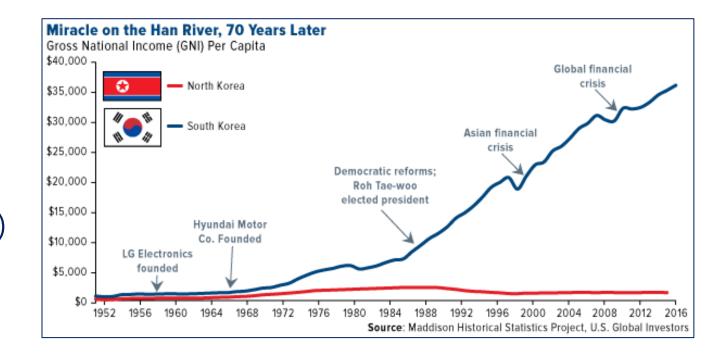


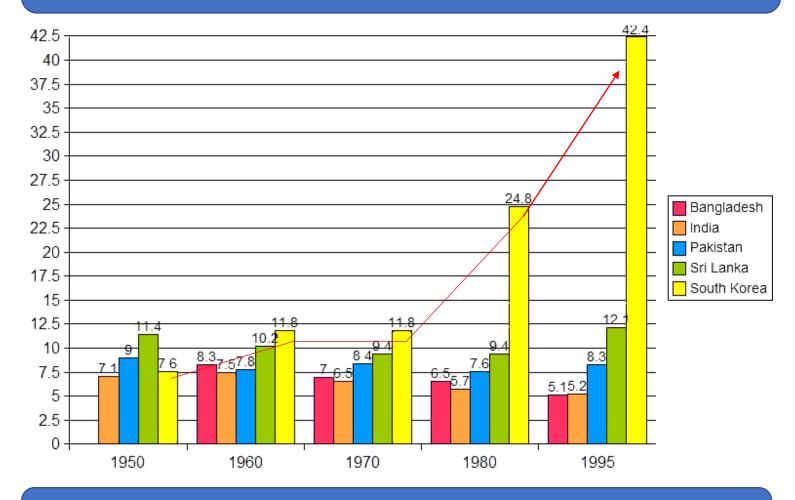
#### Lesson Plan

- South Korea's Economic Miracle?
  - What were the main drivers?

- Geopolitics Important or not?
- Current Northeast Asia + (global)
- Discussion Semiconductor (Korea's Dilemma)



#### 1. How can we understand economic miracle of South Korea?



Per Capita GDP of Asian Economies as a Percentage of US GDP, 1950-1995, Hossain et al., 1999



#### K-Series Boom

South Korea's five leading export items and export amounts

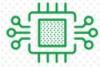
[Unit: USD 1 million, MTI 3 / Korea International Trade Association (KITA), 2019]

93,930

43,036

Semiconductors

Cars





40,691

22,535

20,657

Petroleum products

**Automotive parts** 

Flat panel display and sensors





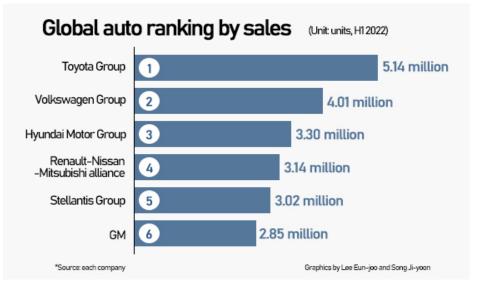












#### 2. Main Drivers of S. Korea's Miracle

#### Several factors have been suggested:

- 1) Japanese colonial period (Bruce Cumings 'Institutional template')
- 2) Alliance with the United States (U.S. foreign aid & access to U.S. market) Cold War
- 3) Pilot agency (Economic Planning Board) & Its economic and industrial policies (e.g., Import substitute, national grants to selected industries, a series of 5-year economic development planning, 1962-1982).
- 4) Competent government administration and public bureaucracy
- 5) High-level of savings
- 6) Diligent workforce and frugal culture / cheap wages
- 7) Political regime

# Case Study – the Development of Ulsan (No.1 Industrial City in Korea)

Different Explanations on South Korea's Economic Miracle

# Ulsan as a Leading Industrial City 📤









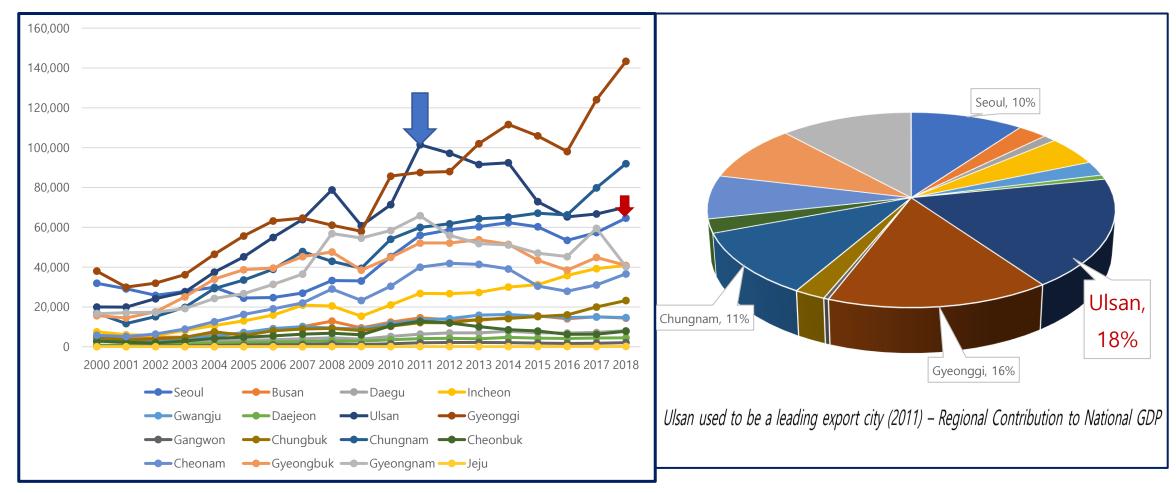






- Ulsan has become arguably one of the most industrialized area in very short period of time (often not captured in Global City theory as Ulsan does not have 'international finance center' Jacobs, 2011)
- Three major industrial sectors: Automobiles + shipbuilding (more than 60% of employment), and Petrochemicals.
- Often called 'the Hyundai City' home to the largest automobile assembly plant and the largest shipyard in the world (Hyundai Motor Company; Hyundai Heavy Industries).
- Petroleum (2<sup>nd</sup> largest combined oil refinery, SK Energy, S-Oil), Petrochemical, Lithium-Ion battery, etc.
- Highest GDP per capital (USD 65,000, 2017) in Korea

#### Economic Status of the City



Regional Export Total (2000-2018), Unit: Million USD

# Ulsan as a product of "state-led Industrialization" – a dominant view (1)

- **Developmental State (DS) theory** the state's leading role to stimulate the industrialization in East Asia and Japan during the postwar period (e.g., Johnson, 1982; Amsden, 1989; Woo, 1991)
- <u>Relevant government bodies</u> followed various industrial and fiscal policies such as subsidies, tariff protection, nurtured selected industries, etc. *with the objective of controlling the development of chosen productive industries in the economy.*
- <u>Varieties of state-intervention</u> ('governed market,' by Robert Wade, 1990) The government's aggressive orchestration of the activities of private firms in different ways (e.g., *leading the market* (small vs. big fellowship), *following the market* methods).
- Role of state-intervention in shifting industrial focus from labor intensive to heavy-chemicals (1970s, Korea): selected 7 areas (steel, shipbuilding, electronics, petroleum, chemical, etc.).



# (e.g.) Automobile Industry in Ulsan

- By the Cabinet Order 403 (1962) Ulsan was designated as a *special industrial district*.
- For automobile industry public enterprise was established first (assembly plant for Nissan)
- State support: Tight import control on finished vehicles, duty-free import of components, and tax-exemption for the producers.
- In 1973, by the Heavy and Chemical Industry Plan (HCI), automobile became the priority the government encouraged domestic firms to go into kit assembly of cars as a first step to build finished cars from the scratch.
- Hyundai obtained the permission in 1967 to assemble complete-knock-down (CKD) car kits in a joint venture format (with Ford) / By the late 1970s, 90% of the parts were domestically manufactured.
- "His (Park Chung Hee) favored location for the promotion of new industrial project" 82-acre industrial complex was built in Ulsan (**Ulsan Industrial Complex**), Studwell (2014, p.93)

# Ulsan as a product of State-led Industrialization – a revised view (2)

- Unlike state-centric view of Ulsan development (e.g., Amsden, 1989; Woo, 1991), a revised view sees Korea's industrialization from **state-business partnerships**.
- "It was NOT one-sided state intervention": Businesses faithfully followed in creative and timely manner to the state's national development strategies (Todd, 1985).

  1962, 5-year National Development Plan
- (e.g.) Ulsan's shipbuilding industry (Hyundai): Dominant view (product of national economic development plan, Woo, 1991; Porter, 1990) vs. Revised view (Hyundai-led the government's HCl policy).



# Ulsan as a Nested Global City – The Global Industrial City Thesis (3)

• Ulsan was not simply the product of state-led industrialization. Mix of different factors and environment (e.g. Jacobs (2011); Gim and Kim (2014)).

National Development Context (DS)

Designation of Special Industrial Districts
Industrial Policies / Protection

The Growth of Ulsan as an Industrial Core

International forces

Export-orientation / Global Market Foreign countries' Influence (U.S.) Global economic crisis Supranational embeddedness in Northeast Asia

Embeddedness to East Asia Colonial legacy Technological Transfer

Subnational agglo merations and inter -local linkages

Regional Clusters (Dongnam Economic Zone) Domestic agglomeration

## (e.g.) Oil Refinery in Ulsan



 Multi-scalar tension' in the process of Oil Refinery Industry in Ulsan (Gim and Kim, 2014) – highlighted multi-scalar actors beyond state-society dichotomy (state-centric view).

National Development Context (DS)

National energy security after Korean war / national priority Selection of Ulsan, State-business Oil
Refinery as
a basis of
Ulsan
Industrial
Complexes

Supranational embeddedness in Northeast Asia

Japanese colonial legacy (refinery) Global energy market / agents Gulf oil companies' interests in East Asia

Subnational agglomerations and inter-local linkages

Territorial interests of big businesses Ulsan bay, low tide, accessibility to global market Locational benefit of Ulsan

International forces

Relationship w/ the United States U.S. aids and U.S. Oil firms investment

# So, in your view, which explanation is better?

One thing is clear: Both domestic and geographic (external) factors must be considered together today.

Semiconductor industry can be a very crucial part of the technological and strategic competition between the US and China – What imply?

## Why Northeast Asia – 'Peaceful Rise'

- World's Largest piece of Land
- Home to 60% of the World's Population
- GDP 40% of the World Economy
- Have long been driven by great power allies

#### Since the 1970s:

- Regional tension eased
- Globalization
- Economic interdependence
- Blurring of prior dichotomies between friends and foes



#### 'The Asian Paradox'

 "The situation in East Asia, in which continuous conflicts are ongoing in the political and security domain despite a relatively high level of economic cooperation and interdependence in the region." (Kim 2016).

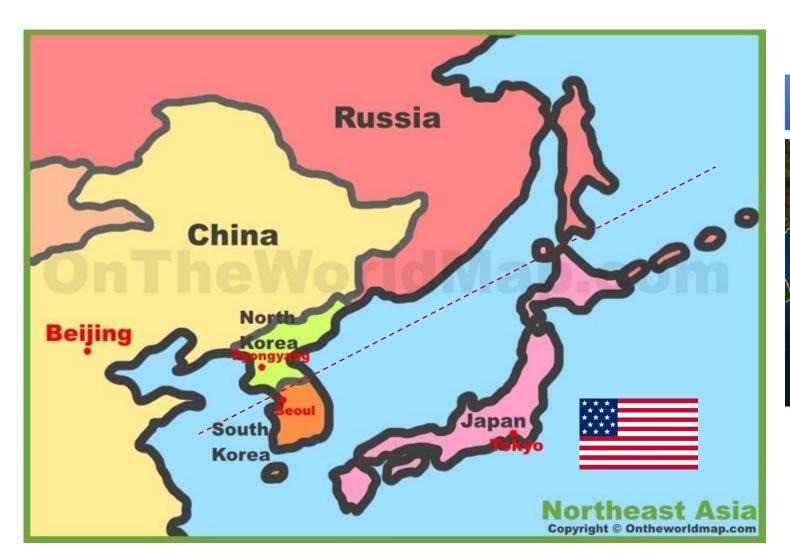


Former Korean Minister of Foreign Affairs, Yoon Young-Kwan



Renowned
Political
Scientist, Peter
Katzenstein

## Geographical Distinctiveness



# Big 4 Diplomacy CHINA Area claimed by China WIETMAN WIETMAN WIETMAN WIETMAN WIETMAN REQUEST R

## Korea: Unpleasant History

Invaded by
foreign forces
3,000 times in
history
Tang, Qing
Dynasty (China)
Japan
US
France





Push from China

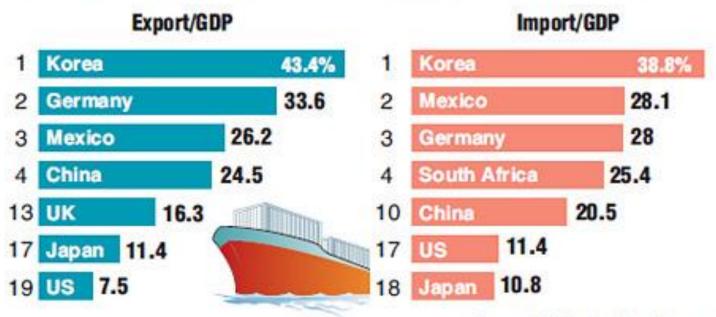
Push from US to join US-led liberal order again!



Then, why not just join the US-led new world alliance? – not that simple

South Korea Most Dependent on Trade (OECD)

#### Economic dependence on export/import



Source: IMF/Yonhap News Agency

#### Then, why not just join the US-led new world alliance? – not that simple

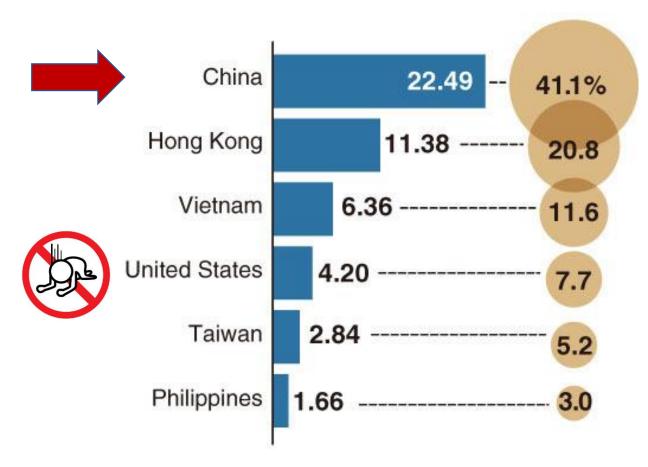
South Korea's Top 10 Export Items (2019)



#### Korea's semiconductor exports by country

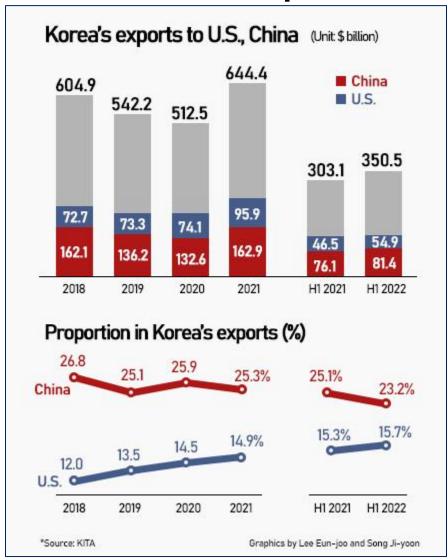
(Unit: \$ billion, from Jan. through July)

South Korea's Semiconductor Export (2019)



Source: Korea International Trade Association

## Korea's Exports to Two Superpowers



- Shift to US-led alliance?
- Major factors:
  - Lockdown of major cities in CN
  - CN's localization campaign
  - Pressure from US The Indo-Pacific Economic Framework for Prosperity(IPEF) + Chip 4

#### "Chip War" – South Korea's Dilemma

- Semiconductors have become the most essential tool for a country's growth as an economic power in the present world.
- What does US' imposing restrictions on the transfer of advanced semiconductors and the inputs required to produce them?
- If you follow economic interests? What do you have to choose? (US / China)
- If you follow political interests? What do you have to choose? (US / China)

#### US' main motivation?

- 1) Significance of semiconductor US' global production dropped (40  $\rightarrow$  12%)
- 2) US' just design → no manufactures (reshoring)
- 3) Security (China's rise)

#### Discuss – Korea's Dilemma

- From geopolitical perspective.
- Korea's main concerns from economic perspective.
- Korea's main concerns from political perspective.
- Korea's main concerns from social perspective

• Please email me if you have any question – <a href="mailto:ybae@dau.ac.kr">ybae@dau.ac.kr</a> will get back to you in a few days.