Economic Development and Industrial Policy of Korea
Implications for Serbian Economy

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Contents

Ⅰ. Introduction

- **Why government intervention?**
  - Government can help to remedy a sort of market failure via proactive steering of capital toward particular firms or sectors
  - Subsidies, favorable loan terms, assistance with coordination, export help, import protection, and public ownership
  - In 1962 government played a central role, while in 1982 government was considered to be main obstacle to development
- **Need industrial policy in the 21st century?**
  - After global crisis of 2008, the debates shift ① from '*whether* the governments should have active policies' to '*how* the requisite policies should be designed'; ② undervaluation index for their currencies is likely to substitute the industrial policy; ③ institutional innovation requires a pragmatic approach which avoids ideological lock-in
- **Getting intervention right**
  - successful economies have always relied on government policies that promote growth by accelerating structural transformation.

Ⅱ. Korean Experiences

- Korea in the past years
  - Per capita GDP: \$87 (1960) → \$26,305 (2013) (302-fold)
  - Exports: \$10 million (1960) → \$557.3 billion (2013, 6th in the World): (46,441-fold)

	1971-1980	1981-1990	1991-2000	2001-2010
Real GDP growth rate	**9.0**	**9.7**	**6.5**	**4.2**
Potential GDP growth rate	9.9	8.5	6.6	4.7
Labor Input	3.1	2.4	1.7	0.5
Capital input	2.2	3.3	1.9	1.6
Total Productivity	**4.6**	**2.8**	**3.0**	**2.6**

Ⅱ-1. Changes of Korea's Industrial Policies

Import Substitution (before 1960)

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Promoting Export-oriented Light Industry (1961-1972)

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Promoting Heavy-Chemical Industry (1973-1979)

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Industrial Rationalization (1980-1990)

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Promoting High-Tech Industry (1987-1990s)

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Exploring New Growth Engine Industries (2000s ~ Present)

Ⅱ-2. Government Intervention for Export Drive (1960s-70s)

Korea turned to Export Drive responding to the shortages of foreign currency resulting from the decrease of Foreign Aid, mainly from the US, since the early 1960s

Export Target Each Year and Strong Drive

- Incentives and Awards

kotra
Korea Trade-Investment Promotion Agency

Establishment of KOTRA (1962)

- Provided overseas market information and assistance to exporting SMEs

KITA
KOREA INTERNATIONAL TRADE ASSOCIATION

Role of KITA not just as the Conventional Trader's Society but as an Instrument to promote exports -

- Membership fee was obligatory (semi-tax)

DAEWOO INTERNATIONAL

Establishment of General Trading Companies by the Trade Law

- o function as the windows (agency) for exports of SMEs

☞ Government Intervention for Export Drive

The Expanded Meeting for Export Promotion

Presided by the President and attended by the Ministers and Entrepreneurs

Trade Tower Awarding Ceremony
Annual Trade Day

Ⅱ-3. Major Tools of Export Promotion Policies (1960s-70s)

Systemic Assistance (incentives) to Exporters

- Allowance for retaining foreign exchange earnings and Preferential Exchange rates
- Exemption from import controls and tariffs
- Financial support for exporters at preferential interest rates
- Tax concessions and favor for key industrial firms
- National Awards by the President

Manpower Training

- Establishment of vocational schools at various levels (high schools, colleges, universities)
- Establishment of Trade Department in Major Universities
- Establishment of Foreign language training center

Ⅱ-4. Industrial Upgrading and Catch-Up (1980-1990s)

Challenges

- Korea's exports have grown very fast, which provoked severe challenges from inside and outside
- Due to the rise of income, labor-intensive low price goods lost competitiveness
- Advanced countries have introduced protective measures

Catch Up

- Korean government and business sectors have promptly responded to the new challenges and tried to explore new sources of competitiveness
- Industrial upgrading has been the key to continued growth of exports and the whole economy

Ⅱ-5. Changes in Major Industries

R&D/GDP Ratio

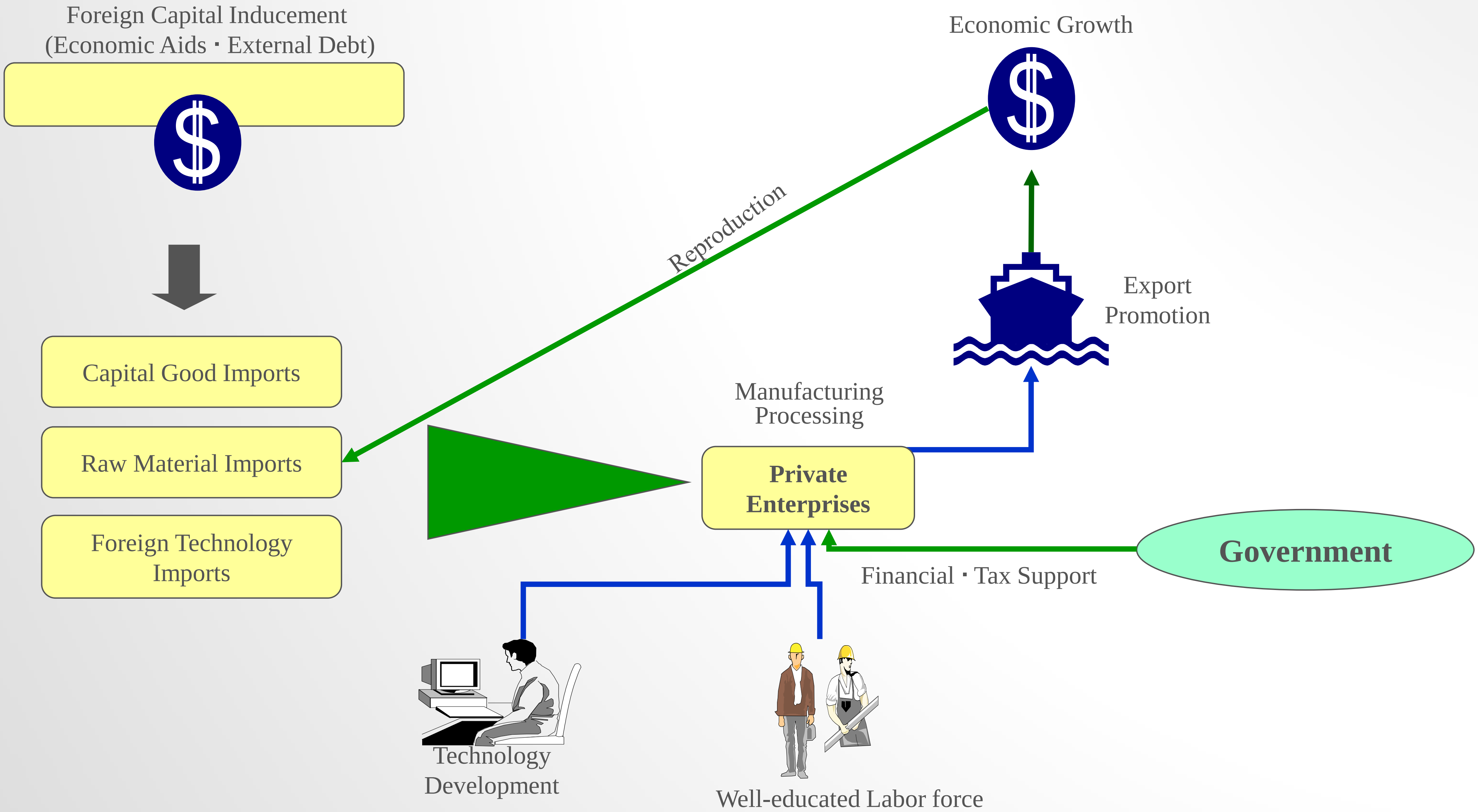
0.5 (1965) — 0.56 (1980) — 2.65 (2000)

Labor-Intensive	Capital-Intensive	Technology-Intensive
(textiles, footwear)	(shipbuilding, steel)	(automobile, semiconductor)

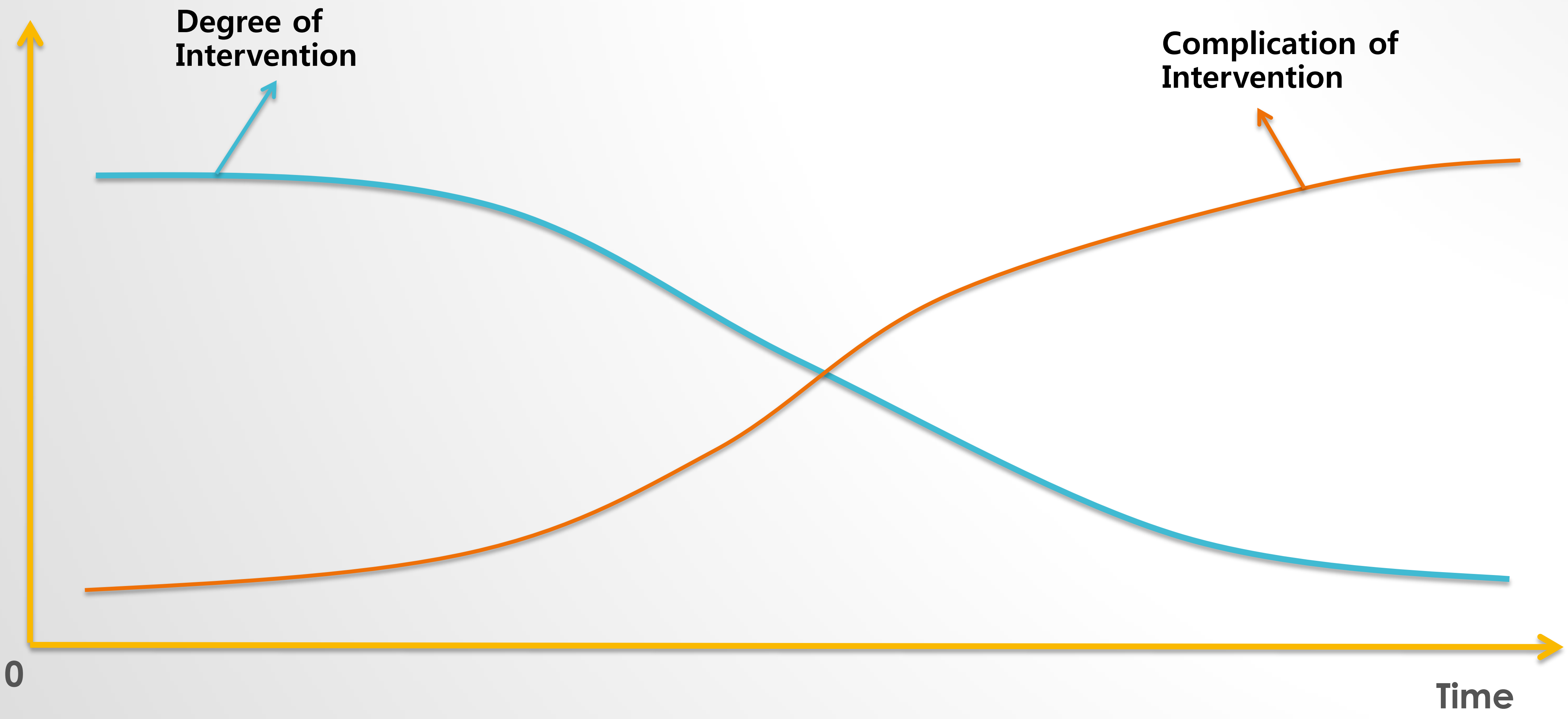
Trends of 5 Leading Export Items of Korea

1961	1970	1980	1990	2000	2005	2010
Iron ore	textile	clothing	clothing	semiconductor	semiconductor	ship
Tungsten	multi-tube	steel plate	semiconductor	computer	automobiles	semiconductor
Raw-Silk	wig	footwear	footwear	automobiles	Portable phone	Display
Anthracite	iron ore	ship	video Equipment	petroleum products	ship	Automobiles
Squid	electronics	audio equipment	ship	ship	petroleum products	petrochemicals

☞ Outward-looking Development Strategy



☞ Degree & Complication of Intervention

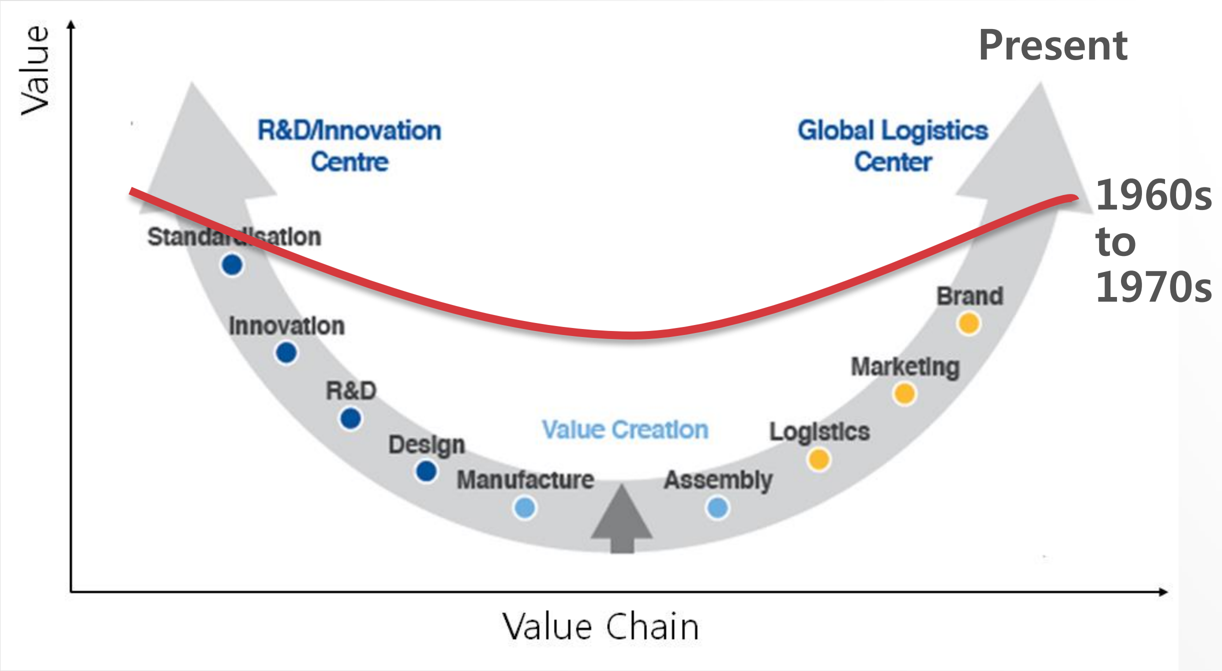


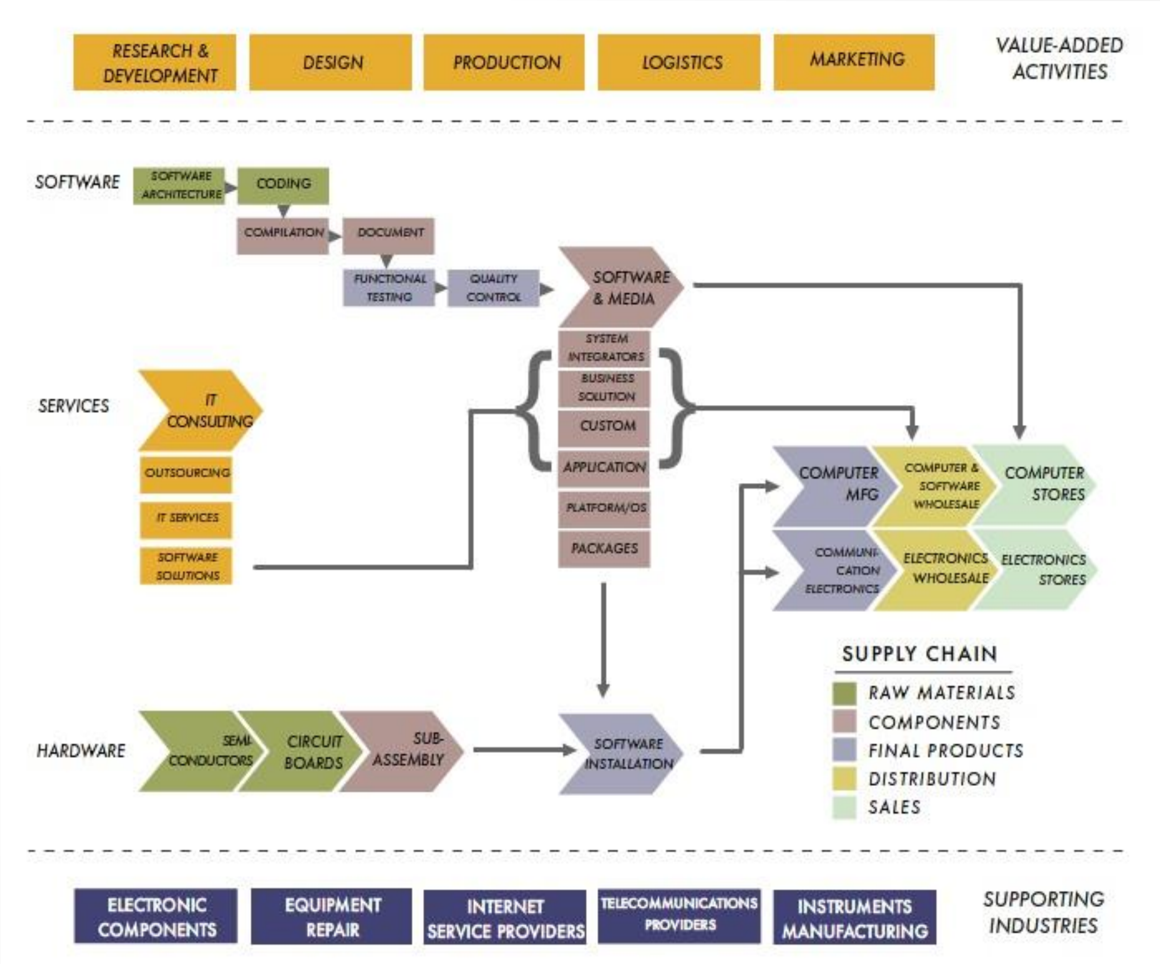
☞ Role of Korean General Trading Company

	Mechanism	Results
Promotion of Trade	Trade Information Channel, Overseas market exploitation	Link to Global Value Chain
Enhancement of Production System	Production and Investment for Global Competition	Acquisition of Technology by technology import or by R&D
Management of Foreign Exchanges	Export earnings for import of element of production system	Secure foreign reserves and integration of capital for Industrialization
Support SMEs	Networking with SMEs	Increase of Industrial backward and forward effect
Regional Development	Regional based General Trading State Company	Globalization of regional economy

☞ Linking Global Value Chain

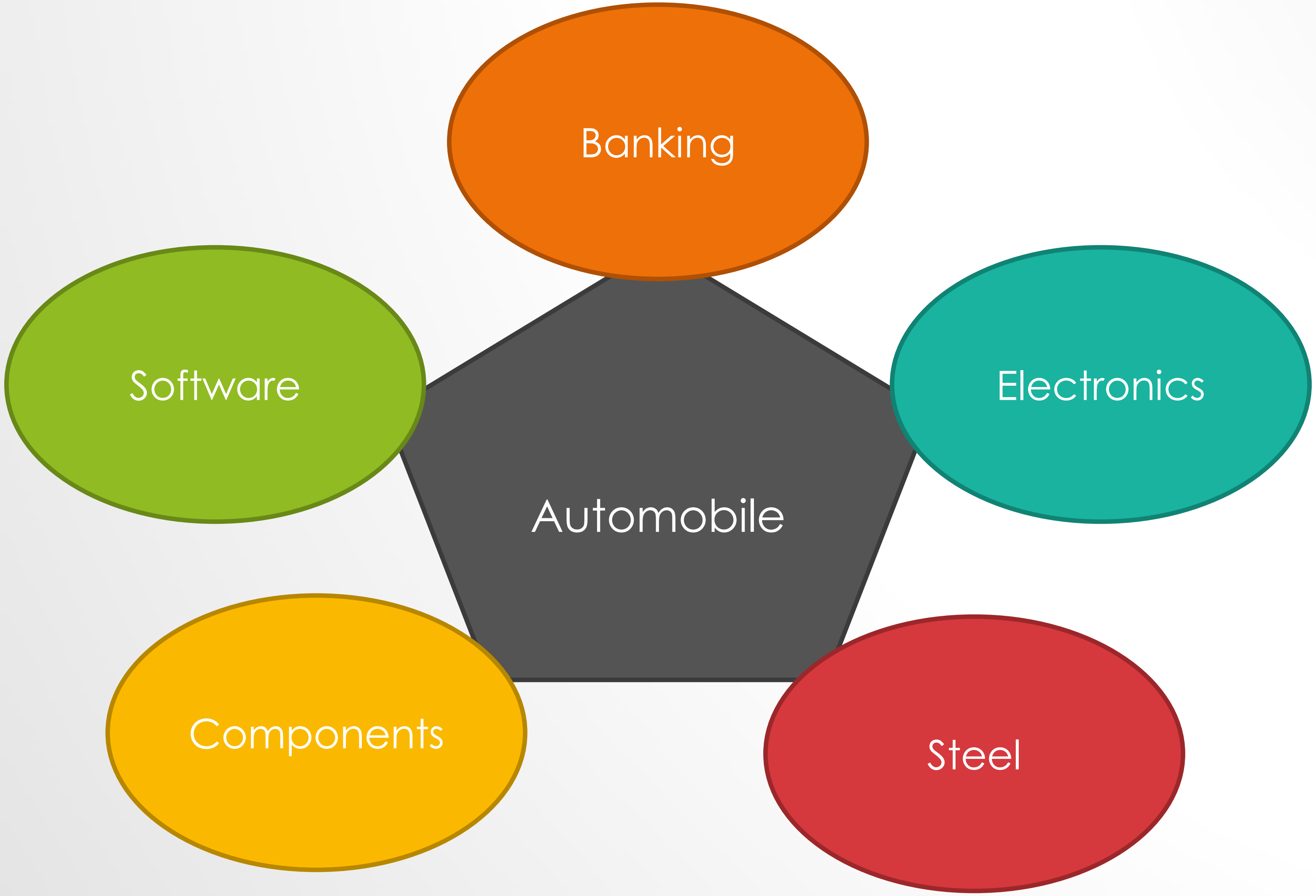
A value chain, the full range of activities of the firm, should be linked to global production system.





Source: CGGC (http://www.cggc.duke.edu), More Information: Global Value Chains (www.globalvaluechains.org)

☞ Linkages with relevant sectors *matters*



Ⅱ-6. New Challenges and Changing Policies

Increase of Income and Improved Standard of Life

- Increase of Labor Cost and Rent
  - Production Automation and Outward FDI
- Changes of Life style and Labor attitude in parallel with Upgraded Education level
  - Imports of foreign labor
- Private sector-led industrial structure and Democratization
  - Direct government intervention difficult

Intensified Competition in the Global Market

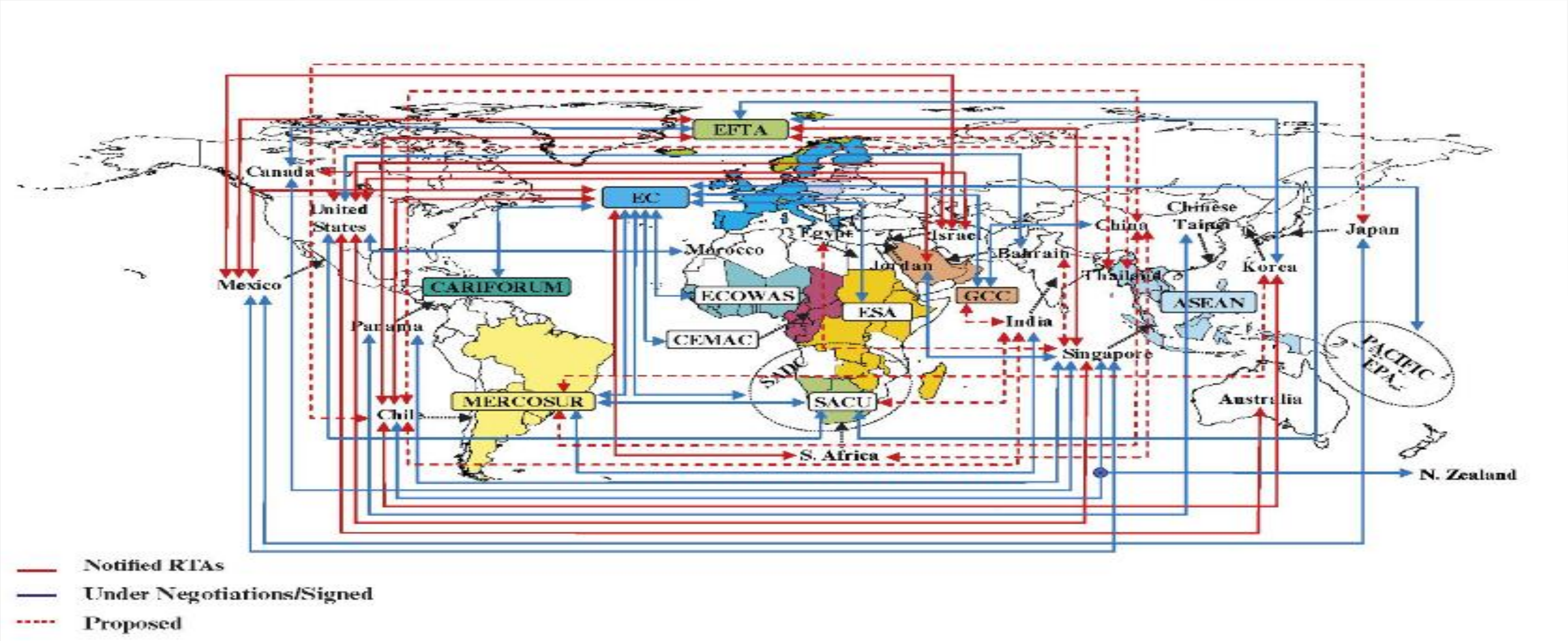
- Innovation and Technology driven new products as imperative
  - Increase of R&D

WTO regulations and New Global Standards

- Direct subsidies and financial assistance impossible
  - Insurance, export credit, project financing expanded

☞ Active Trade Agreements

Greater trade integration is associated with faster growth



Ⅲ. Lessons from Korean Experiences

- Collaboration between government ad the private sectors
  - There will be the deliberation councils, supplier development forums, investment advisory councils, sectoral round-tables, or private-public venture funds
  - These collaborations aims to elicit information about investment opportunities and bottlenecks.
- Need to rely on both carrots and sticks
  - Government incentives need to be temporary and based on performance.
  - Incentives can raise consumer prices and bottle up resources in unproductive activities.
- Avoid abuse and capture
  - Industrial policy aims to serve society at large, not the bureaucrats who administer it or the businesses that receive the incentives.

Ⅲ-1. A Suggested Framework of Industry Promotion Strategy

Long-term Goal
Sustainable Economic Growth via Industrialization

Promotion of Strategic Sectors

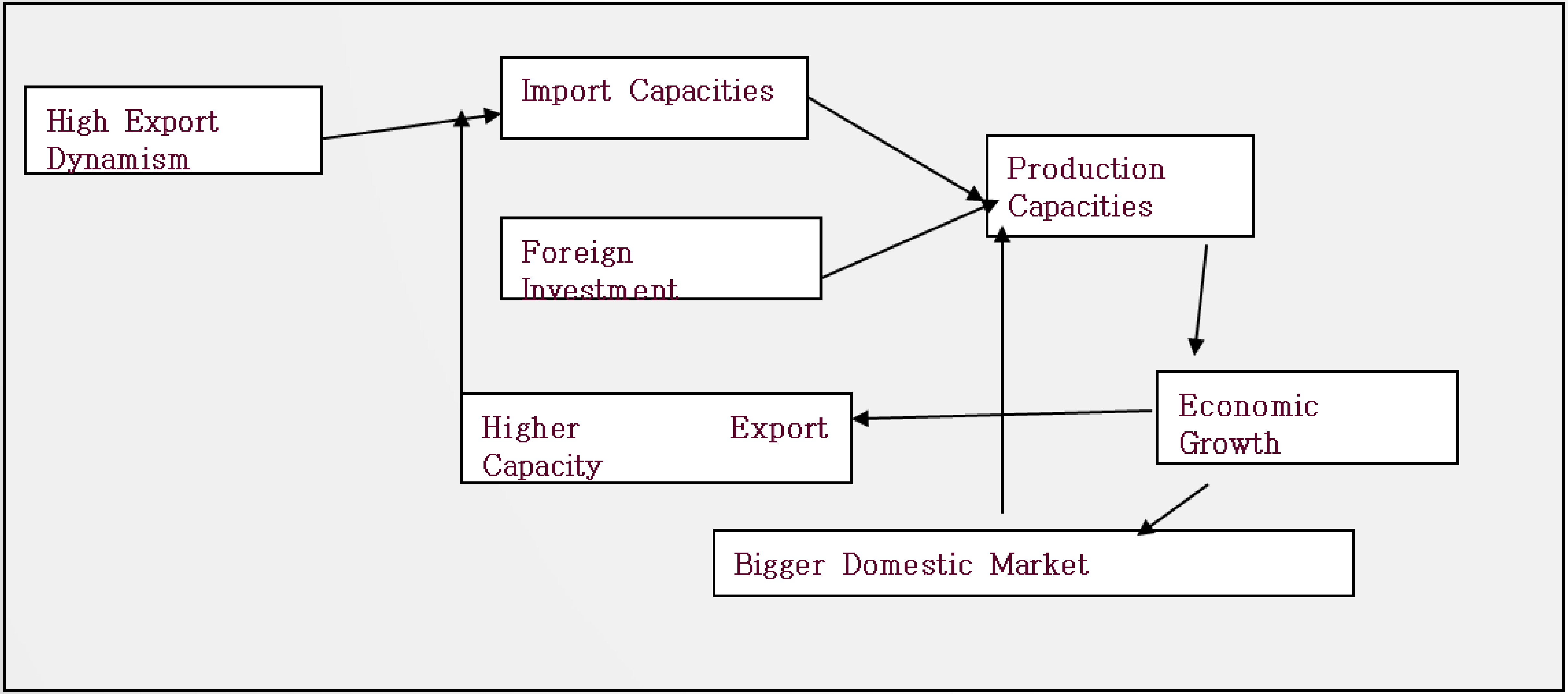
- Automotive Industry
- Textile Industry
- Rubber Manufacturing

Policy Measures

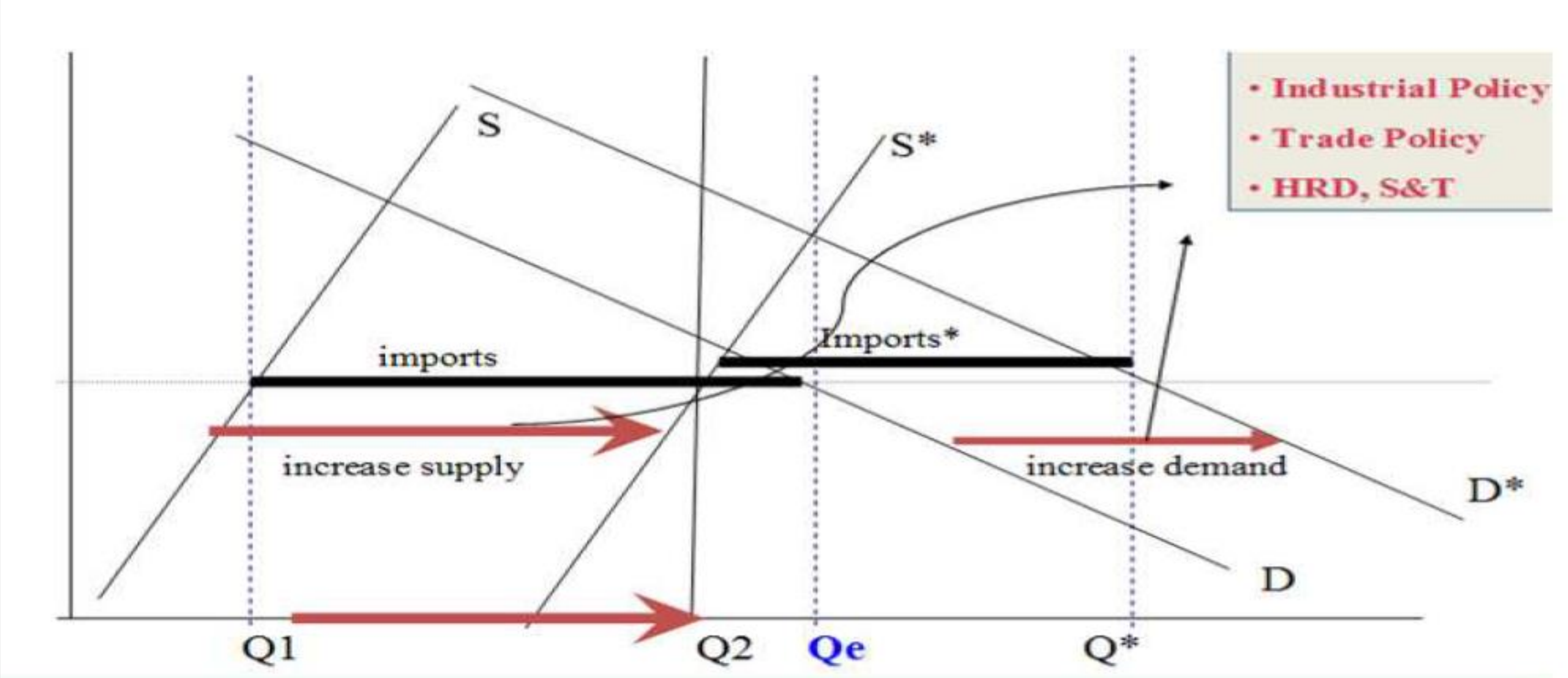
- Resource Mobilization
- Public Investment Policy
- Assistance to Private Sector
- HRD
- Institutional Infrastructure

- Specific Schedule for Implementation
- Set up goals of measure implementation
- Assessment and Evaluation Mechanism
- Monitoring System

☞ Why we export?



☞ Market Failure and Government Intervention

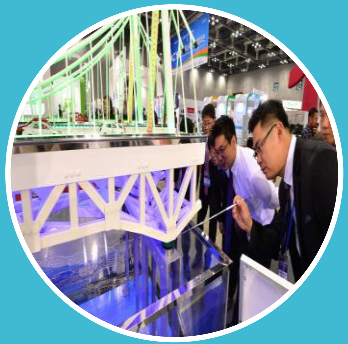


Source: Han, Hongyul, et.al(2012)

☞ Major Factors for Catch-Up

Two Players

- Private Companies
- Government and Its Agency for development



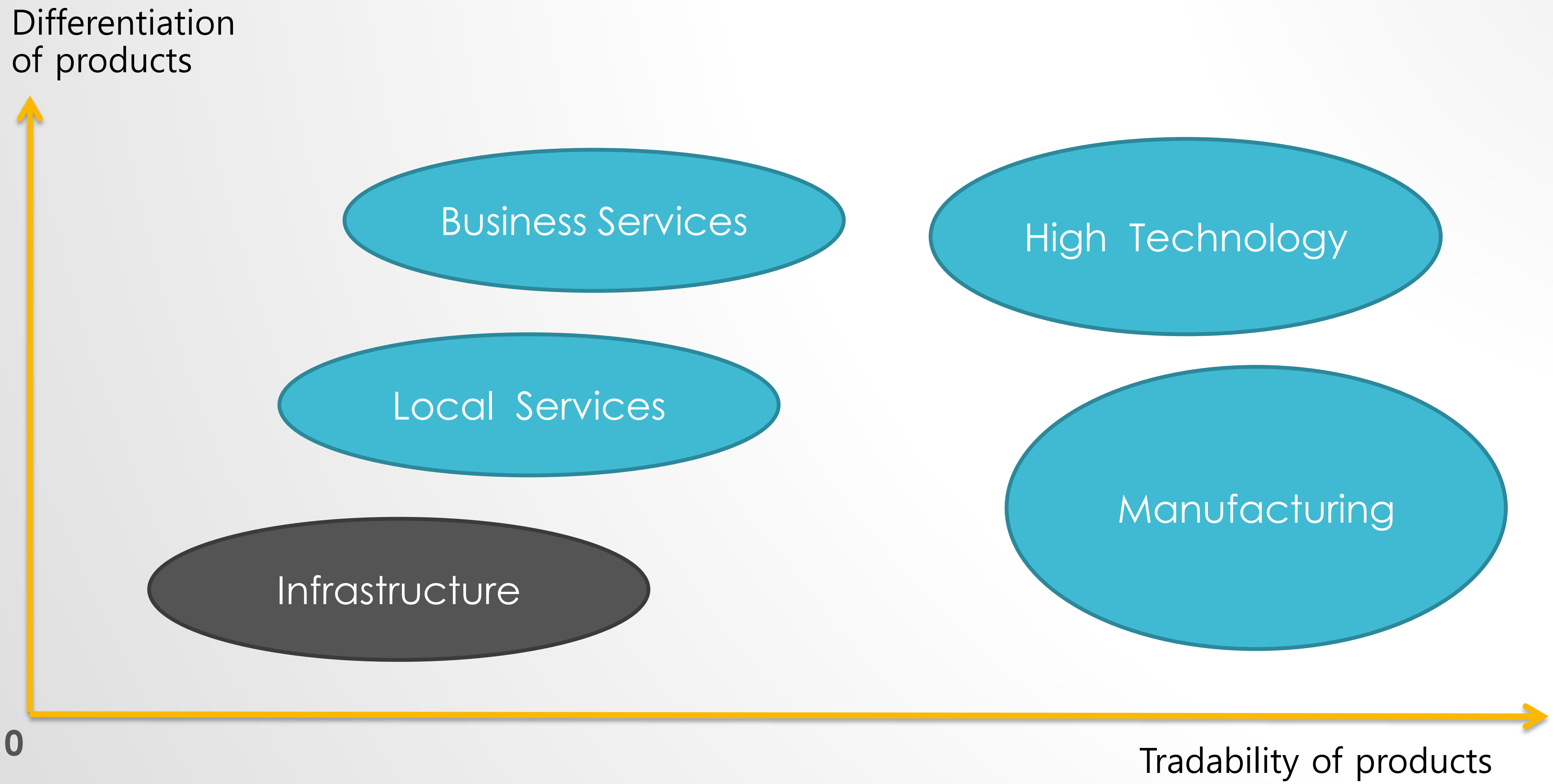
Capacity Building Process (Government and private companies)

- Access to overseas information
- Outward export strategy (regulation and learning-by-doing)
- Core technology development and import substitution
- Industry Upgrading based on the dynamic comparative advantages

Institutional Arrangement for Capacity Enforcement

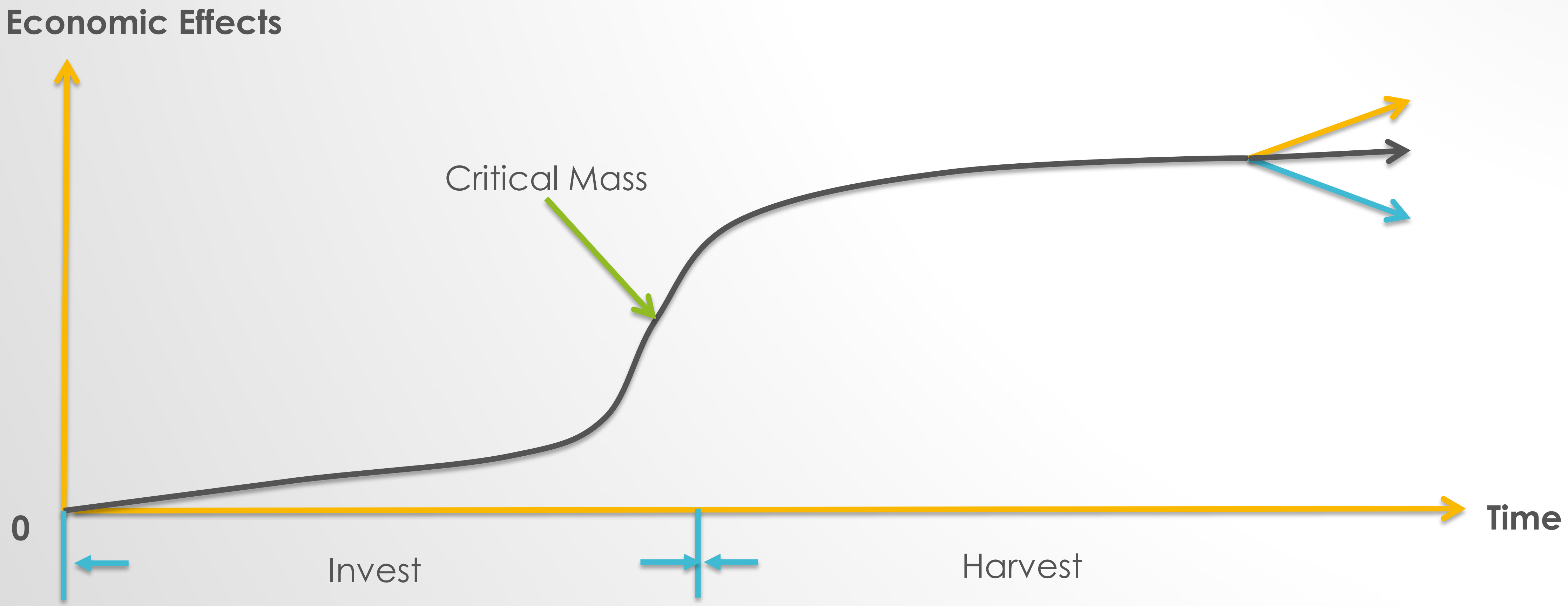
- Provide Public Education and HRD
- Establish Financial system for Catch-Up
- Maintain Macroeconomic Stability
- Reduce non-market intervention gradually

☞ Selection of Sectors

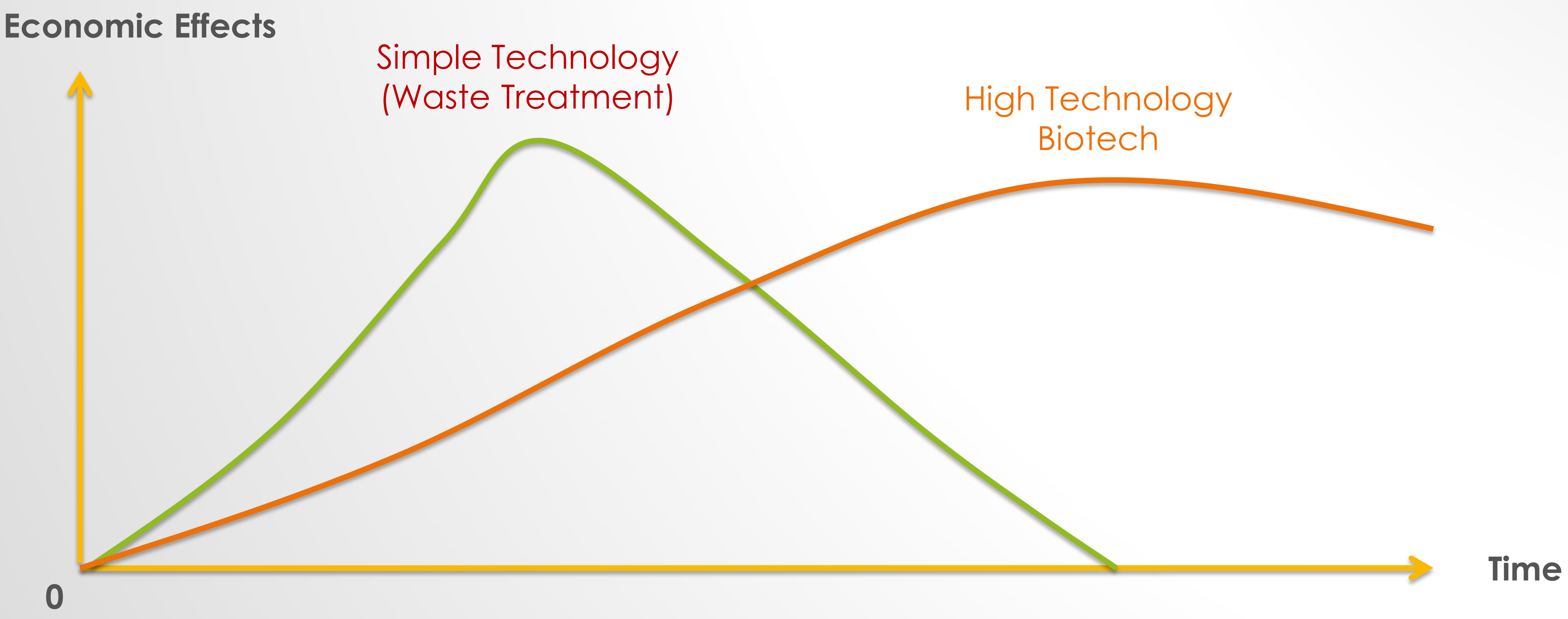


☞ Economic Effects of Innovation and Industrial Policy

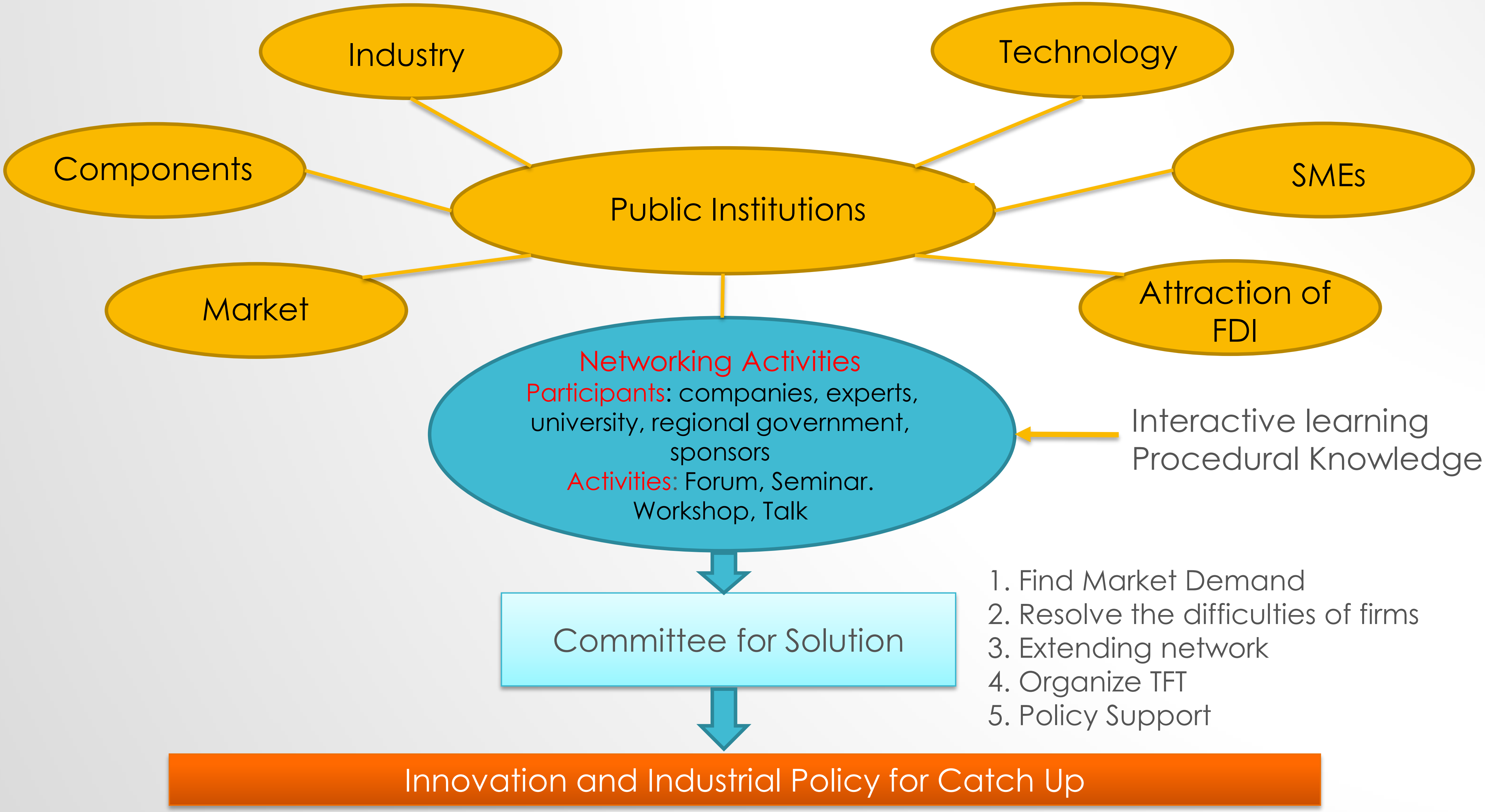
Changes occur slowly at first while producers, designers, distributors and consumers engage in feedback and learning processes. This is usually a cumulative process and critical mass builds up over time as clusters of innovations emerge in new economic sectors.



☞ Time Lag Effects of Innovation and Industrial Policy



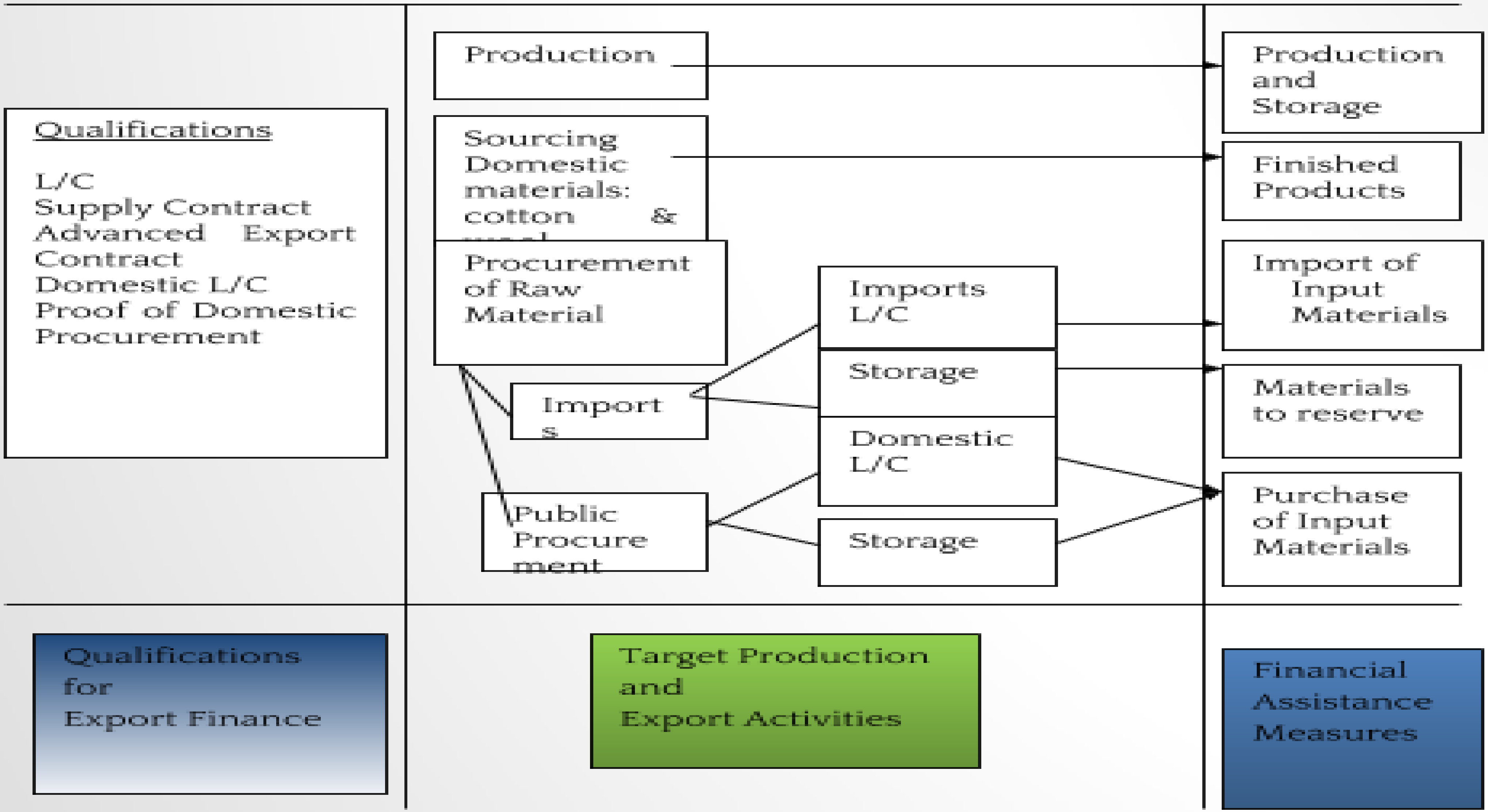
☞ Public-Private Partnership for Catch Up



Ⅲ-2. Resource Mobilization for Industrial Policy

- Any industrial policy requires various types of resources; investment capital, human resources, management skill and policy expertise and market mechanism to support efficient allocation of resources.
  - As industrial policy is a kind of 'big push' approach, a new institution of development bank need to take the responsibility of mobilizing financial resources and channeling them into the strategic industries.
  - Governments of developing countries need to involve in the allocation of limited resources into the productive sectors they want to promote.
    - Establishment of a Public Corporation
    - Creation of Development Financial Institutions such as Serbian Development Bank and Serbian EXIM Bank
    - Establishment of a public development bank should be considered as most newly industrialized countries did.

☞ Functional Structure of a typical EXIM Bank



Ⅳ. Conclusion

- Openness and export promotion is not *panacea*
  - Developing countries simply resorted to devaluation or standard trade liberalization
  - However, there are numerous cases of macro-oriented reform bringing immediate recovery and eventually another round of crisis.
- Government interventions should be combined with capacity-enhancing elements (technology and education)
  - One of the most important elements of Korea's success was the emphasis on capability and technological development.
  - Changes in export structure are the continuous improvement of firm-level capabilities
- The roles of the developmental agencies
  - Agencies are needed to guide and coordinate the whole process while the goal of development is sustainable economic growth via enhancing the capabilities of private companies.

Q & A