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It is said that Alexander the Great introduced opium to India as early as 330 B.C.; while uncertain if it was actually Alexander the Great, it is clear that opium had been a significant part of Indian culture before British imperialism. The Portuguese, who first observed Indian opium use in 1600, stated that opium was widely used and was highly valued in society.¹ Opium's role in culture was just as important when the British East India Company established itself in India. The Company took control of opium production and established a state monopoly. The opium trade was very lucrative and was imperative in paying for the cost of imperialism in India. This paper will focus on the time period of 1842-1880 with economic analysis from 1842-1858. The Second Opium war ended in 1842, which removed all legal barriers of the opium trade to China and substantially increased production. After 1880, opium became less important to India's economic interests because other exports were developed and opium comprised a smaller proportion in total revenues and exports. The Company also enforced policies that limited consumption of opium in India. Yet, why limit consumption of a good that is valued in a culture's society when there is also a high fiscal interest?² A common rationale for limiting consumption of opium is the deplorable nature of drugs and the power of anti-drug policy of Britain, but this argument is completely contradicted by both the policies of encouraging opium trade with China and officials rejecting the rhetoric of anti-opium reformers insisting that opium is detrimental to health and quality of life. A better explanation would be Britain's economic interests in reducing the trade deficit. British control of opium production and trade in India significantly lessened the cost of imperialism by creating large streams of revenue. British

¹ Richard Newman, "Early British Encounters with the Indian Opium Eater," In *Drugs and Empires: Essays in Modern Imperialism and Intoxication 1500-1930*, ed. James H. Mills and Patricia Barton, (New York: Palgrave Macmillan, 2007), 58.

² John F. Richards, "Opium and the British Indian Empire: The Royal Commission of 1895," *Modern Asian Studies* 36 (May 2002): 401.

policy discouraged the development of the domestic Indian opium market because Britain could achieve the same substantial revenues while also offsetting the visible trade deficit with China and therefore better serving British economic interests.

The British obtained profits from the opium trade through the state-controlled monopoly in Bengal, collecting pass fees from the Malawa opium producing region, and imposing excise taxes on domestic sales.³ The profits from the Bengal region were the most extensive and comprised the majority of British revenue from opium. In 1797 the British East India Company established a trade monopoly on Bengal opium. Production and operation were in control of contractors who would advance funds to farmers, purchase the opium produced, and then sell the opium product to the Company. The Company made its revenues by auctioning off merchandise in Calcutta. For the next twenty years, the East India Company tested different policies attempting to maximize revenue and increase productivity. The reforms made the production and manufacturing system more efficient making opium less costly to produce. One reform eliminated the poppy cultivation in the districts of Rangpur and Bhagalpur and focused production in Behar and Benares.⁴ The land in Behar and Benares districts was better, so a product of higher quality was cultivated. Also, by consolidating the poppy cultivating land it was easier to supervise peasants therefore lessening costs of opium production. British actions from 1790 to 1816 shaped Bengal into the most efficient opium-producing center in the world and led to steady revenues from opium for the rest of the nineteenth century.

The second largest source of opium revenue was collected through pass fees in Malwa. Malwa was an opium-producing region that was not controlled by the East India Company.

³ The Bengal opium is a generic term used commonly in opium records, but in this case specifically refers to the opium producing regions in the districts of Bihar and Benares.

⁴ The East India Company's Regulation VI of 1799 accomplished this reform by banning the production and trafficking of opium in non-Company sanctioned regions.

Opium production in Malwa was highly lucrative and allowed Indians to profit in the market. Malwa opium was traded through Bombay, rather than Calcutta where Bengal opium was traded. Although opium production in the Malwa region was illegal, the Company allowed production, since it would cost large quantities of money and manpower to completely restrict trade and production. The Company acted practically, realizing the tremendous cost of completely prohibiting trade, and instead produced a fee system in order to profit from the Malwa opium trade. Private production and sale of Malwa opium was permitted and pass fees were levied on merchants. Because British officials were not involved in the operation or production of opium, the only cost associated with revenue from Malwa opium was administrative in the actual collection of the tax. The tax collection was incredibly efficient with very low costs, therefore making revenues from pass fees a significant contribution to British profits. J.W. Wong emphasizes the low cost by comparing the tax collection of salt and opium. Both goods have the same basis for comparison because both are sold through Bombay and the Company is not involved in the production. Over a period of ten years, opium taxes were consistently over ten times cheaper to collect than salt, never exceeding 0.6% of the gross revenue collected.⁵

The final source of revenue was collected through excise taxes on the domestic sales of opium. Profits from the sales of domestic opium contributed the least to British revenue. The British maintained policies in India that minimized domestic consumption. For example, most Indians could not afford opium not only because of the high tax rate but also because of the

⁵ Wong, J. W., *Deadly Dreams: Opium and the Arrow War (1856-1860)*, (New York: Cambridge University Press, 2002), 395-6. Wong also compares tax collection with other goods from the year 1858-9. Expressed as a percentage of the gross revenue collected, the tax expense rate for the post office was 90.02%, salt 11.83%, land revenue 10.52%, customs 4.9%, stamp duties 3.91%, and opium 1.84%--the smallest expense rate.

careful control of the supply, which increased the price. Excise taxes from domestic use were the least extensive contribution to British opium revenues.⁶

Opium revenue was a substantial source of profit for the British in India, as these profits made up a considerable percentage of both total British revenues from India and total Indian exports. There were two economic indicators used in evaluating the opium trade: the annual record of official monies received and the number of chests exported. The Opium and Customs Departments of British India compiled the data collected on opium revenues during the period. John F. Richards states there was no evidence of official biases and suggests the data collected was accurate with margins of error from 10% to 20%.⁷ In the fifty-year period from 1842-1880 opium revenue on average was 15% of India's total revenue, which is significant for a single commodity. Comparing other sources of revenue in India with opium revenue illustrates the scale of opium returns. In 1843 opium became the second largest source of revenue for India.⁸ Opium revenues generated more revenue than customs and stamp taxes combined, which were the fourth and fifth largest sources of revenue.⁹ Analysis of opium revenues in comparison with other Indian exports shows how important opium was to Indian trade. From 1842-1859, opium made up 31.5% of all Indian exports and from 1859-1880 dropped to some extent to a proportion of 18.66% of all exports. Opium was the single largest contribution in generating India's export surplus. The contribution of opium to both total revenues and exports indicates the degree in which opium revenues serviced the cost of imperialism in India.

⁶ John F. Richards, "The Opium Industry in British India," *Indian Economic & Social History Review* 39 (2002).

⁷ The data compiled is nominal so was not adjusted for changes in the price level, so I focused on figures as a percentage of either overall revenues or in comparison with another good's total revenue to adjust for any changes in price level or in all levels of revenue. Richards India 2002, 154-5

⁸ Treaty of Nanking was signed in 1842 after the first Opium War by Britain and China and relaxed restrictions on the opium trade in China

⁹ See Richards, "The Opium Industry in British India," 153.

As the British Empire expanded its control of India it also accumulated debt, so it was necessary to find a source of revenue in order to service the debt and maintain the British Empire. Opium became this source of revenue. The relationship between opium revenue and the British Empire points to the degree in which opium revenues absorbed the costs of imperialism. Scholars agree on the importance of opium revenues in maintaining the strength and cost of the empire in India. Richards states that opium and the Indian Empire "marched together" and through analysis of the revenue data from 1790-1934 the large opium revenues indicated the "enduring importance and long-term stability" of opium revenues to the colonial state. ¹⁰ Marc Jason Gilbert argues that revenue from opium was indispensable to the British Indian Empire and led the British to develop a type of imperial dependence on those revenue streams.¹¹ J.W. Wong claims that opium was the "single most important cash crop for India" and opium revenue serviced the cost of imperial expansion in India.¹² Before the Second Opium War, revenue from opium only covered British interest on its debt. After the war, opium revenue was enough to pay out between two and three times British interest. Wong uses this data as evidence of opium revenues being used to service the cost of imperial expansion in India. Opium revenues are consistently linked to maintaining the Empire by covering the cost of imperialism. However, the majority of the revenues that serviced the cost of imperialism in India did not come directly from India to Britain, but rather were proceeds from trade with China.

Opium revenues were necessary in decreasing the cost of imperialism, yet the British enacted policies designed to minimize domestic consumption of opium and instead focus all

¹⁰ See Richards, "The Opium Industry in British India," 154-5.

¹¹ Gilbert, Marc Jason, "Empire and Excise: Drug and Drink Revenue and the Fate of States in South Asia," in *Drugs and Empires: Essays in Modern Imperialism and Intoxication 1500-1930*, ed. by James H. Mills and Patricia Barton, (New York: Palgrave Macmillan, 2007), 117.

² See Wong, *Deadly Dreams*, 375.

production on trade with China. The British domestic policy established through the East India Company's Regulation 13 of 1816 was designed to produce "maximum revenue with minimum consumption".¹³ Therefore, it was not so much as a concern for its imperial subjects well-being as it was for British economic interest. On the supply side, there was strict regulation of permits for vendors to sell opium. A limited number of licenses were granted to vendors, thus limiting the availability of opium. On the demand side, the East India Company fixed the retail price attempting to strike a balance between limiting consumption and smuggling. If the price was too high then smuggling would inevitably occur. Yet, the British fixed the price above the market price in order to limit consumption but not so high as to encourage smuggling. The British used the excise tax system to control the market by essentially making opium too expensive for most Indian citizens to obtain legally or illegally. There was a limit on opium possession and it was criminal to have more than the allotted amount; granted, the limit was so generous it was not necessary to enforce the policy often, yet the policy would to some extent discourage dealing and smuggling. Consumption was controlled by the state, which made a deliberate effort to limit the consumption of opium in India. British policies were effective in minimizing demand as annual consumption per capita of legally sold opium was a week's supply for a moderate user.¹⁴

The majority of scholars agree that British policy was designed to limit consumption, but they do not provide a convincing explanation as to why the British did not develop both a domestic Indian market as well as a market for foreign trade. There is evidence that neither the Board of Trade nor the opium agents could provide an adequate supply for Indian demand of

¹³ Haq, M. Emdad-Ul, *Drugs in South Asia: From the Opium Trade to the Present Day*, (New York: Palgrave Macmillan, 2000), 33.

¹⁴ See Richards, "Opium and the British Empire," 412.

opium.¹⁵ So why not develop the domestic market and earn even more revenue? The main arguments put forth revolved around paternalism and anti-opium sentiment from Britain as the main influences of the domestic drug policy. Richard Newman, in his essay "Early British Encounters with the Indian Opium Eater," expresses British concern for the use of opium as the primary motive in the East India Company's policies limiting consumption. He concludes that the Company's paternalistic concern was "undoubtedly genuine." As evidence, Newman states "there is no indication that the Company promoted the use of drugs in India as a source of profit for itself."¹⁶ However this assertion is incorrect as the Company policy was shaped first and foremost around the pursuit of maximum revenue and secondarily on minimizing consumption. The argument put forth by Newman is further weakened by the paradox of Britain's opium trade to China. John F. Richards, in his essay "The Moral Economy of Opium in East India," points out the paradox in this argument that if selling opium to India was deemed immoral, then any sales of opium to China should likewise be deemed immoral.¹⁷ However, the government was fully committed to the opium trade in China, which contradicted the reasoning presented by antiopium reformers.¹⁸

The influence of anti-opium reformers was also not likely a cause for the British policy to limit consumption. Anti-opium rhetoric was weakened by the pervasive use of alcohol in Britain and by the role of opium in Indian culture. The British opium reformers opposed an aspect of Indian culture that Indians in society did not view as particularly harmful. Anti-opium reformers were influenced by cultural biases about the East, as opium use was seen as disgusting and

¹⁵ See Newman, "Early British Encounters with the Indian Opium Eater," 66.

¹⁶ Ibid., 68.

¹⁷ John F. Richards, "The Indian Empire and Peasant Production of Opium in the Nineteenth Century," Modern Asian Studies 15, (1981), 78.

¹⁸ The distinction between British-Indian subjects and Chinese colonized to explain the discrepancy of drug policy could be argued, but I found no evidence of this during my research.

degrading.¹⁹ The Royal Commission of 1895 on Opium refuted many of the claims of the harm of opium made by anti-opium advocates showing that the attack on Indian opium was a form of cultural imperialism.²⁰ The Commission was the principal report on opium from the British Parliament and encompassed observations from the entire nineteenth century. The Commission concluded that moderate use of opium "did not harm either the physical or moral condition of the people in India" as well as disputed many other unfounded claims by anti-opium reformers.²¹ There was also "absolute unanimity" among respondents who stated that alcohol was considered to be far more harmful than opium. Since alcohol consumption was widespread and tolerated in Britain, but viewed as more deplorable than opium, it seems sensible that opium should have been tolerated in India. The Royal Commission came to this conclusion, which invalidated the claims of anti-opium reformers. The beliefs of anti-opium reformers did not reflect the opinions of the policymakers in India who were the main contributors to the report, so it is likely that British reformers were not the principal reason why the British did not develop an opium market in India. The contradictory policies implemented by the British in limiting consumption in India while expanding the opium market in China can be explained by evaluating British economic interests in foreign trade.

¹⁹ The judgments were clearly based in western ideology. See Richards, "Opium and the British Empire," 418.

The Royal Commission was created by British Prime Minister William Gladstone as a means for public inquiry into the opium question in India. The Commission intended to answer questions regarding the prohibition and sale of opium, financial effects of potential prohibition, medical use of opium, and the view of opium by Indian society. The economic effects were not included in this paper because they fell outside the specific time period 1842-1880 being analyzed. For a succinct summary and analysis of the 2,500 page full report see Richards, "Opium and the British Indian Empire."

There were many other claims raised by anti-opium reformers that were contradicted and to some extent disproved by the Royal Commission's report. These included reports that opium use causes insanity, premature death, and suicide. Also more generally that opium use was not responsible for any disease peculiar to itself. See Richards, "Opium and the British Empire," 403.

The best explanation for why the British neglected to develop the domestic opium market while expanding the Chinese opium market is that the Chinese market could better serve Britain's economic interests by earning the same large streams of revenue while also reducing Britain's trade deficit with China. M. Embad-ul Haq agrees and believes that the contradictory measures enforced by colonial authorities were "an attempt to receive foreign currency, especially from China... [so] the colonial authorities discouraged local consumption of opium and encouraged opium exports."²² Maintaining a healthy balance of trade served a compelling state interest to Britain because it protected the strength of the sterling, the source of the country's power. The interest rate was so high that all production of opium was devoted to export to China, which fully benefitted Britain's balance of trade; balance of trade is directly linked to the strength of currency. Balance of payments deficits, caused by a trade deficit when imports exceed exports, reduce a country's gold reserves and also reduce confidence in the ability of a country to redeem its currency in gold, therefore decreasing both its stability and its value. Confidence in British sterling was vital in securing the capital inflow and outflow. Cain and Hopkins in British Imperialism: 1688-1800 emphasize the importance of the strength of the British sterling as "the basis of [the City's] success."²³ Invisible income from the service industry, which was one of the most important parts of the City's economy, depended on huge capital inflow and outflow; confidence in sterling was vital to securing the capital flow. Sterling was the most important international currency during the period of 1842-1880; it was important for Britain to maintain the power of its currency because the strength and ease of convertibility of sterling increased the demand for British goods and services and therefore added to Britain's

²² See Haq, *Drugs in South Asia*, 33.

²³ Peter Cain and Anthony Hopkins, *British Imperialism, 1688-2000 (2nd Edition)*, (New York: Longman, 2001), 181.

economic power.²⁴ It is clear that Britain had a compelling state interest in reducing its trade deficit as to maintain the strength of sterling and therefore the economic power of the City, the opium trade became a way to fix the problem of the trade deficit with China contributing to Britain's global visible trade balance.

The source of the Britain-China trade deficit was the high demand in Britain for Chinese goods while China showed no significant interest in European goods.²⁵ The demand in Britain was predominantly for tea and silk, but also for porcelain. Because of the disparity between the demand, Britain paid its balance of payments deficit through large exports of silver to China. Development of opium became an "alternative means" of financing this trade and the "triangular trade" emerged. China was the creditor of England because of the consumption of tea, silk, and porcelain. England was in turn the creditor of India for various reasons including the requirement to pay revenue and dividends on East India stock to Britain and also because of a trade deficit in favor of Britain. India was the creditor to China because of the opium trade, thus creating a triangular trade.²⁶ Opium became a way for Britain to offset its trade deficit. It is important to analyze the importance of income from opium on financing the balance of payments deficit in order to determine the degree of influence on British economy.

In the eighteenth and at the beginning of the nineteenth centuries, Britain used invisible income to fill the visible trade gap. In the second half of the nineteenth century, the service industry was no longer able to fill the widening trade gap and began to rely on income from abroad for the balance of payments deficit. Though invisible income covered the balance of payment deficits from 1855-1873, there are two important factors that still explain the

²⁴ Ibid., 164.

²⁵ See Chaudhuri, *The Cambridge Economic History of India*, 847.

²⁶ See Wong, *Deadly Dreams*, 376.

importance of offsetting the Chinese trade deficit: the relationship between trade deficits, strength of sterling, invisible income, and the additional benefit of a net surplus on balance of trade on Britain's economy. Invisible income relies on the value of sterling, and if the visible commodity trade deficit is significant enough it can be detrimental to the strength of sterling. Decreasing value and confidence in sterling would affect the City's ability to generate future invisible income. A surplus on the current account benefits Britain's economy because Britain can increase assets domestically and abroad, therefore adding to the net balance of trade is always beneficial. However, it is imperative to add revenue from abroad to cover the balance of payments deficit if invisible income from the service industry cannot, as was the case from 1874-1890. Britain had a negative 0.4% trade deficit and relied on the 5.4% net income from abroad to cover its balance of payments, this income from abroad included revenues from the opium trade.²⁷ Opium sales in China made up for 25-35% of Britain's global visible trade deficit.²⁸ It was necessary for these revenues streams to derive from China, because trade within India would not benefit an increase in the balance of trade. Indian opium had great strategic importance in the trade triangle between China, Britain, and India because it served a double purpose. It generated and transmitted revenue from China to India, which helped supply India's increasing silver needs.²⁹

To analyze the economic importance of opium, I analyzed the relationship between Britain's trade deficit with China and opium revenues using data from 1842-1858. The dependent variable is the visible trade deficit and the independent variable is opium revenues. I

²⁷ C.H. Feinstein, R.C.O. Matthews, and J.C Odling-Smee, *British Economic Growth, 1856-1973 (Language Science and National Development)*, (Palo Alto: Stanford University Press, 1982), 442.

²⁸ See, Wong *Deadly Dreams*, 409. ²⁹ Top Chung, *Ching*, and the Prove Net

²⁹ Tan Chung, *China and the Brave New World: A Study of the Organs of the Opium War*, (Durham, NC: Carolina Academic Press, 1978), 89.

predicted a positive sign for the opium revenues coefficient meaning that opium revenues cause an increase in the trade deficit with China. The opium revenues are lagged one year in order to account for the slow process of commerce and accounting of trade. Also money is being transmitted through India further slowing the process. The methodology is consistent with historical research because it means that as the British trade deficit with China grows, opium revenues from China to India (and Britain) also increase to make up for the trade deficit. Using a double linear log model, I ran an ordinary least squares regression with opium revenues lagging one year. This is a useful specification for a regression model because the slope coefficient can be interpreted as elasticity.

Results:

Dependent Variable: LNTRADE Method: Least Squares Date: 04/20/10 Time: 15:18 Sample (adjusted): 1843 1857 Included observations: 15 after adjustments

	Coefficient	Std. Error	t-Statistic	Prob.
С	0.284012	0.254645	1.115326	0.2849
LNOP(-1)	1.038656	0.189427	5.483142	0.0001
R-squared	0.698130	Mean dependent var		1.654639
Adjusted R-squared	0.674909	S.D. dependent var		0.329883
S.E. of regression	0.188089	Akaike info criterion		-0.380241
Sum squared resid	0.459905	Schwarz criterion		-0.285834
Log likelihood	4.851808	Hannan-Quinn criter.		-0.381247
F-statistic	30.06485	Durbin-Watson stat		1.581794
Prob(F-statistic)	0.000105			

The result for the opium revenues coefficient is the expected sign (positive) and is statistically significant. The estimated coefficient for opium is 1.038 meaning that opium is slightly elastic compared with the trade deficit. Although, in terms of other goods I would assume that opium is

relatively inelastic; it makes sense that the coefficient would be elastic in the context of comparing the revenues to the overall trade deficit because there are some other factors that affect the deficit between Britain and China. One limitation of the data is that there are only 15 observations. The Durbin-Watson statistic is within the normal bounds for the number of observations signaling that there is limited serial correlation. The adjusted R-squared .6749 is the fraction of the sample variation in the trade deficit that can be explained by opium revenues. These results are evidence for the relationship between opium revenue and Britain's trade deficit with China.

To question the importance of the opium trade with China, I used another economic model to analyze the relationship between Britain's main Chinese imports (tea and silk) and opium revenues. The dependent variable is British tea and silk imports from China, and the independent variable is opium revenues. I predicted a positive sign for the opium revenues coefficient, meaning that opium revenues cause an increase in Chinese imports to Britain. The opium revenues are not lagged by a year because the trade is more directly between China and Britain as many of the importers of Chinese goods also exported Indian opium. The methodology is consistent with historical research because it means that as Britain makes more money through opium revenues from China, then they can afford more Chinese goods. Using a double linear log model, I ran an ordinary least squares regression. The log specification is useful so the slope coefficient can be interpreted as elasticity. I would predict that opium would be inelastic.

Results:

Dependent Variable: LNTEA Method: Least Squares Date: 04/20/10 Time: 15:30 Sample: 1842 1857 Included observations: 16

	Coefficient	Std. Error	t-Statistic	Prob.
C LNOPIUM	0.415371 0.899722	0.283303 0.170951	1.466171 5.263051	0.1647 0.0001
R-squared Adjusted R-squared S.E. of regression Sum squared resid Log likelihood F-statistic Prob(F-statistic)	0.664266 0.640285 0.173565 0.421747 6.384481 27.69971 0.000120	Mean depender S.D. dependent Akaike info crite Schwarz criterio Hannan-Quinn o Durbin-Watson	var rion n criter.	1.888816 0.289390 -0.548060 -0.451487 -0.543115 1.509747

The opium revenues coefficient is the positive expected sign and the results are statistically significant. The estimated coefficient for opium is 0.899 meaning that opium is inelastic as predicted. The Durbin-Watson statistic is within the normal bounds for the number of observations, signaling that there is limited serial correlation. The adjusted R-squared is .6402 which illustrates a general good fit of the data. The British silk and tea imports can be explained partially by opium revenues, which can be used as evidence for examining the trade relationship between Britain and China. There is a significant link between British Chinese imports and opium revenues, which serves as (indirect) British exports to China. Britain depended so much on opium revenue for its amount of Chinese imports, which is evidence for Britain's dependence on opium in leading its trade policies. Trade with China served Britain's economic interests, which could be the reason why Britain did not develop an opium market in India.

The British East Indian Company made opium production into an efficient and profitable business. The British Empire capitalized on the economic opportunity and used the opium trade to service the cost of imperialism while also reducing its trade deficit with China and in so strengthening its economy. British policymakers in India rejected arguments against opium use yet consistently enacted policies that limited domestic Indian consumption of opium. There is a gap in the scholarly literature explaining why Britain did not develop a domestic opium market. There is evidence that there was a high demand for opium in India yet almost exclusively all the opium that was produced each year was sold to China. Because of Britain's economic motives in balancing trade with China, the opium trade is focused exclusively on China. Because Britain's economy depends so much on capital inflow and outflow to the country, it was very important for Britain to have a strong currency and balanced trade. There is strong econometric evidence showing that opium revenues can explain the variation of Britain's trade deficit with China. There is also compelling evidence showing the relationship between the main British imports from China and Britain's revenue from opium. These two economic relationships illustrate how the British relied on the opium trade with China and how the opium trade governed its policies including in limiting the development of a potentially threatening domestic Indian opium market.

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