviour. Patent applications by Indian residents serve as accepted indicators of technological capability and innovation intensity. Multiple studies (Brooks & Jongwanich, 2011; Cantwell & Mudambi (2005) document a positive correlation between patent activity and OFDI flows, suggesting that innovation-competent firms are better positioned to compete and embed within global knowledge networks. Though less commonly analysed due to data limitations, R&D expenditure as a share of GDP complements patents as a proxy of innovation capacity. Forte and Santos (2015) find that higher R&D intensity positively influences OFDI by enhancing firms' absorptive capabilities and technological sophistication, reinforcing their global competitiveness.

Strand 3: Institutional Quality and Governance

Institutional quality in the home country critically shapes OFDI strategies from emerging economies. Strong governance, regulatory stability, and effective legal frameworks reduce transaction costs, mitigate risks, and enable firms to internationalise strategically (Forte & Santos, 2015). Empirical research confirms that institutional robustness facilitates access to financing and cross-border networks and enhances firm credibility in foreign markets (Amal & Tomio, 2015; Cuervo-Cazurra, 2016).

Conversely, weak institutions and political instability often drive firms toward "institutional arbitrage" or "institutional escapism," relocating operations to jurisdictions with more predictable policies (Chiappini & Viaud, 2021; Globerman & Shapiro, 2002). In India's context, this dual dynamic manifests in OFDI directed at high-governance, developed economies primarily for asset-seeking motives, while investments in institutionally weaker economies tend toward market access or resource acquisitions. Such cases typically require firms to adopt adaptive strategies to navigate complex local institutional environments effectively.

5.3 Empirical Model

This study estimates three distinct empirical models: one for aggregate OFDI and two sector-specific models for the manufacturing and services sectors. Each specification utilises a consistent set of explanatory variables: macroeconomic, financial, technological, and institutional-openness indicators, to facilitate cross-sectoral comparison of OFDI determinants.

In general form, the models can be expressed as

$$OFDI_t = \alpha_1 + \phi OFDI_{t-1} + \sum_{k=1}^n \beta_k X_{kt} + \varepsilon_t \quad \dots(5.1)$$

Where

- ⊙ $OFDI_{t-1}$ is the dependent variable representing outward FDI (aggregate, manufacturing, or services) at time 't';
- ⊙ $OFDI_t$ is the one-period lag of outward FDI, capturing persistence and dynamic adjustment in outward investment behaviour
- ⊙ X_{kt} denotes the set of independent variables (explained below);
- ⊙ ε_{it} Is the error term capturing residual variation;
- ⊙ α_1 is the intercept, representing the baseline level of OFDI when all explanatory variables are zero;
- ⊙ β_k and ϕ are the coefficients to be estimated, reflecting the magnitude and direction of the impact of each independent variable on OFDI.

5.3.1 Variables and description

Dependent Variable

This study employs three dependent variables, reflecting total and sector-specific OFDI from India:

- ⊙ $OFDI_Total$ – Total OFDI flows from India across all sectors.

- ⊙ *OFDI_Mfg* – OFDI flows specifically from the manufacturing sector.
- ⊙ *OFDI_Services* – OFDI flows from the services sector.

All variables are expressed in current US\$ millions and sourced from the RBI fact sheets.

Independent variables

In the explanatory variables, we include macroeconomic, financial, technological, and institutional factors that can influence India's OFDI. The variables selected are grounded in established theoretical frameworks such as the Eclectic Paradigm (Dunning, 1980), the Investment Development Path (Dunning & Narula, 1996), and macroeconomic theories of capital mobility, while also reflecting empirical practices in recent OFDI studies from emerging economies.

1. Macroeconomic Indicators

- ⊙ **GDP per Capita** (*GDP_PC*): A proxy for economic capacity, measured in current US\$. Higher GDP per capita reflects stronger economic capacity and firm competitiveness, enabling greater OFDI. It signals a country's readiness to shift from domestic investment to international expansion.
- ⊙ **Exchange Rate** (*ER*): Nominal exchange rate, capturing currency valuation and international cost competitiveness. A decrease in value implies an appreciation of the Indian Rupee (INR) against USD, which in turn reduces the cost of acquiring foreign assets, encouraging OFDI. However, a depreciation of the rupee discourages OFDI from India.
- ⊙ **Current Account Balance** (*CA_GDP*): Expressed as a percentage of GDP, reflecting the economy's external balance. A current account surplus indicates higher national savings and potential capital availability for OFDI. It reflects external strength, supporting outward capital flows.
- ⊙ **Capital Account Balance** (*KA_GDP*): Also measured as a percentage of GDP, representing capital transfers

and transactions. A liberalised capital account enhances firms' ability to finance investments abroad. Positive capital account flows ease cross-border investment restrictions.

2. Financial Indicators

- ⊙ **Stock Market Capitalisation** (*Stock*): Measured as a percentage of GDP, it reflects financial market depth. A well-developed equity market increases access to capital and lowers financing costs for OFDI. It reflects investor confidence and corporate funding depth.
- ⊙ **Credit to Private Sector** (*Credit*): Domestic credit provided to the private sector (% of GDP), indicating financial access. Greater domestic credit availability facilitates external investments by reducing liquidity constraints. It supports firms' financial readiness to pursue OFDI.
- ⊙ **Foreign Exchange Reserves** (*Forex*): Gross forex reserves as a percentage of GDP, including Special Drawing Rights (SDR) and gold. High reserves indicate macroeconomic stability and buffer external shocks, instilling confidence for overseas investment.

3. Technological Indicators

- ⊙ **Patent Applications** (*Patent*): Number of patent filings by Indian residents, capturing innovation capacity. A higher number of patents reflects innovation and technological capability, motivating firms to seek strategic assets or markets abroad. It also shows absorptive capacity for foreign knowledge.
- ⊙ **R&D Expenditure** (*R&D*): Research and development expenditure as a percentage of GDP, indicating technological investment. Robust R&D investment enhances competitiveness and encourages firms to internationalise to scale innovations. It supports technology-driven outward expansion.

4. Institutional and Openness Indicators

- ⊙ **Regulatory Quality** (*RQ*): Measures perceptions of government effectiveness in



designing pro-business regulations. Better regulatory frameworks reduce uncertainty and transaction costs, thereby promoting OFDI. Strong institutions build investor confidence for cross-border operations.

- ⦿ **Trade Openness** (*Trade_Open*): A composite index (from the KOF Globalisation Index) measuring trade flows and partner diversity. High trade openness increases exposure to global markets, often preceding FDI flows. It reflects a firm’s maturity in international engagement and encourages OFDI.

We compiled annual data spanning 2007 to 2023 for all the variables listed above. Detailed definitions and data sources are provided in Appendix Table A.0. Given the small sample size and the presence of variables integrated of mixed orders [I(0) and I(1)], the Autoregressive

Distributed Lag (ARDL) bounds testing approach was adopted to examine long-run relationships. A brief overview of the ARDL methodology and the unit root test results is provided in Appendix A.1 and Appendix Table A.2, respectively. The findings from the ARDL bounds tests, which provide evidence of long-run cointegration between OFDI and its determinants, are reported in Appendix Table A.3.

5.4 Findings from ARDL estimation

We estimate various ARDL specifications to examine the possible impact of the determining factors for Total OFDI, manufacturing OFDI and services OFDI. The full estimation results, including coefficient values, standard errors, and model diagnostics, are presented in Appendix Table A.4-6. The key summary of the findings is given in Table 5.1.

Table 5.1: Summary of Key Long-Run Determinants of OFDI by Sector (ARDL Estimates)

Variable	Total OFDI	Manufacturing OFDI	Services OFDI
Macro-Economic Indicators			
<i>GDP Percapita</i>	↑**	↑*	↑**
<i>Exchange rate</i>	↓**	↓***	↓**
<i>KA_GDP</i>	n.s.	n.s.	↑**
<i>CA_GDP</i>	n.s.	n.s.	n.s.
Financial Indicators			
Stock	n.s.	n.s.	n.s.
Credit	↑*	↑**	n.s.
Forex	n.s.	↑**	n.s.
Technological Indicators			
R&D	↑*	↑***	↑**
Patent	↑*	↑***	↑**
Institutional/Openness			
Regulatory Quality	n.s.	↓*	n.s.
Trade Openness	↑**	↑***	n.s.

Note: Summary results are derived from sector-specific Autoregressive Distributed Lag (ARDL) estimations covering the period 2007–2023. The dependent variable is OFDI (Total, Manufacturing, or Services), and explanatory variables include GDP per capita, exchange rate, capital account to GDP, current account to GDP, stock market capitalization (Stock), credit to the private sector (Credit), foreign exchange reserves (Forex), R&D expenditure (R&D), patent applications (Patent), regulatory quality, and trade openness. Reported arrows (↑/↓) indicate the direction of long-run relationships. ***, **, and * denote statistical significance at 1%, 5% and 10% levels, respectively, and n.s. denotes not statistically significant. Full estimation results and diagnostics are provided in Appendix Tables A.4–A.6.

5.4.1 Determinants of Total OFDI

The results from the three ARDL specifications for India's total OFDI (Table 5.1) show that macroeconomic fundamentals play an important role, but with mixed effects. GDP per capita is positive and statistically significant at the 5% level, reinforcing the Investment Development Path view that rising domestic income levels expand Indian firms' outward investment capacity. Whereas the exchange rate has a negative and significant effect at 5%, implying that rupee depreciation constrains OFDI by raising the cost of acquiring foreign assets. In contrast, the external balance indicators, such as the current account (CA_GDP) and capital account (KA_GDP) openness, are found to be statistically insignificant, but they exhibit a positive sign, suggesting that they serve more as background conditions than direct drivers of outward flows.

It is interesting to see that financial depth emerges as a particularly strong enabler of OFDI. Credit to the private sector (Credit) is consistently positive and highly significant (10% level of significance), underscoring the importance of well-developed domestic credit markets in easing liquidity constraints and supporting cross-border expansion. Other financial indicators, such as stock market capitalisation (Stock) and foreign exchange reserves (Forex), are not significant, indicating that credit availability is the more decisive financial channel.

Technological and openness indicators are found to be robust determinants. Both R&D expenditure and patent applications show a strong positive and statistically significant at 10% level, highlighting that innovation-driven firms are more likely to expand abroad. Similarly, trade openness exerts a positive and significant effect, confirming the complementarity between trade integration and outward FDI. These results together suggest that while macroeconomic capacity and financial resources create the baseline conditions for OFDI, it is technological strength and global integration that provide the sustained push for India's international expansion. Relative to macro and financial variables, these innovation and openness factors appear to be the most consistent and forward-looking drivers of India's total OFDI.

5.4.2 Determinants of Manufacturing OFDI

Table 5.1 also shows that macroeconomic fundamentals remain important but operate with notable differences compared to total OFDI. GDP per capita continues to have a positive effect and is significant. Similarly, the exchange rate effect is stronger and highly significant, reflecting the particular sensitivity of capital-intensive manufacturing projects to currency depreciation. It is also interesting to see that the external balance indicators, such as (KA_GDP and CA_GDP), remain insignificant, suggesting that balance-of-payments conditions play a limited role in driving sector-specific manufacturing flows.

Financial indicators remain a key driver of outward investment, but the pattern differs from the aggregate results. Similar to total OFDI, domestic credit (Credit) is positive and significant, confirming the role of liquidity access in supporting expansion abroad. However, unlike the aggregate models, foreign exchange reserves (Forex) also emerge as significant for manufacturing OFDI, highlighting those external buffers matter more for long-gestation and capital-intensive projects typical of manufacturing. Stock market capitalisation, as in the aggregate case, remains insignificant.

The influence of innovation is even more pronounced in manufacturing than in total OFDI. Both R&D expenditure and patent applications are positive and highly significant (1% level). This indicates that technological capability is not just a facilitator but a central determinant of Indian firms' manufacturing internationalisation, particularly in sectors like pharmaceuticals, engineering, and electronics. Compared to the total OFDI results, the stronger and more consistent impact of innovation underscores manufacturing's shift from cost-based to capability-driven outward investment.

Trade openness (Trade_Open) exerts a strong and highly significant effect on manufacturing OFDI, reinforcing the trade–FDI complementarity hypothesis. Greater integration into global trade networks encourages Indian manufacturing firms to deepen supply chains and secure market access through outward investment. By contrast, regulatory quality (RQ) is negative



and weakly significant (10%). This suggests that improvements in India's domestic regulatory environment do not necessarily translate into greater outward manufacturing investment. One possible explanation is that Indian firms in manufacturing may be motivated to internationalise when domestic regulations are perceived as overly stringent or costly relative to host environments.

5.4.3 Determinants of Services OFDI

Like in manufacturing, GDP per capita is positive and significant, but here the effect is stronger, suggesting that rising domestic income provides the knowledge base, skilled labour, and technological sophistication necessary for services internationalisation. The exchange rate is also negative and significant, though the impact is less pronounced (5%) than in manufacturing (1%), consistent with the lighter capital intensity of services. Interestingly, capital account openness (KA_GDP) has a positive and significant effect on services OFDI, unlike in manufacturing, where it is insignificant. This indicates that Indian service-sector firms, such as banks, insurers, and IT companies, benefit directly from fewer restrictions on moving capital across borders, because establishing foreign branches, funding joint ventures, or acquiring overseas firms requires smooth access to international financial flows. By contrast, manufacturing OFDI is less sensitive to capital account liberalization and instead relies more on domestic credit availability to finance its capital-intensive overseas ventures. Likewise, technological indicators such as R&D expenditure and patent applications were also found to have a positive and significant impact on OFDI, indicating the role of innovation. However, trade openness and regulatory quality were found to be statistically insignificant in the services sector, despite being significant drivers in manufacturing and total OFDI models. This suggests that services OFDI may rely less on trade integration and more on institutional and financial enablers such as capital account openness.

In summary, the ARDL results reveal both shared drivers and sector-specific contrasts in India's outward FDI. At the macroeconomic level, GDP per capita supports OFDI in both manufacturing and services, though the effect is stronger in services, where rising income fosters knowledge capacity and skilled labour, while exchange rate depreciation constrains both sectors but has a sharper impact on capital-intensive manufacturing. The financial dimension also diverges; in the case of manufacturing OFDI, it is closely tied to domestic credit availability and foreign exchange reserves, which signal external stability, whereas services OFDI relies more on capital account liberalisation to secure access to global funding. Technological capability emerges as a consistent determinant across sectors, but its role differs, supporting product and process innovation in manufacturing and underpinning IT-enabled platforms and service delivery in services. Openness indicators also vary, with trade openness exerting greater influence on manufacturing, while liberalised capital flows are more critical for services. Overall, these findings suggest that while macroeconomic strength and technological capacity form common foundations, the financial structure and openness channels differ, reflecting the capital-intensive character of manufacturing and the knowledge- and finance-driven orientation of services OFDI.

5.5 Conclusion and Policy Implications

This chapter examines the determinants of India's OFDI, focusing separately on total, manufacturing, and services flows using ARDL specifications for the period 2007 to 2023. The results highlight both common drivers and sector-specific contrasts. At the macroeconomic level, GDP per capita positively influences OFDI across all models, though the effect is stronger in services, where rising income fosters knowledge capacity and skilled labour. Exchange rate depreciation consistently constrains OFDI, with the sharpest impact on manufacturing due to its capital-intensive nature.

Financial conditions differ across sectors, and manufacturing OFDI rely heavily on domestic credit and foreign exchange reserves, which reflect liquidity availability and external sector stability, whereas services OFDI is less tied to domestic financial depth and instead benefits from capital account liberalisation that eases access to international funds. Technological capability emerges as a robust determinant in both sectors, though its role varies, driving product and process innovation in manufacturing and underpinning IT platforms and service delivery in services. Institutional quality, however, shows mixed results: regulatory quality (RQ) is weakly negative for manufacturing, contrary to expectations, suggesting improvements in RQ does not encourage firms to invest abroad, while it is insignificant for total and services OFDI. Finally, openness indicators diverge, with trade openness supporting manufacturing OFDI, while liberalised capital flows are more critical for services.

These findings carry important policy implications. Strengthening domestic credit markets, maintaining adequate reserves, and ensuring exchange rate stability are crucial to facilitating the global expansion of Indian manufacturing firms. For services, a calibrated approach to capital account liberalisation, combined with sustained investment in R&D and intellectual property, is essential to maintain India's competitive edge in IT, finance, and professional services. More broadly, innovation and macroeconomic capacity emerge as shared foundations of OFDI across all sectors, but strategies must be tailored to recognise the capital-intensive character of manufacturing, the knowledge- and finance-driven orientation of services, and the need to create enabling but not overly restrictive regulatory conditions at home.



Chapter

06

Aligning India's OFDI with Free Trade Agreements (FTAs)

6.1 Introduction

This chapter looks at India's top OFDI destination countries—Singapore, Mauritius, the USA, Switzerland, the UK, Australia, Japan, and the Netherlands—and India's competitors in these respective destinations' inward FDIs. A comparison is also made with the commitments made by these top OFDI destinations in Mode 3 to these competitors in any FTAs signed by them with such countries vis-a-vis commitments provided to India in case of any FTA with us.

This helps assess whether India has received equitable or less preferred treatment relative to those partners. Prima facie, better preferential treatment to our competitors could be one of the relevant factors for their higher OFDI to these destinations. However, in case India has received equitable

treatment compared with its competitors, then this factor could be ruled out while analysing India's OFDI to such countries. This analysis should provide suitable indications for our FTA negotiations with these top OFDI destinations to at least match the best commitments provided by them to others to ensure a level playing field.

6.2 Singapore

Singapore remains India's leading destination for outward foreign direct investment (OFDI),

particularly in the services sector. In 2023, the highest FDI inflows into Singapore in services came from the following sectors: Construction; Wholesale & Retail Trade; Accommodation & Food Services; Transportation & Storage; Information & Communication; Finance & Insurance; and Professional, Administrative & Support Services. We look at the key FDI providers in Singapore in such sectors and then compare the commitments in FTAs by Singapore with such countries vis-a-vis India.

Table 3.1: Foreign Direct Investment in Singapore by Source Economy and Major Industry

(Stock As At Year-End), Annual Values in Millions of Singapore dollars

Foreign Direct Investment Finance & Insurance						
Sl. No	Country	2019	2020	2021	2022	2023
1.	United States	2,38,153.10	2,74,581.90	3,47,925.10	3,58,845.90	5,24,659.40
2.	South and Central America and The Caribbean	3,04,846.10	3,47,705.30	4,30,970.10	4,37,667.80	4,69,721.90
3.	European Union (EU-27)	63,319.40	84,093.50	1,05,853.10	80,777.10	1,47,713.10
4.	United Kingdom	58,126.60	80,757.50	67,552.80	77,380.10	86,072.30
5.	Hong Kong	59,374.80	73,476.50	73,001.10	74,763	82,047.70
6.	Canada	52,475.70	68,030.10	94,469.50	90,140.90	80,724.70
7.	India	17,450.80	16,321	18,609.10	19,042.50	25,287.40
Foreign Direct Investment - Wholesale And Retail Trade						
1.	European Union (EU-27)	71,539.70	68,090.50	87,395.60	1,17,372.90	1,12,609.70
2.	South and Central America and The Caribbean	40,095.20	55,597.20	61,540.80	57,958	62,920
3.	United Kingdom	27,273.90	28,742.20	28,912.50	47,968.30	45,840.50
4.	Japan	38,977.60	41,851.50	41,997.40	45,343.20	41,808.20
5.	Mainland China	18,936.80	20,343.50	24,687.60	29,430.70	33,277.60
6.	United States of America	19,027.40	17,461.60	22,661.80	2,285.30	26,225
7.	India	6,289	6,137.20	6,730	7,897.90	7,706.60
Foreign Direct Investment – Manufacturing						
1	United States of America	43,955.10	71,995.20	83,048.20	93,558.80	87,664.40
2	South and Central America and The Caribbean	86,643.30	77,351.30	82,139.30	77,991.70	72,702.30
3	European Union (EU-27)	42,339.90	45,527.70	56,090.70	68,826.40	53,916
4	Switzerland	20,873.70	16,231.70	14,640.70	19,325.50	16,410.40
5	Japan	19,657.50	13,855.60	15,283.20	15,971.70	16,139.90
6	Taiwan	5,193.80	5,735.20	8,438.20	11,655.20	10,405.20
7	India	-57.5	-85	35.7	-69.2	448.7
Foreign Direct Investment - Professional And Administrative & Support Services						
1.	European Union (EU-27)	52,868.90	19,527.90	35,081.60	44,058.10	40,017.50
2.	United States of America	1,20,906.60	1,52,655.60	1,33,137.10	76,843	35,603.30

Sl. No	Country	2019	2020	2021	2022	2023
3.	Japan	17,513.70	18,484	21,798.70	19,126	19,733.40
4.	South and Central America and The Caribbean	13,741.70	18,077	17,544.10	13,921.60	16,988
5.	United Kingdom	4,169.60	4,995.40	5,075.20	6,756.70	6,819.60
6.	ASEAN	3,107.90	2,024.40	2,544.50	3,095	6,313.60
7.	India	374	-1,734.70	-2,160.70	-1,558.50	-1,420.90
Foreign Direct Investment - Transportation and Storage						
1	Japan	8,939.50	13,190.10	24,093.10	39,133.60	39,023.40
2	European Union (EU-27)	4,893.50	4,191.50	7,493.10	13,449.60	14,412.90
3	Taiwan	2,214.90	2,627.40	6,473.10	14,379.50	11,853.20
4	South and Central America and the Caribbean	5,312.60	7,072.90	11,740.40	18,613.80	10,323.30
5	Switzerland	2,516.50	3,347	9,233.40	6,061.30	7,857.10
6	Hong Kong	1,479.50	1,580.10	2,347.10	4,267.50	4,023.60
7	India	667.1	685.8	1,097.40	885.7	1,319.40
Foreign Direct Investment - Information & Communications						
1	United States of America	4,282.4	12,307.6	17,215.6	12,758.8	15,137.1
2	European Union (EU-27)	12,700.1	11,637.9	9,904.6	12,880.6	13,666.4
3	South and Central America and The Caribbean	5,911.6	6,147	11,192.5	8,448.4	3,970.8
4	ASEAN	272.4	472.5	3,252.2	3,509.3	3,913.9
5	Hong Kong	691.6	-341.5	373.4	787.9	3,524.4
6	Japan	580.3	866.2	1,714.5	2,206.3	2,382.9
7	India	1,018.4	266.9	337.9	773.9	1,163
Foreign Direct Investment – Construction						
1	Japan	2,631.90	2,663.70	2,226.30	2,674.40	2,787.70
2	Hong Kong	481.9	988.1	1015.7*	1,072.80	1,115
3	Republic Of Korea	754.6	878	609.4	989.6	805.4
4	European Union (EU-27)	672.9	927	1,011.10	507.7	745.5
5	Mainland China	682.9	413.3	428.6	421.8	715.2
6	ASEAN	850.5	522.4	604.9	532.2	546.4
7	India	103.6	-78.9	-103.5	-94.5	-133.2

Source: Department of Statistics, Singapore

6.2.1. Financial and Insurance Services: Mixed Access for India

Under CECA, India's access to Singapore's financial sector, especially banking, faces several regulatory and operational constraints (detailed in the Annex). Key restrictions include:

- ⊙ Only three Indian banks may be granted Qualifying Full Bank (QFB) licenses, with or without prior operations in Singapore.
- ⊙ A single operational office is permitted; establishing additional branches, ATMs, or relocating requires approval from the Monetary Authority of Singapore (MAS).
- ⊙ A majority of directors must be Singaporean citizens or permanent residents.
- ⊙ Offshore banking services face strict controls: deposits must exceed S\$250,000, and loans to residents are capped at S\$500 million.

- ⊙ M&As involving over 5%, 12%, or 20% ownership need ministerial clearance.
- ⊙ Electronic banking commitments remain non-binding, and representative offices are not permitted to conduct business.
- ⊙ Regulatory approval is mandatory for foreign ownership; loans over S\$5M to non-residents must be converted to foreign currency if used outside Singapore and cannot be used for speculative purposes.

6.2.2 Comparison of Singapore's commitments to India with those provided by it to key competitors

The United States, Singapore's largest source of FDI in financial services, operates under the USFTA, which follows a negative list approach. Similar to India, the U.S. is subject to safeguards such as the cap on credit facilities, restrictions on ATMs, limits on the number of QFBs, and deposit-related restrictions for wholesale banks. The EU and the UK have also received commitments from Singapore that are broadly in line with those extended to India. While the specific quantitative limits, such as the number of licenses, may vary, the overall level of commitment remains largely the same across all three partners.

However, in one area, the EU, UK, and USA have secured more liberal access:

- ⊙ Removing restrictions on advisory and other auxiliary financial services and financial information transfer, which remain regulated in India.

The ASEAN-Hong Kong FTA also offers commitments similar to those extended to India, with the main difference being in the quantitative limits. Restrictions on advisory and other auxiliary financial services, as well as on the transfer of financial information, remain the same as those applied to India.

6.2.3 Wholesale and Retail Trade: Fully Liberalised for India

Under CECA, Singapore has completely liberalised the wholesale and retail trade sector

for India, with no restrictions on market access or national treatment, a significant positive outcome for Indian investors. Hence, the question of better treatment for any competitor does not arise.

6.2.4 Professional & Administrative Support, Transportation & Storage, and Construction Services: Liberal Access

In the remaining key sectors, Professional & Administrative Support Services, Transportation & Storage, and Construction, Singapore has granted full market access with no restrictions under CECA. This liberal stance is consistent across Singapore's FTAs, placing India on par with other major FDI partners.

Under the India-Singapore CECA, India has secured full liberalisation for computer-related services, with no restrictions. In the basic telecommunications and mobile services segment, Singapore allows a cumulative foreign shareholding of up to 73.99%, comprising 49% direct investment and 24.99% indirect investment. For resale-based and audiovisual communication services, there are no restrictions. However, for Value-Added Network (VAN) services, foreign companies must either register a local branch with Singapore's Registry of Companies and Businesses or appoint a local agent with power of attorney. Additionally, VANs are prohibited from transmitting traffic that resembles basic telecom services. Among Singapore's top FDI partners in this sector—the USA, EU, Hong Kong, and Japan—the USA is the leading source of FDI in information & communication services. Under the USSFTA, both Services-Based Operators (SBOs) and Facilities-Based Operators (FBOs) must be incorporated under Singapore's Companies Act. The EU, another major FDI partner, is subject to similar requirements; all telecom service providers must be incorporated locally. While the EU enjoys full liberalisation in VAN services, India still faces restrictions in this segment.

6.2.5 Information and Communication Sector

Under the ASEAN-Hong Kong FTA, commitments are largely similar to those offered to India. Hong Kong faces the same 73.99% cap on foreign



shareholding in basic and mobile telecom services. For VAN services, Hong Kong's access is subject to commercial arrangements with licensed operators.

In contrast, Japan enjoys the most liberalized access under the Japan-Singapore FTA, with no restrictions on FBOs and SBOs, subject only to exclusions for services regulated by the Ministry of Information, Communications and the Arts and the Singapore Broadcasting Authority Act.

Given that Singapore is India's largest OFDI destination in services and considering the strategic importance of the ICT sector for India, there is significant scope to seek better and more liberal commitments in this area.

Key Takeaways:

While India enjoys liberal market access across most services sectors under the CECA, the financial services sector remains comparatively restrictive, particularly in banking and auxiliary services, highlighting clear scope

for improvement in future CECA reviews. Given that Singapore is India's largest OFDI destination in services, and considering the strategic importance of the Information and Communication Technology (ICT) sector for India, there is strong potential to pursue more liberal commitments, especially as Japan has secured a fully liberalized market in this area. Moreover, the USA and EU also enjoy more favorable terms compared to India, underscoring the opportunity for India to negotiate stronger commitments going forward.

6.3 Mauritius

Mauritius is India's second-largest destination for OFDI in services after Singapore, based on data from 2007 to 2023. The top services sectors in which Mauritius receives FDI include Accommodation and Food Services, Information and Communication Services, Wholesale and Retail Trade, Administrative and Support Services, and Human Health and Social Work Activities.

Table 6.2: Inward Foreign Direct Investment in Mauritius: Country-Wise Trends (Value in Rs Million)

S.no	Country	2023	2022	Total FDI Share IN 2023	Total FDI Share In 2022
1	United States	6962	476	18.81%	1.42%
2	France	6934	10357	18.73%	30.92%
3	South Africa	3838	3863	10.37%	11.53%
4	UK	1529	1958	4.13%	5.85%
5	UAE	1378	2208	3.72%	6.59%
6	India	685	810	1.85%	2.42%

Source: Bank of Mauritius

India and Mauritius signed a Comprehensive Economic Cooperation and Partnership Agreement (CECPA), under which Mauritius has provided market access commitments in Mode 3 (commercial presence) across the above sectors. Mauritius has granted liberal market access to India in nearly all of these sectors, with only minor conditions:

⦿ **Restaurant Services:** Market access is granted, with a preference for "high-end, upscale, authentic fusion" restaurants

⦿ **Telecommunication Services:** No specific restrictions, except that the issuance of new mobile or fixed-line service licenses is subject to an economic needs test.

⦿ **Retail Services:** Full market access is allowed, with the only exception being for controlled goods.

Beyond these, Mauritius has also provided unrestricted market access to India in other critical sectors for India's OFDI, including Banking, Construction and Auxiliary Services.

The USA, France, South Africa, the UK, and the UAE are major FDI providers to Mauritius. Among these, Mauritius has signed a CEPA with the UAE, under which it has offered similar commitments:

- ⦿ For telecommunication services and restaurant services, the conditions mirror those provided to India.
- ⦿ In retail services, there are no restrictions without the condition on controlled goods, as in the case of India.

Key Takeaways:

Mauritius has, for the most part, extended liberal and non-restrictive market access to India under the CEPA across key services sectors that align with India's OFDI profile. While minor conditions exist in specific subsectors such as restaurant and telecommunication services, these are consistent with the commitments Mauritius has made to other FTA partners, including the UAE. The only notable difference is in retail services, where Mauritius has provided full market access to the UAE, whereas India's access is subject to a mild condition. Apart from this, Mauritius's overall approach to India remains highly liberal.

6.4 United States of America

India currently does not have any formal services-related commitments or trade agreements with the United States. As a result, this chapter seeks to identify the most liberal commitments made by the U.S. in Mode 3 (commercial presence) to its trading partners, which could serve as a reference point for assessing potential opportunities for Indian service providers.

The most comprehensive offer made by the United States in the area of services is its revised offer submitted to the WTO in 2005. Since then, the only significant trade agreement incorporating services that the US has signed is the United States–Mexico–Canada Agreement (USMCA). Other FTAs concluded by the US are relatively old, limited in scope, and not relevant for the purpose of this study. Accordingly, this analysis compares the US Revised Offer with the

USMCA to identify the most liberal commitments made by the US in Mode 3.

The top service sectors attracting foreign direct investment (FDI) into the United States include banking and financial services, wholesale trade, professional, scientific, and technical services, retail trade, and information services. In alignment with India's outward FDI profile, the sectors examined in this chapter include professional services, telecommunication and information services, management consulting, technical testing, construction, banking, hospital and social services, hotel and restaurant services, and auxiliary services related to all modes of transport.

It is worth noting that the US revised offer is scheduled following the General Agreement on Trade in Services (GATS) architecture of the positive list approach, while the USMCA schedule follows the negative list approach. This creates some challenges for direct comparison, but it is still possible to assess which offer provides more liberal market access in key sectors of interest.

The analysis finds that, with the exception of a few sectors such as hospital and other healthcare services, accounting, auditing and bookkeeping services, architectural services and urban planning, and landscape architecture, the US Revised Offer is more liberal and hence more relevant for assessing potential market access for Indian service providers.

In accounting, auditing, and bookkeeping services, the US Revised Offer imposes restrictions: only licensed individuals can operate as sole proprietors or partners. However, no such limitation exists under USMCA. In architectural and urban planning services, the Revised Offer includes state-level restrictions (e.g., in Michigan, two-thirds of firm leadership must be licensed locally), which are absent in USMCA. For hospital and health services, the Revised Offer includes needs-based limits and state-specific ownership restrictions (e.g., in New York), while under USMCA, the US broadly reserves the right to regulate public-purpose social services, including health care.



Table 6.3: Foreign Direct Investment in the USA by Source Economy and Major Industry, 2023 (Values in Millions of US Dollars)

Sl. No.	Country / Source	Manufacturing	Transportation Equipment	Computers & Electronic Products	Machinery	Finance & Insurance	Wholesale Trade	Depository Institutions	Professional, Scientific & Technical Services	Retail Trade	Information	Real Estate & Leasing
1	All countries	22,23,555	2,29,010	1,94,747	1,31,933	5,73,833	5,41,203	2,38,754	2,38,732	1,98,572	-	2,13,329
2	European Union	11,89,681 (53.5%)	88,107 (38.47%)	1,30,193 (66.85%)	89,215 (67.62%)	1,56,782 (27.32%)	1,78,548 (32.99%)	54,440 (22.80%)	1,24,476 (52.14%)	1,02,059 (51.40%)	1,71,824 (65.76%)	94,319 (44.21%)
3	United Kingdom	3,12,235 (14.04%)	50,677 (22.13%)	10,360 (5.32%)	9,100 (6.90%)	65,224 (11.37%)	26,398 (4.88%)	24,094 (10.09%)	60,991 (25.55%)	10,758 (5.42%)	15,165 (5.80%)	10,727 (5.03%)
4	Japan	2,82,695 (12.71%)	68,300 (29.82%)	29,492 (15.14%)	22,376 (16.96%)	92,439 (16.11%)	1,40,361 (25.94%)	32,812 (13.74%)	11,619 (4.87%)	-	18,210 (6.97%)	32,128 (15.06%)
5	Switzerland	2,01,275 (9.05%)	-	3,648 (1.87%)	1,436 (1.09%)	-	-	-	-	-	-	-
6	Canada	81,141 (3.65%)	9,018 (3.94%)	-	3,736 (2.83%)	1,19,931 (20.90%)	82,608 (15.26%)	98,413 (41.22%)	9,981 (4.18%)	25,142 (12.66%)	12,768 (4.89%)	18,615 (8.73%)
7	South Korea	-	4,272 (1.87%)	-	-	7,610 (0.48%)	56,309 (10.40%)	-	-	-	-	-
8	Australia	-	-	-	-	-	-	-	13,185 (5.52%)	-	-	6,539 (3.07%)
9	Germany	-	-	-	-	-	-	31,285 (13.10%)	-	-	-	-
10	Ireland / EU Islands	-	-	18,058 (6.91%)	-	-	-	-	-	-	-	-
11	Taiwan	-	-	4,356 (2.24%)	-	-	-	-	-	508 (0.26%)	-	-
12	Hong Kong	-	-	-	-	-	-	-	-	262 (0.13%)	-	-
13	India	2,465 (0.11%)	10 (0.00%)	-81 (-0.04%)	-7 (-0.01%)	-	319 (0.06%)	2,443 (1.02%)	3,941 (1.65%)	-	190 (0.07%)	-

Key Takeaways:

The US Revised Offer to the WTO in 2005 serves as the most comprehensive and liberal benchmark for India to consider when evaluating the potential for enhanced services trade with the United States. This comparative assessment will help inform India's position in any future bilateral discussions on services trade and investment with the US.

6.5 Switzerland

Switzerland is among India's key partners in outward foreign direct investment (OFDI). The highest FDI inflows into Switzerland in the services sector have been concentrated in Financial and Insurance Activities, Wholesale and Trade, Human Health and Social Work Activities, Transportation and Storage, Construction, and Administrative and Support Services. These sectors also align with India's top OFDI sectors in services.

India has signed a Free Trade Agreement with the EFTA countries, including Switzerland, under the Trade and Economic Partnership Agreement (TEPA). However, market access in Switzerland remains restricted for Indian companies in the insurance sector. Representative offices are not permitted to conduct business or act as agents, and insurance companies incorporated in Switzerland must take the legal form of a joint-stock company. Similarly, in the banking and financial services sector (excluding insurance), restrictions remain, commercial presence may be denied to entities whose ultimate shareholders or beneficial owners are from non-party countries, and representative offices are not allowed to conduct or conclude business or act as agents.

Notably, Switzerland's key FDI partners in the financial and insurance sectors include the USA, Ireland, France, and Germany. Among them, Switzerland does not have an FTA with the USA or Ireland, and although it has arrangements with EU countries like France and Germany, those do not include specific provisions on trade in services.

In contrast, for other major service sectors such as Wholesale and Trade, Human Health and Social Work, Transportation and Storage, Construction, and Administrative and Support Services, Switzerland has provided largely liberal market access to India, particularly in management consulting, where there are no restrictions.

Information & Communication Services and Hotel & Restaurant Services are also among India's key OFDI sectors. Switzerland has granted full market access to India in these sectors under Mode 3. the USA or Ireland, and although it has arrangements with EU countries like France and Germany, those do not include specific provisions on trade in services.

In contrast, for other major service sectors such as Wholesale and Trade, Human Health and Social Work, Transportation and Storage, Construction, and Administrative and Support Services, Switzerland has provided largely liberal market access to India particularly in management consulting, where there are no restrictions.

Information & Communication Services and Hotel & Restaurant Services are also among India's key OFDI sectors. Switzerland has granted full market access to India in these sectors under Mode 3.



Table 6.4: Inward Foreign Direct Investment in Switzerland: Country-Wise Trends (Value in USD Million)

	2017	2018	2019	2020	2021
WORLD	1420733.7	1404145.8	1430327.1	1450911.9	1206331.8
United States	702732.5	642267.6	660680.6	674823.7	489604.2
Ireland	118703.2	155709.9	77916.3	120389	114192.7
France	44185	51045.4	60798.7	66635.3	52768.4
Germany	40534.3	32110.1	38801.4	43673.2	46014.9
India	1856.2	2338.2	2565	1300.4	1189.4

Source: OECD International Direct Investment Statistics 2022

Key Takeaways:

While Switzerland offers generally liberal market access to India in most services sectors, restrictions continue in insurance and certain banking services.

6.6 Japan

The table presents Japan's FDI data, categorised by sector and source country.

Table 6.5: Foreign Direct Investment in Japan by Source Economy and Major Industry in 2023 (Value in 100 Million Yen)

Foreign Direct Investment- Construction		
S. No	Country	2023
1.	Taiwan	9.20
2.	U.K.	0.89
3.	Hong Kong	-0.10
4.	U.S.A.	-13.92
5.	Finland	-24.00
6.	India	-25.88
Foreign Direct Investment – Transportation		
1.	Singapore	2,094.26
2.	Norway	9.80
3.	Panama	8.92
4.	U.S.A.	1.08
5.	Germany	- 3.08
6.	Australia	- 3.43
7.	India	.
Communication		
1.	U.S.A.	779.23
2.	R.Korea	763.34
3.	Netherlands	617.34
4.	Germany	201.62
5.	France	164.74
6.	Hong Kong	100.26

S. No	Country	2023
7.	India	- 1.46
Wholesale & retail		
1.	U.S.A.	7,362.13
2.	Hong Kong	426.81
3.	Denmark	165.05
4.	R.Korea	140.71
5.	Taiwan	69.81
6.	P.R.China	25.66
7.	India	.
Finance & Insurance		
1.	U.S.A.	3,556.33
2.	Singapore	1,654.34
3.	France	966.20
4.	U.K.	650.98
5.	Hong Kong	366.29
6.	Luxembourg	279.61
7.	India	.

Source: Ministry of Finance

Japan is an important OFD partner for India. The key FDI-attracting service sectors in Japan, as shown in the table above, include Construction, Transportation, Communication, Wholesale & Retail, and Finance & Insurance. Under the India-Japan CEPA, Japan has fully liberalised these sectors for India under Mode 3, with no market access restrictions.

Other relevant sectors examined in the study include Health and Social Services, and Hotels

& Restaurants. In the Hotels & Restaurants sector, Japan imposes no restrictions on Indian service providers. However, in Health Services,

Japan has listed its commitments as “Unbound,” with the exception that there are no limitations on foreign capital participation. A comparison with the Japan-Singapore Economic Partnership Agreement (JESPA) shows that Japan has applied similar restrictions in the health sector for Singapore as well.

Key Takeaways:

India enjoys broad market access in Japan across most service sectors. However, there remains scope for improvement in Health and Social Services, where Japan maintains comparable restrictions for other partners such as Singapore.



6.7 United Kingdom

Table 6.6: Foreign Direct Investment in the United Kingdom by Source Economy and Major Industry (Stock As At Year-End), Annual

All Values in £ million

Foreign Direct Investment- Construction						
S. No	Country	2020	2021	2022	2023	%
1	All	14600	17023	18890	14611	
2	EU	642267.6	660680.6	674823.7	489604.2	48.96%
3	UK Offshore Islands	4569	5509	5457	4116	30.17%
4	Hong Kong	171	1208	1292	1691	6.70%
5	Irish Republic	669	592	945	877	4.73%
6	India	6	5	51	31	0.14%

Foreign Direct Investment - Retail and wholesale trade, repair of motor vehicles and motorcycles

1	All	169459	158194	182857	177182	
2	EU	82953	67446	74036	59915	41.35%
3	USA	30071	36956	51692	71030	27.59%
4	Japan	13703	14322	13493	19545	8.88%
5	Irish Republic	0	11896	-108	811	1.83%
6	Switzerland	2072	2202	2862	4483	1.69%
7	India	125	134	323	1446	0.29%

Foreign Direct Investment – Transportation and Storage

1	All	89904	85651	93111	92167	
2	EU	17288	15179	17867	19279	19.29%
3	UK Offshore Islands	0	-987	0	6039	1.40%
4	Switzerland	523	881	683	606	0.75%
5	Singapore	521	528	536	794	0.66%
6	Japan	354	0	0	896	0.35%

Foreign Direct Investment – Financial Services

1	All	275685	315062	272636	203499	
2	EU	54855	81564	71848	60636	25.20%
3	USA	47005	65622	48291	48596	19.64%
4.	UK Offshore Islands	47443	63259	59259	35420	19.25%
5	Japan	0	39110	30977	20429	8.48%

Foreign Direct Investment - Information and communication

1	All	151455	1,33,412	1,60,701	2,13,663	
2	EU	41967	45376	57528	107882	50.49%
3	USA	52827	54004	59398	53,208	24.90%
4	Japan	4933	5041	5135	12,074	5.65%
5	Canada	1781	1716	1851	2,181	1.02%
6	Switzerland	C	C	292	358	0.17%
7	India	521	1155	1,313	288	0.13%

Foreign Direct Investment - Professional, scientific and technical services

1	All	552710	574866	622388	641382	
2	USA	227335	243877	235854	222963	38.89%
3	121943	135388	119784	149457	22.02%	
4	UK Offshore Islands	53187	60710	72624	68832	10.68%
5	Switzerland	55148	54922	41181	38319	7.93%
6	Japan	16681	15497	13216	13731	2.47%
7	India	861	773	601	566	0.12%

Source: Office of National Statistics, UK

The UK is a significant destination for India's (OFDI). The UK attracts the highest investment in key services sectors such as Construction, Retail & Wholesale Trade, Transportation & Storage and Financial Services.

The recently concluded India–UK Comprehensive Economic and Trade Agreement (CETA) provides India with full market access under Mode 3 (commercial presence) across a wide range of sectors, including construction, retail and wholesale trade, services auxiliary to all modes of transport, banking, technical and R&D consulting services, management consulting, ICT, and health and social services. Only there is one reservation in R&D Services, except for publicly funded R&D, exclusive rights in natural sciences can only be granted to the UK nationals or UK-based entities. Additionally, for the Hospital and Social services the UK has applied an Economic Needs Test.

Key Takeaways:

Given this high level of liberalisation, India's OFDI into the UK is well positioned for competitiveness and growth. Only Hospital and Social services is restricted based on the Economic needs test. India should proactively leverage this opportunity. Meanwhile, this study also reviews the UK's commitments under FTAs with other major partners, namely EU member states, Canada, and Japan, who also have significant investments in these sectors in the UK. The analysis aims to evaluate the level of liberalisation provided to these countries and draw comparisons to identify potential benchmarks or expectations for India's market access. Notably, in the UK's agreements with partners such as Japan and the EU, some limitations remain in areas like transport auxiliary services and future regulatory measures in financial services.



6.8 Australia

Table 6.7: Inward FDI in Australia: Country-Wise Trends

All Values in Australian \$ Billion

Rank in 2023	Economy	2021	2022	2023	% of total
1	United States	1,052.8	1,097.0	1,170.7	25.1
2	United Kingdom	680.3	964.4	879.0	18.9
3	Belgium	394.0	359.2	379.1	8.1
4	Japan	255.8	258.8	265.2	5.7
5	Hong Kong (SAR of China)	130.5	138.6	146.6	3.1
6	Singapore	124.9	150.3	140.8	3.0
7	Luxembourg	92.2	88.5	103.9	2.2
8	Canada	76.0	104.7	103.8	2.2
9	Netherlands	90.1	90.6	91.7	2.0
10	China	95.0	87.8	88.0	1.9
11	New Zealand	68.8	73.1	79.5	1.7
12	Switzerland	74.6	76.9	76.2	1.6
13	Germany	50.5	51.6	53.6	1.2
14	France	43.5	52.4	51.2	1.1
15	India	29.2	np	47.3	1.0

Source: Australia Dept of Foreign Affairs and Trade

Financial Services

According to Australia's Department of Foreign Affairs and Trade, India ranks as Australia's

15th largest FDI partner. Under the India-Australia ECTA, which follows a negative listing approach, Australia has made commitments in financial services but retains certain reservations. While foreign banks can provide services to Australian enterprises from overseas, they cannot conduct business or raise deposits in Australia without authorisation. Unlicensed foreign banks may only raise funds through debt securities over \$500,000 with proper disclosure, and only authorised deposit-taking institutions (ADIs), either as locally incorporated subsidiaries or authorised branches, may operate in Australia. These branches cannot accept deposits below \$250,000 from individuals or non-corporate entities, and representative offices may only serve liaison functions. Australia allows cross-border provision of specific services such as financial information, data processing, and advisory services with national treatment and permits its residents to access a range of such

services in India. Additionally, Australia reserves the right to maintain state-level financial entities such as treasury corporations and investment bodies, ensuring these do not undermine the trade commitments made under the agreement.

Under the Australia-US FTA, foreign ADI branches cannot accept deposits under AUD \$250,000 from individuals or non-corporate entities, and representative offices are limited to liaison roles without conducting or promoting banking business, similar to the commitments made under the Australia-India ECTA. While the treatment of ADI branches and representative offices is consistent in both agreements, the broader regulatory environment and market access under the Australia-United States FTA (AUSFTA) is considered more liberal.

Australia's commitments to India and those given to the UK and Japan are largely similar in core areas like foreign bank operations, ADI framework, and deposit thresholds.

In the case of the Australia-Hong Kong FTA, Australia allows cross-border (Mode 1) supply

of certain financial services from Hong Kong, including:

- ⊙ Provision and transfer of financial information, data processing, and related software
- ⊙ Advisory and auxiliary services (excluding intermediation) related to banking
- ⊙ Investment advice and portfolio management for collective investment schemes in Australia (excluding trustee, custodial, and unrelated execution services)

Key Takeaways:

Australia's commitments to Hong Kong appear somewhat more liberal in Mode 1, especially for services like portfolio management and advisory services to collective investment schemes. In contrast, its commitments to India under ECTA are more restrictive in operational terms (e.g., high capital thresholds, deposit caps, licensing rules), though clearer commitments exist for Mode 2. Thus, overall, Australia's commitment to Hong Kong is marginally more liberal in practice, particularly in cross-border financial service supply. While ADI branch and office rules are similar across agreements, Australia offers more liberal market access under AUSFTA. Its commitments to India, the UK, and Japan are broadly comparable in core banking areas.

Information & Communication Services

Under the India–Australia ECTA, Australia has maintained restrictions on foreign ownership in Telstra (Australia's largest telecommunications and media company), limiting total foreign equity to 35%, with individual or associated foreign investors capped at 5%. Telstra is also required to have its chairperson and majority of directors as Australian citizens and to keep its head office, main operations, and incorporation within Australia.

Under the AUSFTA, Australia has retained key restrictions in sensitive sectors. Foreign

ownership in Telstra is capped at 35% of non-Commonwealth-held shares, with a 5% limit per foreign investor, and requirements that its chairperson and majority of directors be Australian citizens, while its headquarters, operations, and incorporation remain within Australia.

In its FTAs with the UK, Japan, and Hong Kong, Australia has maintained similar restrictions on foreign ownership in Telstra.

For other services such as construction, professional, transport, and wholesale & retail trade, Australia appears to have provided liberalised commitments to India at a level comparable to what it has provided to its other FTA partners.

Key Takeaways:

Australia's commitments under Mode 3 for services such as construction, professional, transport, and wholesale & retail trade appear to be broadly in line with what is offered to its other FTA partners. However, across its FTAs with India, the US, UK, Japan, and Hong Kong, Australia has consistently retained similar restrictions on the telecom sector regarding foreign ownership in Telstra.

Overall conclusion

By and large, this analysis indicates that India is not at a disadvantage vis-a-vis its main competitors in its major destination markets except for some cases when others have received preferential treatment compared to India. So it would appear broadly that India's OFDI has not been adversely affected by its trade agreements; however, we have been unable to fully exploit and benefit from the opportunities that our trade agreements have thrown up. In certain instances where these destination countries have provided better treatment to our competitors, India should ask for at least the same level of liberalisation in future negotiations with these partners.





Chapter

07

Conclusion and Policy Recommendations

7.1. Conclusion

This report presents the most comprehensive and data-driven assessment of India's outward foreign direct investment (OFDI) to date, covering the period from 2007 to 2023. It brings together firm-level evidence, cross-country comparisons, and policy linkages to analyse how Indian enterprises are engaging with global markets. The findings collectively show that India's OFDI has matured significantly in scope and sophistication but remains uneven in structure, concentration, and policy alignment.

India's OFDI volumes have expanded steadily—totaling over USD 209 billion during 2007–2023—yet annual flows continue to fluctuate between USD 5–13 billion. This reflects



both growing internationalization and persistent volatility. Outward investment remains concentrated in a few destinations—Singapore, Mauritius, the Netherlands, the U.S., and the U.K.—and in select service sectors, particularly financial and business services. Manufacturing-led and technology-intensive investments, though rising, remain relatively shallow in scale and diversification.

Over time, the motives behind India’s OFDI have evolved. Earlier phases were driven by tax efficiency and energy acquisitions, whereas recent trends reflect market access, capability-building, and technology partnerships. However, this transition has been uneven. A small set of large, experienced firms—typically diversified conglomerates—continues to dominate, accounting for the majority of outward flows. Meanwhile, a growing base of mid-sized firms shows strong potential for global integration but faces gaps in financing, risk mitigation, and institutional support.

The report identifies a heavy concentration of OFDI at the firm level, even as the number of investing firms has expanded significantly since 2015. This pattern indicates that India’s global investment footprint is driven more by firm-specific scale, strategic maturity, and technological capabilities than by broad-based internationalisation across the enterprise sector. Smaller firms mostly engage in incremental, low-depth ventures, while mid-sized firms are the most dynamic new entrants. Large firms operate as mature multinationals with multi-sector and multi-country footprints, signalling growing but uneven globalization within India’s corporate landscape.

Sectorally, the composition of India’s OFDI has shifted from energy, capital goods, and telecom toward pharmaceuticals, digital services, clean energy, and innovation-led sectors. Network-based analysis shows that Indian investments are increasingly ecosystem-oriented, integrating manufacturing, services, finance, and logistics in cross-border operations. This marks a gradual transition from isolated transactions to more structured, capability-driven global engagement.

In terms of competitiveness and sectoral alignment, India exhibits strong congruence with services-oriented and investment-hub economies—most notably Singapore, the U.S., the U.K., the Netherlands, and Japan—where Indian capital aligns closely with host-country priorities in financial services, manufacturing, and trade-related sectors. In contrast, Mauritius, Australia, and Switzerland display weaker structural alignment, reflecting either conduit-based investment or underrepresentation in host-priority sectors. Across destinations, India tends to overinvest in certain non-priority service categories while remaining underrepresented in technology-intensive and manufacturing sectors that dominate global FDI trends.



The determinants of OFDI reveal a differentiated pattern between sectors. Manufacturing OFDI is driven by credit availability, foreign exchange reserves, and trade openness—conditions linked to capital intensity and supply chain integration. Services OFDI, by contrast, depends on income growth, innovation capacity, and financial mobility, underscoring its knowledge-based nature. Exchange rate stability and innovation emerge as key enablers, confirming that India’s global expansion is increasingly led by capability-rich, technology-oriented firms rather than cost arbitrage alone.

Finally, the analysis of Free Trade Agreements (FTAs) shows that trade architecture facilitates but does not guarantee outward investment. In economies like Singapore and Japan, FTAs have supported sectoral diversification and regulatory comfort, especially in finance and ICT. Yet, across many partner countries, India underutilises available FTA opportunities, revealing limited policy coordination and firm-level awareness. The absence of an India–U.S. FTA remains a strategic constraint. The report highlights the need for greater coherence between trade and investment policy, ensuring that FTAs, capital access, and sectoral incentives function in tandem rather than isolation.

Overall, the evidence suggests that India’s OFDI has entered a new phase of selective maturity—one that reflects both progress and imbalance. Indian firms are building deeper international linkages, moving from transactional investments toward ecosystem integration. However, the pattern remains concentrated, services-heavy, and unevenly aligned with host economies’ structural priorities.

Sustaining and diversifying India’s global investment footprint will therefore require coordinated action across four fronts:

1. Develop a coherent national outward investment strategy that identifies priority regions, high-potential sectors, and

technology-linked opportunities—supported by a single-window facilitation platform to reduce costs and provide structured guidance for mid-sized and first-time investors.

2. Adopt a tiered outward investment policy framework that differentiates support mechanisms for large, mid-cap, and small investors—ensuring financial access, risk mitigation, and institutional mentoring aligned with firm capabilities.
3. Integrate outward investment priorities into trade and FTA frameworks, embedding investment protection, sectoral access (especially in ICT, finance, and manufacturing), and data-driven monitoring through a real-time OFDI dashboard.
4. Strengthen innovation and manufacturing depth abroad by promoting investments in technology-intensive, clean energy, and digital sectors, linking these efforts to India’s domestic innovation ecosystem and global value chain integration.

If pursued cohesively, these steps can position India not merely as an emerging investor but as a systemic participant in global value creation—anchored in innovation, competitiveness, and institutional resilience.

7.2 Policy Recommendations for Strengthening India’s OFDI

Based on the five components of comprehensive analyses on India’s OFDI — trends and patterns, firm-level strategies, sectoral alignment, determinants, and FTA integration — an evidence-based policy recommendations have been devised that are organized into five strategic pillars. These recommendations are designed to address structural gaps while leveraging India’s emerging strengths in global investment.

Pillar I. Develop a National Strategy for Outward Investment

Recommendation 1: Establish a Clear National Strategy for Global Expansion

India should develop a unified outward investment strategy that identifies priority destination regions, high-potential sectors, technology acquisition targets, and opportunities for deeper integration into global value chains. By mapping areas where Indian firms hold long-term competitive advantages—such as healthcare and agro-processing in Africa, digital services and manufacturing in ASEAN, and advanced technologies in Europe—India can define the sectors in which it seeks to build a sustained investment presence. Such a strategic approach would strengthen India’s global investor profile and help maximize returns from outward investments.

The study finds that India’s OFDI is highly concentrated, with nearly 60% directed to just five countries. Much of this investment does not align with the priority sectors of partner countries, and promising areas such as ICT, professional services, clean energy, and critical minerals remain underexplored. At the same time, India’s OFDI in the manufacturing sector has witnessed a significant decline. In this context, channelling India’s investments toward emerging “sunshine” sectors as well as the host countries’ priority areas becomes critical. Therefore, a forward-looking strategy is needed to address these mismatches and diversify India’s global investment footprint.

Action Points: Strategic Roadmap for OFDI

A) Develop OFDI roadmap to:

- ☉ Identify priority regions for long-term Indian investment
- ☉ Define strategic sectors and sector-specific missions for global expansion
- ☉ Offer clear, consistent, and accessible guidance for Indian firms — particularly mid-sized and first-time investors

- ☉ Focus on long term investment with the objective of diversifying

Recommendation 2: Create a Single-Window Portal for the Outward Investment Facilitation Platform

One of the key findings of this study shows that more than 80% of the firms investing abroad invest less than USD 1 million due to the high burden of transaction costs, fragmented guidance, and limited access to country-specific regulatory information. Even mid-sized firms with investment potential face institutional and informational challenges, slowing their entry into key markets.

To address these constraints, a unified, investor-oriented digital platform should be established to facilitate outward investment, especially for first-time and mid-cap firms.

This study shows that OFDI is evolving — with shifting sectoral and geographic patterns. However, policy responses remain static. India needs a dynamic feedback system to monitor real-time trends and proactively support promising investors, especially mid-sized firms on the cusp of scaling.

Action Points

- A) **Develop a digital OFDI dashboard:** Track outward investment by sector, region, firm size, and strategy in real time.
- B) **Identify high-potential firms proactively:** Flag firms approaching mid-cap thresholds for tailored support.
- C) **Enable data-driven policy refinement:** Use analytics to anticipate emerging patterns and adjust support mechanisms accordingly.
- D) **Integrate all procedural, regulatory, and compliance processes:** Plan a single-window interface that consolidates guidelines, investment approval steps, reporting formats, and sector-specific compliance requirements.



- E) **Deliver country- and sector-specific investment intelligence:** Include tailored insights on target market dynamics—covering regulatory norms, market size, competition, fiscal incentives, standards, tax structures, and local partnering options.
- F) **Enable guided workflows for new investors:** Provide end-to-end support through intuitive workflows, including document checklists, standard templates, and estimated timelines to improve process transparency and predictability.
- G) **Embed advisory and mentoring services:** Facilitate access to legal experts, sector specialists, experienced Indian investors operating abroad, and technical advisors to support informed decision-making by mid-sized firms.

Pillar II. Tier-Based Framework

Recommendation 3: Implement Tiered OFDI Promotion Policies Based on Firm Size and Investment Scale

This study reveals that India’s outward investors vary significantly in scale and capacity. A small group of large firms accounts for most investment volume, while the vast majority are small-scale investors with limited institutional support and risk appetite. Mid-cap firms, although few, represent a strong potential growth segment but face disproportionate barriers in regulatory navigation, financing, and project execution.

To address this, a tiered policy framework should be adopted — offering differentiated facilitation based on investment size, firm capacity, and strategic intent. This will help scale mid-cap players and reduce friction for experimental investors, without compromising the needs of large-cap global champions.

Action Points

Outward investors differ widely in their scale, risk appetite, and support needs. This study finds that large firms contribute a major share

of OFDI, while mid-sized and smaller firms face distinct barriers to scaling globally. A tiered policy approach enables targeted facilitation based on firm size and investment capacity ensuring that support is efficient, tailored, and outcome oriented.

For large firms, the focus should be on facilitating access to long-term capital for major cross-border projects, providing high-level diplomatic and strategic support for market entry and complex ventures, and encouraging overseas expansion aligned with trade agreements and sector-specific missions.

For mid-sized firms, the focus should be on targeted support to navigate foreign regulations and mitigate risks, linking export strengths with overseas investment incentives and financing tools, and offering sector-specific advisory platforms.

For smaller and experimental investors, the focus should be on creating soft-landing mechanisms abroad, enabling diaspora engagement and simplified reporting regimes to lower entry barriers, and supporting first-time market entry through co-funded feasibility studies.

Pillar III: Leveraging Trade Agreements and Institutional Reforms

Recommendation 4: Align OFDI Strategy with FTA Commitments and Competitor Parity

This study reveals that Indian firms face relatively less favourable access in key sectors compared to competitors under existing FTAs, particularly in services like financial advisory and ICT. While India has signed several new trade agreements (e.g., UAE CEPA, Australia ECTA), they remain underutilised from an OFDI perspective. To address this, India should formally integrate outward investment priorities into trade negotiations and leverage FTAs to create supportive investment environments for Indian firms abroad.

Action Points

A. Integrating Investment Protection into Trade Agreements

Consider negotiating investment protection as part of trade agreements for better synergy & leverage, rather than pursuing it as a standalone negotiation. Investment protection is a must to secure risk free OFDI. This will also strengthen services investment linkages.

B. Negotiate improved sectoral access

Seek stronger commitments in sectors like ICT and financial services during upcoming FTA reviews and discussions (e.g., Singapore CECA, potential US agreements).

Pillar IV: Industry-focused recommendations for Indian Firms

Recommendation 6: Practical, Evidence-Based Actions for Companies to Scale Overseas Investment

These recommendations are tailored for Indian firms, especially mid-sized exporters and service-sector players, based on firm-level patterns (Chapter 3), sectoral alignment findings (Chapter 4), and financial/compliance constraints (Chapters 2–3) repeatedly observed in India's outward investment behaviour.

1. Build Internal “Go-Global” Capabilities

What firms can do

- ⊙ Establish small Global Strategy Units (2–3 people) to analyse markets, navigate regulations, understand regulations, oversee global risk planning and manage partners/advisors.

- ⊙ Conduct structured feasibility studies before committing capital, instead of reactive or network-led entry.

- ⊙ Prepare risk matrices covering currency, regulatory, and operational risks for each target market.

2. Use Joint Ventures and Co-Investment Platforms Strategically

What firms can do

- ⊙ Form JVs in regulated sectors (e.g., healthcare, fintech, telecom, agri-inputs) where full control is not feasible.
- ⊙ Join co-investment platforms with firms abroad to share entry costs and risks.
- ⊙ Anchor ventures with a local partner to handle distribution, compliance, and supply chain issues.



- ⦿ Co-locate in India-led sectoral clusters abroad (e.g., digital services, healthcare, engineering) to benefit from shared ecosystems.
- ⦿ Share logistics, legal, warehousing, and compliance services with other Indian firms to reduce operational costs.

3. Target Global Value Chains Niches Through Multi-Market Expansion Strategies

What firms can do

- ⦿ Focus on 2–3 value chain positions per market instead of broad entry attempts.
- ⦿ Use GVC mapping to identify sectors where India has export strengths but low

investment presence (e.g., engineering goods in Europe, digital services in Australia, biologics in Japan).

4. Invest in Compliance, Standards, and Financial Structuring Capabilities

What firms can do

- ⦿ Build in-house systems for ESG reporting, standards certification, and IP portfolio management.
- ⦿ Develop compliance checklists for each target market before entry.
- ⦿ Structure investments with hedging, staggered commitments, and a mix of equity, loans, and partnerships

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APPENDICES

APPENDIX - 3A

Methodology: Network-Based Sectoral Clustering of OFDI Firms

This study employs a network-based methodology to examine the sectoral clustering of Indian firms engaged in outward foreign direct investment (OFDI). The analysis is based on firm-level OFDI data sourced from the Reserve Bank of India (RBI) for the years 2008, 2015, and 2023, capturing temporal evolution in clustering patterns.

A weighted bipartite graph is constructed for each benchmark year, in which two types of nodes are defined:

- ⊙ $F = \{f_1, f_2, \dots, f_n\}$: set of firms
- ⊙ $S = \{s_1, s_2, \dots, s_m\}$: set of sectors

An edge e_{ij} is formed between firm f_i and sector s_j if the firm has made an OFDI transaction in that sector during the corresponding year. The edge weight w_{ij} reflects the magnitude of OFDI, calculated as the sum of equity, loan, and guarantee components reported in the RBI dataset. Thus, the adjacency matrix $A \in R^{n \times m}$ represents the financial intensity of firm-sector linkages. To analyse the structure of this investment network, the bipartite graph is projected onto a unimodal firm-firm network $G=(V,E)$, where each node represents a firm, and an edge exists between two firms if they have invested in at least one common sector. The edge weight between firms f_i and f_j is defined

as the sum of their co-investment intensities across shared sectors:

$$w_{ij}^{firm} = \sum_{k \in S} \min(w_{ik}, w_{jk}) \dots (2)$$

This approach captures not only co-participation but also the financial significance of shared sectoral investments.

The resulting firm-firm network is subjected to community detection using the Louvain modularity optimisation algorithm (Blondel et al., 2008). The algorithm iteratively partitions the network into non-overlapping clusters (communities) that maximise modularity Q , defined as:

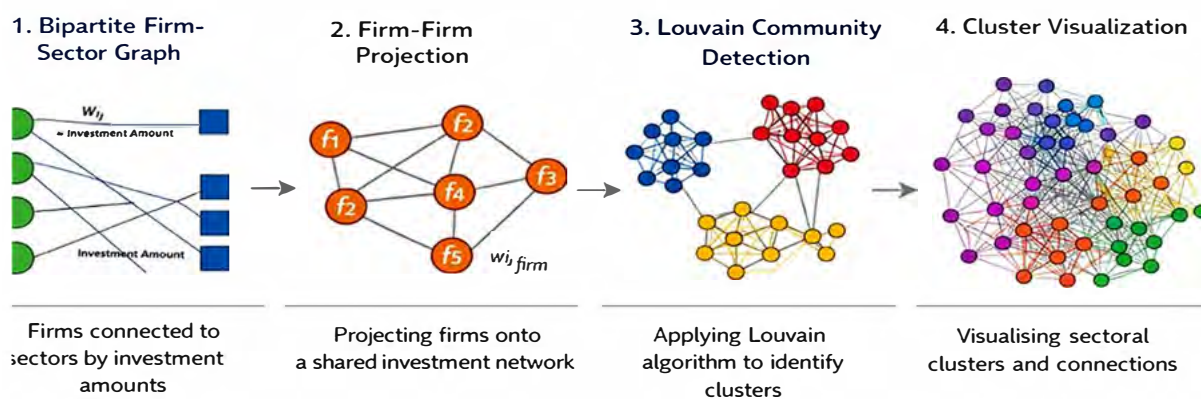
where:

- ⊙ w_{ij} the observed edge weight between firms i and j ,
- ⊙ k_i and k_j are the sum of weights of edges attached to firms i and j respectively,
- ⊙ $w = \sum_{i,j} w_{ij}/2$ is the total edge weight in the network,
- ⊙ $\delta(c_i, c_j)$ is the Kronecker delta, equal to 1 if firms i and j belong to the same community and 0 otherwise.

Modularity Q serves as a measure of the strength of division of the network into communities, with higher values indicating well-defined clusters.



Network-Based Sectoral Clustering of OFDI Firms



This schematic illustrates the four-step methodology used to detect sectoral and cross-sectoral clusters among Indian outward-investing firms. The process begins with the construction of a bipartite firm–sector graph (Step 1), where firms are linked to sectors based on the magnitude of their outward FDI. This is followed by a projection into a firm–firm network (Step 2),

where connections represent shared investment patterns. The Louvain community detection algorithm is then applied (Step 3) to identify tightly-knit clusters of firms with similar sectoral profiles. Finally, network visualisation (Step 4) reveals emergent investment communities, with node colours representing different clusters and edge weights reflecting co-investment intensity.

APPENDIX - 3B

Lorenz Curve Analysis of India’s OFDI by Firm Size

The Lorenz curve analysis of India’s outward foreign direct investment (OFDI) distribution by firm size (Figure 3B.1) reveals an extreme degree of concentration characteristic of oligopolistic investment structures. The substantial curvature of the observed distribution away from the 45-degree line of perfect equality indicates that OFDI flows are heavily skewed toward a small subset of firms.

Empirically, firms investing less than USD 1 million annually—representing approximately 84 per cent of all outward-investing firms—collectively account for only around 2% of total OFDI value. In contrast, the top 1% firms, defined as those investing more than USD 100 million, command nearly 63% of aggregate outward investment flows. The implied concentration ratio between the average investment per firm in the largest and smallest categories exceeds 11,000:1, reflecting a classic power-law or “heavy-tailed” distribution.

The cumulative distribution further shows that even at the 99th percentile of firms, only about 37% total OFDI value is accounted for, with the remaining 63% concentrated among fewer than 50 firms. This pattern is corroborated by a Herfindahl–Hirschman Index (HHI) of 2,358, indicating a moderately high level of concentration in outward investment activity.

Such extreme skewness mirrors inequality patterns observed in income and wealth distributions, where high Gini coefficients signal limited dispersion. In the context of OFDI, this suggests that India’s outward investment is driven primarily by a small cohort of globally mature firms with advanced financial, managerial, and institutional capabilities, rather than by broad-based participation across the enterprise spectrum. Consequently, policy efforts aimed at widening India’s outward investment base must address not only access to finance, but also the substantial capability and scale gaps separating large multinational firms from smaller internationalizing enterprises.

Figure 3B.1: Lorenz Curve of India’s Outward FDI Distribution by Firm Size

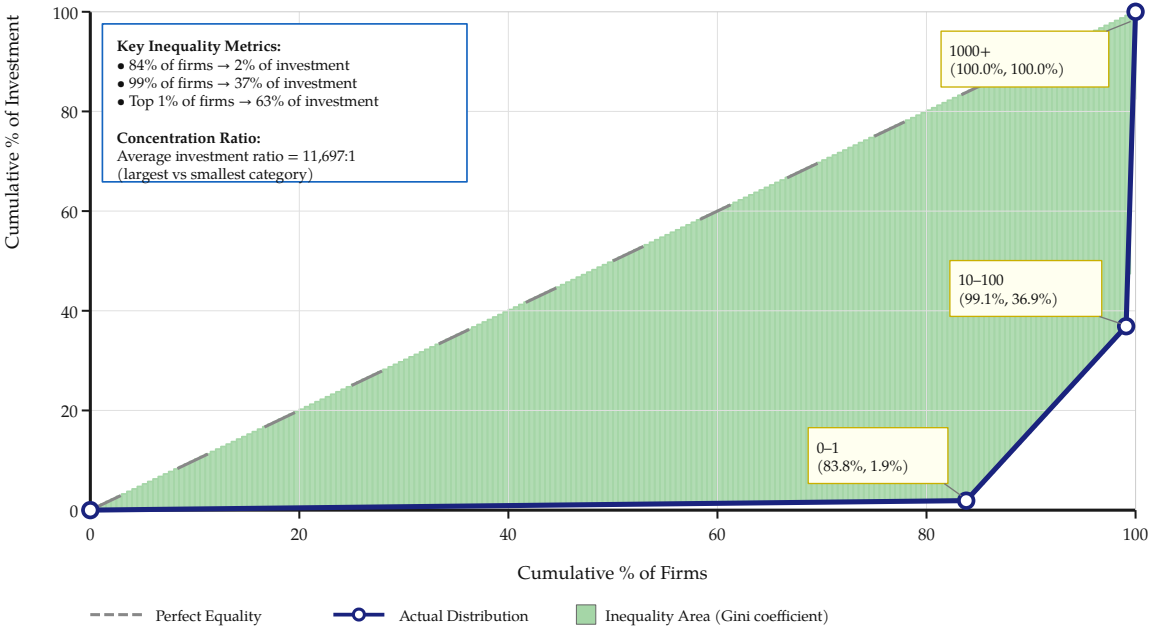


Figure presents the Lorenz curve for India’s OFDI distribution by firm size, revealing extreme concentration. The substantial deviation from the 45-degree line of perfect equality indicates that investment is heavily skewed toward a small number of large investors. Specifically, 84% of firms (investing less than \$1 million each) account for merely 2% of total OFDI, while the top 1% of firms command 63% of total outward investment. This pattern follows a power-law distribution with a concentration ratio of 11,697:1 between the largest and smallest investment categories, suggesting that India’s outward FDI landscape is dominated by a handful of mega-investors rather than broad-based participation.”

APPENDIX - 4A

Methodology for Sectoral Matching and Structural Similarity Analysis

This appendix outlines the methodology used in Chapter 4 to benchmark India's sectoral OFDI distribution against the sectoral inward FDI profiles of eight key host economies—Singapore, the United States, the United Kingdom, the Netherlands, Switzerland, Australia, Japan, and Mauritius. The objective is to assess the degree of alignment between India's outward investment priorities and the sectoral composition of FDI received by each host country.

The analysis is structured around a quadrant-matching framework, supported by two robust summary indicators: the Overlap Index and the Cosine Similarity Index. Together, these tools provide both a level-based view (extent of shared presence across sectors) and a structural view (alignment of investment patterns regardless of scale).

1. Quadrant-Based Matching Framework

India's OFDI sectoral shares are compared to host countries' inward FDI sectoral shares using a common nine-sector concordance. For each host country, the two distributions are plotted against fixed threshold criteria:

- ⊙ Host ≥10% sector share
- ⊙ India ≥5% sector share
- ⊙ This produces a four-quadrant classification:
- ⊙ Q-I: Aligned — sectors of mutual priority
- ⊙ Q-II: Over-weighted — sectors emphasized by India, but not the host
- ⊙ Q-III: Marginal — sectors with low weight in both India and host
- ⊙ Q-IV: Missed Opportunities — sectors prioritized by the host, but underweighted by India

This visual mapping provides a first-order policy diagnosis of strategic alignment or mismatch.

2. Overlap Index (Level Similarity)

To quantify the extent of shared sectoral presence, the Overlap Index is computed as follows:

$$\text{Overlap (\%)} = 100 \times \sum_{i=1}^n \min(h_i, a_i) \quad (1)$$

Where:

- ⊙ h_i Host country's FDI share in sector i
- ⊙ a_i India's OFDI share in the same sector
- ⊙ $n = 9$ (total number of sectors)

This index measures the proportion of the distribution that is commonly occupied, regardless of whether India or the host dominates. It is bounded between 0 and 100, simple to interpret, additive across sectors, and ideal for communication with non-technical audiences.

3. Cosine Similarity Index (Structural Similarity)

To capture the overall structural resemblance in investment patterns, the Cosine Similarity index is used:

$$\text{Cosine Similarity (\%)} = 100 \times \frac{\sum_{i=1}^n h_i a_i}{\sqrt{\sum_{i=1}^n h_i^2} \sqrt{\sum_{i=1}^n a_i^2}} \quad (2)$$

This measures the angle between two sectoral vectors, independent of scale. Cosine similarity is particularly useful when total investment levels differ significantly, but the relative emphasis across sectors may still be aligned. It is:

- ⊙ Scale-invariant (insensitive to total size)
- ⊙ Permutation-insensitive (unaffected by sector order)
- ⊙ Ideal for detecting pattern similarity rather than volume similarity

Together, the Overlap and Cosine indices allow for a multidimensional assessment of OFDI–FDI alignment: Overlap provides a “shared footprint” view, while Cosine captures structural proximity in sectoral emphasis.

APPNEDICES - 4B

Appendix 4B.1 USA FDI Inwards

USA Inward FDI from the World

FDI Position in the US on a Historical-Cost Basis, Country by Industry of U.S. Affiliate in USD Million

Industries	2019	2020	2021	2022	2023
Wholesale, Retail & Hotels	623924	1122380	1122380	700769	739775
Manufacturing	1785688	1,866,756	2,108,607	2,229,918	2223555
Financial, Business & Professional	958400	687338	701744	986751	1051319
Miscellaneous	743,612	680,369	691,816	837,330	904822
Transport & Communication	185371	243,163	281,124	278,278	261295
Real estate & rental	161,368	161,889	208,443	221,771	213329
All Industries (Total inflows)	4458362	4,626,452	4,977,492	5,254,816	5394095

USA Inward FDI from INDIA

FDI in the US by India in USD Million

Industries	2019	2020	2021	2022	2023
Manufacturing	632.9332	1409.754	1363.53	1476.134	829.8848
Financial, Insurance & Business	428.3884	1013.275	1921.169	934.1747	1372.549
Community, Social & Personal	168.8282	43.9897	705.9276	49.887	320.1208
Agriculture & Mining (Miscellaneous)	185.6872	244.8649	242.2452	180.2431	302.9406
Electricity, Gas & Water (Miscellaneous)	470.9963	367.1929	0.1	0.001	1.9023
Construction (Miscell)	36.5418	1.198	33.6523	26.6096	48.8458
Transport, Storage & Communication	31.3294	28.4747	5.1123	17.4606	4.0945
Wholesale, Retail Trade, Restaurants And Hotels	216.5115	514.7112	200.3792	277.2408	425.7827



Appendix 4B.2: UK-Inward FDI

UK FDI Inwards from World

Industries	2019	2020	2021	2022	2023
Financial, Business, Professional & Support	1001695	1154960	1202248	1244280	1244280
Manufacturing	468684	423104	474552	442723	442723
Wholesale, Retail & Hotels	169459	158194	182857	177182	177182
Miscellaneous	167596	94880	91067	97600	97600
Transport, Storage & Communication	89904	85651	93111	92167	92167
Agriculture & Mining	1740	2629	2418	3478	3478
Total	1919232	1941266	2068022	2079104	2079104

UK FDI Inwards from India in USD million

Industries	2019	2020	2021	2022	2023
Manufacturing	706.9856	541.2783	2672.783	296.3524	296.3524
Financial, Insurance & Business	685.8386	264.6275	697.0113	1123.145	1123.145
Wholesale, Retail & Hotels	373.1113	551.7797	1350.595	250.7991	250.7991
Construction	88.3964	55.5594	105.5118	103.439	103.439
Transport, Storage & Communication	13.1213	29.2059	102.6622	46.4187	46.4187
Miscellaneous	23.8869	6.0692	35.1442	9.849	9.849
Agriculture And Mining	4.7482	0.2578	0.6753	0.4356	0.4356

Appendix 4B.3: Singapore FDI Inward

Singapore FDI-from world - USD Million

Data Series	2019	2020	2021	2022	2023
Financial, Business & Professional	1737556	1915296	2289413	2296827	2599340
Wholesale, Retail & Hotels	382898.9	423730.5	478230	554915.6	554513.9
Manufacturing	316516.2	327528.1	376666.2	415804.4	369130.6
Transport & Communications	44502.19	54816.25	101267.2	152118.4	138240.6
Construction	10897.37	8669.01	8132.638	8063.566	7186.897

Singapore FDI Inwards from India in USD Million

Data Series	2019	2020	2021	2022	2023
Financial, Insurance & Business Services	2155.437	1477.6954	4929.278	2082.521	1552.221
Wholesale, Retail Trade, Restaurants & Hotels	885.2861	1428.6421	1090.309	756.2522	680.748
Transport, Storage & Communication Services	116.4175	230.5743	85.4115	1486.57	831.2284
Manufacturing	144.0234	264.7318	169.1196	189.9115	552.3755
Construction	236.46	158.173	152.266	45.5518	305.3098

Appendix 4B.4 Japan FDI Inward

Japan FDI Inwards from World

Sectors	2023
Manufacturing	224600949.1
Financial, Insurance, Business	106333159.3
Wholesale, Retail & Hotels	62355251.81
Transport & Communications	34072589.8
Total	427319377

Japan FDI inward from India

Sectors	2023
Financial, Insurance & Business Services	2.4856
Community, Social & Personal Services	1.7076
Wholesale, Retail & Trade	0.662
Manufacturing	0.5226
Transport & Communications	0.1372

Appendix 4B.5: Australia FDI Inward

Australia FDI Inwards from world

Industries	2021	2022	2023
Financial, Business & Professional	233462	279557.2	284210.5
Manufacturing	152976.8	171660.5	167397.7
Agriculture & Mining	499310.9	545535.1	573391.8
Wholesale, Retail & Hotels	87513.78	107749.1	111549.7
Transport & Communications	36108.05	42214.02	46345.03
Electricity, Gas & Water	39966.92	41180.81	41228.07
Construction	26185.23	29667.9	28508.77
Other/Unallocated	185226	258450.2	270175.4
Real estate activities	189360.5	216383.8	203070.2
All industries	1450248	1692251	1725731

Australia FDI Inwards from India

Industries	2021	2022	2023
Manufacturing	17.4371	5.2599	15.3917
Wholesale, Retail Trade, Restaurants & Hotels	16.89	13.0425	6.7417
Transport, Storage & Communication Services	25.1547	0.0069	0.0694
Financial, Insurance & Business Services	1.9128	0.8838	17.0784
Construction	0.885	8.8958	7.9376
Community, Social & Personal Services	1.6763	2.7111	11.1442
Agriculture & Mining	0.7871	0.3915	1.4593
Electricity, Gas & Water	0.0136	0.7934	0.601
Real Estate	0	0	0
Other Services	0	0	0



Appendix 4B.6: Netherlands FDI Inwards

Netherlands FDI Inwards World

Activities	2019	2020	2021	2022	2023
Financial, Business & Professional	3067015	3294025	3314427	3209576	3098998
Manufacturing	360465.9	399457.4	379917	405295.7	396067.5
Agriculture & Mining	0	0	0	0	0
Wholesale, Retail & Hotels	318920	333038.3	309972.7	253834.4	337317.9
Transport & Communications	55273.87	45945.39	42315.78	44911.26	52407.18
Construction	0	0	0	0	0
All industries	2813475	2958666	2986129	2890513	2776937

Netherlands FDI Inwards from India

Activities	2019	2020	2021	2022	2023
Financial, Insurance & Business Services	297.2829	1081.3648	493.6897	609.5982	2289.61
Manufacturing	457.3131	821.3011	736.3284	330.1262	292.51
Wholesale, Retail Trade, Restaurants & Hotels	132.0654	254.5283	893.3454	263.7113	300.31
Agriculture And Mining	471.5133	32.2885	2.6189	105.0314	255.44
Construction	11.7	115.0893	60.0758	167.3639	13.61
Transport, Storage & Communication Services	0.0282	0.0006	0	15.1132	0.00

Appendix 4B.7: Switzerland FDI Inwards

Switzerland FDI Inward from World

Activities	2019	2020	2021
Services	1209592	1214666	968331.9
Financial, Business & Professional	891301.7	890139	647666.9
Manufacturing	177527.6	189098.9	192212.9
Wholesale, Retail & Hotels	287903.4	292294.4	288334.2
Transport & Communications	17406.3	16849.6	17638.4
Construction	39285.5	43623	42363
Total	1430327	1450912	1206332

Switzerland FDI inwards from India

Activities	2019	2020	2021
Manufacturing	1076.834	280.7276	409.0849
Financial, Insurance & Business	866.3914	9.2231	18.1278
Wholesale, Retail Trade, Restaurants & Hotels	19.8717	34.006	6.6267
Construction	0	0	0
Transport, Storage & Communication	0	0	0

Appendix 4B.8: Mauritius FDI Inwards

Mauritius FDI Inwards from world

Activities	2019	2020	2021	2022	2023
Professional & Business Services	57161.75	45147.12	69844.34	204978.6	141131.6
Manufacturing	56520.29	188478.3	74005.28	93134.46	11137.6
Agriculture & Mining	712.7401	14537.67	1411.747	36177.56	512246.4
Wholesale, Retail & Hotels	143545.9	111072.9	212725.7	455427.1	283217.5
Real estate, Community, Social & personal	1156635	1163660	1170452	1208349	1179063

Mauritius FDI inward from India

Activities	2019	2020	2021	2022	2023
Transport, Storage & Communication	57161.75	45147.12	69844.34	204978.6	141131.6
Financial, Insurance & Business	335.1296	891.5121	315.7468	721.5991	226.9253
Manufacturing	103.4535	577.6539	153.538	53.146	156.1143
Wholesale, Retail Trade, Restaurants & Hotels	141.1866	150.3947	115.2723	409.2359	28.2308
Construction	91.7995	182.7681	6.077	0.285	0.7642
Community, Social & Personal Services	19.9534	76.2802	17.8679	6.913	13.8382
Agriculture & Mining	40.0648	32.309	4.1223	0.6346	16.3554



APPENDIX - 5A

Appendix 5A.1 Variables, Measurement, and Data Sources (Determinants)

Variable	Variable code	Description	Source
Total OFDI	OFDI_Total	Total Outward FDI flows from India (Million US\$)	RBI Fact sheets
Manufacturing Sector OFDI	OFDI_Mfg	Total Outward FDI flows from the Indian manufacturing sector (Million US \$)	RBI Fact sheets
Service Sector OFDI	OFDI_Services	Total outward FDI flows from the Indian service sector (Million US\$)	RBI Fact sheets
GDP Per Capita	GDP_PC	GDP (current US\$) (Million)	World Bank
Exchange Rate	ER	Nominal Exchange Rate	RBI
Stock	Stock	Stock Market Capitalization (% of GDP)	World Bank
Credit	Credit	Domestic credit to private sector (% of GDP)	World Bank
Patent	Patent	Patent applications by Indian residents	World Bank
R&D	R&D	Research and development expenditure (% of GDP)	World Bank
Current account (% of GDP)	CA_GDP	Current account balance is the sum of net exports of goods and services, net primary income, and net secondary income.	World Bank
Regulatory Quality	RQ	Regulatory Quality captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.	Worldwide Governance Indicators, World Bank
Openness	Trade_Open	Trade in goods, services, and partner diversity (HH-Index) (composite Index)	KOF Globalisation Index
Foreign Exchange Reserves (% of GDP)	Forex	India's gross foreign exchange reserves comprise foreign currency assets of the Reserve Bank, gold held by the RBI, and Special Drawing Rights (SDRs) of the Government of India.	RBI and World Bank
Net Capital account (% of GDP)	KA_GDP	Net capital account records acquisitions and disposals of non-produced nonfinancial assets, such as land sold to embassies and sales of leases and licenses, as well as capital transfers, including government debt forgiveness	World Bank

APPENDIX - 5A.2

ARDL Estimation Framework and Error Correction Specification

To examine how different economic, financial, and institutional factors influence India's OFDI, we used a well-established econometric technique called the Autoregressive Distributed Lag (ARDL) model. This method is particularly suited for:

- ⦿ Small data sets (as we have annual data from 2007 to 2023), and
- ⦿ Variables that behave differently over time — some are stable (stationary), while others show long-term trends.

Before applying the model, we tested each variable (e.g., GDP, exchange rate, patents) to see whether they were stable or trending, using a standard unit root test (See Appendix A.2). These tests confirmed that our data met the requirements to proceed with the ARDL approach.

The ARDL technique helps identify both:

- ⦿ Short-run dynamics (what drives OFDI in the immediate term), and
- ⦿ Long-run relationships (what matters for OFDI decisions over time).

We also applied a “bounds test” to check if there is a statistically meaningful long-term connection between OFDI and its influencing factors. The results showed that such long-term

relationships exist for all three models: total OFDI, manufacturing OFDI, and services OFDI (Appendix A.3).

In its general form, an ARDL(p,q) model can be expressed as:

$$Y_t = \alpha_0 + \sum_{i=1}^p \phi Y_{t-i} + \sum_{j=0}^q \beta_j X_{t-j} + \varepsilon_t$$

where Y_t is the dependent variable (OFDI), X_t is a vector of explanatory variables, ϕ , and β_j are coefficients to be estimated, and ε_t is the error term. This formulation captures both the autoregressive component of the dependent variable and the distributed lags of the regressors.

Following Pesaran, Shin, and Smith (2001), the ARDL can be re-parameterized into an error correction model (ECM) of the form:

$$\Delta Y_t = \gamma_0 + \sum_{i=1}^{p-1} \lambda_i \Delta Y_{t-i} + \sum_{j=0}^{q-1} \delta_j \Delta X_{t-j} + \phi ECT_{t-1} + \omega_t$$

Where, Δ denotes the first difference operator, ECT_{t-1} is the lagged error correction term derived from the long-run relationship, and ϕ is the speed at which deviations from long-run equilibrium are corrected. A significantly negative ϕ confirms cointegration and indicates how quickly OFDI adjusts toward its long-run equilibrium in response to short-run shocks.



APPENDIX - 5A.3

Unit Root Test Results (ADF)

ADF Statistics					
Variable	Level		First Difference		Order
	Statistics	Prob.	Statistics	Prob.	
OFDI_Total	0.661	0.848	-2.636 **	0.012	I(1)
OFDI_Mfg	-0.57	0.453	-6.181 ***	0.000	I(1)
OFDI_Services	0.268	0.749	-2.518 **	0.016	I(1)
GDP_PC	-5.33 ***	0.004	-4.204 **	0.024	I(0)
ER	3.412	0.999	-2.836 ***	0.007	I(1)
Stock	-6.089 ***	0.000	-9.794 ***	0.000	I(0)
Credit	-3.971 ***	0.009	-5.848 ***	0.000	I(0)
R&D	-0.313	0.979	-6.345 ***	0.001	I(1)
Patent	0.212	0.964	-4.004 ***	0.009	I(1)
CA_GDP	-2.332	0.174	-3.673 ***	0.001	I(1)
RQ	-0.766	0.801	-4.163 ***	0.006	I(1)
Trade_Open	0.756	0.865	-4.365 ***	0.000	I(1)
Forex	-2.385	0.161	-2.82 ***	0.008	I(1)
KA_GDP	-3.73 ***	0.001	-6.908 ***	0.000	I(0)

Note: The table shows the unit root test of the variables based on the Augmented Dickey-Fuller (ADF). The null and the alternative hypotheses are series is non-stationary (contains unit root) and the series is stationary (no-unit root), respectively. The test statistic of ADF is compared with the critical values tabulated by MacKinnon (1994) and MacKinnon (1996), respectively. Lags are selected automatically using the Schwarz Information criterion (SBC). Where *** and ** denote rejection of the unit root at 1% and 5% level of significance.

Findings: Results confirm that the variables are integrated of mixed orders—some I(0), others I(1)—satisfying the key condition for applying the ARDL bounds testing approach.

APPENDIX - 5A.4

ARDL Bounds Test for Cointegration

Model	Calculated F- Stats	Critical Value (5%)	
OFDI_Total		I (0)	I (1)
$OFDI=f(GDP_PC,ER,Credit,Stock)$	6.466	2.26	3.48
$OFDI=f(patent,R\&D,RQ,KA_GDP)$	5.241	2.26	3.48
$OFDI =f(CA_GDP,Trade_Open,Forex)$	5.777	2.45	3.63
<i>OFDI – Manufacturing</i>			
$OFDI_Mfg=f(GDP_PC,ER,Credit,Stock)$	8.372	2.26	3.48
$OFDI_Mfg=f(patent,R\&D,RQ,KA_GDP)$	17.724	2.26	3.48
$OFDI_Mfg =f(CA_GDP,Trade_Open,Forex,ER)$	14.842	2.26	3.48
<i>OFDI – Service Sector</i>			
$OFDI_Services=f(GDP_PC,ER,Credit,Stock,Mktcap)$	6.812	2.26	3.48
$OFDI_Services =f(patent,R\&D,KA_GDP)$	6.544	2.45	3.63
$OFDI_Services = f(CA_GDP,Trade_Open,Forex,GDP_PC)$	8.067	2.86	4.01

Note: The table reports the results for the cointegration test based on the Auto Regressive Distributed Lag (ARDL) procedure developed by Pesaran and Shin (1999) and Pesaran, Shin, and Smith (2001). The null hypothesis of no cointegration is tested against an alternative of cointegration. I(0) and I(1) are the critical values for the lower and upper bounds, respectively, of the F statistic. The dependent variable is outward FDI flows, while the explanatory variables include GDP per capita (GDP_PC), exchange rate (ER), credit to the private sector (Credit), stock market capitalization (Stock), R&D expenditure (R&D), patent applications (Patent), regulatory quality (RQ), current account balance (CA_GDP), capital account openness (KA_GDP), trade openness (Trade_Open), and foreign exchange reserves (Forex).

Findings: ARDL bounds test results confirm a statistically significant long-run cointegrating relationship across all three OFDI models, as the calculated F-statistics exceeded the upper critical value (I(1) bound) at the 5% significance level.



APPENDIX - 5A.5

Long-Run Coefficient Estimates of Aggregate OFDI

Variable	Model 1 (1,0,0,0)	Model 2 (1,0,0,0)	Model 3 (1,0,0,0)
<i>Macro-Economic Indicators</i>			
GDP_PC	1.480** (0.588)		
ER	-2.139** (0.763)		
KA_GDP		0.011 (0.040)	
CA_GDP			0.885 (1.314)
<i>Financial Indicators</i>			
Stock	-0.001 (0.001)		
Credit	0.049* (0.0138)		
Forex			0.016 (0.014)
<i>Technological Indicators</i>			
R&D		2.447* (0.778)	
Patent			0.929* (0.207)
<i>Institutional/Openness</i>			
RQ		-0.017 (0.010)	
Trade_Open			1.292** (0.464)
<i>System statistics</i>			
Error Correction Term (ECT)	-0.787*** (0.118)	-0.649*** (0.108)	-0.549*** (0.102)
R ²	0.735	0.691	0.643
Adjusted R ²	0.734	0.681	0.623
CUSUM	Stable	Stable	Stable
CUSUMSQ	Stable	Stable	Stable

Note: The table reports the long-run coefficients estimated using the Autoregressive Distributed Lag (ARDL) procedure developed by Pesaran and Shin (1999) and Pesaran, Shin, and Smith (2001). Asterisks ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively, with values in parentheses representing standard errors. The dependent variable is total OFDI flows (US\$ million), while the explanatory variables include GDP per capita (GDP_PC), exchange rate (ER), credit to the private sector (Credit), stock market capitalization (Stock), R&D expenditure (R&D), patent applications (Patent), regulatory quality (RQ), current account balance (CA_GDP), capital account openness (KA_GDP), trade openness (Trade_Open), and foreign exchange reserves (Forex). The error correction mechanism (ECM) captures the speed of adjustment toward long-run equilibrium, while CUSUM and CUSUMSQ statistics are used to test the stability of the estimated models.

APPENDIX - 5A.6

Long-Run Coefficient Estimates of Manufacturing OFDI

Variable	Model 1 (1,0,0,0,0)	Model 2 (1,0,0,0)	Model 3 (1,0,0,0,0)
<i>Macro-Economic Indicators</i>			
GDP_PC	0.676* (0.330)		
ER	-0.016*** (0.003)		-0.007* (0.003)
KA_GDP		-0.926 (1.295)	
CA_GDP		-0.043 (0.041)	
<i>Financial Indicators</i>			
Stock	0.002 (0.002)		
Credit	0.049** (0.016)		
Forex			0.053** (0.024)
<i>Technological Indicators</i>			
R&D		3.179*** (0.428)	
Patent			0.547*** (0.136)
<i>Institutional/Openness</i>			
RQ		-0.015* (0.008)	
Trade_Open			2.001*** (0.381)
<i>System statistics</i>			
Error Correction Term (ECT)	-0.858*** (0.113)	-0.684*** (0.062)	-0.599*** (0.059)
R ²	0.788	0.823	0.793
Adjusted R ²	0.768	0.758	0.717
CUSUM	Stable	Stable	Stable
CUSUMSQ	Stable	Stable	Stable

Note: The table reports the long-run coefficients estimated using the Autoregressive Distributed Lag (ARDL) procedure developed by Pesaran and Shin (1999) and Pesaran, Shin, and Smith (2001). Asterisks ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively, with values in parentheses representing standard errors. The dependent variable is outward FDI flows from India's manufacturing sector (US\$ million), while the explanatory variables include GDP per capita (GDP_PC), exchange rate (ER), credit to the private sector (Credit), stock market capitalization (Stock), R&D expenditure (R&D), patent applications (Patent), regulatory quality (RQ), current account balance (CA_GDP), capital account openness (KA_GDP), trade openness (Trade_Open), and foreign exchange reserves (Forex). The error correction mechanism (ECM) captures the speed of adjustment toward long-run equilibrium, while CUSUM and CUSUMSQ statistics are used to test the stability of the estimated models.

APPENDIX - 5A.7

Long-Run Coefficient Estimates of Services OFDI

Variable	Model 1 (1,0,0,0)	Model 2 (1,0,0,0)	Model 3 (1,0,0,0,0)
<i>Macro-Economic Indicators</i>			
GDP_PC	1.098** (0.395)		
ER	-0.011** (0.004)		
KA_GDP		0.121** (0.036)	
CA_GDP			4.105 (2.446)
<i>Financial Indicators</i>			
Stock	0.001 (0.001)		
Credit	0.025 (0.020)		
Forex			-0.007 (0.017)
<i>Technological Indicators</i>			
R&D			1.279** (0.372)
Patent		0.469** (0.150)	
<i>Institutional/Openness</i>			
RQ		-0.004 (0.005)	
Trade_Open			-1.068 (1.024)
<i>System statistics</i>			
Error Correction Term (ECT)	-0.837*** (0.122)	-0.362*** (0.044)	-0.717*** (0.121)
R ²	0.488	0.545	0.504
Adjusted R ²	0.302	0.437	0.424
CUSUM	Stable	Stable	Stable
CUSUMSQ	Stable	Stable	Stable

Note: The table reports the long-run coefficients estimated using the Autoregressive Distributed Lag (ARDL) procedure developed by Pesaran and Shin (1999) and Pesaran, Shin, and Smith (2001). Asterisks ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively, with values in parentheses representing standard errors. The dependent variable is outward FDI flows from India's services sector (US\$ million), while the explanatory variables include GDP per capita (GDP_PC), exchange rate (ER), credit to the private sector (Credit), stock market capitalization (Stock), R&D expenditure (R&D), patent applications (Patent), regulatory quality (RQ), current account balance (CA_GDP), capital account openness (KA_GDP), trade openness (Trade_Open), and foreign exchange reserves (Forex). The error correction mechanism (ECM) captures the speed of adjustment toward long-run equilibrium, while CUSUM and CUSUMSQ statistics are used to test the stability of the estimated models.



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The Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the development of India, partnering Industry, Government and civil society through advisory and consultative processes.

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Confederation of Indian Industry

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