

Economic Development of Japan

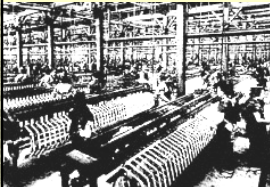
How Japan Globalized in the 19th Century



Farmers



Ricksha



Osaka Spinning Company



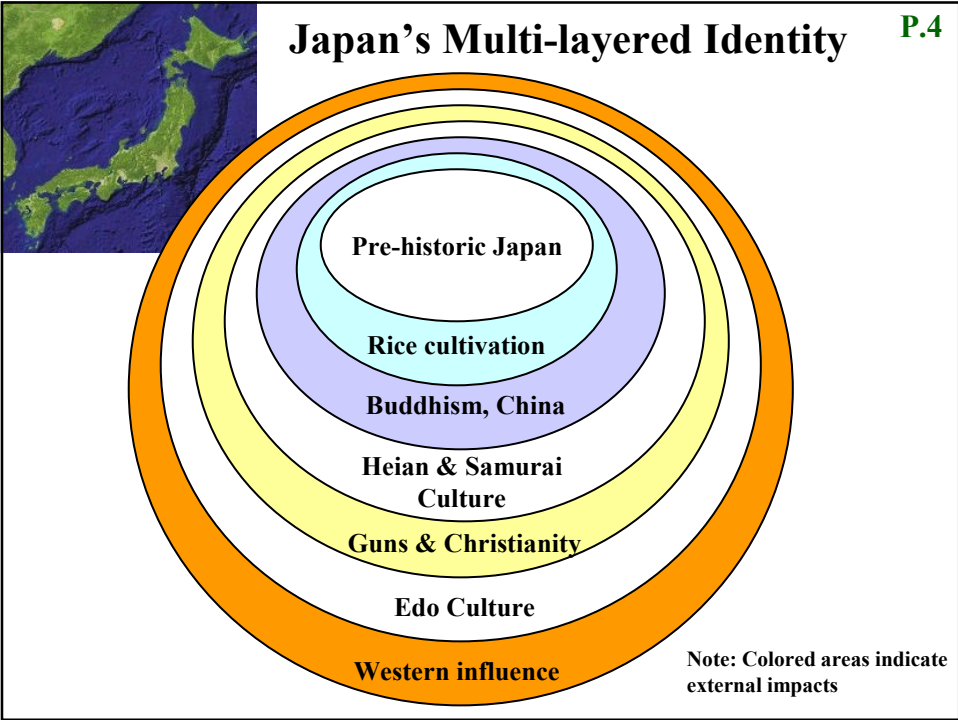
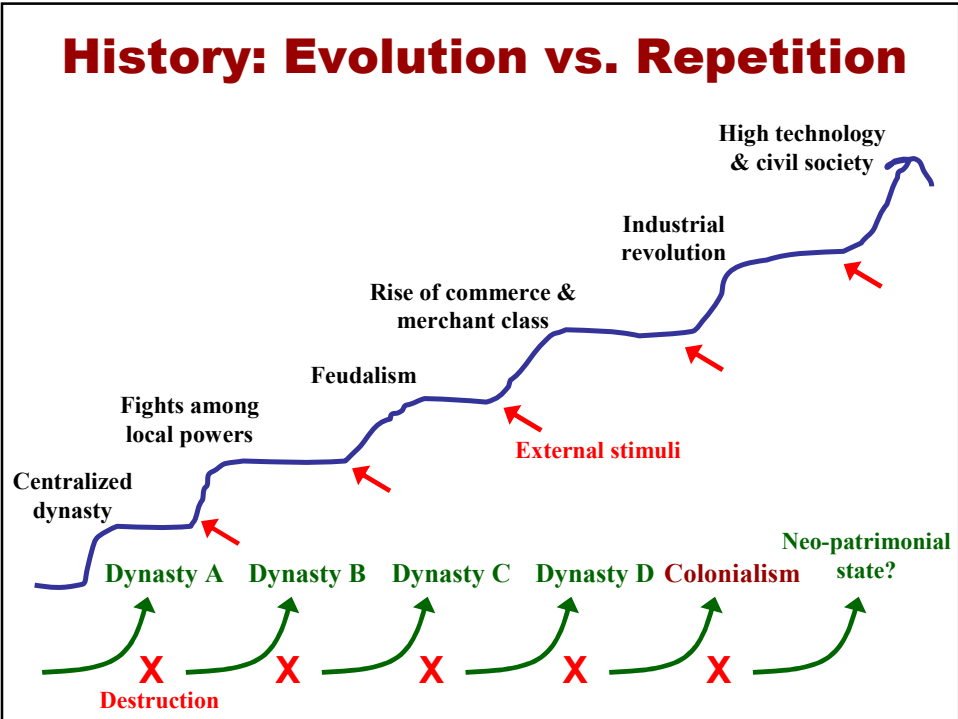
Kenichi Ohno (VDF/GRIPS)

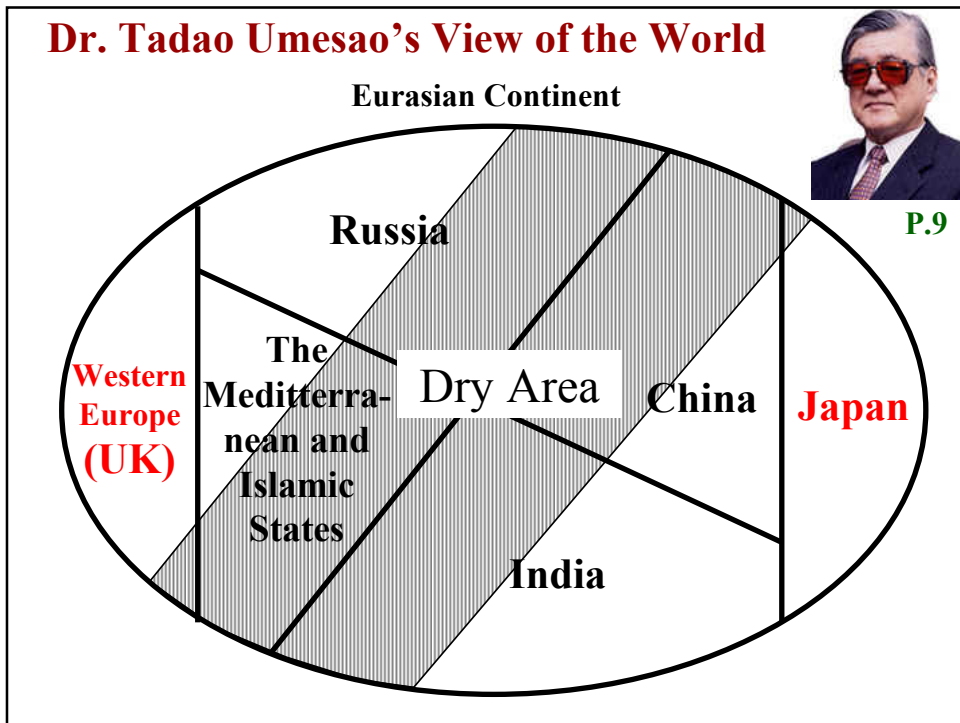
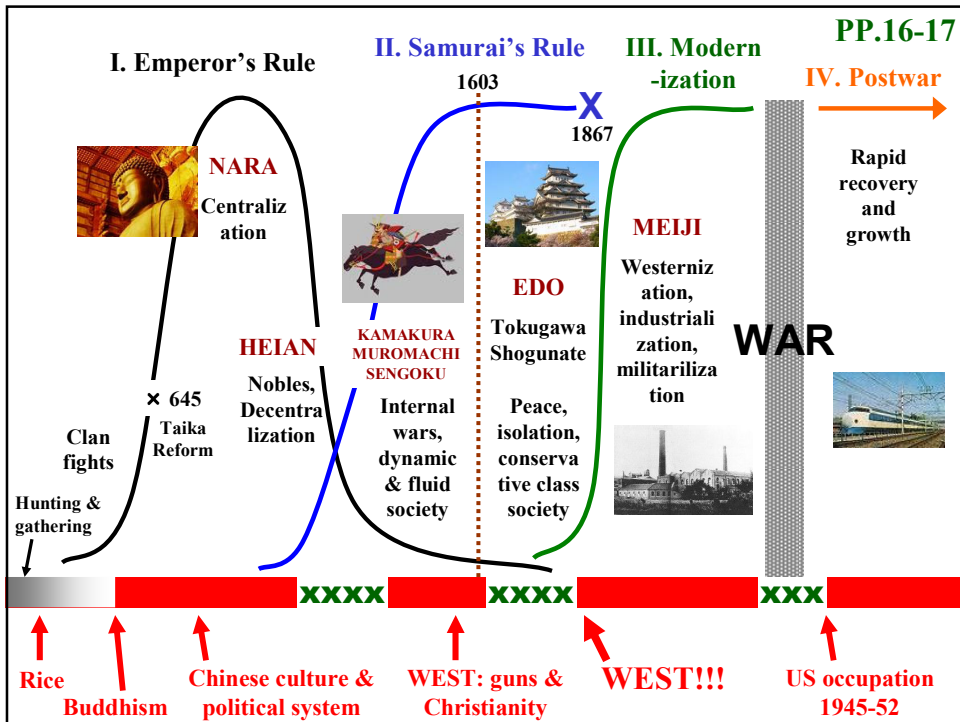


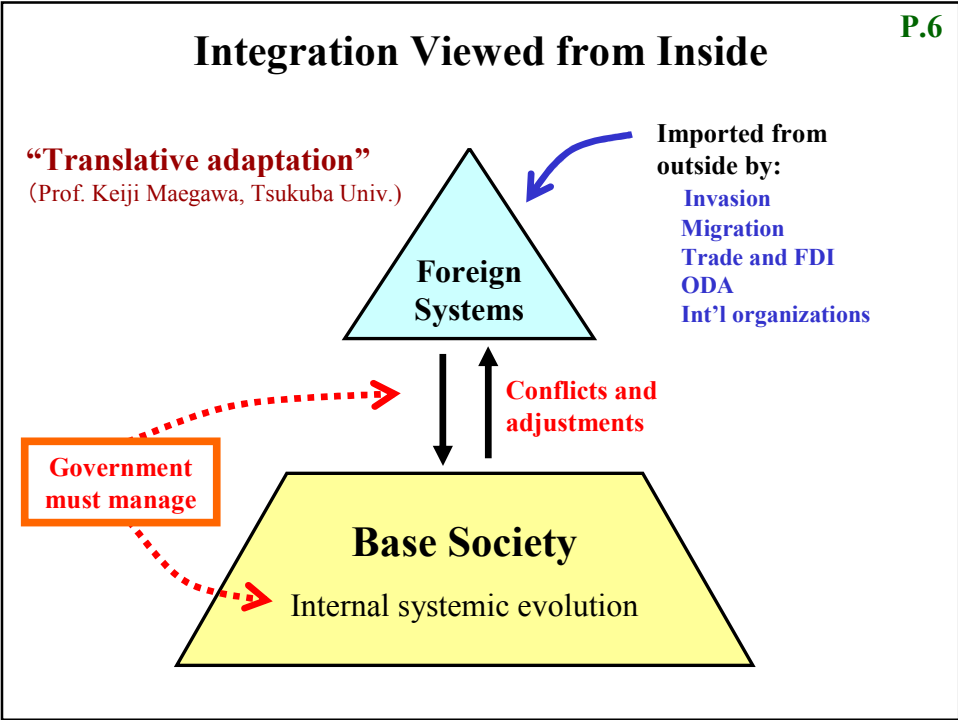
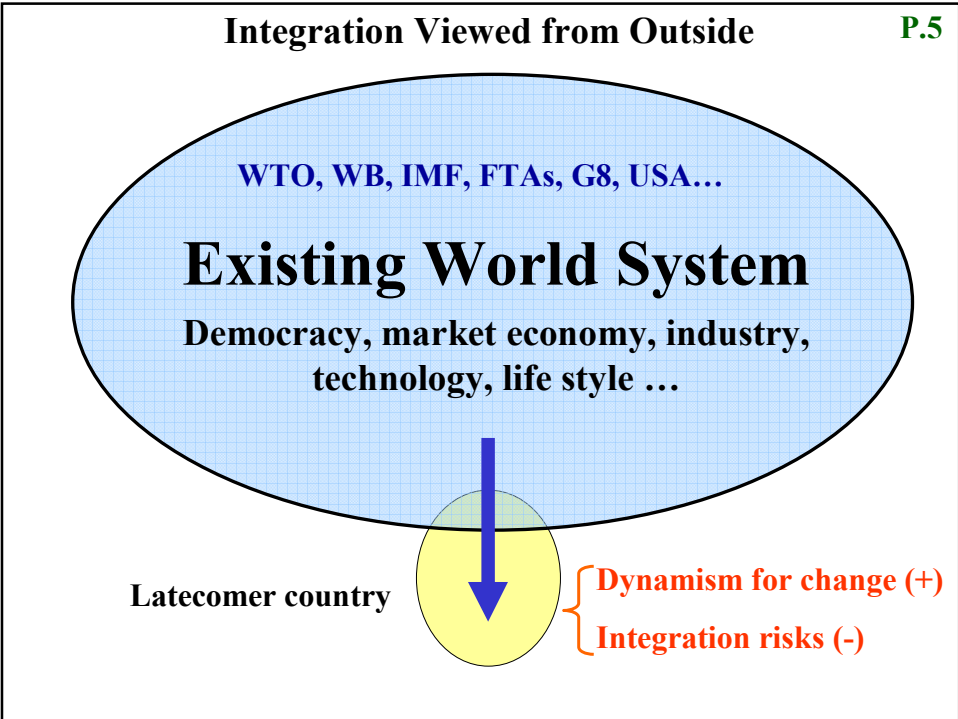
Meiji Japan (1868-1912)

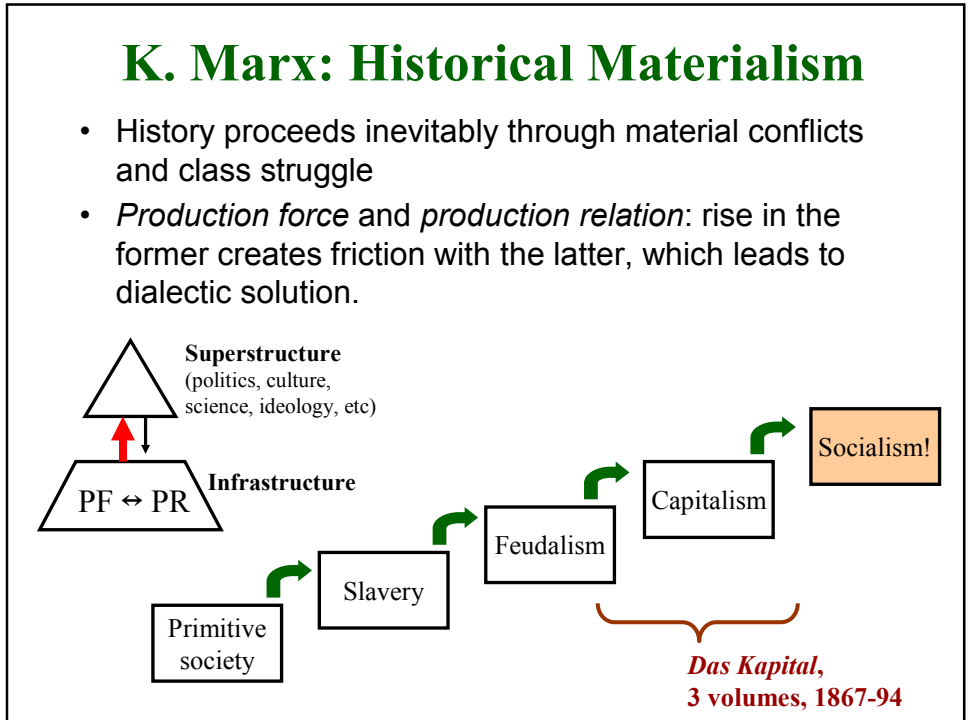
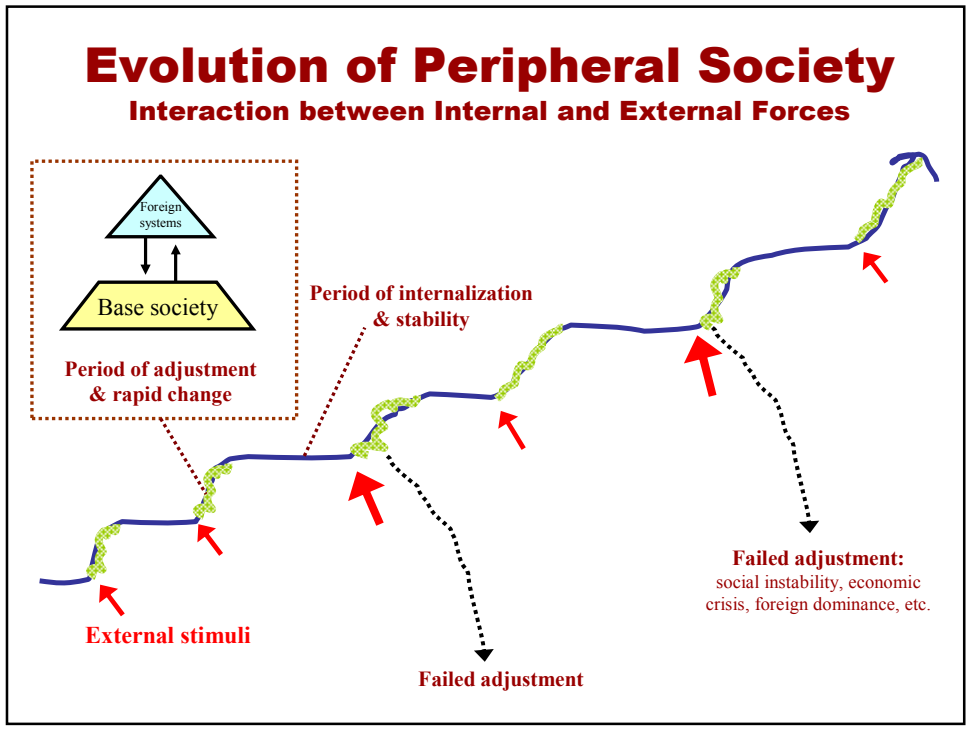
A Unique Latecomer

- ❑ History of peripheral society should be analyzed as interaction between internal and external forces.
- ❑ Japanese history was cumulative and evolutionary thanks to the right distance from civilization (China).
- ❑ When Japan began integration in the mid 19th century, it already had sufficient adaptive power.
- ❑ Japan absorbed Western technology and systems selectively and under its own initiative.
- ❑ Japan's industrialization also nurtured the *monozukuri* (manufacturing) spirit.



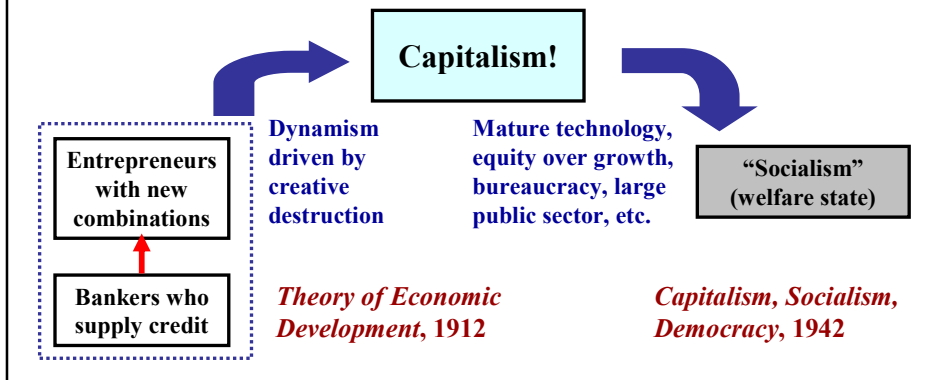






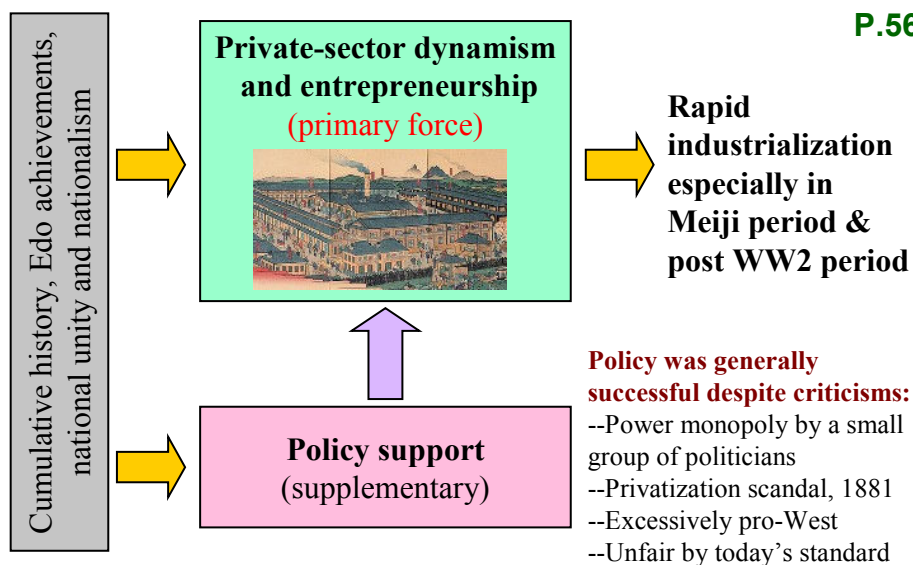
J. Schumpeter: Rise & Fall of Capitalism

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



Japan's economic growth was driven mainly by private dynamism while policy was also helpful

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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



Daimyo in his castle



Samurai police and merchants



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



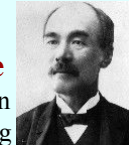
Sumitomo Family

- 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

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

Yataro Iwasaki (1835-85)



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- 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 to many areas: trade, banking, shipbuilding, coal, mining (later, more)

Mechanical factory in Nagasaki, ca 1885

Bakufu's Steel Mill in Nagasaki, transferred to Mitsubishi in 1884



← Eiichi Shibusawa (1840-1935)

From Saitama

Tomoatsu Godai (1836-1885) →

From Satsuma

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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

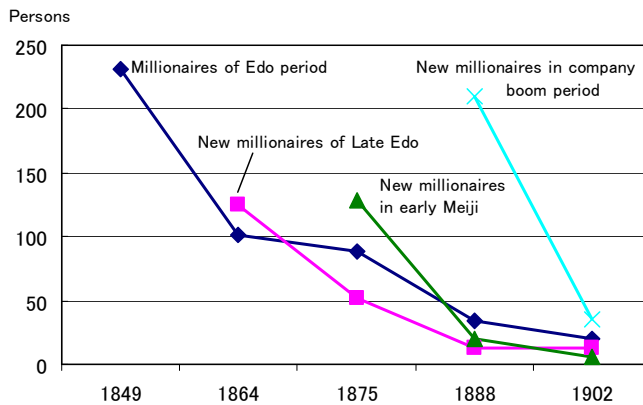
- Studies and builds human network in Nagasaki
- Visits UK; realizes need to industrialize, writes report
- In Osaka, helps to create copper co., railroad, shipping co., rice & stock exchanges, cham. of commerce, university, test centers, trading center, etc
- SOE privatization scandal

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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.



Source: Computed from Miyamoto (1999), p.53. Each line shows how many of the new millionaires emerging each period survived in later periods.

- ▶ 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

Toshimichi Okubo (1830-1878)

High Official Implementing Industrial Policy

- Participated in Iwakura Mission (1871-73) to observe Western technology & systems
- 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 (shipping, etc)
 - Establishment of SOEs and research centers
 - Domestic industry exhibitions
 - Set up bureaucracy, police and local governments
 - Suppress Saigo Rebellion, send troops to Taiwan



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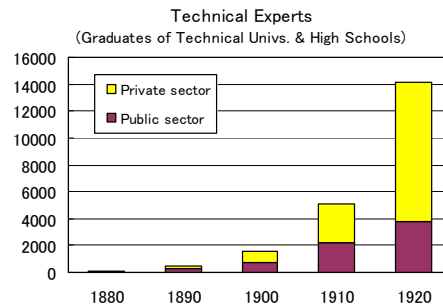
Technology Transfer

PP.62-65

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

Private-sector experts, 1910


Mining	513 (18.0%)
Textile	300 (10.6%)
Shipbuilding	250 (8.8%)
Power & gas	231 (8.1%)
Trading	186 (6.5%)
Railroad	149 (5.2%)
Food	149 (5.2%)
TOTAL	2,843 (100%)



Studying Abroad (Early Engineers)

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- 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)
- 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

PP.65, 179-181

- *Mono* means “thing” and *zukuri* (*tsukuri*) means “making” in indigenous Japanese language.
- 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
1867-1930



Konosuke Matsushita
1894-1989



Soichiro Honda
1906-1991



Akio Morita
(Sony’s co-founder)
1921-1999



How about Vietnam?



- ❑ Vietnam's history has been more disruptive with wars and foreign invasion (too close to China?)
- ❑ No super business leaders or large business groups.
- ❑ Economic policies are not very good.
- ❑ Worker quality is *potentially* good.
- ➔ Vietnam's development must rely heavily on FDI and ODA (risk of losing one's identity and control)
- ➔ Possibility of learning *monozukuri* spirit and becoming Japan's manufacturing partner?