

Notes on Structural Transformation and Implications for Cambodia

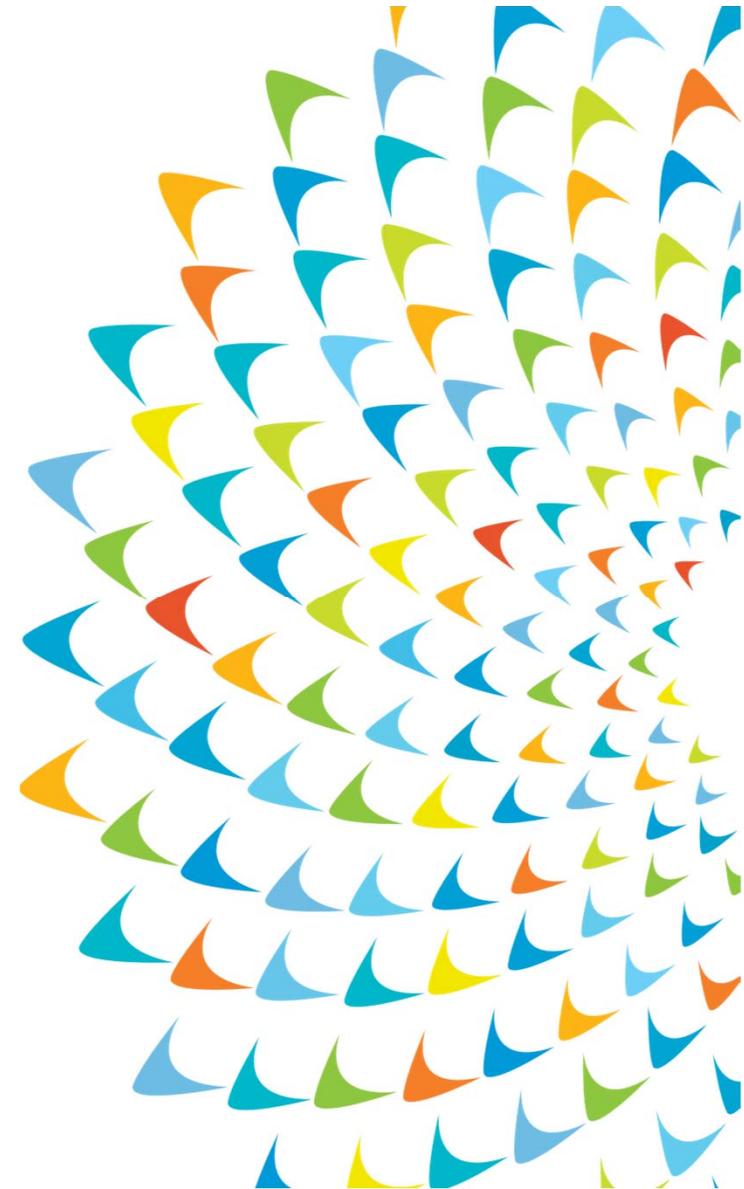
Jesus Felipe

Advisor

Economic Research and Regional Cooperation Department

Asian Development Bank

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Outline

- Theories and Dimensions of Structural Transformation (ST)
- Successful and less successful cases of Structural Transformation: what do we know about them?
- Why does industrialization matter? Premature deindustrialization
- Policies and reforms: Indonesia's example
- Cambodia's ST

Dimensions and Theories of Structural Transformation (ST)

- The term ST refers to how an economy *changes* in time as it becomes richer

Dimensions of change:

- Decline in the share of agriculture (most obvious feature), faster for output than for employment –reallocation of the factors of production. This process is faster today than 100 years ago
- Diversification of production/export structures
- Sophistication of production/export structures
- Other dimensions: Urbanization, gender, consumption patterns

Theories:

- Classical à la Lewis (1954) –duality, surplus labor;
- Baumol's cost disease (AER 1967) –lower productivity in services;
- Hidalgo-Hausmann product space (Science 2007) -capabilities;
- Recent neoclassical literature (Rogerson 2007; Ngai and Pissarides 2007; Duarte and Restuccia 2010; Herrendorf et al. 2014) –two types of explanations: (a) technological, where ST is the result of different rates of sectoral TFP; (b) utility based explanation, where ST is the result of different income elasticities for different goods

Successful and less successful cases of ST

What do we know about them?

- Success refers to the **speed** of the transfer of workers out of agriculture, diversification and upgrading (complexity)
- Successful Asian cases: Japan; Korea; Taipei, China. Where it all began: land reform...then jumped into manufacturing (upgrading) and exports (world demand)
- People's Republic of China: yes, successful; but very unique case
- Indonesia, Malaysia, Philippines, Thailand: Still over 30% of workers in agriculture (25% in the Philippines)... "Slow" process but certainly far ahead of Cambodia
- Vietnam: Yes progress but time will tell..., well ahead of Cambodia
- Bangladesh is also progressing
- Clear NO, e.g., Pakistan, some Central Asian Republics very dependent on natural resources

Why does industrialization matter?

Premature deindustrialization

- **It matters because:** historically, all episodes of rapid and sustained growth is accompanied by structural transformation in the direction of industrialization (manufacturing)
 - labor shift to sectors of higher productivity;
 - manufacturing has a potential for productivity catch-up that is unmatched by most services;
 - to the extent that manufactured goods have high income elasticities of demand, and are produced under increasing returns to scale, industrialization sets in motion a virtuous cycle;
 - BOP: if a developing country does not have a strong manufacturing sector, it will end up running a trade deficit in manufactured goods.
- **Felipe et al. (2018) show that:**
 - All of today's rich non-oil economies enjoyed at least 18% manufacturing employment shares in the past;
 - They often did so before becoming rich;
 - deindustrialization: Manufacturing peaks at lower employment shares today (typically below 18%), than in the past (often over 30%);
 - Compared with employment, output shares are weak predictors of prosperity, and are under less pressure; and
 - Late developers' manufacturing employment shares peak at much lower per capita incomes than previous studies have shown

Policies and Reforms: Indonesia's example

- We are assisting the government of Indonesia to prepare its 2020-2024 medium term plan, in particular a strategy for re-industrialization: awareness in the country
- Since 2014 (President Jokowi): 16 Reforms introduced, with significant implications for manufacturing
- Themes: potential growth and BOP-constrained growth; reforms; incentives; diversification, upgrading and GVCs; firm-size distribution; dynamics of firm growth; monetary and fiscal policies to support growth; modern industrial policy
- Upgrading is difficult and getting into GVCs is useful but not a panacea
- Broad system of incentives to manufacturing: not clear what many incentives do
- Manufacturing (overall): undiversified; unsophisticated; small firms; and a poorly designed incentive system

Cambodia's ST

Shares in Value-added and Employment

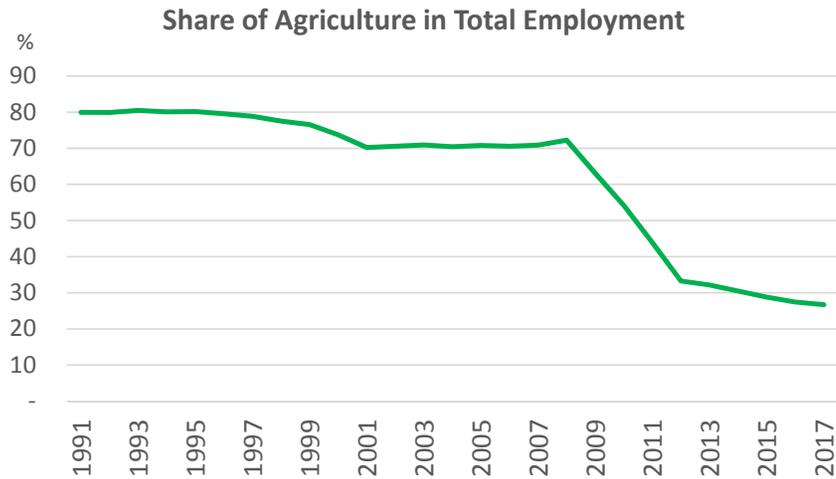
Note the very fast decline in agriculture's employment share...

Value-Added (%)

	1993	2017
Agriculture	45.3	23.4
Manufacturing	8.6	16.2

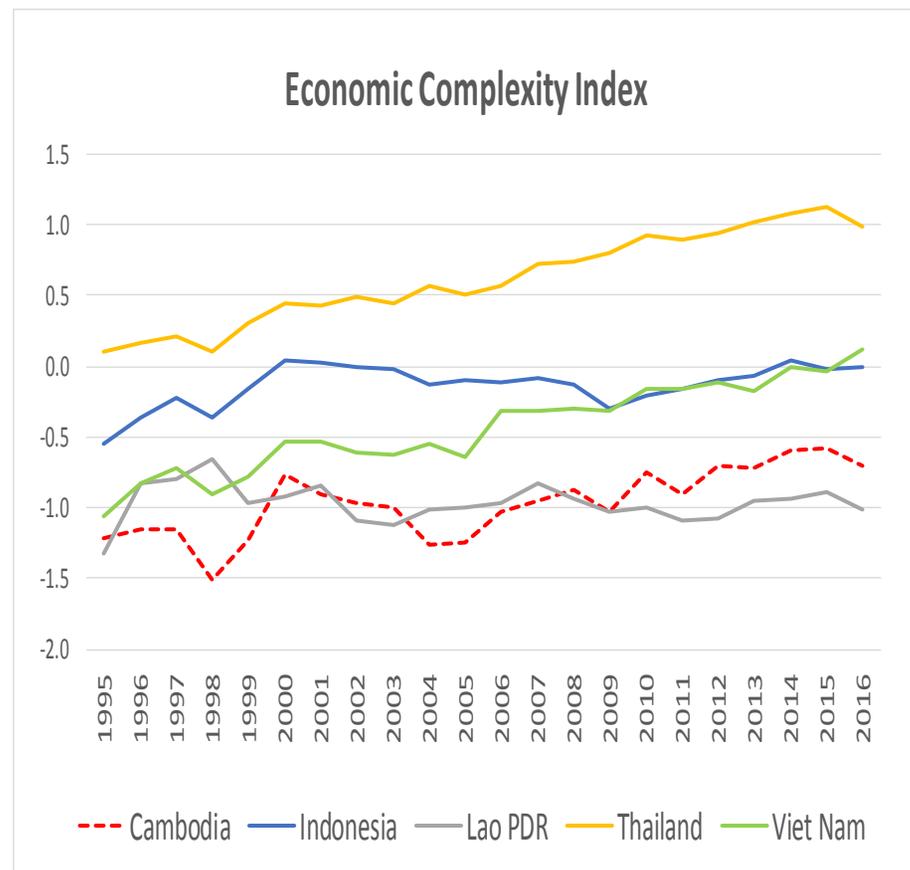
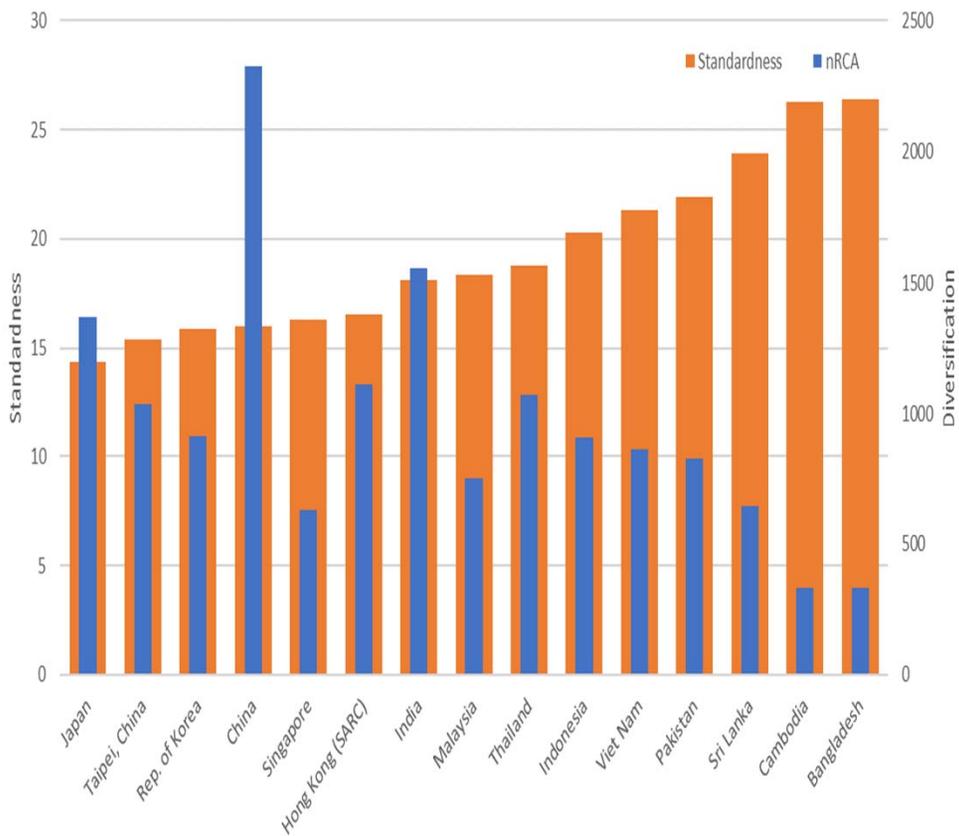
Employment (%)

	1993	2008	2017
Agriculture	80.5	73	26.7
Manufacturing	2.3	6.2	17.4 (2018)

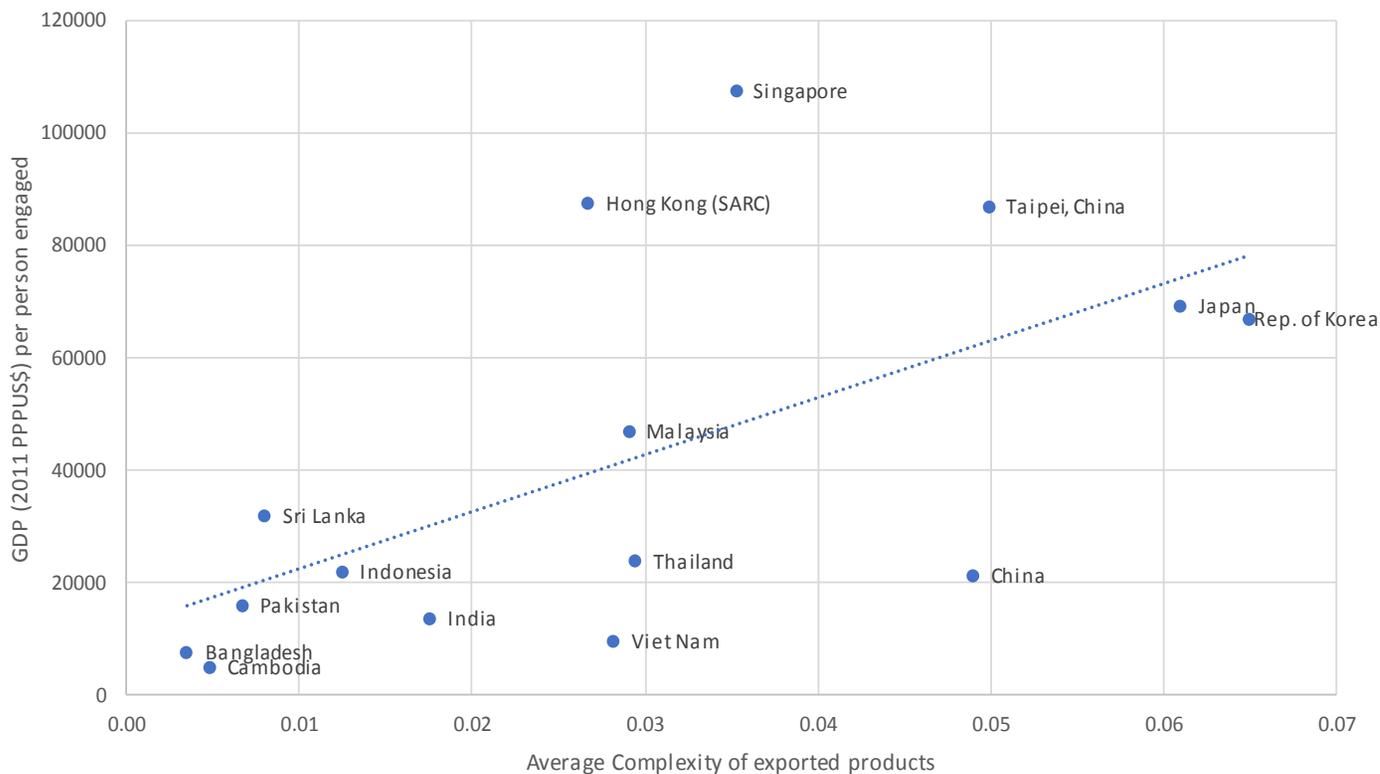


Sources: WDI, ILO, CEIC

Diversification, Standardness and Complexity



Average product complexity and labor productivity, 2014, selected Asian economies



Final notes on Cambodia

- The shift to services: most developing nations today are bypassing the stage of massive industrialization that all advanced economies went through. Largest employers are becoming non-tradable services activities. This is happening in Asia
- Latest growth projection by the Center for International Development for Cambodia (based on its capacity to undergo ST), for the next decade: 4.64% p.a. Consistent with Felipe et al. (2012): 4.50-5.31%
- When will it reach upper middle-income (\$7,250; 1990 \$)? Felipe et al. (2017) estimate that Cambodia turned lower middle-income in 2006, i.e., 12 years ago. The historical median number of years to traverse the lower middle-income segment (\$2,000-\$7,250; 1990 PPP \$) is 55 years, i.e., it has another 43 years from now. Today's per capita income is slightly over \$3,000 (1990 PPP). Realistically, in another 25-30 years.

Final notes on Cambodia

- **Can Cambodia emulate East Asia's successful cases of ST in the 20th century?**
 - Very different world
 - GVCs offer opportunities but they are not a panacea
 - Continue making efforts at diversifying and “choose” a few sectors to upgrade. This should be a joint effort between public and private sectors. Design a strategy



**Thank you for
your attention**

jfelipe@adb.org

