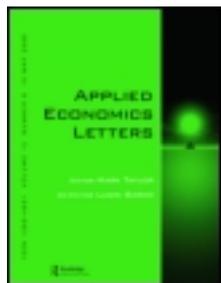


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The opium wars, opium legalization and opium consumption in China

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The effect of drug prohibition on drug consumption is a critical issue in debates over drug policy. One episode that provides information on the consumption-reducing effect of drug prohibition is the Chinese legalization of opium in 1858. In this paper we examine the impact of China's opium legalization on the quantity and price of British opium exports from India to China during the nineteenth century. We find little evidence that legalization increased exports or decreased price. Thus, the evidence suggests China's opium prohibition had a minimal impact on opium consumption.

I. Introduction

The effect of drug prohibition on drug consumption is a critical issue in debates over drug policy. Prohibition advocates claim drug use would mushroom if drugs were legal, while prohibition critics believe use would increase modestly, if at all. Evidence on this issue is scarce due to lack of data on prohibited commodities.

One episode that provides information on the consumption-reducing effect of drug prohibition is the Chinese legalization of opium in 1858. India was a major opium producer during the nineteenth century and the British East India Company exported much of this opium to China and Southeast Asia. China prohibited the consumption and importation of opium during the early part of the century, but after the Second Opium War China yielded to British pressure and legalized opium.

The critical feature of this episode is that the Company kept records of opium exports from India to China. These exports were legal throughout the 1800s even though importation into China and consumption within China, were prohibited

until 1858. Exportation occurred before this date, because third party entrepreneurs purchased the opium in India and smuggled it into China. If China's prohibition reduced consumption to a substantial degree, legalization should have increased exports from India to China unless legalization also spurred production within China. In that case, however, Chinese substitution of domestic for imported opium should have reduced the export price of Indian opium. Thus, the joint behaviour of opium exports and price indicates whether prohibition reduced opium consumption.

We examine the impact of China's opium legalization on the quantity and price of British opium exports to China during the nineteenth century. We find little evidence that legalization increased exports or decreased price.

II. Background

Opium is produced from the opium poppy, a flowering plant native to Turkey. The plant's seedpod

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contains a latex solution that exudes if the pod is scored with a sharp instrument. This latex is raw opium and it contains morphine and other alkaloids with analgesic properties. Raw opium can be eaten or diluted in liquid, but the standard approach is to boil raw opium and then dry it for smoking (Booth, 1996).

The opium poppy was introduced into China between the fourth and seventh centuries by Arab traders and it was cultivated widely for centuries before the East India Company arrived in Asia. Opium was used to cure diarrhea, induce sleep and reduce the pain of diseases like dysentery and cholera.

The English arrived in China in 1637 and were allowed to open a trading station in Canton in 1715 (Beeching, 1975, p. 11). During this time many Western powers imported both opium and tobacco into China. The East India Company obtained an opium monopoly in Bengal in 1773 and in Bombay in 1830. From the 1770s the Company began heavier trade in Canton, often trading opium for tea.

In 1729, rising opium use in China prompted an imperial edict that forbade the sale of opium for smoking purposes. In 1799, another edict prohibited importation (Rowntree, 1905, pp. 6–13). Leading up to the 1799 edict, the Chinese became wary of the opium trade and the ever-expanding British influence in their country. Under pressure from the Chinese government, the East India Company stopped exporting opium directly to China in 1796 and began selling in Calcutta to private merchants, who delivered the opium to China. Thus, the Company denied responsibility for opium and retained other trading rights.

In both 1814 and 1831, the Emperor decreed even stricter laws against importation and sale of opium (Chang, 1964, p. 220). By the 1830's the Chinese economy was in recession and the balance of trade had turned against China. There was no reason to believe the opium trade caused either phenomenon, but a corrupt army, weakened bureaucracy and slowing economy made opium an easy scapegoat (Polachek, 1992, p. 104).

In 1836 the Emperor held a series of 'Opium Debates' between those favouring opium legalization and those favoring suppression. Legalizers claimed the real issues were organized crime and the silver drain. They argued that legalization would generate tax revenues and they believed prohibition was expensive and strengthened the feared lower bureaucracy. The moralists claimed that disregard for the law was no reason for repeal and that legalization

would result in everyone smoking. The legalizers appeared close to victory until a rival political faction thwarted the initiative (Polachek, 1992, p. 114).

After the debates opium addiction became a capital offense and eliminating the internal trade became a major focus of the Ching dynasty. The crackdown did not appear to reduce use, however, so the Emperor assigned Lin Tseh-Sen the task of ridding China of opium. Lin seized and destroyed British opium, but the British continued the trade. The Chinese responded by stopping food shipments to British ships and poisoning water supplies. Drunken British sailors killed a Chinese villager and the British prevented trial of the sailors under Chinese law. Commissioner Lin attacked British ships, but the British destroyed Lin's army and forced Chinese to surrender. Lin was banished and the Treaty of Nanjing was signed in 1842.¹

The treaty gave Hong Kong to the British and opened new ports to British trade. It forbade the Chinese from trying British sailors under Chinese law (extraterritoriality) and gave Britain most-favored-nation status. Opium was not a major focus of the treaty, although the British urged China to legalize and tax opium. The emperor disagreed, saying 'nothing will induce me to derive a revenue from the vice and misery of my people' (Rowntree, 1905, p. 71).

The second Opium War broke out in 1856, when Canton officials boarded the *Arrow*, a vessel accused of piracy and ripped down a British flag. The British again won the war easily. The Treaty of Tientsin, signed in June of 1858, contained no reference to the opium trade but further opened legal trade in favour of the British. After the peace, the British again supported legalization as the only way to control the trade. China finally succumbed, legalizing opium in 1858 with a tariff of about 8%.

III. Opium Exports and Price

We now examine data on the quantity and price of opium exports from India to China to see whether China's opium legalization led to a substantial increase in Chinese consumption. Feige and Miron (2005) describe the data.

Figure 1 presents data on exports measured in number of chests of opium per Chinese population. Overall there is a strong upward trend, beginning around 1820. This trend potentially reflects higher income or an expanding taste for opium. There is

¹ For further details, see Chang (1964, pp. 189–213) and Waley (1995).

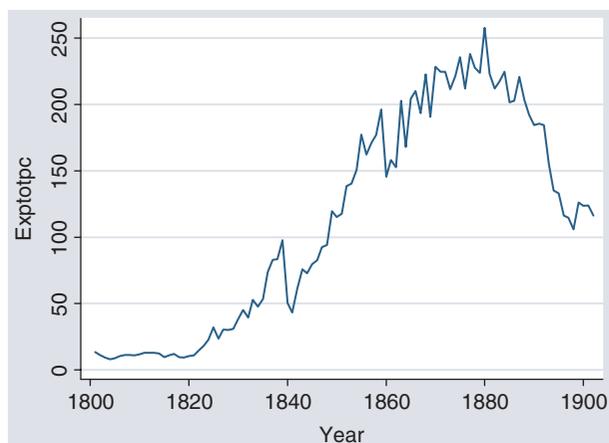


Fig. 1. Opium exports per capita from India to China (in number of chests)

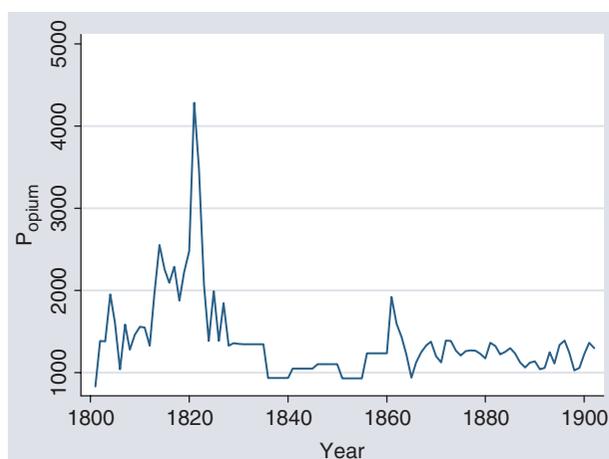


Fig. 2. Price of opium exports in India (rupees per chest)

substantial volatility, especially during the war years (1839–1842 and 1855–1866).

The key fact is that the data show no increase in export growth after legalization. If anything, the trend line becomes less steep around legalization and it eventually turns downward. If legalization increased consumption, exports should have grown faster after legalization, barring a substantial substitution by China towards domestically produced opium. If this occurred, however, exports prices should have fallen.

Figure 2 shows the price of exports. The price is volatile early in the nineteenth century. Prices appear to have increased (slightly) rather than decreased after legalization, the opposite of what

should have occurred due to substitution by the Chinese from imported to domestic opium.

Regressions of the quantity or price of opium exports on the price of rice (as a proxy for the inverse of income), a quadratic trend and a dummy for the legalization period confirm the impression provided by the figures: there was no perceptible change in export quantity or price after legalization.

IV. Conclusions

China's legalization of opium in 1858 was not associated with a perceptible increase in opium consumption. This conclusion is subject to the caveat that it rests on export data, but it is suggestive nevertheless.

The conclusion may not apply to other prohibitions. Beyond the differences in time and place, there is little evidence that the Chinese expended substantial resources enforcing opium prohibition. The episode raises a cautionary note about the impact of weakly enforced prohibitions, however and the evasion and corruption that occurred are reminders of the constraints faced by any prohibition, even under significant enforcement.

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