

KOREA'S ECONOMIC DEVELOPMENT: THE MIRACLE ON THE HAN RIVER

EE482 Industrialization: Role of Public and Private Sectors
(Section 046401)

Semester 1 / 2023

Faculty of Economics, Thammasat University

Disclaimer: All contents are used for educational purpose only. Please do not circulate nor use for commercial purpose.



Addressing the African people, **US President Barack Obama** was quoted as saying in **Ghana's Parliament** during his first state visit to Africa:

*But despite the progress that has been made . . . we also know that much of that promise has yet to be fulfilled. **Countries like Kenya had a per capita economy larger than South Korea's when I was born.** They have badly been outpaced. Disease and conflict have ravaged parts of the African continent. . . . **From South Korea to Singapore, history shows that countries thrive when they invest in their people and in their infrastructure [applause]; when they promote multiple export industries, develop a skilled workforce and create space for small and medium-sized businesses that create jobs.***

Source: <https://web.archive.org/web/20160227060205/https://www.whitehouse.gov/administration/president-obama>

Source: <https://obamawhitehouse.archives.gov/the-press-office/remarks-president-ghanaian-parliament>



The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 1995

Robert E. Lucas Jr.

Prize motivation: "for having developed and applied the hypothesis of rational expectations, and thereby having transformed macroeconomic analysis and deepened our understanding of economic policy."

Contribution: Development and application of the theory of rational expectations in macroeconomic analysis.

If as the axiom says, “a picture is worth a thousand words,” the pictures Seoul’s downtown **Chong-gye stream** show symbolically the **remarkable transformation** of living standards of citizens of Seoul and the Korean people during recent decades.

The **shabby houses** in **Seoul** in the **1950s** were completely reshaped in the 2000s, as the right-hand side picture illustrates. Its unprecedented rags-to-riches story has been dubbed the “**The Miracle on the Han River,**” as did **Robert Lucas Jr.** (1993):

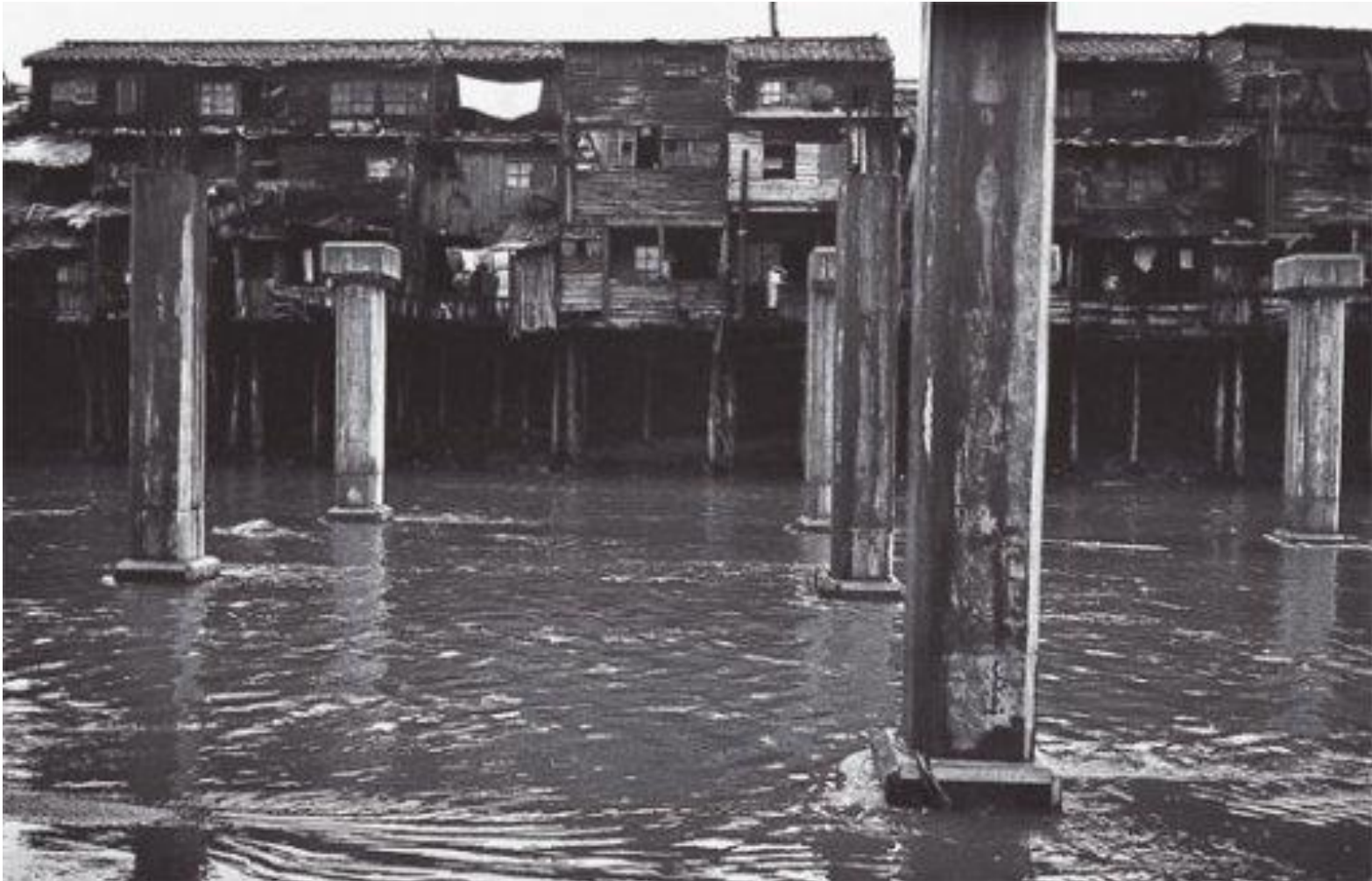
*I do not think it is in any way an exaggeration to refer to this **continuing transformation** of the **Korean society as a miracle**. . . . Never before have the lives of so many people undergone **so rapid an improvement** over so long a period, nor is there any sign that this progress is near its end.*

During the Joseon Period (1392-1897), Cheonggyecheon was a stream running through the centre of Seoul from east to west.

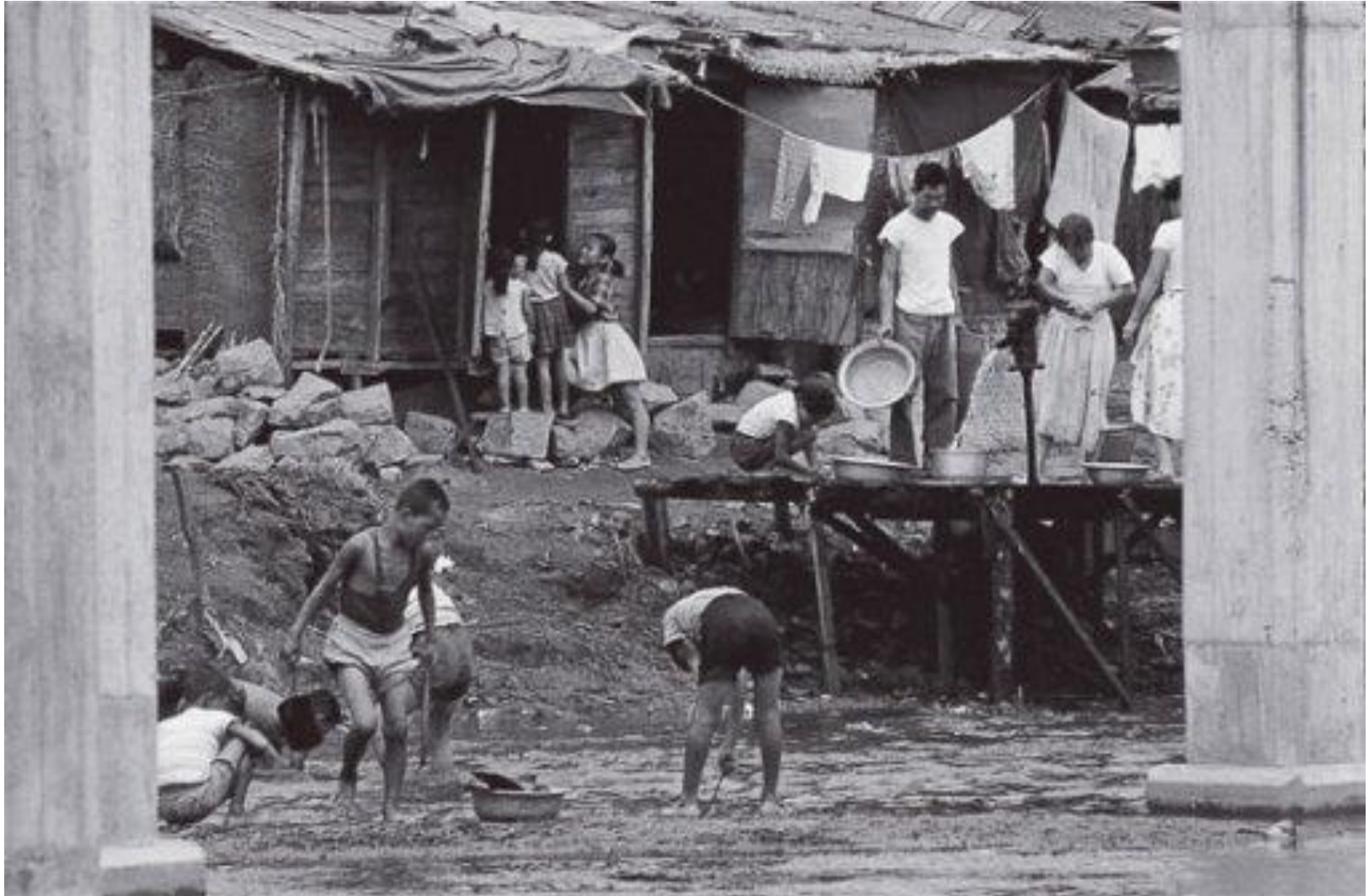
Cheonggyecheon stream during 1910-1945



Cheonggyecheon stream in 1950s



Cheonggyecheon stream in 1950s



Cheonggyecheon stream in 1950s



Cheonggyecheon stream in 1950s



Cheonggyecheon stream

1950s



2018



Source: https://www.reddit.com/r/korea/comments/8jua0q/cheonggyecheon_in_1950s_vs_2018/

Historical Background

- President Park Chung Hee **tailored institutions** and ideas to his own purposes that suited his own **aspirations** for **heavy industrialisation**.
- It is generally known that **Park emulated the Japanese economic model**. But he **did not officially promote Japan but Germany**.
- As **Germany** had **heavily influenced Japan's** political economy, **Park's promotion of Germany** could be regarded as a ruse to **hide his preference to Japan**.
- The **fathers of the modern nation-states** of East Asia were commonly influenced by **Germany** when it came to their favoured **model** of **social, political** and **economic development**.

Historical Background (cont'd)

- **Ito Hirobumi**, Meiji Japan's **first Prime Minister**, looked to **the Prussian model** for inspiration when **drafting the Meiji Constitution** while emphatically **rejecting a British influenced constitution** in 1890.
- In the 1920s and 1930s, **Chiang Kai-shek**, the founding leader of the Republic of China **admired the discipline** and **orderliness** of the **Germanic national spirit**.
- He wrote in a letter to his adopted son who had been sent off to the 'Military Academy (Kriegsschule)' in Munich that '**Germany is the only country from which we can learn something**. They can give us the base from which to develop our own style: firm and solid'

Historical Background (cont'd)

- Park and many of his important staff were contemporaries as **former officers** of the **Japanese Army in Manchuria**, China during **the war in the 1930s and 1940s**.
- There they **witnessed the heavy industrialisation** under the wartime system **led by the Japanese military and technocrats**.
- Their past military career of the Japanese Army in Manchuria **played a pivotal role** in **building up heavy industry** of South Korea in **the 1970s**.
- The **postwar political economy of Japan** was also a product **of emulation the Manchurian system**, which was led by many **former bureaucrats of Manchuria** in the 1950s.
- After a long discrepancy, Park also **copied the Japanese emulation of the Manchurian model in the 1970s**.
- The **Manchurian wartime economy** in the 1930s originates from a **reception of German political economy** by the **Japanese military and technocrats**, which **took place from the Meiji Restoration** in the 1880s to World War II.

Source: Directly quoted from Han, Y.S. (2016). Miracle from the Rhein to the Han River: Heavy industrialisation of South Korea and its social consequences under Park Chung Hee. Unpublished Ph.D. Dissertation. Lancaster University.

Historical Background (cont'd)

- **East Asian elites** were commonly preoccupied with **modernisation and the Westernisation** of their states to survive from Western imperialism.
- They aimed to **achieve rapid industrialisation**, and **military modernisation** with their ultimate aim of defeating Western civilisation.
- Interestingly, for the East Asian elite, **Western civilisation** included only Anglo states (**England** and **the USA**) and **France**.
- On the other hand, the East Asian elite saw **Germany** as a newly **emerging non-Western state** in Europe.
- They believed that the rapid ascendancy of Germany into great power in the late nineteenth century **could be a model for Asia** to pose a **challenge to England, France, and the USA**.

Historical Background (cont'd)

- In particular, the **German victory over France** in the Franco-Prussian War was **well received** by the **military leaders of China** and **Japan**.
- The military leaders in China and Japan were **the most pro-active** in **desiring cooperation with Germany** for the **industrialisation and modernisation** of their **militaries** from the **1910s to the 1940s**.
- The **Japanese military and technocratic elite** who had been to Germany to **study the German wartime system** in the **1920s played leading roles** in the **invasion of Manchuria**, the north-east part of China.
- Based on their studies on the German wartime economy, they **incorporated a Nazi-styled heavy-industrialisation in Manchuria**.
- These German influences on the military and wartime economies in China and Japan created a substantial influence on **the formation of the backbone** of the **postwar political economy** in East Asia after going through the second Sino-Japanese War (1937-1945).

Historical Background (cont'd)

- The **dominance of elites** from **Satsuma** and **Choshu** provinces had a significant impact on the history of Far East Asia in the twentieth century.
- The two domains are located in **the far western part of Japan** which is also the **closest to Korea**.
- Moreover, from the seventeenth and eighteenth century, the **Satsuma** and **Choshu** domains had been **exceptionally free areas** where **contact with Westerners** was officially allowed.
- It had been **a gateway** of the '**Dutch learning**', a **Japanese boom in western learning**.
- Along with the early impacts of Western science and geographical proximity, **young samurais** from the two regions **led a leading role** in the **Meiji Restoration** and subsequent **colonisation of Korea**.

Historical Background (cont'd)

- Under the leadership of **Okubo Toshimichi**, (1830-1878) a **leading statesman of the Meiji government**, radical reforms were introduced to advance from the feudal class system.
- He was one of the **earliest pro-German politicians** in Meiji Japan.
- Toshimichi was an **ardent admirer of Bismarck** and visited Prussia to **get advice from him**.
- In 1873, when he **visited European states to find a new model for Meiji Japan**, he stated that he had found **no hope in Europe except for Germany**.
- Bismarck **urged the Japanese** to see **Germany as the best model for Japan**.
- Toshimichi returned to Japan to **embark on a westernisation** based on **Bismarck's teachings**.
- However, his radical policies **created strong resistance** and strong conflicts regarding the **future direction of Japan**.

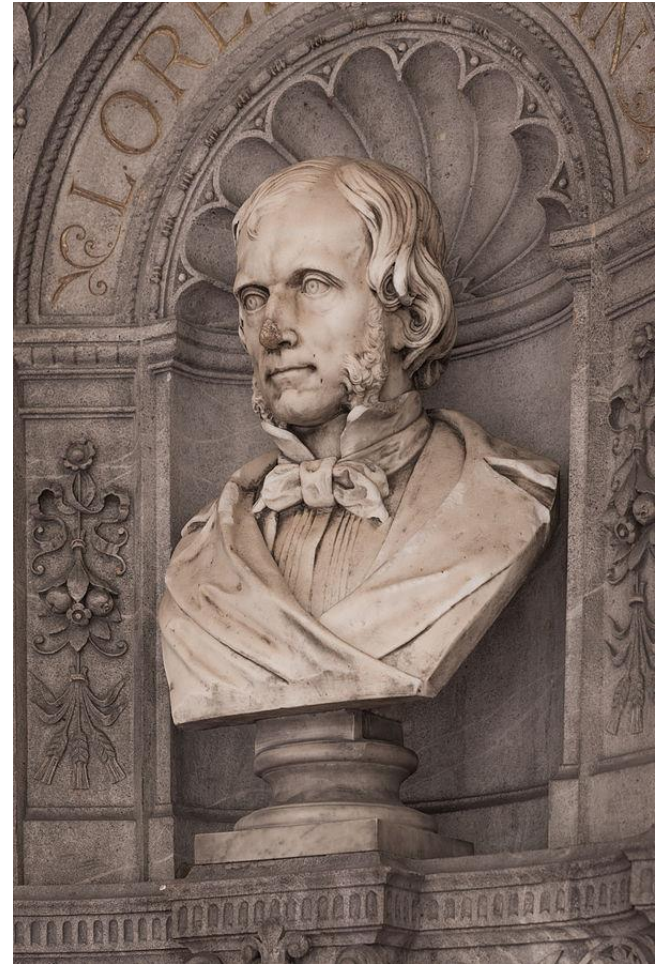
Historical Background (cont'd)

- **Ito Hirobumi** was **introduced to Lorenz von Stein**, a **professor** at the **University of Vienna** who could give him lectures in English.
- Although **Stein's lecture notes** were roughly written, they became **a key text** for the **Meiji Japanese elites**.
- Based on his theory of the science of the state, **Stein taught Ito** a variety of theories on **constitution, education, finance, sociology and public administration** at length.
- For his historical view, Stein dealt with the **French Revolution** and subsequent industrialisation in European historical development.
- He saw that people in the nineteenth century **became free** from their **bondage to soil** and **dependence to agricultural production**.
- However, the **class antagonism emerged**. He saw the origin of class antagonism as the rise of a dependent class **without possession of capital in industrial society**.



Lorenz von Stein

Source: Wikimedia Commons



Bust (white marble) in the Arkadenhof
of the University of Vienna

Source: Wikimedia Commons



Itō Hirobumi (right) in the late Tokugawa Period



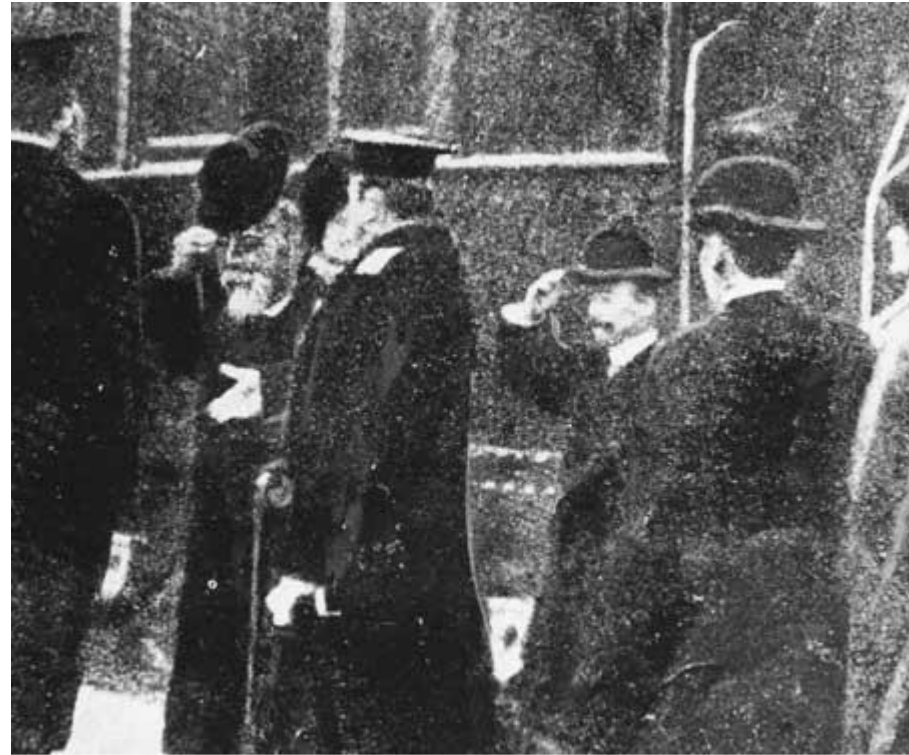
Ito Hirobumi



Ito Hirobumi as Resident-General of Korea with the last Korean Crown Prince Yi Un (1897-1970)



Hirobumi Ito, left, rides a carriage in this undated file photo. He played an important part as Japan forced Korea to sign the protectorate treaty in 1905 and later he became governor general. / Korea Times



Hirobumi Ito, second from left, steps from the train in Harbin Railway Station, on Oct. 26, 1909. A few minutes later, he was killed by young Korean independence fighter Ahn Jung-geun. / Korea Times

Historical Background (cont'd)

- Stein warned that the **industrialisation of Japan** would create an **acquisitive drive and class conflict**, which ultimately would **dismantle traditional harmony**.
- To **overcome class conflict** and to maintain an ethical political attitude that places the **welfare of the whole above class interests**, Stein insisted that the urgent task of Japan was to **maintain impartially the welfare** of the whole and a **harmonious social balance** by means of social legislation and an active administrative policy that works for the **physical and spiritual welfare** of the **lower classes**.
- Ito decided to **add concepts of Shintoism**, the Japanese indigenous religion with Stein's 'social monarchy'.
- After returning to Japan, Ito supported the **adoption of the German model** in the **drafting of a new constitution for Japan**.

Historical Background (cont'd)

- Stein **gave lectures to Japanese visitors** looking for counsel in Vienna for several years.
- These visits are called '**Shutain mode**' or Stein pilgrimage.
- In addition, Stein **provided his answers in letters** to numerous **Japanese politicians, bureaucrats, publicists, and pedagogues**.
- Among them, prominent figures involved **members of the Japanese Royal Family** in addition to **Meiji Emperor**.
- **Five of Stein's students** became **Prime Ministers of Japan**.

Historical Background (cont'd)

- **Kishi Nobusuke** (1896-1987) was a bureaucrat of significance who played a pivotal role in **establishing Manchuria** and designing the **architecture** of the **postwar political economy of Japan**.
- As a **bureaucratic leader** in economic policy for **Manchuria**, Kishi is credited with developing the **state-controlled industrial policy** of the Manchurian puppet state that was to be **emulated by postwar Japan** and **South Korea**.
- His economic policy originates from his study in Germany.
- Kishi **went to Germany** to study the **industrial rationalisation** movement from May to November in 1930.
- He submitted a **report on German control of industry** which became **influential** on the **path that Japan took**.

The Minister of Commerce and Industry Nobusuke Kishi called at childcare center near the Hanaoka mine in 1942



保育所を訪問する岸商工大臣（木村和一さん撮影）

Prime Minister Hideki Tōjō and minister Nobusuke Kishi. October, 1943



Source: Wikimedia Commons, the free media repository

Nobusuke Kishi (1896-1987, left) relaxes at the house of his brother, then-the-Chief-Cabinet-Secretary Eisaku Satō (1901-75), shortly after he was released from the Sugamo Prison on 24 December 1948.



Historical Background (cont'd)

- As to his study on Germany he stated as follows:
*German industrial rationalisation, like the movement of elsewhere, was devoted to **technological innovation in industries**, to the installations of the most up-to-date machines and equipment, and to generally **increasing efficiency**. What distinguished the German movement was its emphasis on **government-sponsored trusts** and **cartels** as the main means of implementing reforms.*
- At the end of the war, **Kishi survived the war crime trials** and became a **major actor** in the most important events in **modern Japanese history** by playing a leading role in **reestablishing a wartime economic system** in postwar Japan after he had become **prime minister**.

Historical Background (cont'd)

- **Kishi** was the **pillar in the establishment** of the '**military-technocratic alliance**' in **Manchuria**.
- Military officers from the Japanese military academy and bureaucrat graduates from the Imperial University embraced technocrats in their organisation of the **planned economy** and **heavy industrialisation**.
- After World War II, this **wartime economy** continued to **survive** in **Japan** and her former colonies **South Korea** and **Taiwan**.
- **President Park** established a developmental state system in **postwar South Korea** by **emulating** the **Manchurian system** because Park had served as a **lieutenant** of the **Japanese Imperial Army** in Manchuria during the war.
- **President Park** and his coteries in his administration had **very close ties** to those **Japanese politicians** and **bureaucrats** who **had served in Manchuria**.



Source: Licensed under the Government of Japan Standard Terms of Use (Ver.2.0)

Shinzo Abe, the **twice Prime Minister**, from 2006 to 2007 and 2012 to 2020 is the **maternal grandson** of **Nobusuke Kishi**.



Source: Wikimedia Commons, the free media repository

Nobuo Kishi, the former **Minister of Defense**, is **Shinzo Abe's brother** and **Nobusuke Kishi's maternal grandson**.

Trial and error for state building

- The new nation was born in 1948 under a democratic mandate, confronted with the Herculean task of nation building in an environment defined by **extreme levels** of **poverty**, **political** and **social insecurity**, did not sound like a promising start.
- **Three vital conditions** are required for nation building:
 - **Poverty reduction**
 - **Social security**
 - **National defense capacity.**

Trial and error for state building (cont'd)

- For the **first 12 years**, the story of the Korean government was like an experiment of **catching two rabbits**, each respectively representing **poverty reduction** and **national security** under democratic institutions.
- The problem with the Korean government was that, **except for foreign aid**, it **lacked** the **means for poverty reduction**.
- The government was facing great difficulty because of having to deal with **internal violence forces** based on ideology and incessant **military threats** from **the North**.

Trial and error for state building (cont'd)

- Under social instability, the government's **poverty reduction effort** was simply **not effective**.
- On the flip side, there was **no way of achieving social stability** in this **atmosphere** of **pervasive poverty**.
- For over a decade since their foundation, the first two administrations mainly focused on imminent relief for the people in famine, rehabilitation from the war and maintaining social stability in the country, which seems to be a catalog of shambolic starts.
- These were the conditions that created the **fertile ground** for a **military coup d'état**.
- The coup leader **Park Chung-hee** was **born in 1917** when Korea was under **Japan's colonial rule**.
- Park Chung-hee's mother became pregnant with him, her seventh child, at the age of 45.

Development planning system (cont'd)

- For the **first time** in the nation's history, a **series of Five-Year Economic Development Plans** as promulgated to provide medium-term blueprints for transforming the country.
- It was **radical in ambition** and scope **based on free market principles**.
- That means, for instance, primarily unlike in a planned economy, the **basic investment** and **business decisions** are made by **individual firms**.

Development planning system (cont'd)

- Park graduated from a **regular school** and became a **teacher at an elementary school** shortly after. He then became a **military official** for the rest of his life until **he raised the coup**.
- Cho Gap-jae (2007), who studied the life of Park leaving a work in 13 volumes on his entire life, describes Park with two words: “**simplicity**” and “**independence**.”
- Because he grew up in a **poor family** in a **country under colonial rule**, these kind of morals or attitudes seemed to have been cemented in him.

Park serving the Imperial Japanese Army



Source: Wikimedia Commons, the free media repository

Park Chung-hee and Song Ho-sung in 1948



Source: Wikimedia Commons, the free media repository

Park Jung Hee in 1961



Source: Wikimedia Commons, the free media repository

President John F. Kennedy (sitting in rocking chair) meets with General Chung Hee Park (wearing glasses and sitting on couch).



Source: Wikimedia Commons, the free media repository



U.S. President Lyndon B. Johnson and First Lady Bird Johnson with South Korean President Park Chung-hee and his wife Yuk Young-soo (second from right), during their official state visit to White House.



Park Chung-hee pours champagne onto the street during the opening ceremony of the Seoul-Busan Expressway in Daegu City on July 7, 1970. Completed in just over two years, the construction of the 428-kilometer expressway began Feb. 1, 1968, mobilizing more than 9 million workers

Development planning system (cont'd)

- The military junta felt the necessity of **establishing an agency** being **exclusively responsible for economic development**, which came in **the form of the EPB**.
- It **was created within 10 days** of the Coup d'état.
- It was charged with the **three core tasks** of **planning, budgeting and attraction of foreign capital**.
- For policy synergy, the budgetary function was **taken away** from the **Ministry of Finance** and placed **within the purview of EPB**.

Development planning system (cont'd)

- Because each line-ministry's policy had to be promoted harmoniously, the EPB was expected to **better perform** the function of **policy coordination** if it had the **authority to budget** each line-ministry's **expenditure**.
- The **Ministry of the EPB** was simultaneously **appointed as the deputy prime minister** so that he or she could **control and coordinate** other line-ministries' policies one level above them.

Development planning system (cont'd)

- The **Korea Institute of Science and Technology (KIST)** and the **Korea Development Institute (KDI)** were established as **think tanks** in 1966 and 1971, respectively, to provide complementary, **empirically backed research** to **support** the government's **development policies**.
- With the government's fullest backing, these **think tanks were remarkable** in **providing** the **technological development** and **theoretical backup** for **economic development**.
- They played a **very critical role** the **early phase** of the development process.

Korea Development Institute: KDI



Source: Wikimedia Commons, the free media repository

Korea Institute of Science and Technology: KIST



Source: Wikimedia Commons, the free media repository

Development planning system (cont'd)

- Within this framework, the **first Five-Year Economic Development Plan (1962-1966)** focused on economic recovery through **export promotion** and increase in **food production**.
- It was wrought with technical know-how and personnel **deficiencies defects**.
- Yet, it was an **instrumental part** of the momentum for the forward thrust of the economy in the succeeding phases.
- **The Second Five-Year Economic Development Plan (1967-1971)** built on **the momentum of the previous years** and inspired the next generation of planners.

Development planning system (cont'd)

- **The Third Plan (1972-1976)** focused on **fostering heavy and chemical industry (HCI)**, aiming to realize an **advanced industrialized country**.
- **The Fourth Plan (1977-1981)** made a significant transformation from being **growth oriented to pursuing growth, equity and efficiency** at the same time, and it incorporated a **social development** scheme into the major component of the national development plans for the **first time**.

Development planning system (cont'd)

- The **Fifth Plan (1980-1986)** also made another **transformation** from the one oriented toward economic development so far to that of **pursuing economic and social development** at the same time.
- Reflecting this concept, the **title was changed** from the economic development plan to **social and economic development plan**, which was followed by the Sixth Plan (1987-1991).

Development planning system (cont'd)

The Economic and Social Development Plans of South Korea		
Plan	Years	Emphasis
First	1962-1966	Electrical Power, Fertilizer Production, Petroleum Refining, Cement, Synthetic Fibers
Second	1967-1971	Steel, Machines, Chemicals and Modernization of Industry
Third	1972-1976	Iron & Steel, Transport Equipment, Machines, Ships, Petrochemicals, Electronics
Fourth	1977-1981	Iron & Steel, Machines, Ships, Petrochemicals, Electronics, Nonferrous Metals
Fifth	1982-1986	Precision Machinery, Electronics and Higher Technology Industries
Sixth	1987-1991	Higher Technology, Research & Development, Manpower Training
Seventh	1992-1996	Microelectronics, Bioengineering, Aerospace, Fine Chemicals

Sectoral Origins of GNP

	Agriculture, Forestry, Fishery	Manufacture, Mining	Utilities, Construction	Services
1954-56	44.6	12.0	3.2	40.2
1957-61	39.1	15.0	4.2	41.5
1962-66	40.0	18.1	4.4	37.5
1967-71	28.0	21.8	6.3	43.9
1972-76	24.5	26.7	5.8	43.0
1977-81	18.3	30.0	9.2	42.6
1982-86	13.5	30.2	10.9	45.4

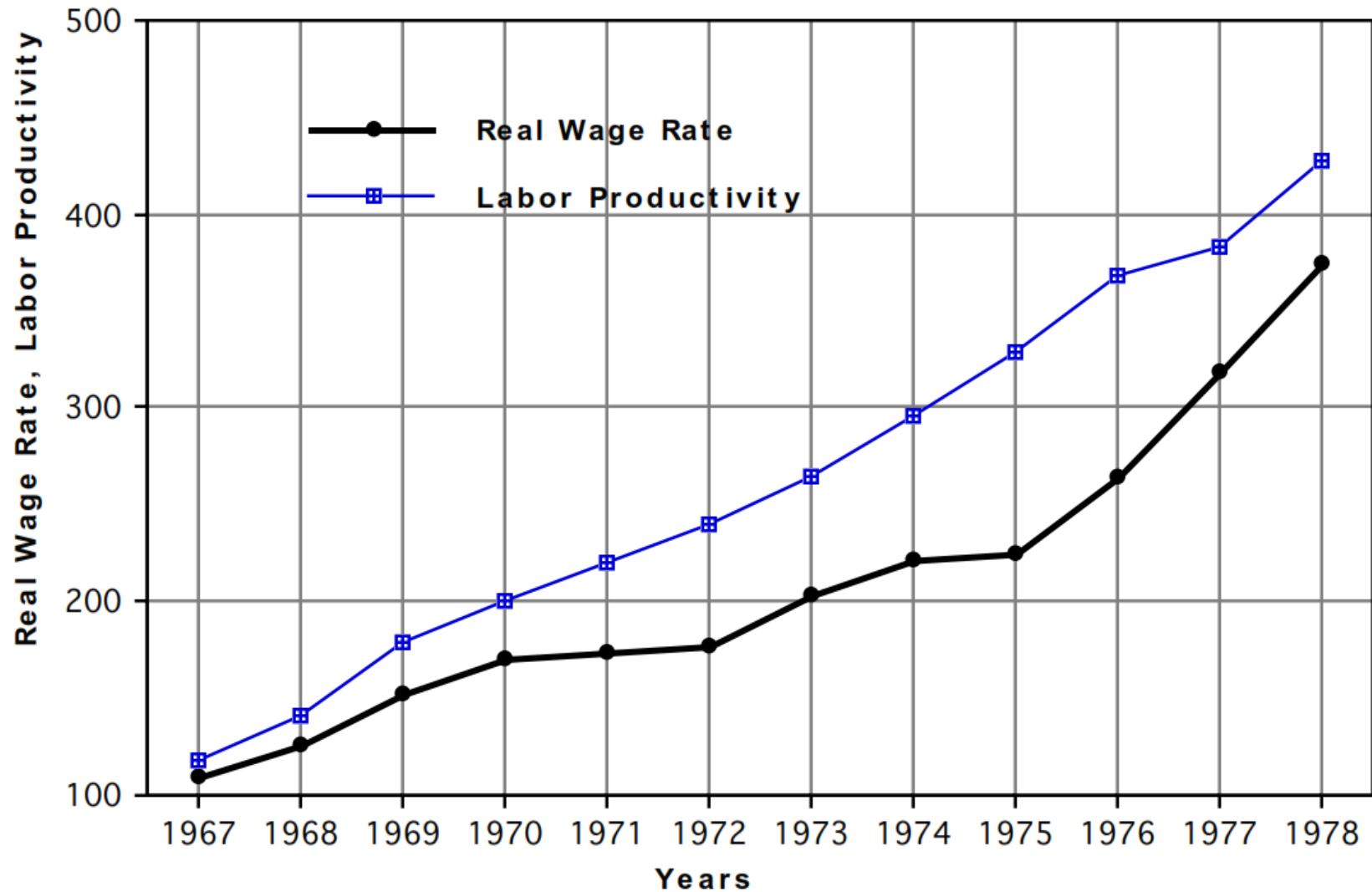
Per Worker Man-Hours in Selected East Asian Countries

	1963	1964	1965	1966	1967	1968	1969	1970
South Korea	50.3	56.0	57.0	57.4	58.8	57.6	56.3	52.5
Philippines	43.6	43.4	45.6	46.7	46.7	-	-	-
Singapore	47.7	47.3	47.2	47.4	47.4	48.3	49.2	-
Thailand	45.7	45.7	45.7	51.3	51.3	-	47.8	-

Source: Kim, K.S. (1991). The Korean miracle (1962-1980) revisited: Myths and realities in strategy and development. Working Paper

#166. The Helen Kellogg Institute for International Studies.

Real Wages and Labor Productivity in Manufacturing



Source: Kim, K.S. (1991). The Korean miracle (1962-1980) revisited: Myths and realities in strategy and development. Working Paper

#166. The Helen Kellogg Institute for International Studies.

Trends in Income Distribution

	% of Income Received		Gini Coefficient
	by upper 20%	by lower 20%	
1965	41.8	5.8	0.344
1970	41.6	7.3	0.332
1975	45.3	5.7	0.392
1980	45.4	5.1	0.389
1985	43.7	6.1	0.363

Source: Kim, K.S. (1991). The Korean miracle (1962-1980) revisited: Myths and realities in strategy and development. Working Paper

#166. The Helen Kellogg Institute for International Studies.

Sources of National Income

	Unincorporated Business		Wages and Salaries	Property Income ¹	Others ²	Total
	Agriculture	Nonagriculture				
1965	32.7	19.2	31.8	10.6	5.7	100.0
1970	24.3	16.5	39.5	13.9	5.8	100.0
1975	23.5	17.3	38.4	12.7	8.0	100.0
1980	14.6	12.3	49.4	17.5	6.2	100.0

¹ Profits, dividends, rents, corporate net savings, and transfers.

² Government enterprise profits and statistical errors.

Source: Kim, K.S. (1991). The Korean miracle (1962-1980) revisited: Myths and realities in strategy and development. Working Paper

#166. The Helen Kellogg Institute for International Studies.

Items	Remarks	Unit	1962	1965	1970	1975	1980	1981
GNP		Millions of 1975 U.S. dollars	1,362	1,428	2,009	2,023	2,098	2,115
	Growth rate	%	2.2	5.8	7.6	7.1	-6.2	6.4
	Per capita GNP	U.S. dollar	87	105	243	574	1,481	1,607
Indices of	Total index	1975 = 100	10.5	13.7	37.4	100.0	209.8	231.7
Industrial	Mining	1975 = 100	44.8	59.1	71.3	100.0	111.2	119.1
Products	Manufacturing	1975 = 100	9.2	11.9	35.3	100.0	215.9	238.8
	Electricity	1975 = 100	9.9	16.4	46.2	100.0	187.7	202.7
Foreign Trade	Exports (FOB)	Million dollars	54.8	175.1	835.2	5,081.0	17,504.9	21,253.8
	Imports (CIF)	Million dollars	421.8	463.4	1,984.0	7,274.4	22,291.7	26,131.4
Price index	Wholesale	1975= 100	16.1	28.8	42.0	100.0	225.2	275.8
Foreign exchange holdings		Million dollars	168.6	146.3	609.7	1,550.2	6,571.4	6,891.0
Unemployment	Rates	%	-	7.4	4.5	4.1	5.2	4.5
Population	Mid-year	1000 persons	26,513	28,705	32,241	35,281	38,124	38,723
	Growth rate	%	2.90	2.57	2.21	1.70	1.57	1.57

Source: Kim, K.S. (1991). The Korean miracle (1962-1980) revisited: Myths and realities in strategy and development. Working Paper #166. The Helen Kellogg Institute for International Studies.