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# Thai Industrial Component Manufacturing and Foreign Investors' Role in Local Supply Chains

泰國工業零組件製造及外資在當地供應鏈角色

## ▶ Introduction

*Thailand's industrial sector has long been a pillar of the nation's economy, but its strength today lies not in isolated manufacturing firms but in intricate local and global supply chains that bind domestic producers to multinational investors. Over the past decade, foreign direct investment (FDI) has shaped how Thailand manufactures automotive parts, electronics, and high-tech components. These capital and knowledge flows have simultaneously bolstered productivity and exposed domestic manufacturers to external dependencies — both opportunities and vulnerabilities.*

## ▶ Thailand's Industrial Base: Scale and Composition

Thailand's manufacturing sector is broad but concentrated in a few key component industries: automotive parts, electronics and electrical components, machinery, and increasingly, electric vehicle (EV) parts.

### Industrial Manufacturing and GDP Contribution

Manufacturing has traditionally been a large share of Thailand's economic output. Historically, manufacturing industry accounted for more than a third of GDP and employed a significant portion of the workforce, though the exact share fluctuates with economic cycles and global demand. The electrical and electronics (E&E) segment remains vital. For example, in 2024 Thailand's electronics exports exceeded US\$75 billion, with semiconductors alone contributing more than US\$9.6 billion. The country now ranks among the top global producers of integrated circuits, with roughly 4% of global output, and is a major exporter of hard disk drives (HDDs).<sup>1</sup>

### Automotive Component Manufacturing<sup>2</sup>

Thailand is Southeast Asia's largest automotive manufacturing hub. In 2023 the automotive industry was valued at approximately US\$12.67 billion, producing 2.55 million vehicles, a figure projected to rise toward nearly 3 million by 2028.

The domestic supply chain in this sector is deep:

- ▶ About 720 Tier-1 suppliers and 1,100+ Tier-2/3 firms operate locally, providing engines, chassis parts, electronics, and other critical components.
- ▶ Roughly 80% of vehicle components in Thailand are sourced locally, an unusually high localization rate for the region.

Yet the survival of this network depends on continuous integration with foreign multinational manufacturers, especially Japanese, European, and (increasingly) Chinese firms.

## Foreign Investment Trends in Thai Industrial Manufacturing

Thailand has aggressively courted foreign investment for decades, using targeted incentives and strategic industrial zones to attract capital and technology. The result: sustained growth in FDI into manufacturing and related supply chains.

### FDI Volume and Sector Focus<sup>3</sup>

In 2024:

- ▶ The Thai Board of Investment (BOI) reported total investment promotion applications reaching over 1.13 trillion bahts (approx. US\$33 billion), the highest in its history — up 35% from the prior year.
- ▶ More than 2,000 of these projects were foreign-backed, meaning foreign investors accounted for roughly 65% of all investment applications.

Foreign participation is especially strong in:

- Automotive and EV component manufacturing;
- Machinery and electronics;
- Electrical appliances and metal fabrication.

### Major FDI



This surge is tied in part to the development of the Eastern Economic Corridor (EEC) — a targeted high-tech investment zone covering Rayong, Chonburi, and Chachoengsao provinces. **Between January and April 2025, foreign investment into the EEC grew by 43%, representing US\$959 million and over half of all FDI into the country.**<sup>4</sup>

### Changing Patterns and Source Countries

Foreign investor composition has diversified:

- ▶ Japanese manufacturers continue to dominate automotive parts and precision machinery.
- ▶ Western multinationals — especially in electronics — have expanded existing Thai operations, exemplified by Western Digital's US\$693 million upgrade of its hard drive facilities, which now produce a significant share of global HDD output.<sup>5</sup>
- ▶ Chinese firms are rapidly increasing presence, particularly in EV and battery parts manufacturing. Investments by companies like BYD, MG, and GWM into Thailand's EV ecosystem now exceed US\$1.44 billion and have created nearly 10,000 local jobs with 40–60% of components sourced locally.<sup>6</sup>

## ▶ Supplier Linkages: How Foreign Investors Anchor Local Supply Chains

FDI doesn't just build factories — it creates interdependent networks of suppliers, logistics providers, and technology partners. Thailand's success in this aspect lies in structural initiatives that have matured over decades.

### Government Support for Supplier Development

Thailand's Board of Investment (BOI) and its industrial linkage arm, BUILD (BOI Unit for Industrial Linkage Development), have played crucial roles by:

- ▶ Mapping component suppliers and linking them with assemblers;
- ▶ Hosting workshops, trade fairs, and factory visits;
- ▶ Providing technical consulting and training to help SMEs meet global buyer standards.

Additionally, **recent policy moves encourage joint ventures and co-development partnerships between Thai SMEs and foreign investors, especially in the automotive parts sector.** These initiatives aim to accelerate technology transfer and give Thai firms access to export markets.

### Technological Integration and Capability Building

Empirical research confirms that firms integrated into global supply chains — meaning those connected directly with foreign multinational buyers — show higher technological and operational capabilities than those oriented only toward the local market. Local suppliers aligned with global value networks demonstrate superior planning and inventory technologies compared to peers not so connected.

This pattern is vital: when foreign investors set up operations, their standards for quality, timeliness, and process automation cascade through their supplier networks. Local firms that adapt accordingly reduce cost, improve quality, and become export-ready.

## ► Realities and Limitations: Where Thailand's Model Fails to Deliver

Acknowledging strengths is necessary — but so is confronting blind spots. Thailand's industrial supply chains face real challenges that demand honest scrutiny.

### Dependence on Imports and External Inputs

Despite strong export performance, **Thailand's manufacturing base shows a persistent reliance on imported inputs.** A recent analysis by the Siam Commercial Bank Economic Intelligence Centre reported that imports have grown faster than domestic output since 2020. By 2024, the value of imported goods reached 53% of GDP, a 12-year high<sup>7</sup>

This trend is troubling for component manufacturers whose margins and competitiveness depend on the stability of intermediate goods supply. If local firms cannot deepen upstream production (e.g., basic steel, semiconductors), dependency on imported inputs — particularly from China — can erode Thailand's industrial autonomy.

### Risk of Becoming a Mid-Tier Assembler Rather Than an Innovator

SCB EIC<sup>8</sup> cautioned that thousands of Thai manufacturers risk becoming “product fronts” — essentially trading intermediaries rather than producers — due to an influx of imported parts and finished products. About 3,000 firms could be in this category, weakening the country's role as a true producer in global value chains.<sup>9</sup>

The danger here is structural: if local firms remain confined to mid- and low-value assembly — even when embedded in multinational supply chains — long-term competitiveness and technological leadership will lag regional peers investing more aggressively in upstream innovation.

## ► Strategic Reflections

Given these dynamics, how should Thailand think about the future of its industrial component sector and foreign investment's role?

### Invest in Upstream Capabilities

Thailand must leverage foreign capital not just for production volume but for capability development:

- R&D partnerships between domestic firms and multinationals can accelerate innovation;
- Skills and technical education aligned with advanced manufacturing must expand beyond assembly-level proficiencies;
- Public-private investments into sectors like semiconductors, advanced materials, and battery technology would diversify beyond automotive and traditional E&E components.

### Selective Localization Policies

Rather than broad import substitution, selective targeting of critical upstream industries — such as precision electronics, specialty chemicals, and core materials — could help the domestic supply base capture more value and reduce vulnerability to external shocks.

### Balance Market Openness with Domestic Development

Foreign investment and global supply chain integration yield benefits, but Thailand must ensure policy frameworks (like the Foreign Business Act and BOI incentives) strike a balance that protects strategic industries while remaining attractive to global investors.

## ► Conclusion

Thailand's industrial component manufacturing landscape is at an inflection point:

- Foreign investors have brought capital, jobs, and integration into global supply chains that have enhanced Thailand's profile as a manufacturing hub.
- The automotive sector illustrates both strengths (high localization rates, strong export figures) and dependency patterns that demand strategic correction.
- Electronics and EV component clusters show promise, but sustaining high-value supply chains will require deeper upstream capabilities and meaningful technology transfer.

The measure of Thailand's long-term success will not be exporting tonnage alone, but whether domestic firms graduate from being ancillary suppliers to becoming innovation leaders embedded within global manufacturing ecosystems. ▣

<sup>1</sup><https://www.aseanbriefing.com/news/thailands-role-in-asean-supply-chains-reshoring-realignment-and-risk-mitigation/>

<sup>2</sup><https://www.aseanbriefing.com/news/thailands-automotive-industry-a-guide-for-foreign-investors>

<sup>3</sup><https://www.angelrealestate.co.th/web/foreign-investment-in-thailands-industrial-sector/>

<sup>4</sup><https://marketresearchthailand.com/insights/articles/eec-thailand-2025-supply-chains-future>

<sup>5</sup><https://www.aseanbriefing.com/news/thailands-role-in-asean-supply-chains-reshoring-realignment-and-risk-mitigation/>

<sup>6</sup><https://www.ainvest.com/news/thailand-strategic-attraction-chinese-manufacturing-investment-regulatory-momentum-long-term-returns-2510/>

<sup>7</sup><https://www.nationthailand.com/business/economy/40052831>

<sup>8</sup>SCB EIC refers to the Economic Intelligence Center (EIC), the economic research arm of Thailand's Siam Commercial Bank (SCB).

<sup>9</sup><https://www.nationthailand.com/business/economy/40052831>

