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Taiwan’s Economic Policies and Financial Transformation during the Japanese Colonial Period

Japanese Industry Policies in Colonial Taiwan: Tea and Sugar

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1. Export and growth

2. Japanese industrial policy on sugar

3. Implications on the post-war growth
Taiwan’s average growth rate of GDP per capita from 1955 to 2000 was the highest in the world.

GDP per capita = income per person (quality of life)

Why Taiwan grew so fast? No consensus, but it is agreed that … it was an export-led growth after 1950s.
Export and growth
Japanese industrial policy on sugar
Implications on the post-war growth
References

Taiwan: 1960

Sugar-Tea
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Taiwan’s export

- But export to GDP ratio had been high since early Japanese period
Taiwan’s Export

Export and growth

Japanese industrial policy on sugar

Implications on the post-war growth

References
• In the early Japanese period, tea and sugar were the most important exports (export values were the same in 1906)
• During 1905–1940, there was an amazing growth in sugar, but not tea (production index, 1906 = 100)
Taiwan sugar empire

• 矢内原忠雄 (1929) (Yanaihara):

《台灣糖業帝國》Taiwan sugar empire
• Output ratio of sugar to the sum of the industry sector
• Sugar industry declined after 1950s while other industries were growing
• Two questions: rise and fall of the sugar industry
Two questions

• The rise of the sugar empire
• The decline
Japan’s sugar before 1895

- In 1894: Japan consumed 4 million tons of sugar, 80% was imported, mostly from Dutch India.
- After 1895, Taiwan became the main supplier of sugar to Japan.
- This seems to imply that Taiwan had comparative advantage in sugar production, or Taiwan’s sugar was cheaper.
Sugar production

Sugar industry

- Cane production: output of cane per hectare
- Sugar production: output of sugar per unit weight of cane

Japanese industrial policy on sugar

Export and growth

References
Sugar output (short tons) per acre of cane
Java was much more productive than Taiwan
Taiwan’s sugar was more expensive than Java (unit: Taiwan dollar per 60kg)

Why after 1895, Taiwan became the main supplier of sugar to Japan?
Tariff

- Taiwan’s raw sugar exported to Japan was tax free
- Heavy tariff on raw sugar imports from other countries, including Java
- An example:
  Java sugar in Japan: $10 + $8 (tariff) = $18
  Taiwan sugar in Japan: $16 + $0 (tariff) = $16
• In mid-1920s, fine sugar retailed price in Japan was about 24 Yens per 60kg, about half of which was tax (矢内原忠雄, 1929, p. 307)
Industrial policy

- Under the tariff policy, Java’s sugar could not compete with Taiwan’s sugar, even though it was produced at much lower cost
- Industrial policy = heavy tax on imports
The rise of the empire

- Taiwan’s sugar empire was built not on comparative advantage, but on industrial policy by the Japanese government
Industrial policy

• Japan was not the only country adopting sugar industrial policy

• In the early 1930s, US retail price of raw sugar was about 3 cents per pound, about 60% of which was tariff (Dalton, 1937, p. 29)
Who were benefited?

- Who were benefited?
  - Japanese sugar factories in Taiwan
  - Taiwanese farmers
Who were benefited?

- Who were benefited?
  - Japanese sugar factories in Taiwan
  - Taiwanese farmers

- Who paid the price?
  - Japanese sugar consumers (from 12 Yens to 24 Yens)
Sugar policy and Taiwan

• Taiwanese consumers also paid high price for sugar (about 90% of sugars were exported)

• Taking into account of consumers and farmers, it seemed that Taiwan was benefited from the industrial policy
Sugar policy and Taiwan

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• Taking into account of consumers and farmers, it seemed that Taiwan was benefited from the industrial policy
• Was it?
Post-colonial development

- After 1945, Taiwan could no longer export sugar to Japan free of tax
- Taiwan had to compete with other sugar producing countries from around the world
- However, Taiwan had no comparative advantage in sugar production
Cost and price

- Cost was higher than price
- And so the sugar empire collapsed
Concluding remark

- With the decline of the sugar industry, textile took the place of sugar and became the most important export of Taiwan

- How it was achieved?
Export and growth

Japanese industrial policy on sugar

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References

- In 1990 US dollars
• Institutions:
  “Institutions provide the incentive structure of an economy” (North, 1991)
  • Private property rights
  • Contracts enforceable by third parties
  • Markets with responsive prices