CAMBRIDGE UNIVERSITY PRESS

Economic History Association

The Myth of Free-Trade Britain and Fortress France: Tariffs and Trade in the Nineteenth Century Author(s): John Vincent Nye Source: The Journal of Economic History, Vol. 51, No. 1 (Mar., 1991), pp. 23-46 Published by: Cambridge University Press on behalf of the Economic History Association Stable URL: <u>http://www.jstor.org/stable/2123049</u> Accessed: 05/11/2010 10:17

Your use of the JSTOR archive indicates your acceptance of JSTOR's Terms and Conditions of Use, available at http://www.istor.org/page/info/about/policies/terms isp_ISTOR's Terms and Conditions of Use provides in part

http://www.jstor.org/page/info/about/policies/terms.jsp. JSTOR's Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at http://www.jstor.org/action/showPublisher?publisherCode=cup.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



Cambridge University Press and *Economic History Association* are collaborating with JSTOR to digitize, preserve and extend access to *The Journal of Economic History*.

The Myth of Free-Trade Britain and Fortress France: Tariffs and Trade in the Nineteenth Century

JOHN VINCENT NYE

This examination of official commercial statistics suggests that the conventional wisdom regarding early free-trade efforts of Britain and France is wrong. French average tariff levels were, surprisingly, consistently below those of Britain throughout most of the nineteenth century, even after the abolition of the Corn Laws and before passage of the 1860 Treaty of Commerce. Previous scholarship has focused on French commercial policies covering a narrow range of items and has largely ignored the overall trade policies of both nations. This study moves us further away from stories of development and trade confined to a few "leading" sectors.

"Our Parliament is to be prorogued on Tuesday and dissolved the same day," Victoria wrote to her Belgian uncle on June 29, 1852. "Lord Derby himself told us, that he considered Protection as quite gone. It is a pity they did not find this out a little sooner; it would have saved so much annoyance, so much difficulty."¹

While France [1815–1848] was thus maintaining almost intact her virtually prohibitive tariff, England was making rapid progress toward the adoption of complete free trade, so that the divergence in the tariff policies of the two countries became steadily greater.²

One of the great economic advances of the nineteenth century was the spread of liberalism and the expansion of world trade. In the popular fable that makes "history" of this event, Britain was the great nation of free trade, whose liberal commercial policy made possible the achievement of unparalleled peace and prosperity. Britain's abandonment of protection and subsequent rapid success spurred other nations

The Journal of Economic History, Vol. 51, No. 1 (Mar. 1991). © The Economic History Association. All rights reserved. ISSN 0022-0507.

The author is Assistant Professor of Economics, Washington University, St. Louis, MO 63130. I wish to thank Jeremy Atack for assistance in obtaining various documents. Douglass North, Joel Mokyr, Ed Greenberg, Gary Libecap, Donald McCloskey, Larry Neal, and Peter Temin provided helpful comments and suggestions. I also benefited from the comments of the editors, Paul Hohenberg and Peter Lindert, and two referees. Of course, I retain sole responsibility for all errors. Seminar participants at Washington University and the University of Arizona helped me to clarify my arguments. This research was completed while I was supported by a fellowship from the Olin Foundation; I have also received partial support from the Bradley Foundation. I gratefully acknowledge their assistance.

¹ Clapham, An Economic History of Modern Britain, p. 1.

² Dunham, The Anglo-French Treaty, p. 11.

to follow her example, culminating in the gradual adoption of more liberal trade policies in neighboring European states.

The view that the rise of free trade in Britain initiated the rise of free trade in Europe still frames our historical explanations of the economic expansion of the last century.³ The conventional wisdom is that France—in contrast to Great Britain—had an outmoded and crippling system of tariffs and prohibitions in the first half of the nineteenth century, and that it was not until the 1860 Anglo-French Treaty of Commerce that the French took steps toward moderate protection.

But how do we know this to be true? From what evidence have we concluded that Britain was the solitary free trader in the early to mid-nineteenth century? What criteria have been used to establish that Britain vigorously liberalized while other nations—especially France—continued to close their doors and raise obstacles to the importation of other nations' products?

Paul Bairoch wrote the following of the period in the latest volume of *The Cambridge Economic History of Europe*:

The situation as regards trade policy in the various European states in 1815–20 can be described as that of an ocean of protectionism surrounding a few liberal islands.

The three decades between 1815 and 1846 were essentially marked by the movement towards economic liberalism in Great Britain. This remained a very limited form of liberalism until the 1840s, and thus only became effective when this country had nearly a century of industrial development behind it and was some 40–60 years ahead of its neighbors. A few small countries, notably The Netherlands, also showed tendencies towards liberalism. But the rest of Europe developed a system of defensive, protectionist policies, directed especially against British manufactured goods.⁴

Similar stories are told elsewhere in the literature.⁵

³ This fable of commercial prosperity and international integration through free trade has seemed so compelling that it has become the fundamental motivation of an entire branch of the political science literature through the theory of hegemonic stability (Gilpin, *Political Economy*; Keohane, *After Hegemony*). The hypothesis is, in brief, that international free trade is a public good requiring a powerful leader, or hegemon, to become established. In the absence of a dominant Britain, prisoner's dilemma problems would prevent states from moving toward free trade. Britain's unique and unilateral shift to free trade is therefore a necessary if not quite sufficient condition for the integrated European market that developed late in the nineteenth century. In another essay, I consider the implications of my findings for the literature on commercial policy and international relations (Nye, "Revisionist Tariff History").

⁴ Bairoch, "European Trade Policy," p. 6.

⁵ The scholar who did most to enlighten us about the details of changing trade policy in the French Second Empire did not himself seem to perceive how open French trade had become even before the 1860 Cobden-Chevalier treaty. Dunham underestimated the efforts of Napoleon III when he wrote in reference to the treaty that "On the side of England it marked the practical completion of the adoption of free trade which had been begun by Huskisson nearly forty years before, whereas on the side of France it was only the first decisive step in a reduction which was not desired to go beyond the limits of moderate protection" (Dunham, *The Anglo-French Treaty*, p. 1).

But an examination of British and French commercial statistics suggests that the conventional wisdom is simply wrong. There is little evidence that Britain's trade was substantially more open than that of France. Very little of the existing work on British or French trade has taken a comparative perspective, and there has been little economic as opposed to political analysis of the commercial interaction between nations. Most of the economic work has focused on the volume of trade in the two nations and has taken the changing tariffs for granted as an interesting stylized fact.

When the comparison is made, the trade figures suggest that France's trade regime was more liberal than that of Great Britain throughout most of the nineteenth century, even in the period from 1840 to 1860. This is when France was said to have been struggling against her legacy of protection while Britain had already made the decision to move unilaterally to freer trade. Although some have recognized that Napoleon III had begun to liberalize France's trade regime even before the 1860 treaty of commerce, both current and contemporaneous accounts treat the period before the 1860s as a protectionist one in France and a relatively free one in Britain.

A straightforward examination of the raw numbers immediately alerts us that something is amiss in the fable. Table 1 and Figure 1 present the average customs rates of the United Kingdom and France, where the rates are calculated from tariff revenues as percentages of the value of importables. These numbers are taken from Albert Imlah's reworking of the British trade statistics and Maurice Lévy-Leboyer and François Bourguignon's recent work on nineteenth-century France. The figures show French tariff rates to be substantially lower than British rates for the period of "high protection" during the first four decades of the century. Average French tariffs in this earlier period were comparable to those of Britain after she had begun her move to free trade with the abolition of the Corn Laws. Judging by the absolute size of the fall in

A recent text by Rondo Cameron reviewed conventional wisdom in its discussion of the rise of free trade, first in Britain and then in France. Cameron wrote of the period that

The treaty provided that Britain would remove all tariffs on imports of French goods with the exception of wine and brandy. These were considered luxury products for British consumers, so Britain retained a small tariff for revenue only. . . . France, for its part [with the 1860 treaty] removed its prohibitions on the importations of British textiles and reduced tariffs on a wide range of British goods to a maximum of 30 percent; in fact, the average tariff was about 15 percent ad valorem. The French thus gave up extreme protectionism in favor of a moderate protectionism (Cameron, *A Concise Economic History*, p. 276).

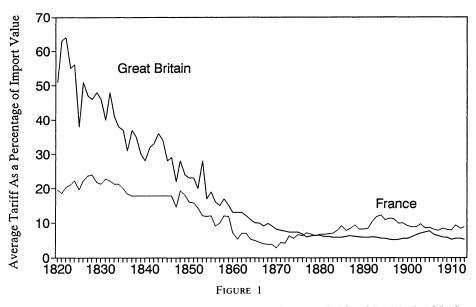
Napoleon tried in the 1850s to reduce the strongly protectionist stance of French policy, but because of opposition in the legislature he was unable to carry through a thorough reform of tariff policy. . . . The thought in Britain at this time, after its move to free trade, was that the advantages of a free trade policy would be so obvious that other countries would adopt it spontaneously. Because of the strength of protectionist interests, however, this was not the case. Accordingly, a treaty negotiated by Cobden and Chevalier late in 1859 was signed in January 1860.

Nye

Year	Britain	France
1821-1825	53.1	20.3
1826-1830	47.2	22.6
1831–1835	40.5	21.5
1836–1840	30.9	18.0
1841-1845	32.2	17.9
18461850	25.3	17.2
1851–1855	19.5	13.2
18561860	15.0	10.0
1861–1865	11.5	5.9
1866–1870	8.9	3.8
1871–1875	6.7	5.3
1876–1880	6.1	6.6
1881–1885	5.9	7.5
1886–1890	6.1	8.3
1891–1895	5.5	10.6
1896–1900	5.3	10.2
1901–1905	7.0	8.8
1906–1910	5.9	8.0
1911–1913	5.4	8.8

TABLE 1 AVERAGE CUSTOMS RATES OF GREAT BRITAIN AND FRANCE: NET CUSTOMS REVENUE AS A PERCENTAGE OF NET IMPORT VALUES, QUINQUENNIAL AVERAGES OF ANNUAL RATES, 1821–1913

Sources: Imlah, Economic Elements, tables 11 and 19, pp. 121, 160 for Great Britain; Lévy-Leboyer and Bourguignon, L'Économie française, table A-VI, pp. 343–47 for France.



AVERAGE TARIFF RATES: TARIFF REVENUE AS A FRACTION OF ALL IMPORTS Sources: Imlah, Economic Elements; and Lévy-Leboyer and Bourguignon, L'Économie française.

average tariff levels, England seems to have shown a much greater change in tariff levels than France.⁶ But Britain started out from much higher levels—over 50 percent—than did France, which never exceeded 25 percent in any single year. Bearing in mind the high point from which British tariff levels fell, one notes that the changes in tariffs seemed to fit the conventional chronology, beginning in the late 1820s and falling rapidly from the 1840s onward.⁷ Similarly, French tariffs steadily declined till the early 1850s and then plummeted to a low of around 3 percent in 1870-well below the minimum for Britain at any time in the nineteenth century. French tariff levels remained at quite low levels till the move back toward protection in the last 10 or 15 years of the century. British average tariff levels did not compare favorably with those of France till the 1880s and were not substantially lower for much of the time. The view of Britain as the principled free trader is most consistent with the tariff averages from the end of the nineteenth century, indicating Britain's commitment to keeping tariffs low in opposition to rising protectionist sentiment both at home and abroad. Furthermore, her movements toward free trade were magnified by the scale of her involvement in the world economy. In fact, Britain's rapid shift to freer trade was fully matched in timing and extent-and even anticipated (in the French discussions of tariff rationalization before 1830)—by the commercial restructuring taking place in France.

Calculations of average tariff rates based on the ratio of total tariff revenues to total importables require some qualification. For instance, the tariff level may be set so high that certain items that might otherwise be imported in large amounts enter fitfully or not at all.⁸ In the case of outright prohibitions, consumers are implicitly paying a tariff equal to the difference (at most) between the home price of the domestically produced good and its foreign equivalent. Adjustments need to be made to get more comparable British and French tariff statistics.

In short, we have a classic index-number problem, complicated by the lack of a unique and well-accepted index of the degree of openness of a nation's trade. If one nation had had lower tariffs on every single

⁶ The use of average tariff levels as a basis from which to denote the size and timing of the move to free trade is standard in the literature. Both Imlah's classic discussion and McCloskey's employ some version of tariff revenues as a percentage of importables to indicate how free British trade was (Imlah, *Economic Elements*; McCloskey, "Magnanimous Albion").

⁷ The British figures are not entirely reliable before the 1820s (and indeed before the 1840s) due to the inappropriate valuations of the commodities imported and exported. An extensive reworking of the trade statistics was produced by Imlah based on the work of Gayer, Rostow, and Schwartz and has remained the basis for all further research, though Davis expanded further on the commodity series (Imlah, *Economic Elements*; Davis, *The Industrial Revolution*).

⁸ In Bairoch, a table of comparative tariff levels for Western Europe does not list that of France given the prohibitions on many items ("European Trade Policy," table 3, p. 6). However, the items primarily affected—manufactures—were never that large a share of imports. As I demonstrate, it is possible to take some crude account of the effects of those prohibitions by examining import shares in the later periods of very low tariffs and no prohibitions.

item of trade than the other, it would be easy to state categorically that it had the more liberal trading structure.⁹ The inequality is not so simple, of course. Yet we do not need precise average tariff rates to see that British tariffs were not uniformly or even "generally" below those of France for most of the century.

Even without making adjustments, we can see that certain parts of the argument are robust to these respecifications. First, one would expect the following to be true: if items that were prohibited prior to the policy changes in the late 1850s and 1860s were then permitted to enter at some positive tariff, it might well be the case that the average tariff levels after prohibitions were removed would increase, given the new import composition. For instance most cotton textiles, which were banned prior to the 1860 treaty, were imported in fairly large quantities after the treaty at a tariff rate (20 to 30 percent) higher than the overall average. But if this meant that average tariff levels prior to the Second Empire would need to be adjusted to take this prohibition into account, the size of the drop in average tariff levels during the period from 1852 to 1870 is *underestimated* by the unadjusted average tariff rates, because earlier all-commodity averages would be too low. Given the already low tariff levels of the 1860s, full information about the appropriate corrections would only serve to underline the openness of Napoleon III's France and the magnitude of the change in tariffs from the early 1840s to the fall of the Second Empire.

A substantial share of French imports was duty free and, though prohibitions may have distorted this figure in the first half of the nineteenth century, the proportion of duty-free items did not change much and even grew in the period when prohibitions were replaced with tariffs.¹⁰ This runs counter to the intuition that the existence of prohibitions masked the true extent of protection by biasing the fraction of duty-free imports upward relative to the years of freer trade. Table 2 shows that the proportion of French imports by value that were duty free stood at around 61 percent in 1849 and increased to 65 percent by 1869. What is remarkable is the stability of the shares of dutiable and duty-free items in value terms through periods of widely varying tariff levels and trade restrictions. Thus, with only a third of all imports being dutiable even in the period when moderate tariffs replaced all prohibi-

⁹ One possible index compares tariff revenues in Britain and France using each other's tariff rates. If Britain were clearly more open than France, French tariff revenues would decline using British rates and British revenues would increase using French tariffs. However, calculations for the period from 1847 to 1856 indicate that both countries' revenues decrease when the other's tariff rates are applied. This is not surprising, given the later discussion in this paper. Contrary to the precepts of international trade, Britain and France tended to levy duties on items on which they did not have a comparative advantage, which partially explains the results of this index.

¹⁰ The other officially protected commodity was colonial sugar. Both colonial and foreign sugar were taxed at high rates, though the latter paid much higher duties than the former. As we will see later, the sugar tariffs did play an important role in the overall tariff levels for both countries.

PERCENTAGE OF ALL FRENCH IMPORTS BROKEN DOWN BY TARIFF CLASSIFICATION USING CURRENT VALUES								
	1849	1859	1869	1857–1859	1867–1869			
Duty-free	60.7	64.4	64.8	63.2	64.9			
Dutiable	39.3	35.6	35.2	36.8	35.1			

TABLE 2

Source: France, Tableau Général du Commerce, 1869.

tions, it should come as no surprise that even fairly large adjustments in the composition of earlier imports would not do much to raise the average tariff levels by more than a few percentage points. Certainly these are not enough to eliminate the 8 to 15 percent gap in average tariff rates between Britain and France in the 1830s and 1840s, nor the larger gap that existed in the 1820s and early 1830s.

One way of adjusting the average duties to take some account of the problems mentioned earlier is to apply the tariff rates by commodity class to the import distribution of another period. Using an estimate of the "true" import shares in free trade adjusts for the fact that high tariffs in certain periods may lead to too small a share of imports. In this case, using the import composition of a period characterized by nearly free trade (France in the late 1860s or Britain in the 1880s) serves as the basis for more reliable index-number comparisons. In addition, I test for the sensitivity of my French figures to the large swings in import composition and tariff rates by applying the rates in every period to the import shares in every other period. As it turns out, these calculations have the advantage of permitting easy comparison with tariff calculations already available in the literature.

In his well-known essay on free trade and British national income, Donald McCloskey examined the sensitivity of changing tariff levels to changing import demand by recalculating British tariff levels for 1841, 1854, and 1881 using the commodity weights of each of the different

Using Individual Tariff Rates from the Year:	Weighted by Each Commodity's Share of Import from the Year:					
	1841	1854	1881			
1841	35%	30%	27%			
1854	25	18	16			
1881	13	10	6			
Total decline	22	21	21			

TABLE 3 ALTERNATIVE CALCULATIONS OF THE BRITISH TARIFF RATE:

Source: McCloskey, "Magnanimous Albion," p. 309.

		Percentage	es, Using Weights	in Decade	
Decade	1827–1836	1837–1846	1847–1856	1857–1866	1867-1876
1827-1836	20.82	19.10	19.97	21.43	19.96
1837-1846	18.73	16.86	17.55	19.05	17.67
1847-1856	14.63	13.41	13.03	14.33	13.10
1857-1866	8.89	7.35	7.17	6.89	5.81
1867-1876	8.74	6.76	6.40	6.02	4.93

 Table 4

 ALTERNATIVE CALCULATIONS OF FRENCH TARIFF RATES USING DIFFERENT DECADAL IMPORT WEIGHTS

Source: Calculations based on France, Tableau Décennal du Commerce, 1867-76.

years.¹¹ I reprint the results of his calculations as Table 3 because it is worth using his numbers as benchmarks. His alternative calculations of the tariff rates alter several of the figures by as much as five to ten percentage points. Nonetheless, the magnitude of the absolute change in tariffs seems fairly constant. The large hypothetical changes produced by using different commodity weights are partly attributable to the coverage of British tariffs throughout most of the century. The large duty-free component of French goods would make French tariff levels still more insensitive to changes in composition.

Table 4 shows the results of a similar set of calculations (compare with the Appendix. Tables 5 and 6) using tariff rates based on decadal averages for France drawn from the official trade statistics.¹² Each period's tariff rates are then recalculated with weights derived from the import composition of all the other decades. For example, the value of 20.82 on the top line of Table 4 represents the counterfactual tariff rate that would have obtained if the tariffs of 1827–1836 had applied to the quantities demanded in 1867–1876 under the tariff regimes and demand curves of 1867–1876. The numbers I began with were slightly lower than those given by Lévy-Leboyer and Bourguignon, but the differences cannot be tracked easily because those scholars did not document precisely how they arrived at their figures.¹³ However, some of the difference may be accounted for by adding in the small but rather constant export taxes (usually less than 3 to 4 percent of total import duties) and a number of administrative fees. These figures are left out of my calculations to make the exercise as comparable as possible to McCloskey's. In any case, the differences are not great enough to affect the discussion. One can treat their figures as a benchmark and use my calculations as a means of testing for the sensitivity of the averages.

¹² France, Tableau Décennal du Commerce, 1867–76.

¹¹ McCloskey, "Magnanimous Albion," p. 309.

¹³ Lévy-Leboyer and Bourguignon, L'Économie française, p. 228. The authors seem to note the low average level of French tariffs but do not push the idea much further except to note that the 1860 treaty could not have accounted for large changes in GNP. No comparison with other nations was made or suggested.

Note how robust the French figures are to fairly substantial respecification. In no case do the average tariffs increase by more than two to four percentage points. The numbers used in calculations were selected to bias the results upward. To deal with the problem of prohibitions on textiles, I assumed the effective tariff to be 50 percent. This figure was derived from the comparative prices on cotton yarn for the period from 1825 to 1864 calculated by Patrick O'Brien and Caglar Keyder, using an exchange rate of 25 francs to the pound.¹⁴ O'Brien and Keyder's figures show cotton yarn in France to be some 30 to 40 percent higher than in Britain during this period, so 50 percent would seem to be a reasonable upper bound. This number is consistent with the writings of even the most fervent French protectionists who argued that a rate of 40+percent, consistently applied, would have been sufficient to defend existing producers against foreign competition.¹⁵ Most of the textiles excluded had fairly elastic demands and therefore faced much smaller effective tariffs.¹⁶ No easily comparable price series are available for wool, but woolen textile prices did not seem to be systematically higher in France than in Britain. Jean Marczewski's numbers even show a lower average price for raw wool in France than in Britain throughout the century.¹⁷ At any rate, using the 50 percent markup from cotton varn for wool is certainly an overestimate. Besides my using a high tariff rate in these cases, combining the import composition of the 1860s and 1870s with the tariff rates for the earlier periods ignores any changes in income or responses to lowered textile prices that would have increased consumption of such products (so long as they could be imported), thus

¹⁴ O'Brien and Keyder, Economic Growth, p. 46.

¹⁵ I have simplified the calculations by focusing only on French prohibitions, again with an eye toward refuting the hypothesis that British trade was uniformly freer. A more detailed calculation would make corrections for redundant British tariffs.

¹⁶ The more extreme protectionist case is represented by the following example from France, *Enquête: Traité de Commerce*, vol. 4, p. 59. A rather biased comparison of spinning costs in Oissel and Oldham that appears in testimony before the 1860 inquiry comes to the conclusion that British spinners have a cost advantage of about a third relative to French spinners (and this information was challenged vigorously by the English and numerous Frenchmen). The witnesses presented average total costs per spindle for Oissel and Oldham and found that

Différence de prix par broche	14 ^f 71
d'Oissel, le prix de chaque broche pour celle d'Oldham	41 [°] 16 26 [°] 35
soit pour la filature	

Therefore, even accepting that this cost per spindle fully represented differences in the marginal costs in both industries and taking the above as a high upper bound, it seems that a tariff of 50 percent strictly applied would have served to maintain existing rents of the protected industries even if transportation costs were ignored. These figures were subsequently challenged by various officials and some observers maintained that no such difference existed at all (Fohlen, L'Industrie textile, 1956).

¹⁷ Marczewski, "Le Produit physique," p. xxii.

tending to overstate the weight of textiles in the recalculations. Any further adjustments made in the direction of more reasonable assumptions would only serve to confirm that French tariff levels averaged 10 to 15 percent for the 1840s and 1850s and 4 to 8 percent for the 1860s and 1870s.

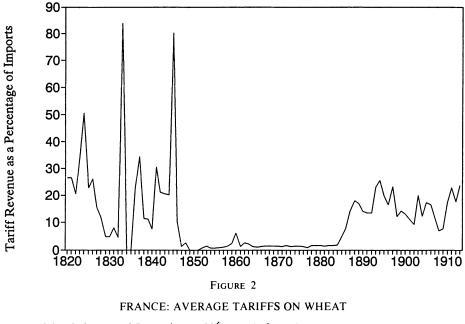
In the light of the high duty-free component of French trade, it should not be surprising that the French tariff averages are robust to changes in the markup assumed for textiles. Furthermore, large increases in many items do not change their representation in dutiable goods, because overall imports rose in most categories.¹⁸

If French average trade levels were lower than, and at worst comparable to, those of Great Britain for virtually the whole of the nineteenth century and particularly for the first part of the century and for the late Second Empire, how can such a pattern have been ignored for so long? Many conjectures are possible; I will confine myself to the most obvious.

Trade formed a much larger proportion of British production than it did in France for most of the century. This fact, coupled with the much larger absolute level of total British trade, was bound to make British trade policy seem more important to the world at large.¹⁹ Given the high starting level of British tariffs, the steady and ultimately dramatic drop in the average level of British tariffs would have seemed doubly impressive to outside observers focusing on government action that affected very large volumes of trade. In contrast, much of France's commerce was internal and, to the extent that the economy developed or was retarded, was more seriously affected by domestic economic developments than by trade policy. Tariff reform was a prominent accomplishment of Napoleon III, but it was only one part of a large-scale effort to modernize and stimulate the French economy. Furthermore, and despite discussion that has focused on the exogenous politics of the 1860 treaty, the falling average tariff rates show there were substantial changes in France's overall trading regime even before the treaty came under discussion. Some of those changes were unplanned; others were simply unheralded. Other French reforms in the

¹⁸ The tariff averages are fairly insensitive to large changes in the tariff rate I substitute for prohibitions of textile manufactures. Calculations performed using a 100 percent tariff on both cotton and wool do not change Table 3 significantly. Given the data we have on prices and the range of textiles imported, it is unlikely that the true effect of prohibitions on French prices would even have matched the 50 percent figure I employed in the text.

¹⁹ It should be noted that total British trade was greater than that of France throughout the nineteenth century; however, it is interesting that the share of exports in GDP was not very much higher in Britain than in France and did not remain so after the Second Empire. After 1870 the ratios for the two countries were quite similar, and France's export/GDP figure was even higher on occasion in the 1890s. (Based on independent calculations using figures in Mitchell, *European Historical Statistics* and Lévy-Leboyer and Bourguignon, *L'Économie française.*)



Source: Lévy-Leboyer and Bourguignon, L'Économie française.

quarter-century before the 1860 treaty, like those promoted with only limited success by Huskisson in Britain in the 1820s, did a great deal to improve trading conditions in France through the removal of older prohibitions and a tariff "rationalization" (imposition of more uniform tariff rates), though these improvements may not have received as much attention as did the 1860 treaty.

Certainly a large part of the impressions that have been retained about Britain's shift to free trade was owing to the intensity of the debates over the Corn Laws. Large drops in the tariffs on agricultural items were bound to affect British trade, and the ideological nature of the debate stamped commercial discussions in England thenceforth. The spotlight on Corn Law repeal obscured the important, though less publicized, changes occurring in France. The graph of average tariffs in French wheat imports (see Figure 2) shows the dramatic drop in rates around the time of the Corn Law repeal. Although the changes moved in parallel, the British talked free trade while the French, even under Napoleon III, always spoke of going no further than moderate protection.

Free traders in both England and France were much more concerned with free trade for specific classes of goods they felt were vital to industry than they were with the generalized free trade favored by neoclassical economists. Lucy Brown wrote in her study of the freetrade movement that the free traders were not averse to tariffs of all kinds:

It should be emphasized again that Radical free-traders of this kind expressed no objections to the general principle of deriving a large proportion of the public revenue from import duties. To the regressive character of taxation which leant heavily on duties on tea, coffee, and sugar they were, as has been shown, largely indifferent, perhaps on the grounds that they were not necessities. There is also a final point. None of these duties, except those on timber, which were strongly attacked, and the duty on Swedish iron, were levied on raw materials used in industry, so that they could not be said directly to raise the price of exports. But in criticizing the corn laws a great deal of emphasis was placed on the argument, which was itself based on a subsistence theory of wages, that the corn laws raised wages and therefore indirectly the price of exports. This line of argument could equally well be applied to duties on tea, coffee, and sugar, but it was not used. The reason for this distinction was probably the commonsense one that there is a large degree of difference between the effects on the cost of living of the price of bread and the effects of the price of tea. Altogether then, there was nothing in the Board of Trade in 1840 comparable to the late Victorian propaganda for the "free breakfast table."20

The striking thing about the decadal averages of tariff revenues for France is the high proportion of these "consumption" tariffs for all periods from 1827 to 1876. The large absolute increase in tariffs on wool and cotton products arising from the removal of prohibitions is outweighed by the share of tariff revenues that are accounted for by the main consumption and colonial imports, primarily sugar and coffee. The percentage of total tariff revenues derived from four of the largest consumption items-colonial and foreign sugar, coffee, and olive oilremained at a fairly constant total of about 55 to 60 percent. If anything this percentage total is larger for the latter decades, suggesting that tariff levels and their distribution are not substantially biased by the addition (or previous exclusion) of textile products that are no longer prohibited but enter at some tariff level higher than the overall average. In one sense then, the French prohibitions on cotton and wool textiles and high tariffs on a few other competitive items brand them as protectionist only if one defines protectionism to mean tariffs on a very narrow range of manufactured items. Judged by a broader standard, one that asks how open the nation's trade was rather than how much it consciously sheltered specific industries, nineteenth-century French trade was quite open indeed.

Whether we make this artificial distinction between consumption and protectionist tariffs or not, the French did seem to perceive that a move to free trade meant a more general move by lowering tariffs across the board for consumption items as well as for industrial goods. Lower tariffs on sugar and coffee were prominent components of the emperor's

²⁰ Brown, The Board of Trade, p. 157.

stated policy in 1860.²¹ Such intervention was genuinely liberating in light of the protectionist policies advocated by colonial sugar interests. In particular, the gap between tariff rates on foreign and colonial sugar narrows throughout the century to a point at which the average tariff rate on foreign sugar is actually below that of French colonial sugar in the period of 1867 to 1876 (see Table 7 in the Appendix).

Finally, a careful study of the Appendix shows that though coffee and sugar tariffs were high in both nations, they were somewhat lower for Britain than France from the middle of the century. However, the large imports of tea and wine paying very high tariffs in Britain (usually well over 100 percent), with no dutiable imports of corresponding volume in France, do much to increase the average level of British tariffs.

Ultimately, attempts to distinguish too finely between protectionist and revenue tariffs both change the debate and mislead the observer. Revenue tariffs usually mean those that impose a uniform tax on the consumption of an item having no domestic substitute.²² In contrast, "protective" tariffs penalize foreign products to benefit local industry. But it is troublesome to read protectionism as limited to tariffs on those items also produced in the home country. The problem with this narrow reading is the basic economic fact that there are substitutes for virtually everything. Raise the tariff on wine and people will drink beer; the tariffs on coffee affect the patterns of tea consumption; and the tariffs on sugar affect not only how the tea will be consumed, but also the foods that the tea will be taken with. One can imagine a continuum of substitutes for most imported products, with declining elasticities of substitution. The neat separation of tariffs into those for "revenue" and "protectionist" purposes is useful in explaining both the public revenue and the political economy aspects of tariffs-why revenue tariffs might be more likely to appear than protectionist ones. But in evaluating a nation's adherence to the principles of free trade and its importance to the economy, we should take care not to confuse the issues.²³

Furthermore—the radical free-trader's propaganda aside—most of the remaining British revenue tariffs were strongly protectionist and

 21 Thus in his letter of Jan. 5, 1860, to the Minister of State, Napoleon III summed up his economic policy goals as the following: (1) suppression of tariffs on cotton and wool, (2) successive reductions on sugar and coffee, (3) vigorously pursued improvements in transportation routes, (4) reduction in the canal tariffs and then general reductions in the costs of transportation, (5) loans to agriculture and industry, (6) large-scale public works projects, (7) removal of all prohibitions, and (8) commercial treaties with other nations (France, AN F¹² 2484).

²² Alternatively, they mean tariffs imposed uniformly on domestic products as well as imports, which was certainly not the case for the British revenue tariffs.

²³ In some ways, the question of consumption or revenue tariffs is about the ratio of government tariff revenues to gains to domestic producers from the higher tariff. In the revenue case, this ratio is large (or more accurately, the producer gain is small). However, the long-run elasticity of domestic supply is always greater than the short-run elasticity, ensuring that even a fairly strong "revenue" tariff will become more protectionist in the long run.

were recognized as such by British customs officials. The British Parliamentary Papers document both the extent of British tariffs and prohibitions in the earlier half of the century, and the extent to which the so-called revenue tariffs on wine, spirits, tea, sugar, and tobacco survived throughout the period of "free trade" and were used to protect both domestic and colonial industry.

The British parliamentary report speaks of "the long list of articles which were altogether prohibited to be imported, or could be imported under severe restrictions" lasting virtually unchanged till at least the 1830s, with a few surviving well into the 1860s.²⁴ In certain cases the prohibitions were said to have been holdovers from British rivalry with the Dutch and to reflect the political influence of the East India Company.

Ever since the year 1660, a positive prohibition had existed and been enforced, against the importation from the Netherlands and Germany, in any ships whatever, of wines, spices, groceries, almonds, currants, dates, ginger, liquorice, pepper, raisins, figs, prunes, sugar, tobacco, potashes, pitch, tar, salt, rosin, timer, olive oil and numerous other articles.

Then silk manufactures of every kind, except silk lace were absolutely prohibited to be imported, as also were embroidery, buttons, band strings, cutwork and fringe made of thread, beef, cattle, ground corn (except wheatmeal, wheatflour and oatmeal), mutton, lamb, pork, sheep, swine, malt, foreign fish (with a few exceptions), cards, chocolate, cocoa paste, gloves, thread of copper and brass, manufactured tobacco (except from the plantations of Spain and Portugal, and except snuff), whalebone cut, wines, and woolen cloths. Besides these absolute prohibitions other considerable categories of goods could only be imported by license; others only in a few ports; others only in particular kinds of packages.²⁵

It was the commendable accomplishment of the British government to have simplified its tariff structure and eliminated most of these tariffs and prohibitions in the period from the late 1840s to the 1870s. But such measures were also being undertaken by the French, who attracted less notice (perhaps because they had less need of drastic reform in the first place). Moreover, the British emphasis on removing tariffs on *manufactured goods* and not on other "non-essential items" has caused us to ignore the protectionist aspects of those duties augmented "upon purely fiscal considerations."²⁶

I have already mentioned how wine tariffs must have affected the beer brewers. More significant is the fact that the tariffs on wine and liquor imposed by Britain before the 1860 treaty were levied by volume of wine rather than by alcoholic content or value. This had the effect of favoring Spanish and Portuguese products, in which British merchants had a

²⁴ Great Britain, Customs Tariffs, p. 38.

²⁵ Ibid., pp. 38-39.

²⁶ Ibid., p. 40.

direct interest, over the products of Bordeaux and Burgundy.²⁷ The British Parliamentary report contains this query:

In the present day, when the duty is levied according to alcoholic strength, it strikes the enquirer as curious that until 1831, French wine, which is alcoholically amongst the lightest of wines, should have been saddled with the highest duty of any description [per gallon]. But so it was, until the year mentioned, when the Wine Duties were greatly simplified, a duty of 5s. 6d. per gallon being then levied on all foreign wine without discrimination, and 2s. 9d. on Cape Wine. In 1840, by the addition of 5 percent to the duties, the two rates became severally 2s. 10 $\frac{13}{20}$ d. and 5s. 9 $\frac{9}{20}$ d. and so remained until 1860.²⁸

The French had long complained of the pernicious effects of the British tariff system on the French wine trade. Duties and excises on French alcohol to favor Portugal and Spain were initiated in 1667 and 1685 and had been augmented and refined since then, both to protect British beverage interests and to generate revenue.²⁹ A French report to the Minister of Commerce in 1858 remarked that French wines had been the British drink of choice in the seventeenth century, but that the preferential tariff treatment of Portugal and Spain and the British investment on the Continent that followed had led to the French wines being displaced. French exports to Britain had barely changed in the last hundred years; they were less in the mid-1840s than they had been in the late 1600s; and British per capita wine consumption from all foreign countries had actually declined in the first half of the nineteenth century. Moreover, even after the tariffs on wine by volume were "equalized" in 1831, the French bore the brunt of the tariffs, because the average barrel (la pièce) had a value of 300 or 400 francs whereas the Portuguese wines of higher alcoholic content were valued at 1,500 or even 2,000 francs.³⁰ Other reports complained that the British were in the anomalous position relative to other nations (taking into consideration the domi-

²⁷ The system whereby resident British merchants in foreign countries could organize as Factories with a measure of independence from the local authorities was well known in Portugal and Spain. These Factories were an important special interest in British trade policy, quick to respond to changes in commercial legislation and quick to lobby for change. For example, the large British communities of the Lisbon and Oporto Factories only became heavily involved in wine and spirits in the early 1700s, when the tariffs favoring Portugal and Spain over France came into effect. They quickly became important actors in the wine trade and worked to preserve and control the advantages they derived from that preferential treatment (Francis, *The Wine Trade*, pp. 179–224). This British-controlled wine trade "was a principal factor in stabilizing Anglo-Portuguese relations" (ibid., p. 179). British and Portuguese wine concerns played a major role in blocking all attempts at liberalizing trade with France at the end of the War of Spanish Succession in 1710 and 1713 and solidified British ties to the Portuguese that would persist for over a century after (ibid., p. 129).

Given the extent of Britain's merchant interests in wines from Spain and Portugal, one could say that the wine trade involving the three nations was as much *domestic* British trade behind barriers against French wines as it was international trade.

²⁸ Ibid., p. 141.

²⁹ Ibid., p. 5.

³⁰ France, AN F¹² 2525.

nance of French wine in world production and trade) of importing 10 to 20 times as much wine from Portugal and Spain as from France and consuming substantially less wine in general than would have been warranted by her growth in income and population.³¹ The degree to which French wines had been kept out of the British market and the degree of substitution of other wines can be seen from the fact that after the 1860 treaty, when the tariff on all liquor remained high but the gap between French and other wines was partly closed by setting duties according to alcoholic strength, imports of French wines rose fivefold in the first decade. This matched the quantities imported from Portugal and grew from a sixth to a half of Spanish imports in the same period; by 1882 French wine imports to Britain surpassed those from either Portugal or Spain.³² This despite complaints that the British tariffs and excises still biased British consumption toward the more expensive wines and protected British beer and tea, causing growth in total wine consumption from all foreign sources to proceed at a more measured pace.33

The section on spirits is equally revealing in that it explicitly discusses the problems of multiple discrimination employed in the British tariff system—with French products at one end, U.K. products at the other, and other foreign and colonial spirits in between. Foreign spirits, and especially French brandies, were either prohibited or taxed at a high rate to favor domestic and colonial spirits.³⁴ Although rum from the colonies enjoyed protection vis-a-vis foreign spirits, colonial producers complained of being excluded by tariffs designed to protect local British (U.K.) products such as gin and whiskey.³⁵ Protection of domestic and

³¹ Although the figures here are not precise, British and French observers agreed that French wine production constituted some 40 to 50 percent of the world's total and that France's representation in internationally traded wine was usually greater than this. Portuguese exports were overwhelmingly sent to the British market and were themselves an anomaly of British tariff policy. Thus French wine imports into Britain, at 5 percent of those from Spain and Portugal, were seen as virtually prohibitive by the French and some members of the British Parliament. Even given the tendency of wine to be a preferred source of customs and excise revenues, no other country in the world came close to having such an odd pattern of wine imports (AN F¹² 2525).

³² Great Britain, Customs Tariffs, p. 156.

³³ The French *viticulteurs* had long considered all drinks together and worried not only about the effects on their trade of the obvious substitutes such as sherry, port, or beer, but also about the growth in consumption of tea and coffee. After all, in the eighteenth century tea was as much a luxury as wine, though it had become the poor man's drink while wine remained an expensive luxury in the nineteenth century (France, AN F¹² 2484 and F¹² 2525). In addition, to the extent that there is a "learned" component of the taste for beer or wine, British tariffs and excises helped form British tastes to the detriment of French wine during the period when rising incomes provided a new consumer base; this required several decades of lower prices to readjust.

³⁴ Great Britain, *Customs Tariffs*, p. 166. Throughout the first half of the century, the report notes, "the high duty on brandy tended not only to restrict consumption of that article to a comparatively small quantity, but—which was far more serious—it encouraged smuggling to any extent which all the efforts of the customs authorities, and of the revenue cruisers failed to put down."

³⁵ Ibid., pp. 167-68.

colonial producers extended further in the century than even the wine tariffs, which were substantially revised and lowered after the 1860 treaty; tariffs on spirits were even raised. As France was a major producer of both wine and spirits, all this customs activity would have seemed quite exclusionary regardless of the fiscal motivation.³⁶

One group, however, did notice that there was a British double standard with respect to free trade: the protectionists. In the vigorous battles over the first attempt at major tariff reform in 1856, a number of writers denounced British unwillingness to lower the duties on wine and spirits while vigorously promoting free trade. *Le Moniteur Industriel* the leading protectionist newspaper—editorialized as follows on its front page:

The wine-producing nations now know that they are the dupes in this great British market that should enrich them; they know that Great Britain will never sacrifice either their distilleries or their pubs for them. She [Britain] does not go so far in her devotion to the theories of free trade. From competition that she does not fear, she is willingly faithful [to free trade]. But free trade that touches her domestic production is another matter: she will hear none of it.

We have recently heard a story concerning these British tendencies, whose authenticity we guarantee. In Spain, as in France, the diplomats of liberalism have shamed the Spanish for their backward ideas regarding the protectionist system and have generously proposed establishing free trade between their two nations. Unfortunately, the Spanish asked if the free introduction of their wines was also included. They responded that that was a separate issue; that it touched too great a number of English interests; that Great Britain drew large revenues from her production of beer and of spirits; that these industries represented vast sums of capital, were the livelihood of masses of workers, and that England could never agree to make such a sacrifice on the altar of her principles. That is how the English understand the regime of free trade! . . . Everything to one side and nothing to the other.³⁷

These arguments have been forgotten partly because the protectionists used such rhetoric to bolster unsound and discredited theories, but mainly because trade reform eventually triumphed in France with the coming of the 1860 Anglo-French Treaty of Commerce. Still, however misguided their defense of protectionism may have been, their observations regarding the limitations of British tariff policy were not inaccurate and shed light on our story.

Although wine and spirits were the major focus of Continental dissatisfaction over British trade policy, protectionist vestiges survived in other high-revenue products such as tobacco. For example, even when "reforming" the duties on raw tobacco and cigars in 1863 (which

³⁶ The tariffs on wine and spirits played an especially important role in commercial history because Britain's unwillingness to risk a revenue shortfall through lowered liquor tariffs caused it to rebuff initial French overtures toward bilateral liberalization in the 1840s (Dunham, *The Anglo-French Treaty*).

³⁷ Le Moniteur, p. 1.

involved increased duties), the Chancellor of the Exchequer spoke of trying "to avoid extending a protective duty to the British manufacturer."³⁸ Yet on the average there was a "cover" to the British manufacturer (effective protection in making cigars) of 11 pence a pound; said cover was in practice an underestimate, established so that the laborers "who were employed in manufacture, amongst whom were women and children, might be well looked after."³⁹

Sugar duties were not done away with until 1874. Before then British manufacture and British colonies had been well protected. Imports of raw sugar came almost exclusively from the West Indies before 1844, and refined sugar derived entirely from domestic British production. In 1844 raw sugar imports were opened up but protection was prolonged as a result of extraneous political concerns having to do with a bill designed to distinguish between free sugar and slave-produced sugar from foreign countries. After 1846 these distinctions were eliminated by Peel, but British refiners were protected until 1874.⁴⁰

In the final analysis, the paradoxical gap between historical perception and commercial reality highlighted in this essay is explained by the observation that writers who talked about trade policy did not really consider the economy as a whole. For the thousandth time, it seems, scholars have confused the process of growth and development with industrialization most narrowly defined as a few areas of production: textiles, machinery, iron, and steel. They have confused what was politically important with what was economically significant. When writers from Clapham to Dunham spoke of the benefits of free trade they often looked to what was happening in the crucial "leading" sectors. Because France had prohibitions on textiles, for example, she was economically backward in relation to England. The fact that France had no comparative advantage in mass-market cotton textiles, consumed large masses of raw cotton and wool for home production, and generally had a comparative advantage in agriculture and expensive silk and linens rather than spun cotton seems to have been overlooked. The importance of certain traded commodities to the political debate has misled scholars into confusing trade and protection in these few areas with overall trade and protection.⁴¹ Protection from the imports of

³⁸ Great Britain, Customs Tariffs, p. 87.

³⁹ Ibid., p. 186.

⁴⁰ Ibid., p. 211.

⁴¹ Entirely typical is the discussion of the coming of the Anglo-French Treaty of Commerce by Leone Levi in his classic work, *History of British Commerce*. Levi has a fine though brief discussion of the changes in French tariff policy leading up to the 1860 treaty and includes the full text of the treaty. However, to compare tariffs between nations he presents a table of comparative tariffs on textiles: cotton, woolens, and linens (Levi, *History of British Commerce*, p. 433). He uses this as an indication of the differences in the openness of trade among nations and as a guide to the extent of the changes ushered in by the era of commercial treaties. As France had rather severe

French silks (in Britain) and English cottons (in France) dominated much of the political discussion of protectionism in the two nations, despite the fact that consumption of both items was always small in relation to total trade.⁴² In contrast, agricultural products were important to both economies, so the British Corn Laws and wine duties did increase the gap in the average tariff between France and Britain before the midcentury. In addition, both France and Britain derived many of their import revenues from coffee and tea, assorted foreign manufactures, and construction materials such as wood. These items were always a significant fraction of revenues, and fluctuations in demand for them were more dependent on changing incomes than on changing tariffs. Furthermore, most of these imports came from nations outside the circle of the half-dozen world trading leaders and were likely to have been left out of discussions of policy designed to increase direct trade between France and Britain. In addition, the problems of colonial protection were an important determinant of trade policy.

Several historians have argued that the achievements in economic growth during industrialization had more to do with the overall perfor-

 42 It is amusing to see how similar protectionist claims were in both countries. The French objected that Britain had such natural advantages and such hardworking laborers that French spinners could offer no serious competition to British cotton and linen. Thus the following from Douai 1838:

A Messrs les Président et Membres de la Chambre des Deputés:

Les maires soussignés au nom des fileurs de lin, au rouet, ont l'honneur de vous exposer que ces très nombreux industriels, se trouvent maintenant dans une situation tellement misérable que si le gouvernement n'intervient point en leur faveur, le travail va leur manquer, partant du pain; situation cruelle; intolérable; ayez pitié de leur détress. . . . Le gouvernement de nos voisins d'outre manche n'oublie rien pour tuer cette industrie de famille, par cela donc éssentiellement nationale sa manière est vraiment libérale, pour atteindre son but plus surement et sans bruit et accorde aux fils de lins mécaniques, une prime *ad valorem de 15 pour cent*, . . . [my emphasis] (France, AN F¹² 2537).

On the other hand, British manufacturers upset by French silks and fine woolens argued as late as 1855 that

The French produce . . . goods which by their intrinsic beauty of texture and dye leave every competitor hopelessly in the rear. The prices . . . are such that we have long since abandoned their manufacture; and the Deputation, unable to find out the cause of this undeniable superiority were obliged to ascribe it to the well-known truth that a trade once established in a certain locality cannot be carried on with the same success at another place, though the latter may, to all appearances, possess even superior advantage (Clapham, *An Economic History*, p. 18).

prohibitions on most subclasses of these items, French trade around 1854 appears extremely protectionist.

In a different context, though Bairoch's recent account of commercial policy discusses tariff restrictions on all classes of items, he still describes the period of "European free trade, 1860–79" primarily in terms of trade in manufactures. His central comparative table of tariffs in Europe is based on a comparison of the average level of duties on 14 manufactured products in 1875 (Bairoch, "European Trade Policy," table 5, p. 42).

mance of an economy than with the stellar characteristics of the more visible sectors.⁴³ Leading sectors make for interesting metaphors, but swiftly rising values in areas that form only small parts of the economy do not explain overall changes in that economy. In much the same way uncritical analyses of trade policy that place a large and unspecified weight on duties levied on "essential" industrial products ignore the direct effects of high tariffs on other items. While it is possible to create models in which certain sectors of the economy provide important dynamic benefits that outweigh static losses in other sectors, these asymmetries are almost never empirically supported. Deadweight losses to the economy from tariffs on sugar, tea, and wine could outweigh losses from tariffs on cotton textiles, if textiles were a small part of one's trade.

None of this is meant to suggest that the move to free trade and its attendant political climate were unhelpful to growth. Undoubtedly the more open attitudes to trade did much to foster a more enlightened view of the role of market forces at home. There was some correlation between the interest in freer trade and the rise of a laissez-faire philosophy. Freer trade did have an impact on French industry, and Napoleon III's reforms did affect the structure of the French economy, though improved transportation, better capital markets, and overall economic liberalization played equal if not greater roles. In the final analysis, though the calculations in this article might be further refined and judgment vary regarding the historical effects of different trade policies, one thing is certain: the traditional stories of free trade counterposing a liberal Britain against a protectionist France, reluctantly dragged into a world of more enlightened commercial policies, must now be seen as false. Economic and political analyses that are motivated by the old stylized facts need to be re-examined accordingly.

⁴³ Mokyr, *Economics of the Industrial Revolution*; and McCloskey, "The Industrial Revolution."

Appendix TABLE 5

MAJOR IMPORTS INTO FRANCE, 1827-1836 TO 1867-1876

(in millions of francs and percentage of import revenue)

	1827- Ave		1837–1846 Average		1847– Avei		1857- Ave		1867- Ave	
	-	Import Rev-		Import Rev-		Import Rev-		Import Rev-		Import Rev-
Commodity	Import Value	enue (%)	Import Value	enue (%)	Import Value	enue (%)	Import Value	enue (%)	Import Value	enue (%)
Silk	40.0	8.3	60.0	7.7	122.3	11.4	255.6	11.6	386.7	11.3
Wool	16.2	3.4	37.6	4.8	52.5	4.9	178.8	8.1	270.8	7.9
Raw cotton	58.9	12.3	96.6	12.4	99.8	9.3	237.9	10.8	242.4	7.1
Wood	23.2	4.8	39.2	5.1	57.2	5.3	125.3	5.7	161.0	4.7
Coal	9.9	2.1	22.4	2.9	65.5	6.1	107.1	4.9	152.2	4.5
Animal hides and pelts	16.3	3.4	26.7	3.4	38.1	3.5	88.0	4.0	143.6	4.2
Livestock	9.4	2.0	8.7	1.1	21.1	2.0	65.1	3.0	137.3	4.0
Coffee	10.1	2.1	13.1	1.7	23.3	2.2	64.5	2.9	83.1	2.4
Flax, linen	0.4	0.1	4.7	0.6	22.7	2.1	46.6	2.1	80.2	2.4
Oleaginous grains	9.6	2.0	36.3	4.7	17.8	1.7	43.9	2.0	71.3	2.1
Woolen textiles	0.5	0.1	0.5	0.1	0.7	0.1	21.7	1.0	68.0	2.0
Sugar, foreign	0.7	0.1	3.9	0.5	16.6	1.5	51.8	2.4	56.5	1.7
Sugar, colonial	44.7	9.3	48.8	6.3	48.7	4.5	66.4	3.0	53.5	1.6
Cotton textiles	0.0	0.0	0.4	0.1	0.8	0.1	7.9	0.4	47.2	1.4
Fats, lard	1.7	0.4	5.2	0.7	6.2	0.6	20.8	0.9	45.5	1.3
Other	238.4	49.7	371.9	47.9	483.7	44.9	818.6	37.2	1408.7	41.3
Total	480.0	100.0	776.0	100.0	1077.0	100.0	2200.0	100.0	3408.0	100.0

Source: France, Tableau Décennal du Commerce, 1867-76.

Nye

	1827-1836		1837-	1837–1846		1847-1856		1857-1866		1867–1876	
Commodity	Duty Paid	Rate (%)									
Silk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Wool	4.5	27.8	8.3	22.1	9.4	17.9	2.5	1.4	0.5	0.2	
Raw cotton	7.2	12.2	11.7	12.1	14.3	14.3	6.1	2.6	0.3	0.1	
Wood	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Coal	2.1	21.2	3.7	16.5	6.7	10.2	9.3	8.7	8.4	5.5	
Animal hides and pelts	0.5	3.1	0.6	2.2	0.6	1.6	0.2	0.2	0.1	0.1	
Livestock	2.0	21.3	1.9	21.8	0.8	3.8	0.4	0.6	0.6	0.4	
Coffee	8.8	87.1	13.2	100.8	18.3	78.5	23.0	35.7	46.8	56.3	
Flax, linen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Oleaginous grains	0.4	4.2	1.2	3.3	2.6	14.6	0.9	2.1	0.1	0.1	
Woolen textiles	0.0	50.0	0.0	50.0	0.0	50.0	2.7	12.4	6.7	9.9	
Sugar, foreign	1.3	185.7	6.1	156.4	17.8	107.2	31.0	59.8	20.5	36.3	
Sugar, colonial	33.8	75.6	35.1	71.9	30.3	62.2	36.8	55.4	33.0	61.7	
Cotton textiles	0.0	50.0	0.0	50.0	0.0	50.0	1.0	12.7	5.7	12.1	
Fats, lard	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Other	39.1	16.4	48.6	13.1	38.8	8.0	37.6	4.6	45.3	3.2	
Total	99 .7	20.8	130.4	16.8	139.6	13.0	151.5	6.9	168.0	4.9	

 TABLE 6

 DUTIES PAID AND TARIFF RATES FOR FRANCE

 (in millions of francs and percentage of current import value)

Source: France, Tableau Décennal du Commerce, 1867-76.

TABLE 7

U.K. NET IMPORTS, TARIFF COLLECTED, AND TARIFF RATES, 1841, 1854, AND 1881 (in thousands of pounds)

		1841			1854		1881			
Commodity	Imports Value Before Tariff	Tariff Revenue	Rate (%)	Imports Value Before Tariff	Tariff Revenue	Rate (%)	Imports Value Before Tariff	Tariff Revenue	Rate (%)	
Coffee	925	888	96	887	468	53	1,081	195	18	
Wheat	6,950	386	6	11,800	173	2	31,000	0	0	
Other grain	1,040	135	13	10,100	242	2	19,800	0	0	
Cotton	10,400	528	5	17,900	0	0	38,800	0	0	
Rum	738	1,060	140	558	1,280	230	462	2,358	510	
Brandy	419	1,330	320	770	1,400	180	1,396	1,613	120	
Sugar	7,630	5,110	67	8,550	4,490	53	23,800	0	0	
Tea	3,480	3,970	110	4,000	4,780	120	8,560	4,000	47	
Staves	472	41	9	666	0	0	567	0	0	
Unsawn fir	4,060	568	14	5,260	253	5	3,470	0	0	
Tobacco	402	3,390	840	998	4,780	480	1,369	8,380	610	
Wine	1,510	1,720	110	2,250	1,910	85	5,426	1,380	25	
Sum	38,000	19,000	50	64,000	20,000	31	136,000	17,900	13	
All Other	30,000	4,700	16	70,000	5,000	7	198,000	1,300	1	
Total	68,000	23,700	35	134,000	25,000	19	334,000	19,200	6	

Source: McCloskey, "Magnanimous Albion," p. 308.

REFERENCES

- Bairoch, Paul, "European Trade Policy, 1815–1914," in Peter Mathias and Sydney Pollard, eds., *The Cambridge Economic History of Europe* (Cambridge, 1989), vol. 8: *The Industrial Economies: The Development of Economic and Social Policies*, pp. 1–160.
- Brown, Lucy, The Board of Trade and the Free-Trade Movement, 1830-42 (Oxford, 1958).
- Cameron, Rondo, A Concise Economic History of the World (New York and Oxford, 1989).
- Clapham, John H., An Economic History of Modern Britain (Cambridge, 1952), vol. 2: Free Trade and Steel 1850–1886.
- Davis, Ralph, The Industrial Revolution and British Overseas Trade (Leicester, England, 1979).
- Dunham, Arthur, The Anglo-French Treaty of Commerce of 1860 (Ann Arbor, MI, 1930).
- Fohlen, Claude, L'Industrie textile au temps du Second Empire (Paris, 1956).
- France, Administration des Douanes, *Tableau Décennal du Commerce de la France*, 1847–56 (Paris, 1858).
- France, Ministre de L'Agriculture, du commerce et des travaux publics, *Enquête:* Traité de commerce avec l'Angleterre (Paris, 1860).
- France, Direction Générale des Douanes, *Tableau Général du Commerce de la France*, 1869 (Paris, 1870).
- France, Administration des Douanes, *Tableau Décennal du Commerce de la France*, 1867–76 (Paris, 1878).
- France, Archives Nationales AN F¹² 2484.
- France, Archives Nationales AN F¹² 2525.
- Francis, Alan D., The Wine Trade (London, 1972).
- Gilpin, Robert, The Political Economy of International Relations (Princeton, 1987).
- Great Britain, Customs Tariffs of the United Kingdom, 1800–1897 (Sessional Papers, House of Commons, 1898), vol. 85.
- Imlah, Albert, Economic Elements of the Pax Britannica (New York, 1958).
- Keohane, Robert, After Hegemony: Cooperation and Discord in the World Political Economy (Princeton, 1984).
- Levi, Leone, *History of British Commerce* (Shannon, Ireland, 1971 reprint of original 1880 edition).
- Lévy-Leboyer, Maurice, and François Bourguignon, L'Économie française au XIXe siècle (Paris, 1985).
- McCloskey, Donald N., "Magnanimous Albion: Free Trade and British National Income, 1841–1881," *Explorations in Economic History*, 2nd series, 17 (July 1980), pp. 303–20.
- McCloskey, Donald N., "The Industrial Revolution 1780–1860: A Survey," in Roderick Floud and Donald N. McCloskey, eds., *The Economic History of Britain Since 1700* (Cambridge, 1981), vol. 1, pp. 87–102.
- McCloskey, Donald N., "Reply to Peter Cain," *Explorations in Economic History*, 2nd series, 19 (Apr. 1982), pp. 208–10.
- Marczewski, Jean, "Le Produit physique de l'économie française de 1789 à 1913," Cahiers de l'ISEA, AF 4 (July 1965), pp. vii-cliv.
- Mitchell, Brian R., European Historical Statistics 1750-1970 (New York, 1975).
- Moniteur Industriel, le (Paris, July 6, 1856).
- Mokyr, Joel A., The Economics of the Industrial Revolution (New York, 1985).

- Nye, John Vincent, "Revisionist Tariff History and the Theory of Hegemonic Stability" (Political Economy Working Paper No. 142, Washington University, St. Louis, MO, 1990).
- O'Brien, Patrick and Caglar Keyder, Economic Growth in Britain and France, 1780-1914 (London, 1976).