

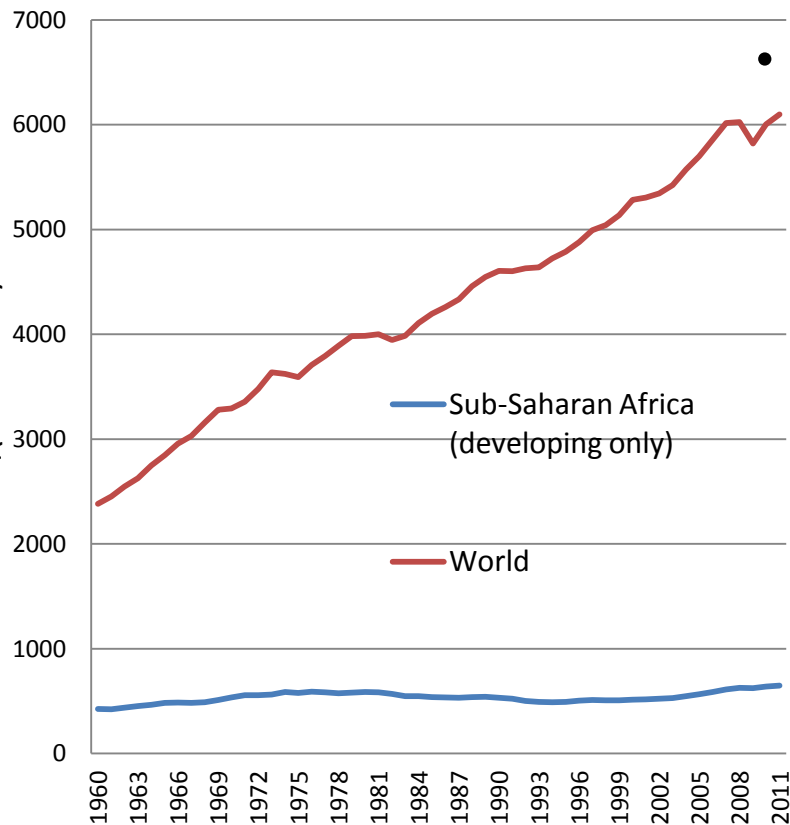
The Golden Age of Industrialization for Developing Countries in a Multipolar World: A New Structural Economics Perspective

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INTRODUCTION

Introduction

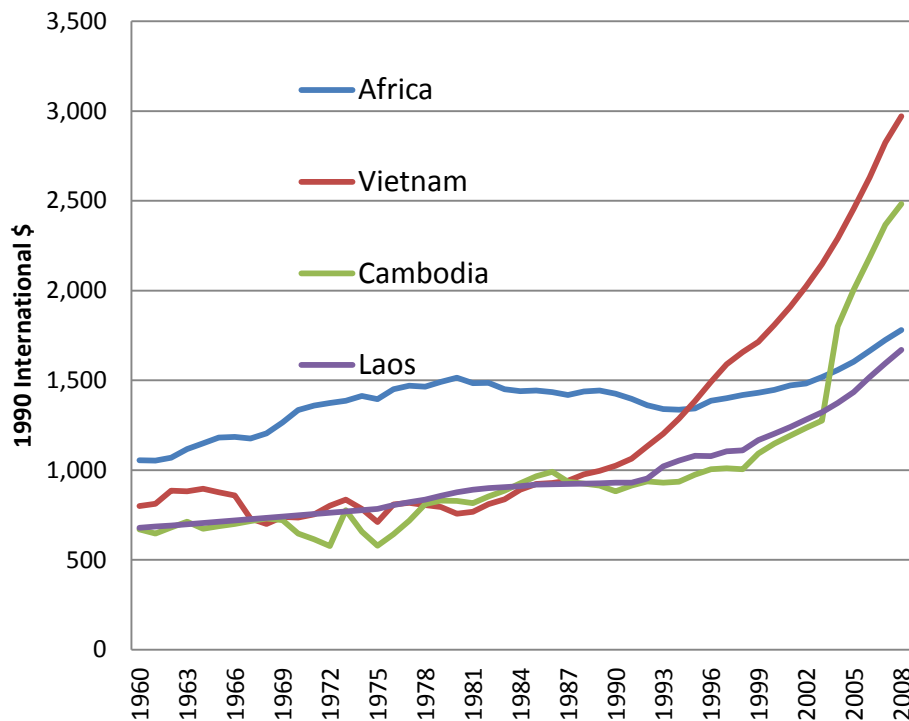
GDP Per Capita in Africa and the World



- After WWII, most formal colonies in the developing world gained political independence and started their industrialization to pursue their countries' modernization and prosperity.
- Between 1950-2008, among about 200 developing economies
 - Only 2 economies, Korea and Taiwan, moved up from low-income to middle-income and then to high-income status. China is likely to be the third one by 2020.
 - Only 13 economies, including Japan, four East Asian dragons, and 8 other European economies surrounding high-income Western Europe, moved from middle-income to high-income status.
 - Most other developing economies have been trapped either in low-income or middle-income status
 - SSA's per capita GDP declined from 29% of the world average in 1960 to 12% of the world average in 2012.

The Low/Middle-Income trap is not a Destiny

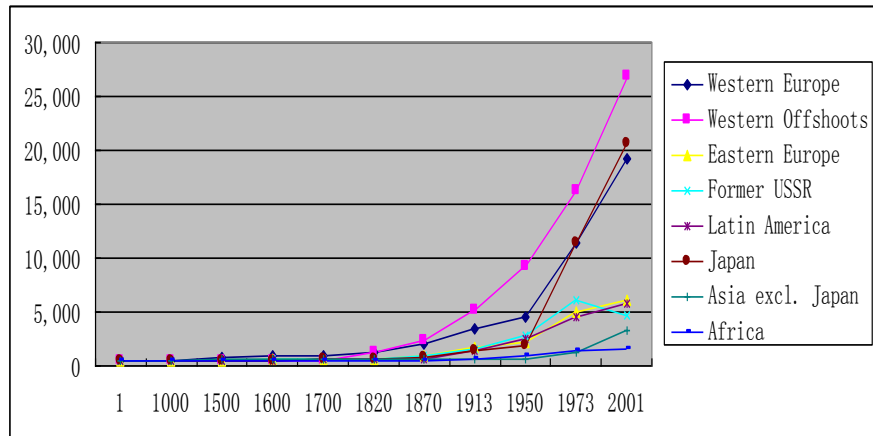
Per Capita GDP in Africa and Some Post Colonial Countries



- Countries can change their economic fate.
- Understanding the nature of growth is required for finding a solution to generate dynamic growth.

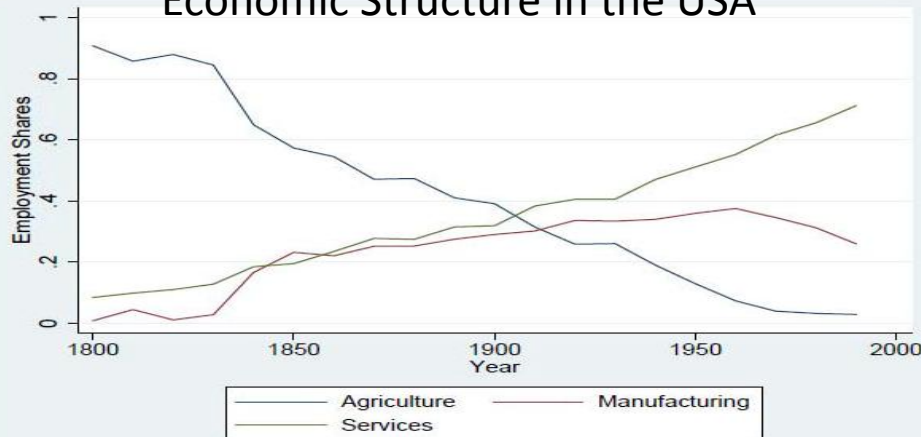
The Nature of Modern Economic Growth

Modern Economic Growth and Great Divergence



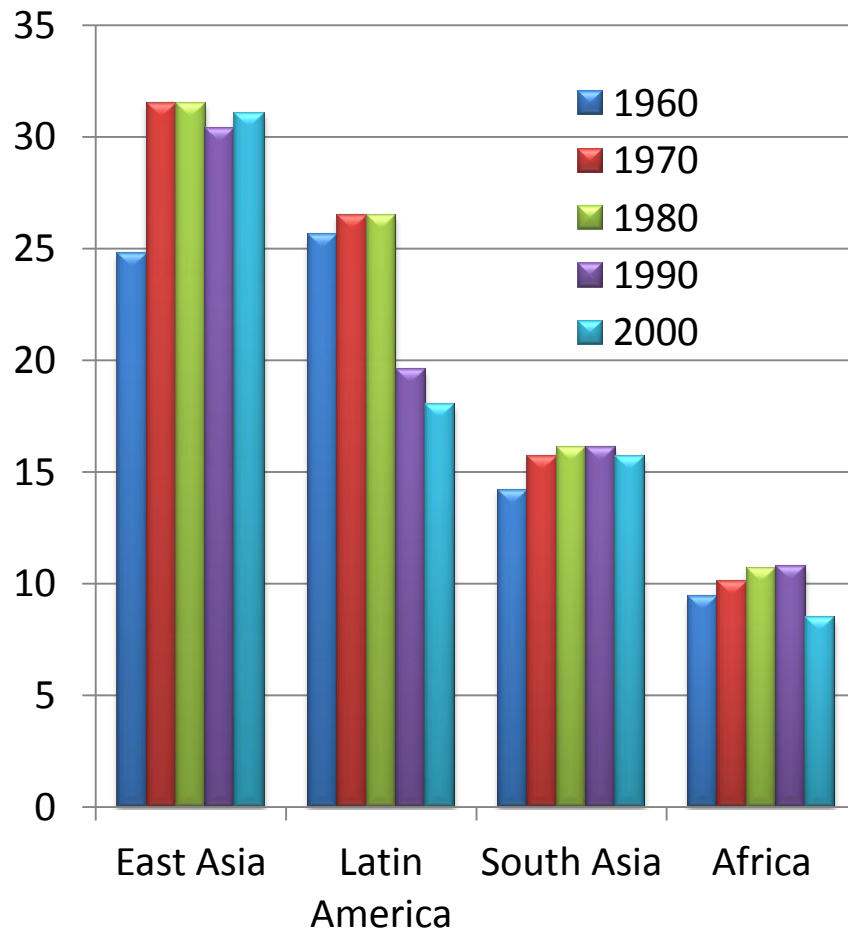
- Sustained income growth is a modern phenomenon
- The nature of modern income growth is a process of continuous structural changes in technologies and industries, which increase labor productivity, and in soft and hard infrastructure in the economy, which reduce transaction costs.

Economic Structure in the USA



Level of Industrialization in Africa is low and Declining

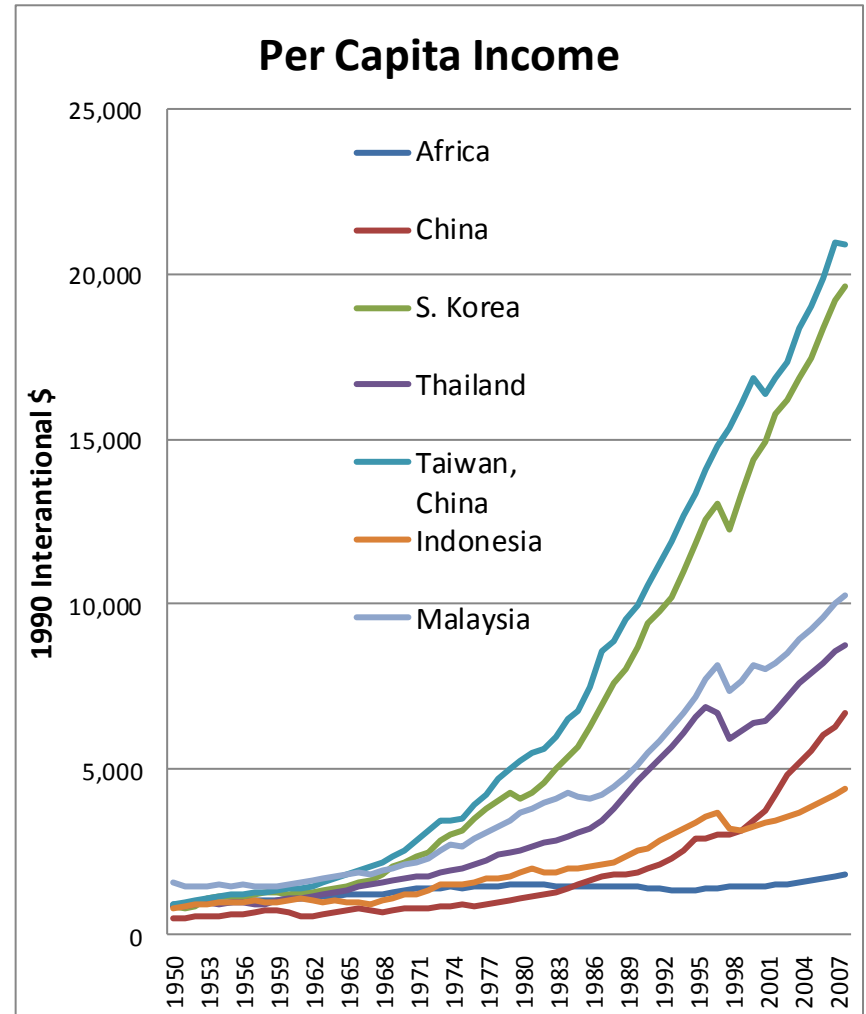
Share of Manufacturing in GDP (%)



- The manufacturing sector in Africa is small and declining
- The poor performance in Africa is reflected in its failure to change economic structure

Is there a recipe for success?

- Thirteen economies in the world achieved an average annual growth rate of 7 percent or more continuously for 25 or more years and became modern industrialized economies in post WWII . Several of them started at the same level of development as Africa in the 1950s
- The Growth Commission Report found that the ingredients for their successes are
 - **Openness and advantage of backwardness**
 - **Macro stability**
 - **High rates of saving & investment**
 - **Market mechanism**
 - **Committed, credible & capable government**
- Is there a recipe for success?



UNDERSTANDING THE PROCESS OF STRUCTURAL TRANSFORMATION

Evolution of Development Thinking

- The development policy, adopted by a country and international development institutions, is inevitably shaped by prevailing development thinking.
- Structuralism-the first wave of developing thinking in post-WWII
 - Aimed to support the development of large modern industries.
 - Focused on market failures and advised the government to directly intervene in resource allocation
 - After a short-period of investment-led growth, the countries following this strategy encountered stagnation and frequent crises
- Washington consensus-the second wave after 1970s
 - Aimed to introduce the modern market institutions and governance
 - Focused on government failures and proposed a structural adjustment program of privatization, marketization, and liberalization
 - The developing countries encountered “lost decades” in the 1980s and 1990s
- There is a need for rethinking development and policy and a call for a third wave of development thinking

The New Structural Economics

- **The main hypothesis.** Industrial structure is endogenous to endowment structure, which is given at any specific time and changeable over time
- **Endowments** at any specific time determine the economy's total budgets and relative factor prices at that time, which in turn determine that specific time's:
 - Comparative advantages of the economy, i.e., industries that have the lowest factor costs of production in the world
 - Optimal industrial structure (endogenous) is endogenous to endowment structure
- **Dynamics.** Income growth depends on:
 - Upgrading industrial structure, which in turn depends on
 - Upgrading of endowments
 - Improvements in “hard” and “soft” infrastructure to reduce transaction costs
- The low-income trap and the middle-income trap are both the result of a country's inability to have a dynamic structural change, which makes a developing country to grow faster than the high-income countries
- *Following comparative advantage (determined by the endowment structure) to develop industries is the best way to avoid income traps:*
 - *It will be most competitive, produce the largest surplus, have the fastest upgrading of endowment structure, and achieve the rapidest industrial upgrading and income growth*
 - *In this process, a developing country can have the latecomer advantages and thus have a faster technological innovation and industrial upgrading*

The Market and the State

- Firms maximize profits...choice of technology and industries based on relative factor prices...

Need for a competitive market system

- Industrial upgrading and diversification needs to:
 - Address externalities
 - Solve coordination problems

Need for a facilitating state

NSE's Growth Recipe and The Growth Commission's Stylized Facts

- The NSE's Growth Recipe: Following comparative advantage *Growth Report*
- Pre-conditions *Stylized Facts:*
 - Market economy #4
 - Facilitating State #5
- The results:
 - Openness and advantage of backwardness #1
 - Competitiveness and strong external as well as fiscal accounts: fewer home-grown crises and larger scope for countercyclical fiscal policies. #2
 - Large economic surplus and high returns to investment: high rate of savings and investment. #3

NSE and the Failure of Structuralism

- The structuralism advised the government to develop industries which were too far advanced compared to their level of development and went against their comparative advantages
- The firms were non-viable in competitive markets and required government policy supports for their initial investment and continuous operations.
- This led to rent-seeking, corruption, and political capture.

NSE and the Failure of Washington Consensus

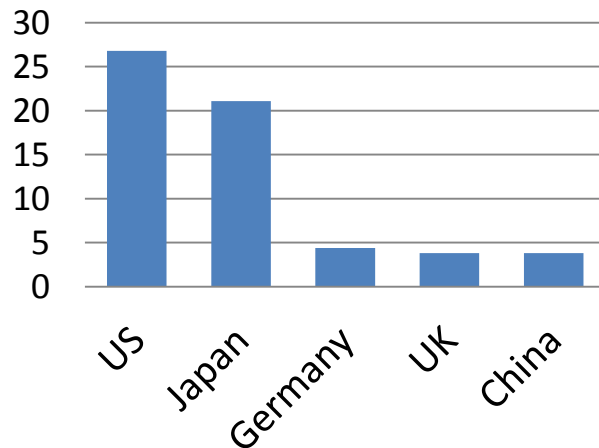
- All developing economies started with the existence of many nonviable firms in old priority sectors due to their previous comparative advantage-defying development strategy.
- The Washington consensus failed to recognize the distortions were endogenous in responding to the needs of protecting nonviable firms in the priority sectors and advised the government to eliminate all distortions immediately, which caused the collapse of old priority sectors.
- The Washington consensus also opposed the government to play a proactive role for facilitating the firms' entry to sectors that are consistent with the country's comparative advantages
- The dynamically growing transitional economies adopted a dual-track approach:
 - The government continued to provide transitional supports to nonviable firms in the old priority sectors and removes distortions only when firms in those sectors became viable or the sectors become very small
 - The government facilitated private firms' entry to sectors that were consistent with the country's comparative advantage and were repressed before the transition

Golden Opportunity for Industrialization in the Multipolar World

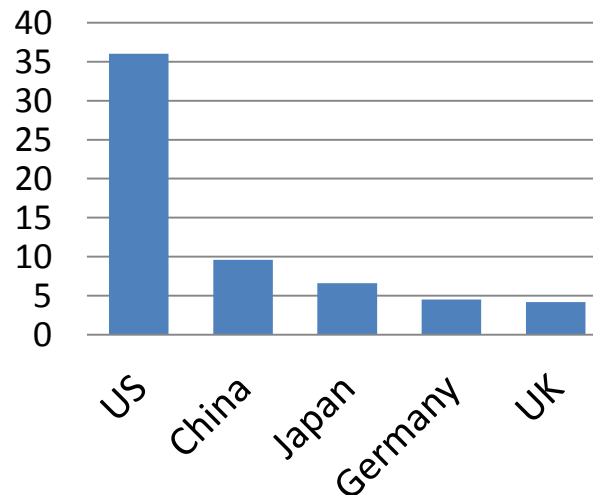
Emergence of a multi-polar growth world

Top 5 Contributors to World Growth by Decade (%)

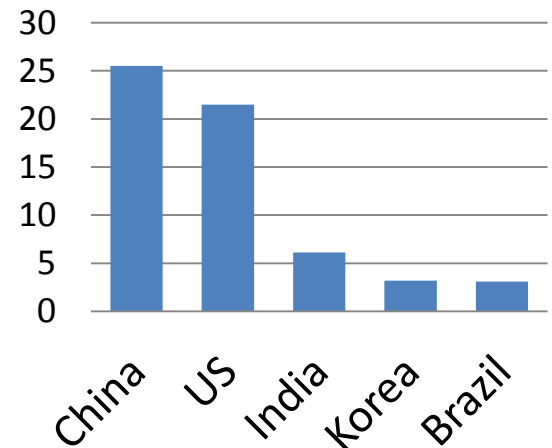
1980-1990



1990-2000

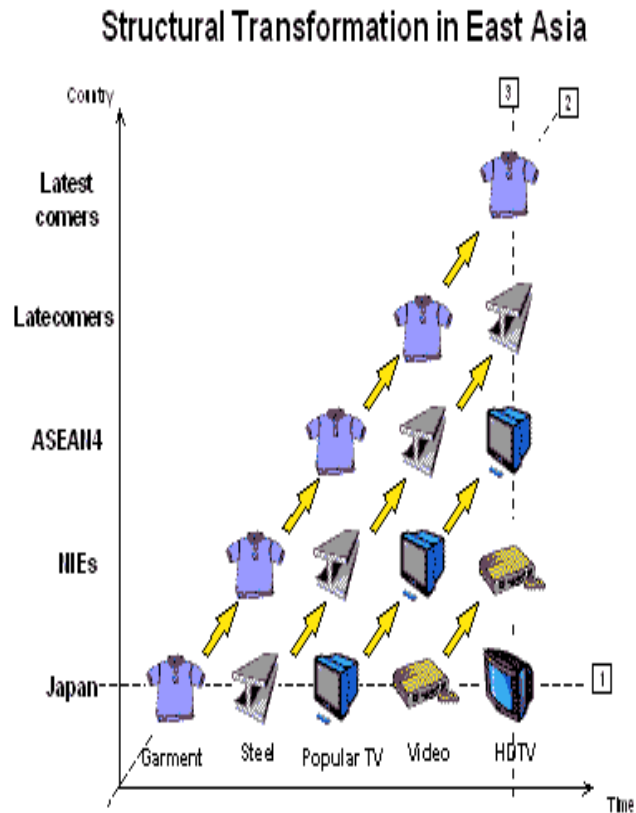


2000-2010



Now, three of the top five contributors to growth are emerging markets (MICs), and one is a newly industrialized country (NIC).

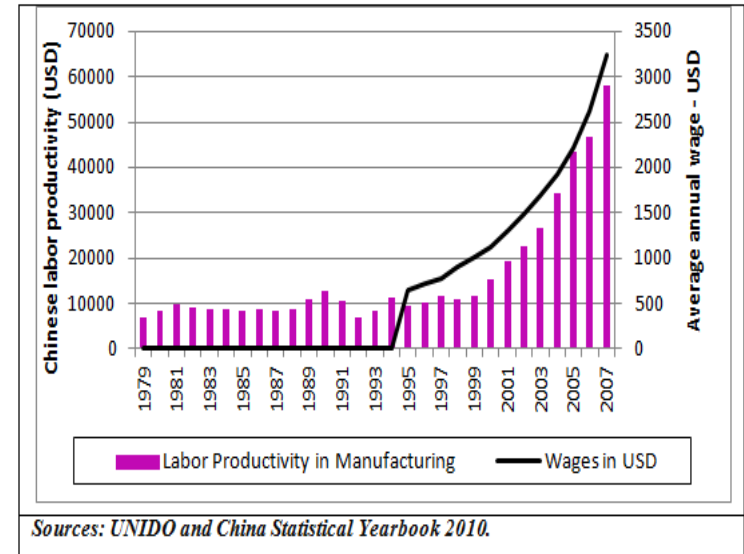
Industrialization and Flying Geese Pattern



- The successful newly industrialized economies in East Asia followed a flying geese pattern.
- The Flying Geese pattern has three dimensions.
 - A country moved from more labor-intensive industries to a more capital-intensive industries step by step according to changes in comparative advantage
 - When a country moved to a more capital-intensive industry, the more labor-intensive industry moved to other lower income countries
 - The congruence of capital-intensity with income-level among income level in the world

The Rise of China and opportunity of Industrialization for other countries

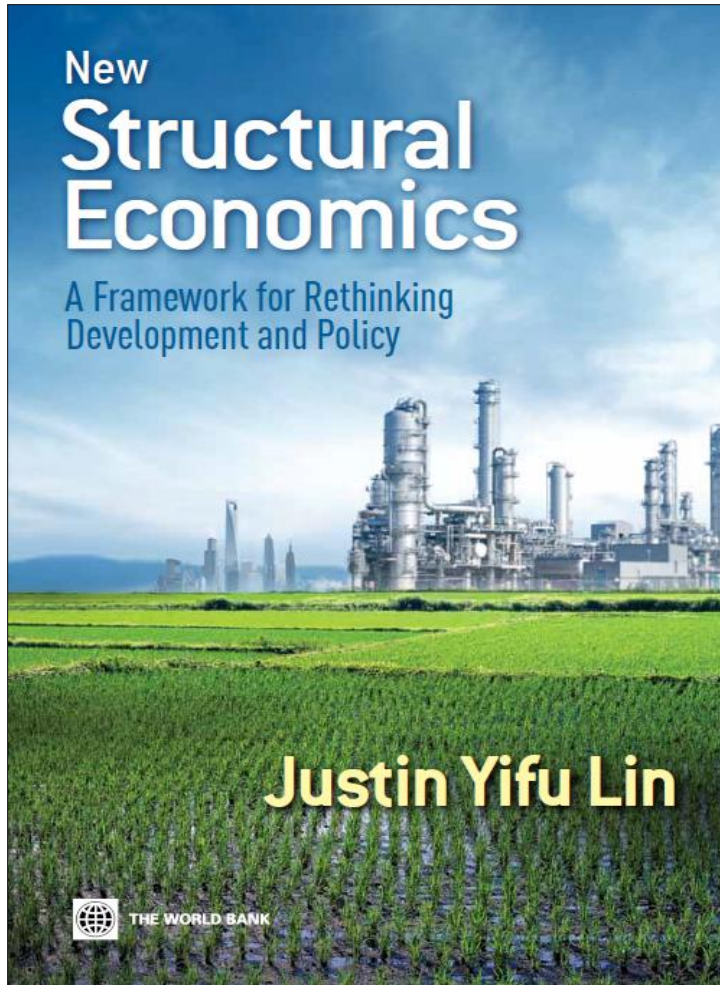
- China has absorbed the surplus labor. The wage increase in the coming years will induce China to move up the industrial ladder from the labor-intensive industries to more capital-intensive industries.
- With 85 million manufacturing jobs, China's upgrading to higher industries will leave a huge space for MANY low-income developing countries to enter a labor-intensive industrialization development phase. This new phenomenon can be referred as a leading dragon pattern.
- If India, Brazil, Indonesia and other large MICs continue their current pace of growth, a similar pattern will arise.



	year	GDP per capita, constant USD		Manufacturing		
		2000 USD	2005 USD, PPP	as % of Total Value Added	as % of Labor	employment in millions
China	2009	2206	6200	43%	17.7**	85
Japan	1960	5493	6976	35%	20**	9.7**
S.Korea	1982	3709	6123	25%	14.6	2.3
**In 1963						
*In 2002						18

Concluding Remarks

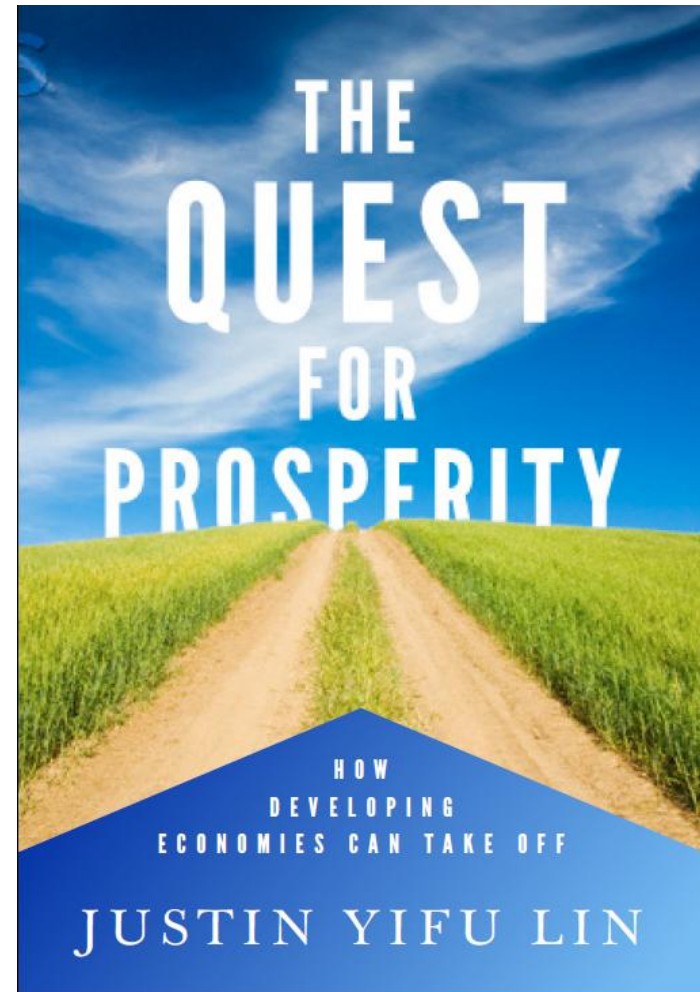
- Every developing country has the potential to grow dynamically for decades, and to become a middle-income or even a high-income country in one or two generations, as long as the government has the right policy framework to facilitate the development of the private sector along the line of the country's comparative advantages and tap into the latecomer advantages.
- The rise of China and other emerging market economies will open the golden opportunities of industrialization and dynamic growth in other developing countries, including those in Africa.



This book can be downloaded for free from the World Bank:

<http://go.worldbank.org/QZK6IM4GO>

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The book was published by the Princeton University Press in September 2012 and is available on Amazon.com now.