



**TIPS FORUM 2019  
INNOVATION AND INDUSTRIALISATION**

**DOES INSERTION INTO GLOBAL VALUE CHAINS PROMOTE  
STRUCTURAL TRANSFORMATION?**

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# INTRODUCTION

- African economies remember the past
- Industrial policies are not costless.
- How does a small economy such as Ghana, sponsor its industrialization?
- Innovation systems?

## GVCS

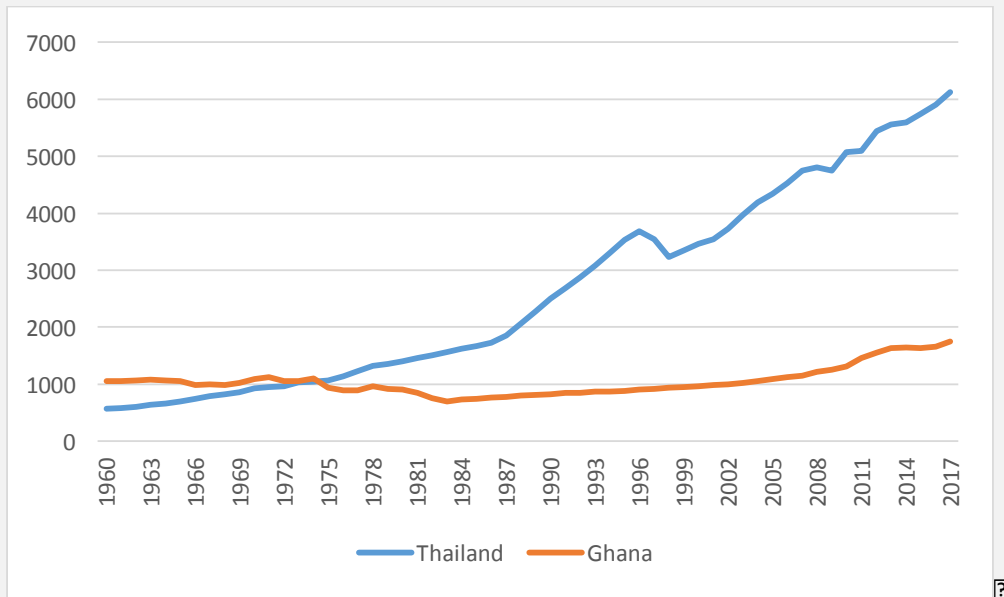
- Why bother about industrial policies when there is a 'shortcut'?
- Foreign firms have the knowledge; developing economies have the low wages. What could go wrong?
- With time, its become obvious after many empirical studies that this suggestion must be nuanced
- GVCs still command lots of attention
- The potential implications are appealing for developing countries

## OVERVIEW OF STUDY

- What role, if at all, will an industrial policy play within the framework of GVC analysis?
- Currently, the GVC framework cannot account for this or other domestic efforts at enhancing innovation (e.g. innovation systems) (Morrison et al., 2008)<sup>2</sup>
- Comparative study of Processed tuna industries of Thailand and Ghana
- The two countries represent the two schools of thought – Thailand embarking on (a sort of) industrial policy and Ghana with no sustainable industrial policy
- Both are integrated into GVCs and we can examine how innovation in both countries have been impacted.

# MACRO PICTURE – THAILAND AND GHANA

Figure 1 GDP Per Capita of Thailand and Ghana



Source: World Bank (2019)<sup>3</sup> Accessed on 30<sup>th</sup> May, 2019

Table 1 Share of Merchandise Exports by Sectors

| Year | Agriculture(%) |       | Manufacturing(%) |       |
|------|----------------|-------|------------------|-------|
|      | Thailand       | Ghana | Thailand         | Ghana |
| 2012 | 5              | 3     | 74               | 11    |
| 2013 | 5              | 4     | 75               | 17    |
| 2014 | 4              | ...   | 76               | ...   |
| 2015 | 4              | ...   | 78               | ...   |
| 2016 | 4              | 9     | 78               | 15    |

Source: World Bank (2019)<sup>3</sup> Accessed on 27<sup>th</sup> April, 2019

<sup>3</sup> World Bank., 2019. World Development Indicators (DataBank). <https://databank.worldbank.org/data/source/world-development-indicators> (accessed: refer to date under figure/table).

# MORE MACRO ....

Table 21 Leading Exports of Thailand in 2016

| Product   | Value(\$ Billion) | Share of Total Exports(%) | Main Export Destination             |
|---|-------------------|---------------------------|-------------------------------------|
| Nuclear reactors, boilers & machinery             | 37.2              | 17                        | USA; China (Hong Kong); Japan       |
| Electrical, electronic equipment                  | 29.7              | 14                        | USA; Japan; China (Hong Kong)       |
| Vehicles other than railway, tramway              | 27.2              | 13                        | Australia; Philippines; Indonesia   |
| Pearls, precious stones, metals, etc              | 14.2              | 7                         | Switzerland; China (Hong Kong); USA |
| Rubber and articles thereof                       | 12.2              | 6                         | China; USA; Malaysia                |
| Plastics and articles thereof                     | 11.4              | 5                         | China; Japan; Indonesia             |
| Mineral fuels, oils, distillation products, etc   | 6.3               | 3                         | Singapore; China; Cambodia          |
| Meat, fish and seafood preparations (fresh)       | 5.9               | 3                         | Japan; USA; UK                      |
| Optical, photo, technical, medical, etc apparatus | 5.3               | 2                         | China; USA; Japan                   |
| Cereals   | 4.6               | 2                         | Benin; China; USA                   |

Source: UN Comtrade (2019a)<sup>4</sup>. Accessed on 27<sup>th</sup> April, 2019

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Table 31 Leading Exports of Ghana in 2017

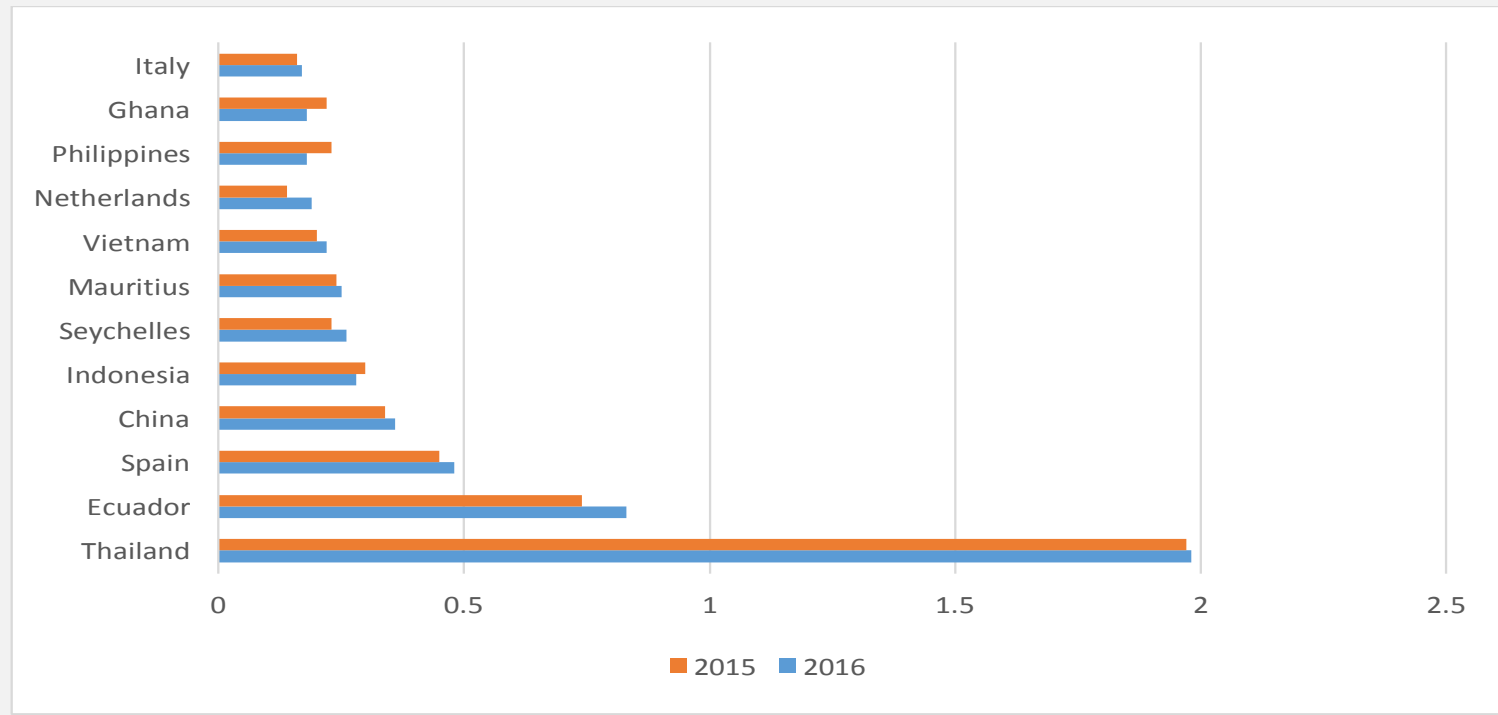
| Product   | Value(\$ Billion) | Share of Total Exports(%) | Main Export Destination          |
|---|-------------------|---------------------------|----------------------------------|
| Pearls, precious stones, metals, coins, etc             | 5.9               | 41                        | India; Switzerland; South Africa |
| Mineral fuels, oils, distillation products, etc         | 3.6               | 25                        | China; Canada; Netherlands       |
| Cocoa and cocoa preparations                            | 2.4               | 17                        | Netherlands; Malaysia; Brazil    |
| Edible fruits, nuts, bee; citrus fruit, melons          | 0.41              | 3                         | Vietnam; India; UK               |
| Plastics and articles thereof                           | 0.37              | 3                         | Burkina Faso; Togo; Mali         |
| Wood and articles of wood, wood charcoal                | 0.19              | 1                         | India; Niger; Turkey             |
| Animal, vegetable fats and oils, cleavage products, etc | 0.19              | 1                         | Senegal; Malaysia; Niger         |
| Ores, slag and ash                                      | 0.19              | 1                         | China; Ukraine; Germany          |
| Meat, fish and seafood food preparations (new)          | 0.14              | 1                         | UK; France; Germany              |
| Salt, sulphur, earth, stone, plaster, lime and cement   | 0.09              | 1                         | Togo; Burkina Faso; Mali         |

Source: UN Comtrade (2019a)<sup>4</sup>. Accessed on 27<sup>th</sup> April, 2019.

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## MICRO STORY

Figure 2.1 Processed Tuna Exports of Selected Countries



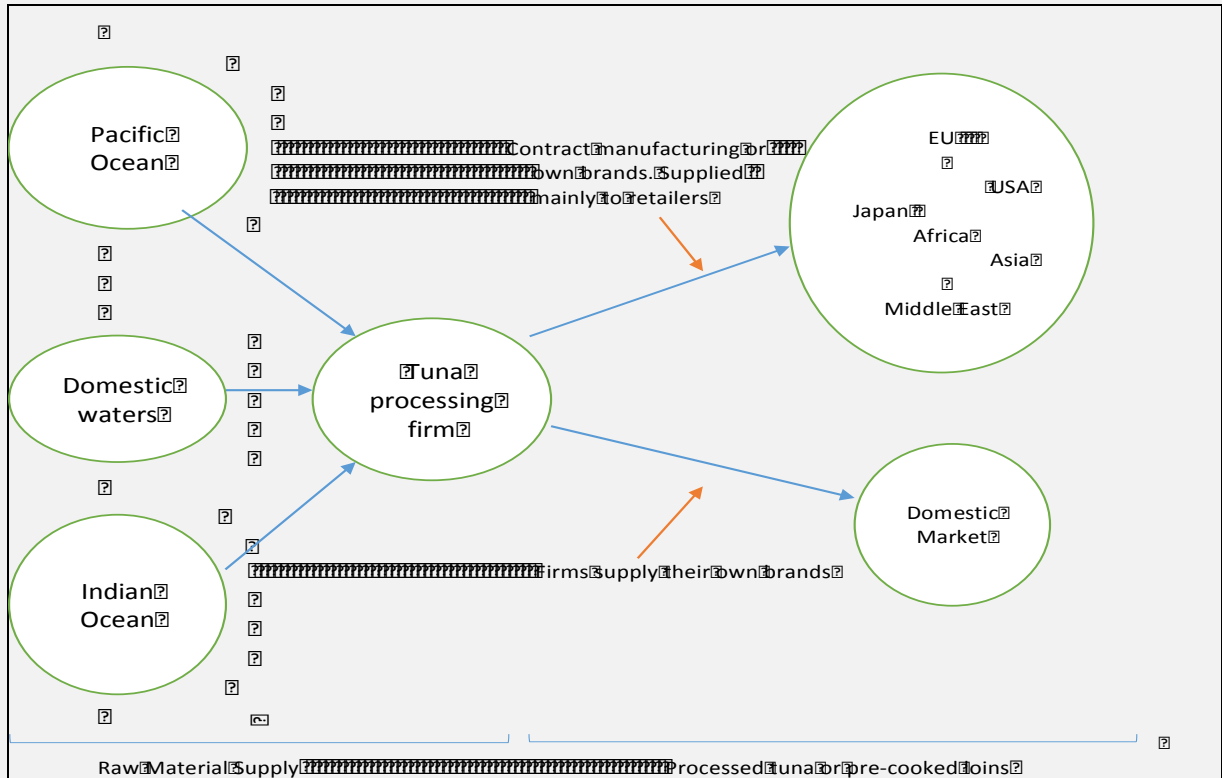
Source: UN Comtrade (2019b)<sup>5</sup>. Source of data for Ghana is GEPA (2018)<sup>6</sup>. Accessed on 27<sup>th</sup> April, 2019.

5 UN Comtrade., 2019b. UN Comtrade Database. <https://comtrade.un.org>. (accessed 4.27.19)

6 GEPA., 2018. Ghana Exports Promotion Authority. Direct communication

# STRUCTURE OF THE PROCESSED TUNA INDUSTRY IN THAILAND

Figure 3 The Thai Tuna Processing Industry

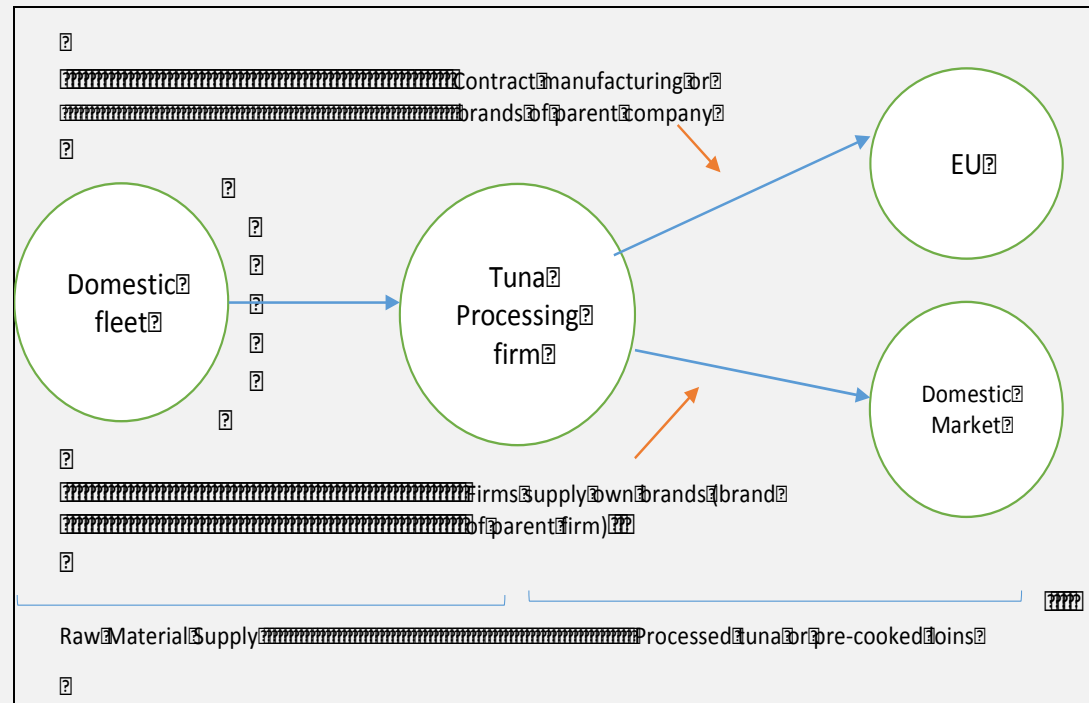


Source: Author. Based on findings of study



# STRUCTURE OF PROCESSED TUNA INDUSTRY IN GHANA

Figure 4. The Ghanaian Tuna Processing Industry



Source: Author. Based on findings of study.

GOVERNANCE STRUCTURES IN TUNA GVCS BASED ON  
GEREFFI ET. AL., (2005:83-84)<sup>7</sup> MODEL

- Modular Governance structure
- Hierarchical Governance structure

<sup>7</sup> Gereffi. G., Humphrey, J., Sturgeon, T., 2005. The governance of global value chains. Review of the International Political Economy 12, 78-104. <https://doi.org/10.1080/09692290500049805>

## UPGRADING IN TUNA GVCS BASED ON HUMPHREY & SCHMITZ (2002:1020)<sup>8</sup>

- Product and Process Upgrading
- Functional Upgrading
- Inter-sectoral Upgrading

<sup>8</sup> Humphrey, J., Schmitz, H., 2002. How does insertion in global value chains affect upgrading in industrial clusters? *Regional studies* 36, 1017-1027.  
<https://doi.org/10.1080/0034340022000022198>

## SOME QUESTIONS

- What accounts for the superior upgrading experiences of Thai firms?
- Why are there more indigenous Thai tuna processors than the case of Ghana?
- What role does GVC play in the promotion of these capabilities in Thai firms? in other words, are Thai firms benefiting more from GVCs than Ghanaian firms?

# ARGUMENTS

- ❑ Thailand's industrial policy (used loosely here) enabled the emergence and subsequent development/competitiveness of the industry.
  - agro-processing industry
  - manufacturing base
  - cluster
  - Business/professional associations
  - domestic market
  - entrepreneurial base

## AND GVCs?

- GVCs are useful and provide important knowledge on new markets
- Enhancement of capabilities in low skilled economies especially where lead firms are producers
- Direction of industry indicates less presence of producers from advanced economies as lead firms
- Gains from GVCs in this case over-hyped
- Without significant capabilities and competitiveness, firms will be shut out of GVCs

## CONCLUSIONS

- Domestic schemes to enhance promotion of capabilities in the economy are critical to the competitiveness of firms. African economies cannot outsource this responsibility to foreign firms
- GVCs are not the panacea to Africa's industrialization challenge
- However, the potential benefits can be enhanced when firms are competitive
- Regional and national chains are effective platforms for honing of skills

THE END

- Thanks for watching/listening to this presentation