Economic Development of Japan

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Topics

- **Overview**—Japanese history as cumulative evolution
- **Meiji Revolution** (late 19th century)—unique transition from feudal class society to modernization
  --Private dynamism
  --Effective policies
  --Industrial human resource
Japanese History as Cumulative Evolution
--A Very Unique Latecomer

- History of peripheral society should be analyzed as interaction between internal and external forces.
- Japan absorbed Western technology and systems selectively and under its own initiative.
- Japanese society changed greatly but did not lose its own identity.
- Umesao Theory—Japanese history was cumulative and evolutionary thanks to the right distance from dominant civilization (i.e., China).

Dr. Tadao Umesao’s View of the World
History: Evolution vs. Repetition

I. Emperor’s Rule
- Nara Centralization
- Heian Nobles, Decentralization
- Taika Reform
- 645
- Clan fights
- Hunting & gathering

II. Samurai’s Rule
- Kamakura Shogunate
- Taiga Reform
- 1603
- Internal wars, dynamic & fluid society
- Peace, isolation, conservative class society

III. Modernization
- Edo Tokugawa Shogunate
- Westernization, industrialization, militarization
- 1867
- MEIJI
- Peace, isolation, conservative class society

IV. Postwar
- Rapid recovery and growth
- WAR

- Rice
- Buddhism
- Chinese culture & political system
- WEST: guns & Christianity
- WEST!!!
- US occupation 1945-52

Centralized dynasty
- Dynasty A
- Dynasty B
- Dynasty C
- Dynasty D

Colonialism
- External stimuli
- Colonialism state?

Destruction
- Centralized dynasty
- Fights among local powers
- Feudalism
- External stimuli
- Industrial revolution
- Rise of commerce & merchant class
- High technology & civil society

External stimuli
- External stimuli
- External stimuli
- External stimuli
- External stimuli

Neo-patrimonial
- Neo-patrimonial state?
Integration Viewed from Outside

Existing World System
Democracy, market economy, industry, technology, life style …

Latecomer country

\{ Dynamism for change (+) \\
Integration risks (-) \}

Integration Viewed from Inside

“Translative adaptation”
(Prof. Keiji Maegawa, Tsukuba Univ.)

Foreign Systems

Base Society
Internal systemic evolution

Government must manage

Imported from outside by:
- Invasion
- Migration
- Trade and FDI
- ODA
- Int’l organizations

Conflicts and adjustments
Evolution of Japanese Society
Interaction between Internal and External Forces

- **Rice cultivation**: 3c BC
- **Japanese culture & political system**: 7-9c
- **Buddhism**: 6c
- **Chinese culture & political system**: 7-9c
- **Guns & Christianity**: 16c
- **Meiji Revolution**: 19c
- **Western powers**: 19c
- **WW2 defeat & US occupation**: 20c
- **Possibility of failed adjustment**: social instability, economic crisis, foreign dominance, etc.

Japan’s Multi-layered Identity

- **Pre-historic Japan**
- **Rice cultivation**
- **Buddhism, China**
- **Heian & Samurai Culture**
- **Guns & Christianity**
- **Edo Culture**
- **Western influence**

Note: Colored areas indicate external impacts.
K. Marx: Historical Materialism

- History proceeds inevitably through material conflicts and class struggle
- *Production force* and *production relation*: rise in the former creates friction with the latter, which leads to dialectic solution.

![Diagram of historical materialism](image)

J. Schumpeter: Rise & Fall of Capitalism

- Capitalism is driven by entrepreneurs who perform innovations
- The success of capitalism produces new problems, attitudes and mechanisms that lead to its downfall

![Diagram of Schumpeter's model](image)
Soseki Natsume’s Lecture
“Development of Modern Japan” (1911)

“Development in the West is endogenous, while Japan’s development is exogenous.”

“Western societies are evolving naturally but Japan after the Meiji Restoration and foreign contact is quite different… after two centuries of isolation, we opened up and encountered Western civilization. It was a big shock we never experienced before.”

“Western tides dominate our development. Since we are not Westerners, every time a new wave arrives from the West we feel uneasy like a person living in someone else’s house.”

[However, compared with other countries, Japan achieved Westernization more successfully without losing identity.]

How about Egypt?

- Egypt has a very long history but it suffered repeatedly from invasion and colonialism. Cumulative evolution did not occur.
- By the standards of East Asia, private dynamism is weak and industrial policies are not very effective.
- Dependency on aid and locational resources (tourism, oil and gas, Suez Canal).
- Internal value creation based on skill and knowledge remains relatively low—Middle Income Trap?
**Different Speeds of Catching Up**

Per capita real income relative to US
(Measured by the 1990 international Geary-Khamis dollars)


**Meiji Revolution**

From Feudalism to Westernization, Modernization, and Industrialization

- When Japan began integration in the mid 19th century, it already had sufficient adaptive power.
- Meiji Revolution was achieved by former samurais through continuous policy competition, not top-down decision making.
- Strong private dynamism was supplemented by appropriate government policies.
- Meiji society produced many dynamic political and business leaders.
Edo Period (1603-1867)

Pre-conditions for Industrial Take-off

- Political unity and stability
- Agricultural development
- Development of transportation and nationally unified markets
- Rise of commerce, finance and wealthy merchant class
- Rise of pre-modern manufacturing
- Industrial promotion by local governments
- High level of education

![City girls, Han lord in his castle, Samurai police and merchants]

![Cultivated Land and Land Productivity graph]

![Class Society diagram]

![Division of Japan into Bakufu and Han Territories map]
Meiji Revolution

17c- Edo Period (feudalism, class society, international isolation)
1853 Forced opening by US Navy (Perry’s Black Ships)
1858 Signing of commercial treaties with West
1858-1881 Transition period
   --Han samurais topple Edo Bakufu (1868)
   --Feudal system removed, strong central gov’t installed (1871)
   --Political fight continues over policy priority—political reform (constitution & parliament), industrialization, military expansion

1881-1890s Implementation period
   --Industrial Revolution (private companies emerge strongly, cotton industry achieves import substitution)
   --Constitution and parliament established (1889-90)
   --Victory over China (Japan-China War 1894-95)

Late Edo & Meiji Socio-political Conditions

Cumulative socio-economic evolution under political stability (Umesao Theory)
National unity & nationalism
Avoidance of civil war & colonization
Rise of rich & intellectuals
Demand for knowledge & participation
Socio-economy vs. old system
Contradiction & need for new policy regime

Bakufu: loss of political legitimacy
Military, diplomatic & economic fiasco under Western pressure
Political competition
Possibility of new leader and social order

Balance between fierce political competition (dynamism) and ultimate national unity (stability)
Meiji Revolution Leaders

In the field of politics and policy making, in order of birth year

- Nakane Sekko HS
- Yokoi Shonan HS
- Nabeshima Naomasa HL
- Shimazu Hisamitsu HL
- Okubo Tadahiro BS
- Katsu Kaishu BS
- Iwakura Tomomi N
- Yamauchi Yodo HL
- Saigo Takamori HS
- Soejima Taneomi HS
- Matsudaira Shungaku HL
- Yuri Kosei HS
- Okubo Toshimichi HS
- Oki Takato HS
- Kido Takayoshi HS
- Fukuzawa Yukichi HS
- Eto Shimpei HS
- Inoue Kaoru HS
- Fukuoka Takachika HS
- Matsukata Masayoshi HS
- Sakamoto Ryoma HS
- Komatsu Tatewaki HS
- Godai Tomaatsu HS
- Itagaki Taisuke HS
- Sanjo Sanetomi N
- Okuma Shigenobu HS
- Yamagata Arimoto HS
- Goto Shojiro HS
- Komuro Shinobu M
- Kuroda Kiyoibaka HS
- Ito Hirobumi HS
- Mutsu Munemitsu HS

Note: Han lord (4)
Han samurai (26)
Bakufu samurai (2)
Noble man (2)
Merchant (1)

Japan’s economic growth was driven mainly by private dynamism (supported by appropriate policy)

- Private-sector dynamism and entrepreneurship (primary force)
- Policy support (supplementary)

Rapid industrialization especially in Meiji period & post WW2 period

Policy was generally successful despite criticisms:
--Power monopoly by a small group of politicians
--Privatization scandal, 1881
--Excessively pro-West
--Unfair by today’s standard

Note: Bakufu is the central military government in Edo period. Han is the local political unit in Edo feudalism.
Rich Merchants from Edo Period (*Gosho*)

**Mitsui Family**
-17c From Matsuzaka
-Kimono trade & money exchange in Edo, Kyoto, Osaka – huge success

<Transition to Meiji>
Manager: *Rizaemon Minomura*
-Cope with bakufu policy to protect Mitsui business
-Support and work with new government
-Internal reform: from *gosho* to *zaibatsu*
-1876 Establish Mitsui Bank & Mitsui Trading Company

**Sumitomo Family**
-16c Adopt Western copper refining, copper trade (Kyoto)
-17c Move to Osaka
-Besshi Copper Mine (under Bakufu’s commission)

<Transition to Meiji>
Manager: *Saihei Hirose*
-Avoiding gov’t confiscation
-Introducing Western mining technology to renovate Besshi
-Business diversification

**Konoike Family**
-Sake making, trading, loans to daimyo
-No serious internal reform in Meiji
-Failed to form *zaibatsu* (Sanwa Bank)

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**Yataro Iwasaki (1835-85)**

- *Seisho* from Tosa, founder of Mitsubishi *zaibatsu*
- Shipping company--grew fast with government support (receiving gov’t ships, contract for military transport)
- Established Nippon Yusen (NYK Line), fierce battle with Kyodo Unyu (anti-Mitsubishi company), 1883-85
- Expanded business into many areas: trade, banking, mining, coal, shipbuilding (later, more)

Bakufu’s Steel Mill in Nagasaki, transferred to Mitsubishi in 1884
Eiichi Shibusawa (1840-1935)
From Saitama

Tomoatsu Godai (1836-1885)
From Satsuma

Super business promoters -- but they did not form zaibatsu

- First, anti-bakufu fighter
- Next, assistant to last shogun
- Works vigorously for MOF (invited by Meiji Government)
- Governor of First “National” Bank”
- Company builder and business coordinator, helping to create 500 new companies
- Social contributions

- Studies and builds human network in Nagasaki
- Visits UK; realizes need to industrialize, writes report
- In Osaka, helps to create copper co., railroad, shipping co., rice & stock exchanges, cham. of commerce, university, test centers, trading center, etc
- SOE privatization scandal

Rise and Fall of Merchants and Enterprises

Q: Who were the main drivers of Meiji industrialization?

A: All types of entrepreneurs including Edo gosho, Yokohama merchants, Meiji zaibatsu, and company boom millionaires.

- Survival game was severe: many entries, many exits
- Japan’s industrial revolution: from 1880s to 1900s
- Japan-China War, Japan-Russia War also accelerated industrialization
Iwakura Mission (Dec.1871-Sep.1873)

--Hastily organized after abolishing feudal system
--Half the cabinet - Iwakura (leader), Okubo, Ito, Kido, Yamaguchi, and other officials (46); attendants (12), students (49); total 107 members

\[
\begin{aligned}
\text{Purpose 1: Start renegotiating unequal treaties (failed)} \\
\text{Purpose 2: Inspect Western systems and technology}
\end{aligned}
\]

<Lessons>
(1) Strong state role is crucial for industrialization (Okubo)
(2) Western style constitution is necessary (Kido)

Toshimichi Okubo (1830-1878)
Top Official Implementing Industrial Policy

- Participated in Iwakura Mission (1871-73) to observe Western technology & systems
- Became top-down promoter of technology import and industrialization
- Minister of Finance; Minister of Internal Affairs
- Policy measures:
  --Supporting businesses (Iwasaki, Godai) to promote industries and import substitution (marine transport, mining, shipbuilding, etc)
  --Establishment of SOEs and research centers
  --Domestic industry exhibitions
  --Establish modern state bureaucracy, police and local governments
Okubo’s Back-to-Office Report after Iwakura Mission, 1874

“The strength of a country depends on the prosperity of its people which, in turn, is based on the level of output. To increase output, industrialization is essential. However, no country has ever initiated the process of industrialization without official guidance and promotion.”

Okubo’s Statement c.1875

“In overcoming low output and trade deficits, the government must introduce policy measures to establish economic foundations, stimulate private businesses, and promote trade. If this state role is denied, it will take too much time for the general public to expand business and the nation will fall into stagnation. This is the most important policy in our current circumstance, even if it is against the orthodox theory of political economy.”

Technology Transfer

1. Foreign advisors (public and private sector)—salary too high

2. Engineering education (studying abroad, Institute of Technology; technical high schools)

3. Copy production, reverse engineering, technical cooperation agreements (esp. automobiles, electrical machinery); sogo shosha (trading companies) often intermediated such cooperation

<table>
<thead>
<tr>
<th>Private-sector experts, 1910</th>
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<tbody>
<tr>
<td>Mining</td>
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<tr>
<td>Textile</td>
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<tr>
<td>Shipbuilding</td>
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<td>Power &amp; gas</td>
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<td>Trading</td>
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<td>Railroad</td>
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<td>Food</td>
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<td><strong>TOTAL</strong></td>
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**Studying Abroad (Early Engineers)**

- First students: bakufu sent 7 students to Netherlands in 1862 (naval training)
- By 1880s, 80 Japanese studied engineering abroad (shipbuilding, mechanical, civil engineering, mining & metallurgy, military, chemistry)
- Study destination: UK (28), US (20), France (14), Germany (9), Netherlands (8)
- They received top-class education and could easily replace foreigners after coming back
- They mostly worked in government (no private industries existed at first)—Ministry of Interior, MOF, Army, Navy, Ministry of Industry

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**Kobu Daigakko (Institute of Technology)**

- 1871 *Koburyo* of Ministry of Industry; 1877 Renamed to *Kobu Daigakko*; 1886 Merged with Tokyo Imperial University (under Ministry of Education)
- First Principal: Prof. Henry Dyer (UK)
- Theory and practice--preparatory course (2 years), specialized studies (2 years), internship (2 years)
- 8 courses: civil engineering, mechanical engineering, shipbuilding, telecommunication, chemistry, architecture, metallurgy, mining (classes in English)
- Educating top-class engineers (import substitution)
Monozukuri (Manufacturing) Spirit

• It describes sincere attitude toward production with pride, skill and dedication. It is a *way* of pursuing innovation and perfection, disregarding short-term profit.
• Many of Japan’s excellent manufacturing firms were founded by engineers full of monozukuri spirit.

![Sakichi Toyota](image1) 1867-1930  
![Konosuke Matsushita](image2) 1894-1989  
![Soichiro Honda](image3) 1906-1991  
![Akio Morita](image4) (Sony’s co-founder) 1921-1999

• Japan’s monozukuri tradition shapes both business attitude and policy orientation (Edo, Meiji, now).
• Long-term relationship and skill & knowledge building within individual companies and among production partners (e.g. assemblers-suppliers).
• Strong demand for 5S, QCD (quality-cost-delivery), *kaizen*, just-in-time system, quality control, and other efforts for constant improvement.

![Sakichi Toyota](image5)  
![monozukuri](image6)  
![Sakichi Toyota](image7)
Summary of Meiji Lessons

- Development is a political process as well as an economic process. The appropriateness of politics is a key factor for successful development.
- Human factor—dynamic leaders in government and business are crucial; adopting laws and institutions are not enough (a new imported car with no driver).
- Strong and effective state initiative is needed for latecomer industrialization—whether 19th, 20th, or 21th century. Washington consensus policies (liberalization, privatization, integration, etc) can take a country only up to lower middle income.

Different Speeds of Catching Up

Per capita real income relative to US
(Measured by the 1990 international Geary-Khamis dollars)