

# **Changing Patterns of Trade, Production and Employment within Global Production Networks: A Comparative Study of Southeast Asian Countries**

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# Purpose/Scope

- Examines the role of engagement in global production networks (GPNs) in export-oriented industrialization through a comparative study of the Southeast Asian countries.
- Motivated by the contemporary policy debate on limits to industrial upgrading within GPNs.
- Southeast Asia, an ideal laboratory for a comparative case study:
  - long history of engagement in GPNs
  - ‘unity within diversity’

# Terminology: GVC versus GPN

## **Global value chain (GVC)**

The full range of activities undertaken to bring a product from its conception to its end users.

The focus is on the ‘structure of governance’ (the interaction among different actors) involved in the value chain of **both** primary products and manufactured goods

# Global production networks (GPN)

Interrelations among firms specializing in different segments of the production process of a given manufacturing product as a single economic group

The prime mover is **‘global production sharing’**: specialization in separate stages/tasks within vertically integrated global manufacturing production.

# Structure

Analytical context

Southeast Asia's engagement in GPNs: A Brief History

Trade patterns

Manufacturing performance

Concluding remarks

Appendix: trade data compilation

# Analytical context

- **Determinants**

Productivity-adjusted labour cost + service link cost

Key factors of production are mobile within GPNs

So, both comparative advantage and absolute advantage (in terms of service list cost) are relevant for the site selection process of MNEs (Jones 2000)

- **Global production sharing and export-oriented industrialisation**

- opportunities for countries to participate in a finer international division of labor

- **Limits to (constraints on) industrial upgrading**

- difference between traditional horizontal specialisation verses vertical specialisation.

- when a country specializing in a specific segment of the value chain, industrial upgrading is constrained by the dictates of the 'lead firm' (the MNEs)

- Recent revival of the case for emulating the Taiwanese and Korean strategy of acquiring technology and building local firms' capabilities with foreign buyers through subcontracting, while keeping MNEs at arm's length
- Is this advocacy consistent with modalities, organizational structure and operational characteristics of GPNs?
- The difference between **buyer-driven** and **producer-driven GPNs**
  - The Taiwanese and Korea subcontracting strategy centered on buyer-driven GPNs
  - MNEs are the dominant players within producer-driven GPNs, which accounts for the lion's share of world GPN trade (keeping MNEs at arm's length is not viable strategy)

Gerschenkronian advocacy of 'meeting missing prerequisites' is relevant to the debate.

# Buyer-driven GPNs

‘Lead firm’ in the value chain is the international buyer (a large retailer or a brand manufacturer).

Common in diffused-technology products such as garments, footwear, toys, furniture and a variety of handicrafts.

FDI is in joint-ventures with local manufacturers.

Input procurement is monitored by the lead-firm, but there is room for use of domestic inputs if possible to meet the required quality standards.



# Producer-driven GPNs

‘Lead firm’ is a multinational manufacturing firm.

Common in vertically integrated global industries such as electronics, electrical goods, automobiles, scientific and medical devices

A close relationship between foreign direct investment (FDI) and GPN trade

# Southeast Asia's engagement in GPNs: A Brief History

- Starting point: Singapore's 'invention' of the 'MNE-led development strategy' in the mid 1960s

'We did not have a group of ready-made entrepreneurs such as Honk Kong gained in the Chinese fleeing from Shanghai, Canton and other cities when the communists took over. Had we waited for other traders to learn to be industrialists we would have starved. It is absurd for critics to suggest in the 1990s that had we grown our own entrepreneurs we would have be less at the mercy of the rootless MNCs'

Lee Kuan Yew 2000, 85

- Subsequently embrace of the strategy by the other Southeast Asian countries, albeit at varying degree and at different times
- Significant differences among countries in the region relating to the stage of development and relative wages, provided the setting for the region-wide spread of production networks (Table 1 in the paper).

# Trade patterns

## Table 2

- The region's share in world non-oil exports increased from 3.1% in the early 1970s to nearly 8% by the late 2010s, with the share of manufactured goods in total non-oil exports from the region increased from 15% to over 70% during this period.
- The share of GPN exports in total manufacturing exports increased from 67% in 1988-89 to 74% in 2016-17.
- Exports within producer drive GPNs accounted for 84% in 2016-17, up from 77% in 1988-89.

Table 2: Southeast Asia in world manufacturing exports (%)

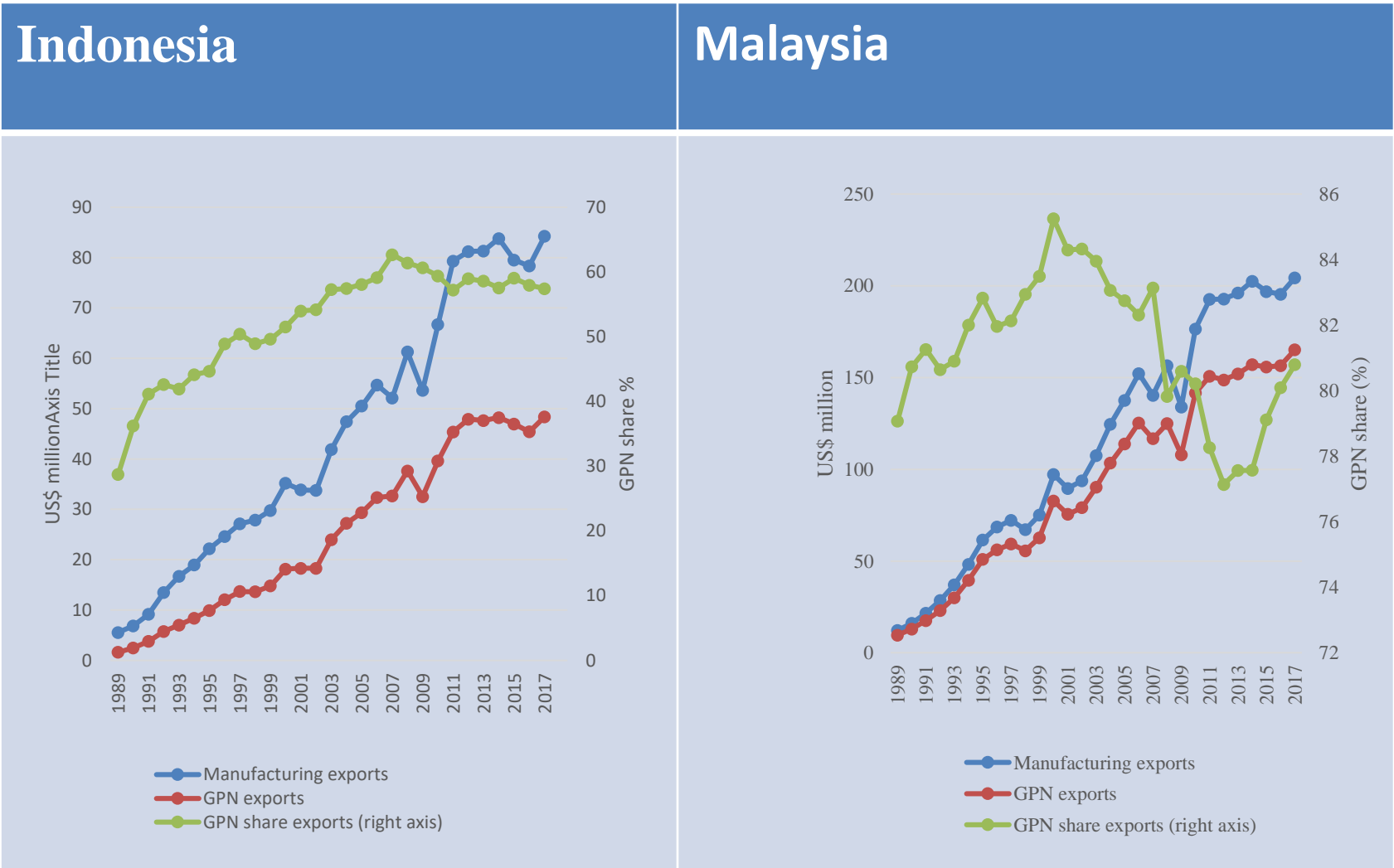
|  | 1988-89 | 2016-17 |
|--|---------|---------|
| Southeast Asia's world export share:           |         |         |
| Non-oil exports                                | 3.0     | 8.2     |
| Manufacturing exports                          | 2.3     | 8.1     |
| GPN exports                                    | 2.9     | 9.8     |
| Composition of Southeast Asian exports         |         |         |
| Manufacturing share in non-oil exports         | 56.6    | 73.6    |
| GPN share of manufacturing exports             | 67.3    | 74.1    |
| Producer driven GPN share in total GPN exports | 77.4    | 84.3    |

- But, there are notable differences among the countries in the region in terms of the degree and patterns of GPN engagement (Tables 3 and 4)
- A notable decline in both annual growth rates and world market shares of GPN exports from the four ‘firstcomers’ to MNE-led industrialization (Singapore, Malaysia, Thailand and the Philippines) over the past one-and-a-half decades or so.
- The region has been able to maintain the seemingly impressive relative growth record mainly because of faster export growth of the ‘second-tier’ exporting countries in the region, in particular Vietnam, that has more than counterbalanced for much slower export growth of the firster countries.

In a significant departure from the export performance record of the previous decades, exports within buyer driven networks (in particular, apparel export, following the MFA abolition) have contributed for a disproportionate share of export increment from the second-tier countries.

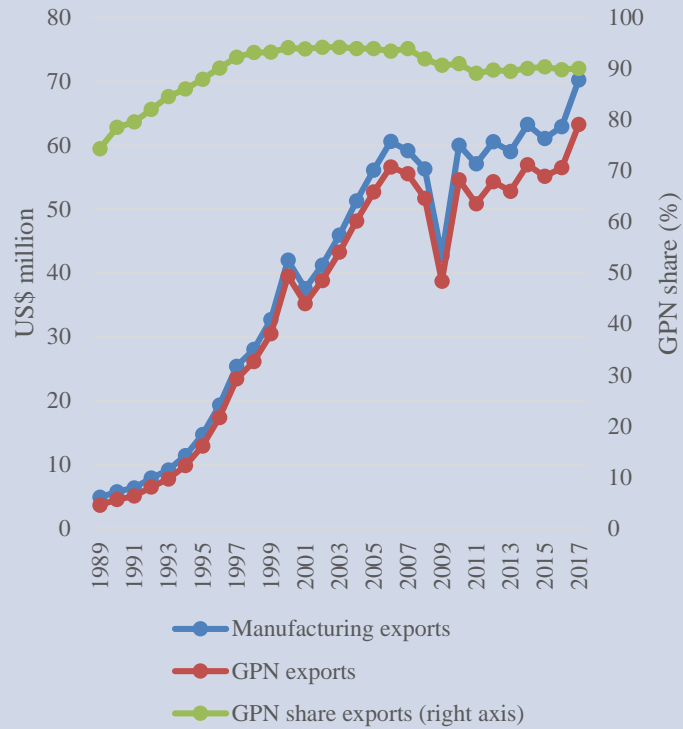
The diminishing dynamism of GPN exports from the four firstcomers is in sharp contrast to the export patterns of their Northeast Asian counterparts: China, South Korea and Taiwan have maintained growth rates well above that of the total world exports of these product.

# Figure 1: Southeast Asian counties: GPN engagement and export performance, 1989-2017

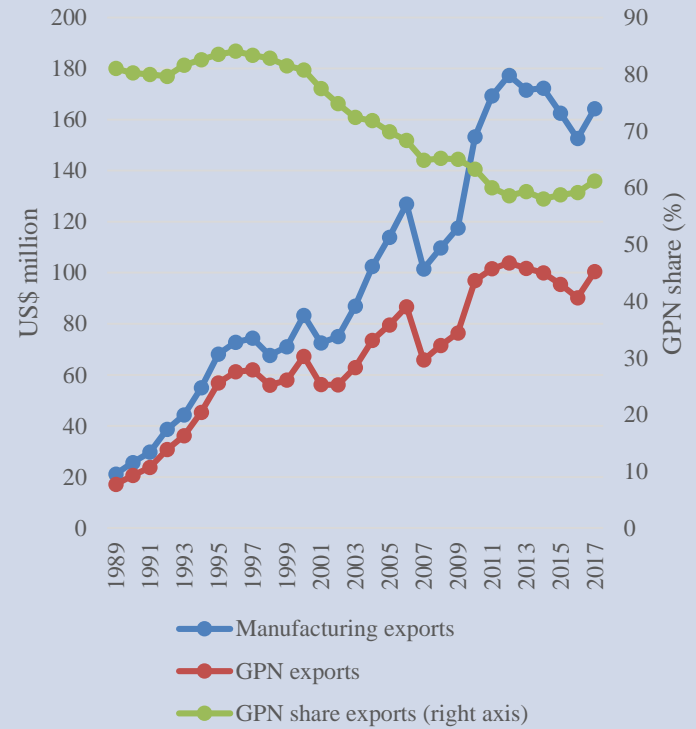




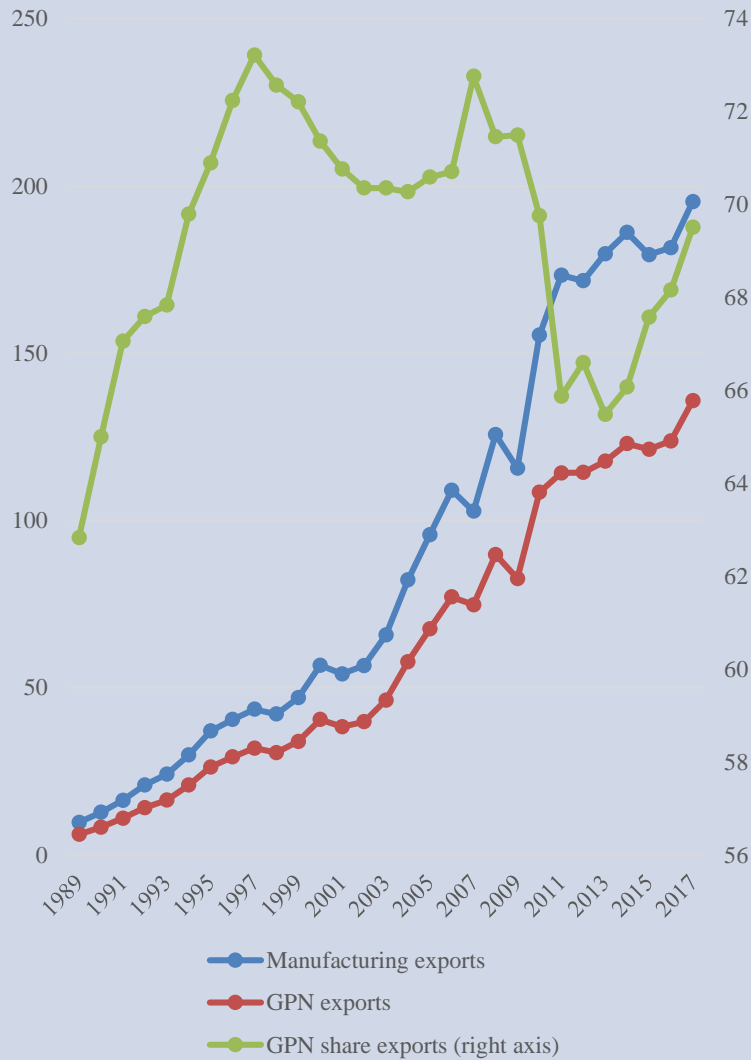
# Philippines



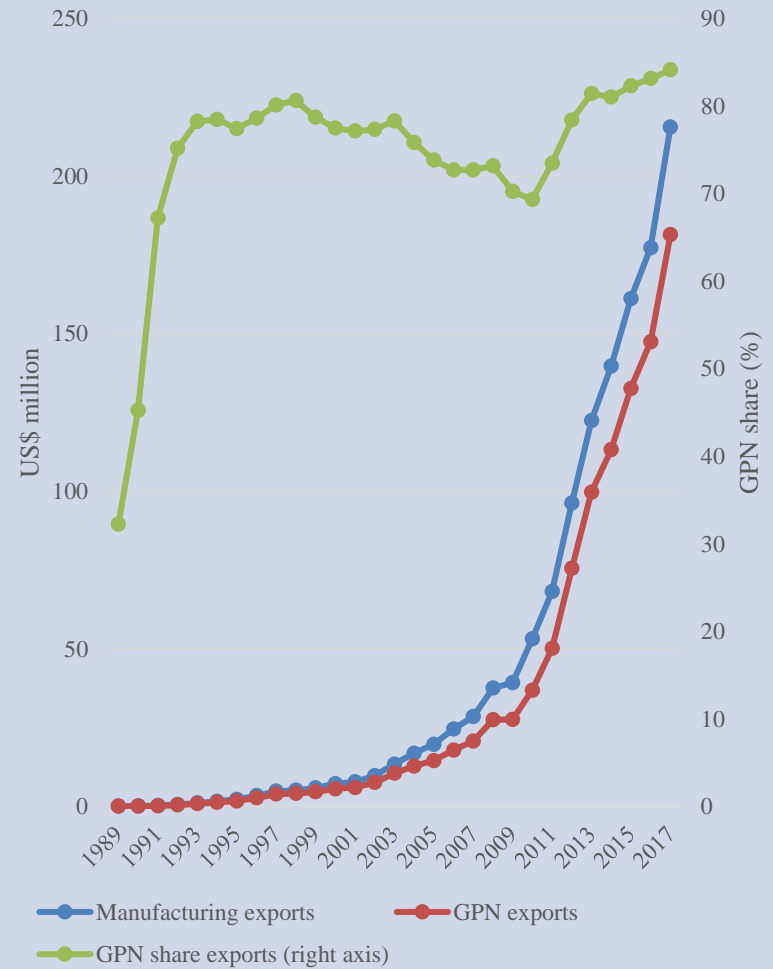
# Singapore



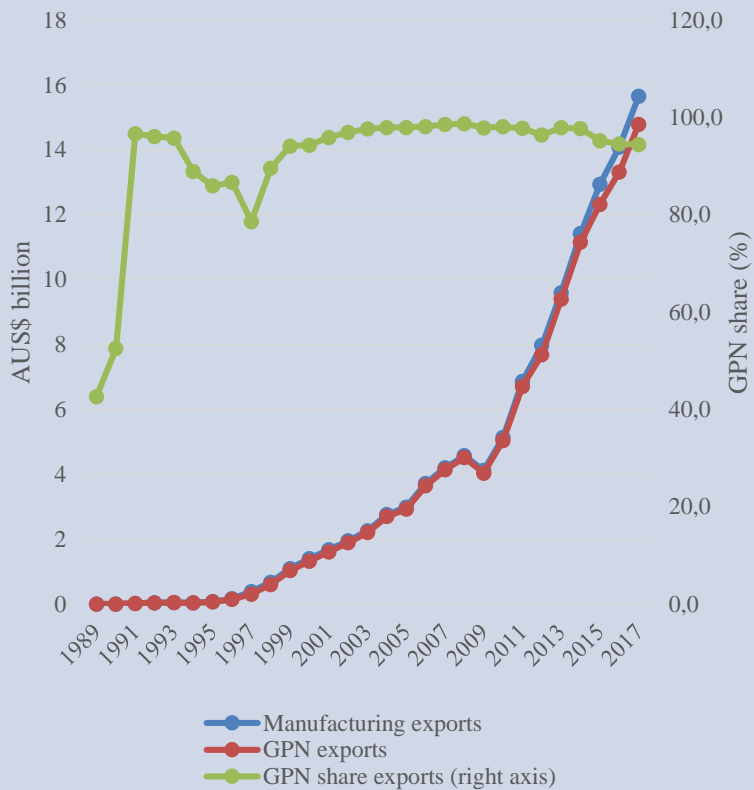
# Thailand



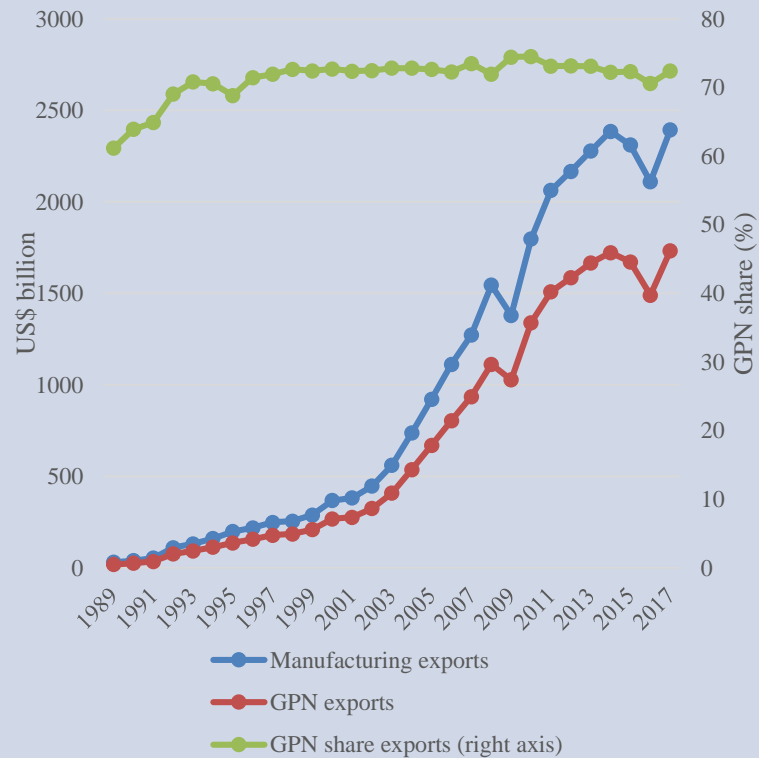
# Vietnam



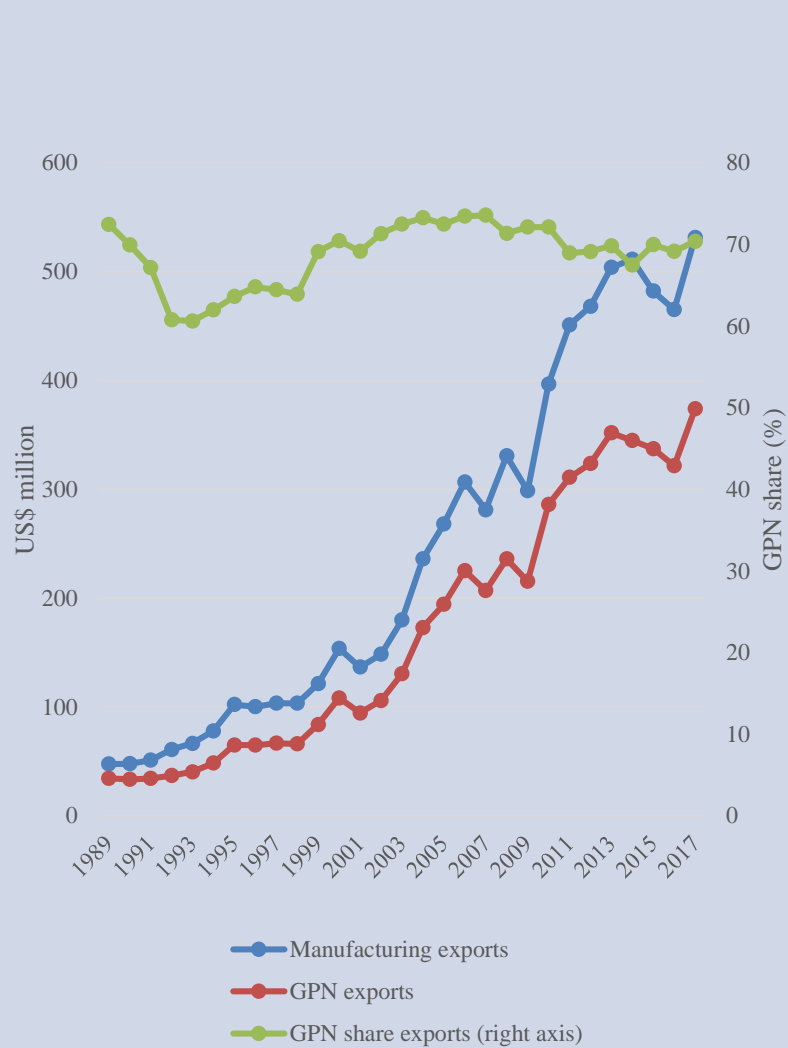
# Cambodia



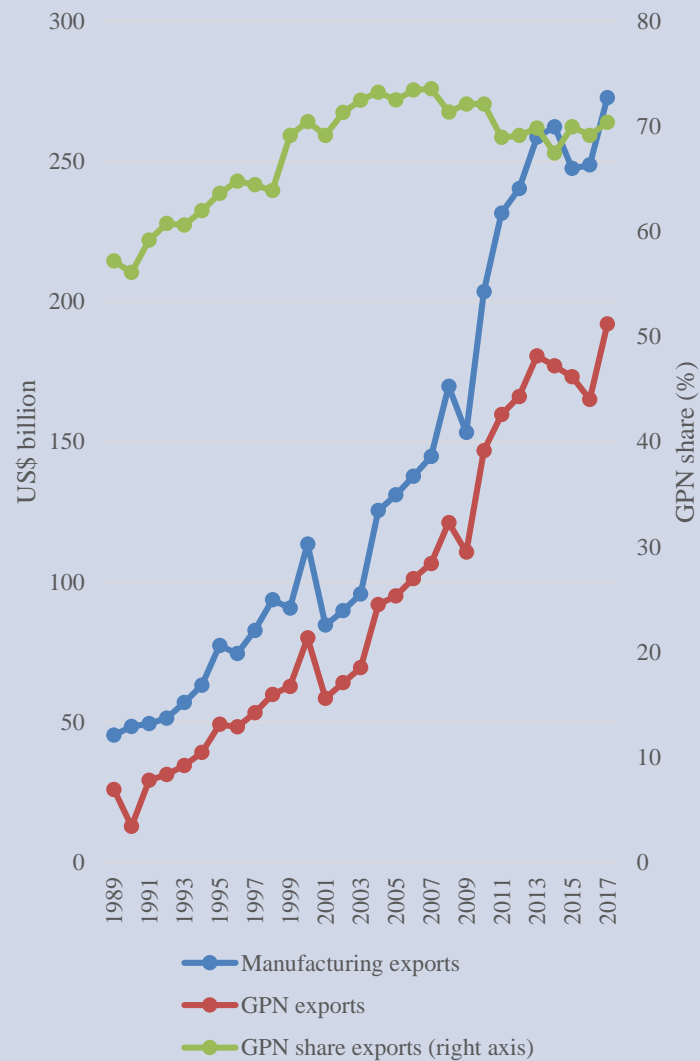
# China



## South Korea



## Taiwan



What explains GPN export slowdown from the four firstcomers?

- ‘Servicification’ (or ‘servitization’): contracting out by manufacturing firms of some knowledge-intensive business services, which were historically embodied in the value of a given product.

Table 6: The share of services<sup>1</sup> embodied in gross exports of computers, electronics and electrical goods (compiled from the OECD TiVA database.)

Relevant for explaining export slowdown of Singapore only.

(No eventide increase in the services content of other countries in Southeast Asia or Northeast Asia: Singapore seems to be a ‘special’ case)

- Decline in China's imports of parts and component imports for all four countries (based on an analysis of China's impart data)
- MNE dominance of production networks
  - Contrasting patterns of GPN exports from these four countries and from Taiwan and South Korea
  - Cross-border procurement of parts and components is governed by the global profit maximization objectives of the MNEs.
  - A strong domestic entrepreneurial base has not evolved within Southeast Asian GPNs.

# GPNs and manufacturing performance

Table 7: Key indicators of manufacturing performance

Discuss.

# Concluding remarks

- Global production sharing has played a pivotal role in manufactured export expansion and industrial transformation in Southeast Asia.
- However, there is clear evidence that over the past one-and-a-half decades export performance of the ‘early entrants’ to GPN in the region has been lackluster.
- The region has been able to maintain its seemingly impressive relative export performance records thanks to the faster export growth of the ‘second-tier’ exporting countries in the region.



- The findings make a strong case for probing why the MNE-led strategy in Southeast Asia has run out of steam and exploring policy options for reviving growth.
- The Northeast Asian strategy of acquiring technology and building local firms' capabilities through subcontracting, while keeping MNEs at arm's length, does not seem feasible in this era of global production sharing in which organization of industries reflects the power dynamics of their lead firms.
- The policy challenge is, therefore, to pursue industrialization by building and improving technology and entrepreneurial capabilities at the local level, while remaining open to trade and FDI and promoting agglomeration effects of MNE participation rather than pursuing protectionist policies.
- Gerschenkronian view of 'meeting missing prerequisites' is relevant for the debate.