2026 • Independent course research • International business

Rethinking China+1: Regional Value Chain Reconfiguration

Does the relocation of assembly capacity to Southeast Asia imply the displacement of China, or a new division of labour across a regional production network? This course research proposal combines trade flows, value-added indicators and preliminary panel estimates.

> Independent course research: research question, descriptive trade analysis and preliminary empirical design as documented in the submitted report.

Research question & framework

The study examines five ASEAN manufacturing economies: Indonesia, Malaysia, the Philippines, Thailand and Viet Nam. Its central hypothesis is that China+1 may redistribute production stages rather than remove China from the supply network. The proposed mechanisms are risk diversification, imported-input dependence and a shift in China’ s upstream role.

Data & analytical design

The evidence is organized into three layers: bilateral HS84/HS85 trade, manufacturing trade in value added, and inward manufacturing FDI. China–ASEAN trade is observed in 2014–2024, ASEAN–US trade in 2014–2023, TiVA in 2015–2022 and available FDI in 2017–2024.

- UN Comtrade: machinery and electrical equipment, including parts and some final products.
- OECD TiVA 2025: foreign value added in manufacturing exports and domestic value added embodied abroad.
- ASEANstats: sector-level manufacturing FDI; Viet Nam is omitted from the FDI comparison because the required series is missing.

A descriptive triangular linkage index multiplies the China-to-ASEAN and ASEAN-to-US trade expansion ratios. It is a comparison device, not a causal estimator.

Findings: trade expansion

+288.8%
China → Viet Nam, HS84+85, 2014–2024

+772.2%
Viet Nam → US, HS84+85, 2014–2023

33.9
Viet Nam triangular linkage index

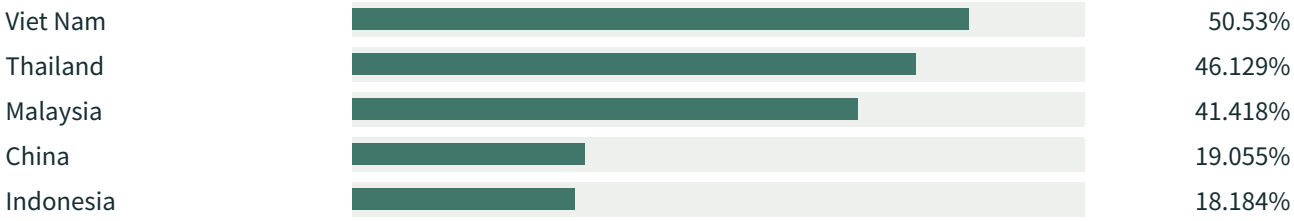
Economy	China → economy growth	Economy → US growth	Linkage index
Indonesia	128.8%	115.9%	4.9
Malaysia	173.2%	103.6%	5.6
Philippines	137.8%	85.6%	4.4

Economy	China → economy growth	Economy → US growth	Linkage index
Viet Nam	288.8%	772.2%	33.9
Thailand	166.7%	143.2%	6.5

The simultaneous increase in Chinese machinery/electrical exports and ASEAN exports to the US is consistent with regional complementarity. The study also uses Germany, the Netherlands, France and Italy as a limited proxy for selected European markets, not for the entire EU.

Findings: value-added structure

Foreign value added in manufacturing exports, 2022



Source: OECD TiVA 2025, as compiled in the original course report.

The foreign value-added shares of Viet Nam, Thailand and Malaysia remained above 40% in 2022. China's domestic value added embodied in foreign gross exports rose from 13.100% in 2015 to 15.337% in 2022. The two patterns support the hypothesis of continued regional interdependence, but do not identify the origin of every foreign input.

Preliminary panel estimation

A log–log model uses a balanced panel of five ASEAN countries over 2014–2023 (50 country-year observations). The dependent variable is each country's HS84+85 exports to the US; the main explanatory variable is China's HS84+85 exports to that country.

Specification	Coefficient	Robust SE	Reported p-value
Pooled model	1.098	0.122	<0.001
Country + year fixed effects	1.646	0.305	<0.001

The fixed-effects estimate implies a positive conditional association: a 1% higher China-to-ASEAN trade value is associated with roughly 1.65% higher ASEAN-to-US trade value in the sample. The result is preliminary, and the reported standard errors are heteroskedasticity-robust, not a guarantee of valid inference under serial dependence or only five country clusters.

Strategic implications & limitations

For multinational firms, a diversified production footprint can remain connected to an efficient supplier base. For ASEAN economies, export growth is not equivalent to domestic value creation; supplier development, skills and technology absorption matter. For China, the study emphasizes higher-value components, industrial software, equipment and supply-chain coordination.

HS84/85 are broad product categories rather than a pure measure of intermediate goods. Trade and TiVA have different classifications and time coverage. Shared demand shocks, exchange rates and investment may

explain the observed correlations. A tariff-exposure difference-in-differences or event-study design is proposed for future research, not presented as completed causal evidence.

Sources & scope

- UN Comtrade Database (United Nations Statistics Division).
- OECD Trade in Value Added (TiVA), 2025 edition.
- ASEANstats, inward FDI by ASEAN member state and economic sector.
- The original course report includes its bibliography and data definitions.

Historical figures and findings are reproduced from the supplied project materials; this brief is not an independent verification or a live market update.