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POLITICAL ECONOMY OF ANGLO-
FRENCH TRADE, 1689-1899:
AGRICULTURAL TRADE POLICIES,
ALCOHOL TAXES, AND WAR

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Abstract

Britain – contrary to received wisdom – was not a free trader for most of the 1800s and, despite repeal of the Corn Laws, continued to have higher tariffs than the French until the last quarter of the century.

War with Louis XIV from 1689 led to the end of all trade between Britain and France for a quarter of a century. The creation of powerful protected interests both at home and abroad (notably in the form of British merchants, and investors in Portuguese wine) led to the imposition of prohibitively high tariffs on French imports -- notably on wine and spirits -- when trade with France resumed in 1714. Protection of domestic interests from import competition allowed the state to raise domestic excises which provided increased government revenues despite almost no increases in the taxes on land and income in Britain. The state ensured compliance not simply through the threat of lower tariffs on foreign substitutes but also through the encouragement of a trend towards monopoly production in brewing and restricted retail sales of beer (which began around 1700 and continued throughout the eighteenth century).

This history is analyzed in terms of its effects on British fiscal and commercial policy from the early 1700s to the end of the nineteenth century. The result is a fuller, albeit revisionist account of the rise of the modern state that calls into question a variety of theses in economics and political science that draw on the naive view of a liberal Britain unilaterally moving to free trade in the nineteenth century. (JEL Classification: F13, H20, N40, N43, N53, O13, Q17)

Keywords: Political economy, agricultural trade policies and war, economic history of Europe, alcohol taxes

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John V.C. Nye

Britain – contrary to received wisdom – was not a free trader for most of the 1800s and, despite repeal of the Corn Laws, continued to have higher tariffs than the French until the last few decades of the 19th century. Moreover, British tariffs tended to be reformed by first lowering or abolishing duties on items in which Britain had enjoyed a comparative advantage or which were usually not significant for their trade. The few tariffs that remained – particularly on items such as wine and spirits – were among the most protective of all tariffs and were mostly the same sorts of tariffs decried by Adam Smith in the *Wealth of Nations*. These in fact went back to the earliest period of British mercantilism in the 17th century when war and politics totally distorted trade relations between Britain and France for the next two hundred years.

Although later authors have tended to dismiss these high tariffs as being “merely” for revenue, their high level, the selective nature of the duties, the difficulty of separating out revenue from protection, and the seriousness with which British rivals such as France treated changes in these tariffs shows how misleading has been the simplistic story of free trade Britain that we have inherited.

The argument is this: an English state eager to reduce its trade deficit with France in the late 17th century found that opportunity as a result of the wars that ran from 1689-1713. War with Louis XIV’s France provided the excuse that protectionists had sought to cut off virtually all commerce with the French. This was especially important for the trade in wine and spirits, one of the largest components of the 17th century English trade deficit. Prohibition and protection led to the creation of powerful interests at home and abroad (notably the brewing industry in London and the English-dominated wine industry in Portugal) who benefited from the absence of competing French imports. These groups successfully lobbied to impose new and nearly prohibitive tariffs on French goods – notably on wine and spirits – when trade with France resumed after the war. Protection of domestic interests in turn allowed the state to raise domestic excises in a credible fashion, therefore leading to a

dramatic increase in government revenues without a need to increase taxes on landed property. The state ensured compliance not simply through the threat of lower tariffs on foreign substitutes, but also through the encouragement of oligopoly in the production and sale of beer. Both entry into wholesale brewing and retail distribution were more tightly regulated and restricted throughout the 18th century, making for a concentrated domestic interest that could work in concert with Parliament.

The net result was an expansive British state with revenues collected through the newly created central tax administration and a cooperative brewing industry that found it easy to shift much of the burden of this taxation onto consumers, who had little say in the matter. The growth of British revenues in the 18th century was so dramatic that it made possible Britain's rise to prominence as a world power (Brewer 1988).

In addition, the protective tariffs had long-term consequences for the pattern of British domestic consumption, perhaps even altering or at least shaping the fundamentals of British "taste." Deforming the centuries' old wine trade with France meant that wine was kept out of the British Isles during the century and a half which included the Industrial Revolution and the rise of mass consumption. It ensured that beer would be the dominant component of the ordinary Briton's drinking habits, and it restricted the consumption of fine Bordeaux and Port to the upper classes.

But this also had long-term effects on the structure of British tariffs. As early as 1789 – thanks to the Eden Treaty – there were early attempts to reform the trade arrangements, but these were interrupted by the French Revolution.

By the 19th century, the leaders of the political class were increasingly favorable to liberal policy though there was still much political opposition to the notion of free trade. It is therefore striking that when the momentous series of reforms in Parliament leading to removal of the Corn Laws passed in the 1840s, reform of the tariff on wine, spirits, and related products were not changed at all¹. Yet these self-evidently protectionist tariffs antedated the Corn Laws that are often seen as the epitome of British mercantilism, and were even explicitly noted in Smith's *Wealth of Nations* (Nye 2007). Nonetheless, lowering or reforming the tariffs on wine, rum, sugar, coffee, tea, etc. now threatened British revenues. It did so both directly through reduction of duties, but more indirectly through the likely need to pare domestic excises to avoid complaints from local producers of competing products that even the most ardent free traders did not see fit to challenge these duties after Britain has

¹ It should be noted that the sugar tariff was significant in this regard, because the conversion of sugar into alcohol was a significant component of the spirits industry.

supposedly moved to free trade in the 1840s. The net result was that Britain was not a truly free trade nation until very late in the 19th century.

The simplest way to appreciate the seriousness of the issue is by examining average tariffs for Britain and France in the 19th century. This basic measure – the sum of duties divided by the value of all imports, is the most common approximation used to indicate the extent to which a nation is or is not a free trader.

Figure 1 shows average tariff rates for Britain and France throughout the 19th century. What is most surprising is that – contrary to conventional wisdom – British tariffs were higher than in France for most of that century. The two curves do not cross until the mid-1870s, and the degree to which French tariffs were higher than in Britain in the last few decades of the 19th century was not nearly as pronounced as the reverse comparison for the early 1800s. This is especially striking because conventional historical narrative has tended to treat Britain as having become a free trader after repeal of the Corn Laws in the 1840s, while France is said to have remained stubbornly opposed to free trade at least until the 1860s (Kindleberger 1964).

Part of this was rhetorical: the British claimed to have moved to free trade, and the French nearly the reverse. But part of it has to do with the peculiar nature of British tariffs. For the most part they were concentrated in comestibles, beverages, and non-industrial goods such as liquor, coffee, tea, sugar, and wine. In contrast, the French had a larger number of tariffs and even had prohibitions on a number of items including some textiles and various manufactures, prior to the 1860s.

But what was significant is that the British tariffs were so much more binding. They imposed very high rates on items that were a large component of consumption of foreign products. More importantly, these were items in which Britain did not have a comparative advantage. Hence the establishment of high and even prohibitive (sometimes reaching several hundred percent) duties on items that Britain did not specialize in producing corresponded to the classic Ricardian case of distortions from free trade.

Many scholars have tended to view these tariffs as mere fiscal impositions that were in no way protective of domestic industry (e.g. Irwin 1993, Tena 2006). But these claims tend to limit considerations of trade distortions to the narrow policy of mere producer protection (as opposed to all distortions in both consumption and production introduced by duties). They also take us too far into questions of the intended purpose of duties as being relevant to the question of who was and was not a free trader. In the British case, this was especially inappropriate because many of the so-called revenue tariffs of the 19th century were so clearly

put into place in an earlier period as part of protectionist policies targeted quite specifically at Britain's rivals, notably the French. Moreover, the view that all the tariffs were offset by equivalent excises on domestic beverages has been shown to be false (Nye 1993). Above all, even a uniform excise on domestic and foreign beverages would have a protectionist effect to the extent that the taxes are imposed solely on the class of goods in which Britain did not have a comparative advantage.²

The tariffs on wine and spirits went back to the period 1689-1713 when England ceased all commerce with France as a result of the Nine Years' War and the War of Spanish Succession. This cessation of trade was especially significant because France was England's largest trading partner in the 17th century and the largest source of imports. Stopping trade with France turned England's large merchandise trade deficit into a surplus for several years. And a very large portion of Anglo-French trade – at least 20 percent – was wine. The cessation of imports from France led to a surge in imports from Spain and, more significantly, Portugal. As Portugal was not noted for its capacity to produce wine and spirits prior to this period, the heavy shift in production directed almost exclusively towards the English market was quite significant (Nye 2007). Portugal was an ally, even something of a dependency of England, and Englishmen dominated the Portuguese wine and spirits trade as growers, producers, merchants and shippers. When the fabled Methuen Treaty of 1704 was signed, England was granted the right to sell textiles freely to the Portuguese in exchange for a promise that Portuguese wine would enter England (and later Britain) at a duty level never to exceed two-thirds of duties imposed on other nations (Nye 2007). Since Portugal was not particularly successful at selling wine to other nations, this arrangement was a clear distortion aimed at creating a supplier of alcoholic beverages that would be favorable to England. Indeed, as Portugal had enjoyed only the most minimal success in exporting wine and spirits prior to the quarter century of war with the French, the Methuen Treaty virtually created the overseas wine market for Portugal.

As has been detailed elsewhere, the end of war with France did not lead to free trade with France but rather a highly limited trade based on elevated volume tariffs that specifically were designed to exclude the bulk of French products from the British market.

² Consider the difference between raising revenue by taxing all textiles versus taxing all alcohol. Both could have been designed not to favor local vs. imported products, but the choice of which class of goods to tax has implications for the trade balance. The only neutral tax would be a uniform excise on all goods and services.

Supplementary tariffs on items that passed through French ports, or were delivered by French ships, or duty reductions on colonial products increased the favoritism against France and in favor of British domestics and allies. Moreover, the fact that – alone among all the British tariffs – the wine and spirits duties were set by volume, rather than ad valorem, meant that cheaper products were entirely excluded from Britain, while small quantities of higher end alcohol, such as the best claret from Bordeaux, would continue to make their way to Albion (Nye 2007).

This was also significant because the other group that benefited tremendously from protection were local brewers and distillers. Beer had emerged as the most important, mass-produced beverage during the years of the Anglo-French wars at the end of the 17th century. Technical improvements leading to economies of scale in brewing, coupled with the growth of London as the major British urban center, promoted beer as the common beverage and also encouraged the transformation of the industry from small-scale home production to concentrated large scale industry. This tendency was further enhanced by laws designed to limit entry into the brewing industry and to lessen concentration in the retail trade as well (Mathias 1959, Nye 2007). Thus, the brewing industry was well-placed to benefit from protection afforded by wine tariffs, but also to bargain directly with the government as a powerful special interest which could (and did) argue for continued protection throughout the 18th century. Attempts to invade the oligopoly tended to fail as late as the early 19th century (Nye 2007).

This also provided the state with a reliable means of imposing a credible tax on domestic consumption of beer and spirits. Whereas previous attempts (in the 17th century) to raise the excise on beer only raised revenues by a modest amount (due to the varieties of evasion that were practiced), the 18th century saw the successful imposition of a variety of excises that were effectively enforced and paid to the government.

Figure 2 shows the steep rise in income earned by the British state throughout the eighteenth century, of which the largest share was due to earnings from customs and excises. Table 1 indicates that during 1788-92, some 40 percent of the major British taxes were due to alcoholic beverages or inputs to brewing and distilling. The striking feature is the stability of the share of revenues from property and land; it remained fairly constant throughout the 18th century. At a time when Britain managed a dramatic increase in the size of state and built up its military to become the dominant power in world affairs, this shift in the relative source of the tax burden was quite remarkable. Moreover, there has been no rigorous analysis of why only Britain and none of the other major powers were able to accomplish this. North and

Weingast (1989) famously point to the role of the Glorious Revolution in making state borrowing and taxation more credible, but give no reasons why the government was able to collect more revenue. A focus on the struggle over wine tariffs and brewing excises makes clear that this shift in interest group politics led to a configuration of interests in which taxes could be imposed and credibly collected from the parties most likely to attempt evasion (Nye 2007).

This also meant that when the time came to reform the British tariff system in the 19th century, the importance of the tariffs for revenue – not primarily for the direct revenue they generated but for their ability to collect revenue from producers of domestic substitutes – served as a drag on legislators' capacity to implement reforms that substantially altered duties on these new luxuries. Indeed, even the repeal of the Corn Laws, which were a much later set of agricultural tariffs than the various duties on alcohol and luxuries, proved so politically difficult that the proponents of the legislation were forced out of power as a result in the 1840s (Schonhardt-Bailey 2006).

In addition, the way in which the tariffs were imposed drastically reshaped the consumption patterns of the British citizenry. Fixed volume duties had the effect of excluding all trade in the lowest quality wines and of tilting the import mix of the remaining products towards wine that was high in alcoholic content or to very high quality products. For the most part, the Portuguese wines benefited from the double effect of their higher alcoholic content and of course from the lower level of the duty itself. Spanish products did not have quite the same preference as that of wines from Portugal, but they still benefited from the shift towards more alcoholic products. For the most part, an overwhelming share of the market left to the French was at the very highest end.

Detailed records of what types of wines were being imported and in what quantities are not available but, as Nye (2007) has demonstrated, one can infer the extent of the quality shift simply by examining the ratio of wines imported in the barrel versus those in the bottle. Given high transportation costs and the possibilities of breakage, only the best wines tended to be shipped directly in bottles. Hence, it was typical for the ratio (by volume) of barrel to bottled wines from France to reside in the range of 15 to 1 up to 25 to 1. In contrast, the ratio for Britain tended to be on the order of 3 gallons of barrel wine for every gallon imported in bottles (Nye 2007). Hence, the perception of wine as primarily being a luxury product in Britain had less to do with any essential qualities of the wine itself or any peculiarities of British culture. Rather, a policy designed to exclude cheap wine and promote beer shaped

what we think of as the canonical British penchant for beer, whiskey, gin and rum for the masses, and claret, sherry and port for the elites.

A Digression on effective protection

It is common to speak of protection as being the opposite of free trade. But this depends on how narrowly one defines protection. In theory, what one would like to do is to have a benchmark of pure free trade and observe how far a country deviates from that benchmark. The problem is that there has been no generally accepted measure that does this for the diverse mix of policies that countries have implemented to distort their trade. The beginnings of a theoretically rigorous basis for measuring trade distortions probably stem from the work of Anderson and Neary (1996) in which they propose a trade restrictiveness index (TRI) that is equivalent to whatever uniform tariff rate would produce the same economic welfare effect as the mix of actual tariffs, quotas and other trade restrictions in place.

It has been commonplace in the applied trade policy literature to rely very heavily on measures of effective protection – that is, on the extent to which a given tariff protects the competing domestic industry taking into account taxes and restrictions on that industry’s inputs as well as outputs. This however, is a conceptual error. For one thing, it limits attention to only some of the many distortions introduced by tariffs. For example, a focus on effective protection tends to ignore the overall effect of tariffs on welfare when there are no clear domestic substitutes. And yet the baseline Ricardian case taught in every course in trade is one in which the importing and exporting nation each specializes in producing one importable and one exportable, so that any tariff would lead to distortions from the ideal benchmark. Thus, no “effective” protection, yet tariffs in both nations would clearly be distortionary deviations from the free trade ideal. Indeed, in this most basic case, a distortionary import tariff is identical to a revenue tariff on consumption of the importable. Nonetheless, a measure of effective protection at distorted prices would be zero in that instance, since there would be no domestic industry to protect. Indeed, in most cases, the presence of a protected domestic industry benefitting from tariffs would probably be indicative of a smaller overall distortion than the case where the domestic industry is only a weak substitute or is non-existent (since there is less surplus loss from limiting trade when local goods are closer equivalents to foreign imports). Most important of all is that there are

rarely tariffs which are purely for revenue or purely for protection. High tariffs for revenue induce the production and use of goods that are weak substitutes. Tariffs that are designed to be protective may nonetheless raise substantial sums for the treasury.

This is especially relevant for the case of Britain and France in the mid-19th century. One of the justifications for British tariffs is that many were merely revenue tariffs or, as in the case of wine versus beer, tariffs were offset by domestic excises. But as Nye (1993) notes, British excises were in fact far below the tariff levels on French wine, especially when taking into account the distortions that led to the lowest quality wine (the ones most likely to compete with beer) being totally excluded from the market in the first place by the high level of fixed, volumetric excises.

More important, a more rigorous investigation of the effect of tariff distortions using a computable general equilibrium framework (that improves on Anderson and Neary 1996) makes possible a precise calculation of the extent of distortions introduced by tariffs in Britain versus France. The calculations demonstrate that the overall welfare distortions of British tariffs in the period prior to the 1860 Treaty were substantially greater than they were for France (see Dakhlia and Nye 2004, and also see the appendix in Nye 2007). The welfare losses as a percentage of GDP were approximately three times larger for British tariffs as they were for French trade barriers, based on a simulation where both countries eliminated all tariffs completely.

Most important of all, we have already seen that the entire history of tariffs on imported alcohol was deeply protective by design, and that this protection was tied into the state's capacity to extract revenue from the protected industry.

Given the high levels of duties and regulations, it is also quite likely that the generally weak substitution effects between all imported beverages (including tea and coffee) and on items that were inputs into the production of spirits (such as sugar) were more important than one would expect from a cursory examination of direct substitutes. That we have done little to examine the equally complicated links between other production categories and the variety of duties and regulations surrounding imports and exports suggests that a superficial treatment of tariffs that seeks to disaggregate "good" from "bad" or liberal from illiberal duties is likely to mislead.

The significance of the wine tariffs can be seen by comparing the ex post ad valorem rates of protection on wine (using total wine import duties divided by wine import value) with the excise on beer. Using average tariff rates on wines and comparing them to the ad valorem rates on domestic beer shows that the wine rates were several times higher than the

rates on beer until the 1860 Treaty of Commerce. For the rest of the century, the average wine tariffs were approximately two to three times the rate charged on beer (figure 3). However, even these differences understate the differences between the wine tariffs and the beer excises, because the wine tariffs were not imposed ad valorem. The tendency to levy them first by volume, and then (after 1860) by alcoholic content would mean that the cheapest and lowest alcoholic beverages would be most highly discriminated against. Those drinks of course would have been the ones most likely to be competitive with beer even though the 1860 reform partially redressed the discrimination between French wine and Portuguese products. But domestic beer remained somewhat protected from foreign competition throughout the 19th century. In addition, high tariffs on weak substitute beverages such as coffee or tea also added a layer of protection.

Most important of all, the mere fact of high taxes on the entire class of beverages, both non-alcoholic and alcoholic, would have distorted British production and consumption to favor those industries (manufactures) in which Britain enjoyed a strong comparative advantage.

The late 19th century

It is only after the passage of the 1860 Anglo-French Treaty of Commerce that Britain and France began to conform to the more common narrative about British free trade. In particular, the removal of French prohibitions on British goods in exchange for a lowered tariff on French wine leads to steadily lower average British tariffs so that, by the late 1870s, British tariffs are clearly below those of France.

Some of the theories that derived from the conventional view of unilateral British free trade policy need to be reconsidered in the light of this revised history. For example, a classic claim by Kindleberger (1964) is that free trade was a public good and that individual nations had incentives to free ride on other free traders by raising tariffs strategically. Depending on the game being played, this might not have been economically rational (if a nation has no market power in world trade, any tariff is sub-optimal), but there may have been political reasons for nations to engage in strategic tariffs even if it were economically rational to stick to unilateral free trade. As a consequence, Kindleberger hypothesized that what is needed is a free trade leader that benefits differentially from open trade and that is willing to hold fast to

free trade in the midst of free riding by minor powers. This thesis has been elaborated in the political science literature under the heading of hegemonic stability (see also Gilpin 1987 and Keohane 1984).

If we do not start from the assumption that Britain uniquely and unilaterally moved to free trade, the theory of hegemonic stability is discredited. Instead, we see that bilateral agreements stemming from negotiations between the leading trading powers played the pivotal role in promoting Europe-wide freer trade. Thus, even someone who insists that Britain was the sole free trader prior to the 1860 Treaty of Commerce would be hard pressed to show that this led to a copycat effect. There was no movement to free trade self-evidently triggered by British moves. Parallel or similar moves in France and the Zollverein states either preceded or were independent of the British changes.

The really important and critical event was the signing of the 1860 Anglo-French Treaty of Commerce. Of great significance was the use of Most Favored Nation clauses in the trade treaty that allowed Britain and France to expand the sphere of open trade by concluding equivalent agreements with other European powers. Anxious not to be left out of the trading bloc resulting from the two leading powers in Europe ending centuries of trade war, virtually all of Europe was quickly drawn into the fold. The result was the period of perhaps the freest intra-European trade ever seen before or since (Nye 2007, Pahre 1998).

This also changes the conventional narrative about British influence on European trade. If the new view is taken into account, not only was Britain not the unilateral free trader, but British exhortations to move to freer trade did little to change the pattern of European commerce. If anything, it was the bilateral agreement with France that was the strategic lynchpin of European liberalization. Since bilateral agreements were viewed then and now as undesirable compromises away from a purist liberalization strategy, it is ironic that the 1860 and the subsequent treaties signed throughout Europe were the proximate cause of the continental expansion of commerce in the late 1800s.

If Britain did not succeed in igniting free trade by repealing the Corn Laws at the beginning of the 19th century, did she at least preserve free trade by her principled adherence to low tariffs at the end of the century? As we will see, British exceptionalism did not allow Britain to serve as a successful free trade hegemon, and most leading nations moved to partially protectionist policies by the end of the 1800s.

The period of political enthusiasm for nearly free trade following the 1860 Treaty was to be short-lived, at least in its purest form. Within a decade of the Anglo-French agreement, changes in the world market for primary goods, particularly in agriculture, led to reversals in

policy such that the core supporters of the European agreements – notably France and Germany – reinstating targeted protective tariffs.

The crucial factor seems to have been the increasing importance of grain from both Russia and the New World in raising supply and lowering world prices, partially as a result of openness, but primarily resulting from the drastic lowering of transportation and transactions costs throughout the 19th century. Land rents fell, and incomes to the owners of agricultural land declined relative to labor wages (Findlay and O'Rourke 2007, pp. 396-97). Thus, the Germans implemented both agricultural and industrial tariffs in 1879 in an alliance that – in principle – turned back on the liberal principles of the 1860s and 1870s. The French began to return to agricultural and industrial tariffs as agricultural imports grew.

The most damaging argument against the Kindleberger thesis of a free trade hegemon is that British adherence to genuinely liberal trade policy at the end of the century does not seem to have prevented the major European powers from abandoning earlier agreements.

However, there might be some merit in the leadership argument, at least if one wanted to weaken the case to claim that British free trade served to moderate the protectionist upsurge that was seen in the late 1800s. It is worth noting that these changes, drastic as they were, still kept overall average tariff levels in the last decades of the 19th century below their levels in the decades immediately following the end of the Napoleonic wars.

For example, German average tariffs from 1880-1913 were 8.6 percent below the average rate of 10.4 percent for the period from 1834-65, and only slightly above the 8.4 percent average rate for the period from 1834-1913 (Dedinger 2006). In France, average tariffs for 1880-1900 were around 7.9 percent compared with 12.5 percent for 1840-60.³

Whether the abandonment of free trade, in principle, and its replacement by an only moderately protectionist regime was partly due to a British influence, or was completely dependent on domestic considerations, is an issue that scholars will have to take up in future work. What is clear is that any consideration of the role of British leadership in the promotion of freer trade in this period needs to be reconsidered, and a fuller account must be given of the interplay between domestic and foreign policy considerations. Furthermore, it is clear that an economically robust treatment of agricultural distortions will have to take fiscal considerations into account where there is a strong tax-collecting reason for import tariffs.

³ Averages calculated from Levy-Leboyer and Bourguignon (1985). Tena (2006) has advanced arguments that would indicate that tariff averages for France should be much higher than the official statistics suggest, especially for the periods before 1860 and after 1880, but only as a result of his excluding items that were “fiscal products.” I have argued (Nye 1991 and 1993) that such exclusion is arbitrary, and it inappropriately conflates the intent of tariffs with their overall effects. In any case, the symmetry of the adjustments make clear that, even in this extreme case, one should not see the late 19th century as unusually protectionist in France.

This is almost certainly the case for nations where excises and customs are of comparable or greater importance for revenue than income and property taxes, as was the case in Britain prior to the 20th century.

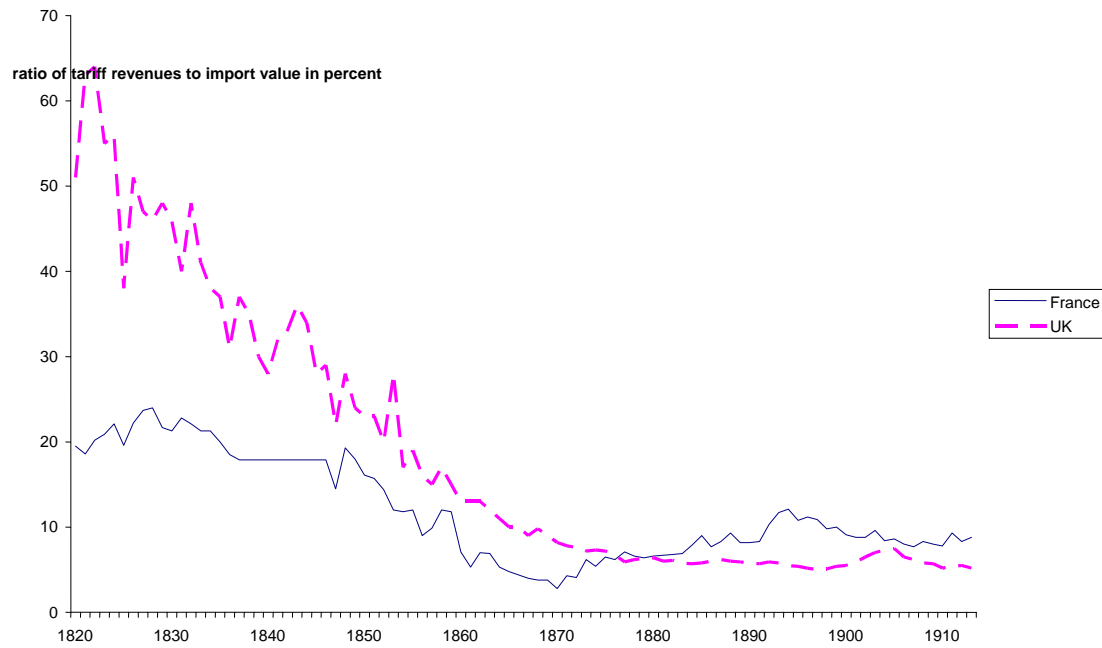
References

- Anderson, J.E. and J.P. Neary (1996), "A New Approach to Evaluating Trade Policy", *Review of Economic Studies* 63: 107-125.
- Brewer, J. (1988), *The Sinews of Power*, Cambridge MA: Harvard University Press.
- Dakhli, S. and J.V.C. Nye (2004), "Tax Britannica: Nineteenth-Century Tariffs and British National Income," *Public Choice* 121(3-4): 309-333.
- Dedinger, B. (2006), "From Virtual Free-Trade to Virtual Protectionism: Or, Did Protectionism Have Any Part in Germany's Rise to Commercial Power 1850-1913?," in J. P. Dormois and P. Lains (eds.), *Classical Trade Protectionism 1815-1914*, London and New York: Routledge.
- Findlay, R. and K. O'Rourke (2007), *Power and Plenty: Trade, War, and the World Economy in the Second Millennium*, Princeton NJ: Princeton University Press.
- Gilpin, R. (1987), *The Political Economy of International Relations*, Princeton NJ: Princeton University Press.
- Imlah, A. (1958), *Economic Elements of the Pax Britannica*, New York: Russell and Russell.
- Irwin, D.A. (1993), "Free Trade and Protection in Nineteenth-Century Britain and France Revisited: A Comment on Nye", *Journal of Economic History* 51(1): 146-52.
- Keohane, R. (1984), *After Hegemony: Cooperation and Discord in the World Political Economy*, Princeton NJ: Princeton University Press.
- Kindleberger, C.P. (1964), *Economic Growth in France and Britain: 1851-1950*, Cambridge MA: Harvard University Press.
- Levy-Leboyer, M. and F. Bourguignon (1985), *L'Économie française au XIXe siècle*, Paris: Economica.
- Mathias, P. (1959), *The Brewing Industry in England: 1700-1830*, Cambridge: Cambridge University Press.

- North, D.C. and B.R. Weingast (1989), "Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England", *Journal of Economic History* 49(4): 803-32.
- Nye, J.V.C. (1991), "The Myth of Free Trade Britain and Fortress France: Tariffs and Trade in the Nineteenth Century", *Journal of Economic History* 51(1): 23-46, March.
- Nye, J.V.C. (1993), "Reply to Irwin on Free Trade", *Journal of Economic History* 53(1): 153-58, March.
- Nye, J.V.C. (2007), *War, Wine, and Taxes: The Political Economy of Anglo-French Trade 1689-1900*, Princeton NJ: Princeton University Press.
- O'Brien, P.K. (1988), "The Political Economy of British Taxation, 1660-1815", *Economic History Review* 41(1): 1-32.
- O'Brien, P.K. and P.A. Hunt (1993), "Data Prepared on English Revenues, 1485-1815", *European State Finance Database*, accessed at www.le.ac.uk/hi/bon/ESFDB/frameset.html. Files used: \obrien\engd002.ssd
- Pahre, R. (1998), "Reactions and Reciprocity: Tariffs and Trade Liberalization from 1815 to 1914", *Journal of Conflict Resolution* 42(4): 467-92.
- Schonhardt-Bailey, C. (2006), *From the Corn Laws to Free Trade: Interests, Ideas, and Institutions in Historical Perspective*, Cambridge MA: MIT Press.
- Tena, A. (2006), "Assessing the Protectionist Intensity of Tariffs in Nineteenth-Century European Trade Policy", in J.P. Dormois and P. Lains (eds.), *Classical Trade Protectionism 1815-1914*, London and New York: Routledge.

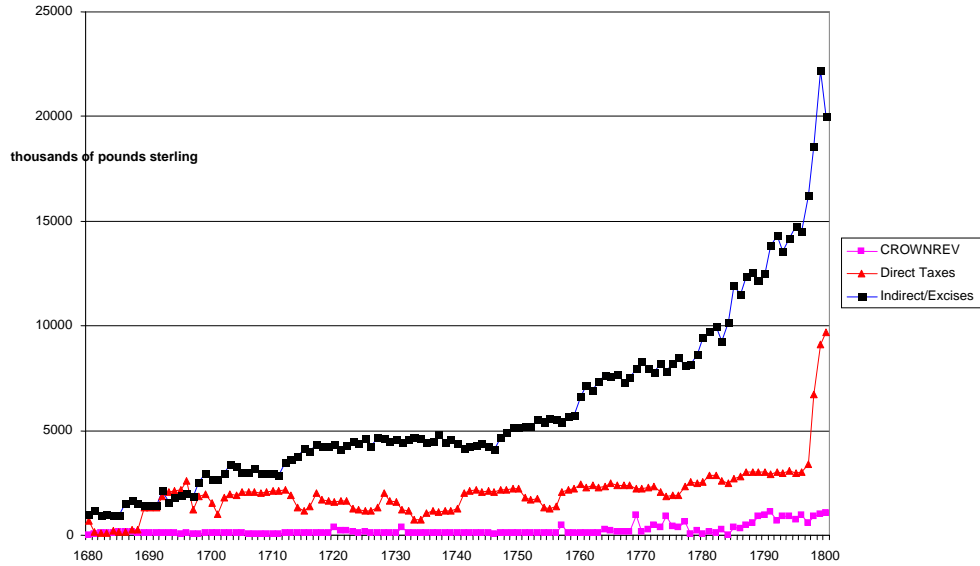
Figure 1: Average tariffs, Britain and France, 1820 to 1913

(percent)



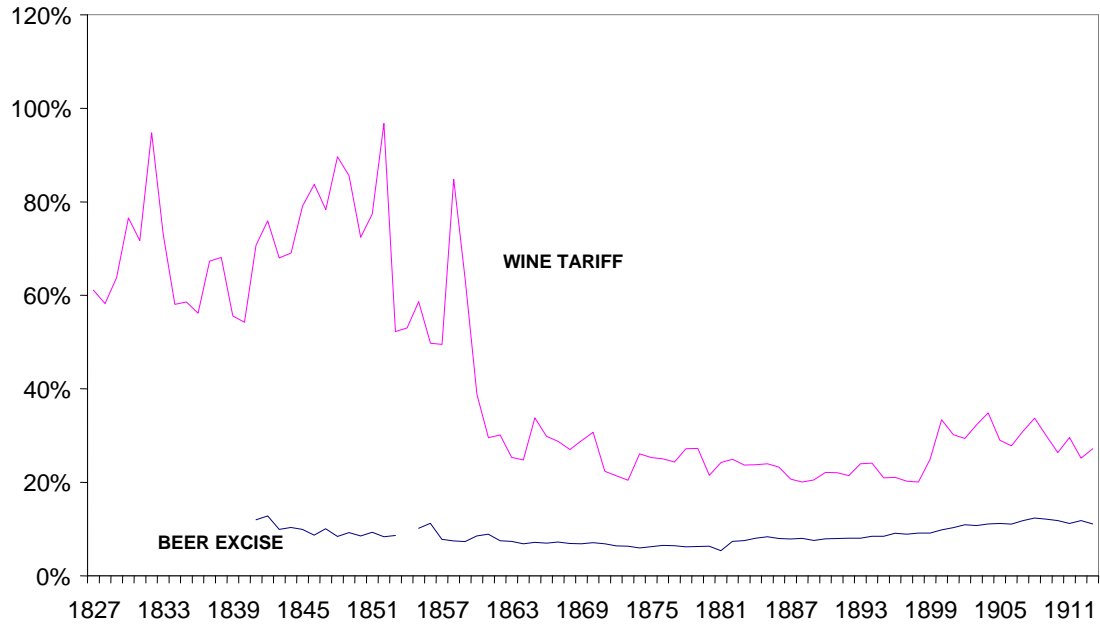
Source: UK data from Imlah (1958), French data from Levy-Leboyer and Bourguignon (1985)

Figure 2: Net Public Revenue, Britain, 1688 to 1800



Source: O'Brien and Hunt (1993).

Figure 3: Beer excise ratio and wine tariff protection, Britain, 1827 to 1913



Source: Tena (2006)

Table 1: Major taxes, Britain, 1788 to 1792

Tax item	Tax revenue (£'000)	Type of tax	Share of total taxes (percent)
1 Direct taxes			
Land, windows, etc.	3388	Direct	21.2
2 Food			
Tea	583	Customs	3.6
Salt	999	Customs	6.3
Sugar	425	Excise	2.7
		subtotal	12.6
3 Heat, Light, Fuel	969	Cust & Exc	6.1
4 Construction material	648	Cust & Exc	4.1
5 Clothing, footwear	1010	Cust & Exc	6.3
6 Soap and Starch	501	Excise	3.1
7 Alcohol and tobacco			
Beer	1968	Excise	12.3
Malt	1838	Excise	11.5
Hops	121	Excise	0.8
Wine	739	Customs	4.6
Foreign Spirits	990	Customs	6.2
Domestic Spirits	654	Excise	4.1
Tobacco	607	Customs	3.8
		subtotal	43.3
8 Commercial Services			
Newspapers, etc.	533	Stamp	3.3
Overall total	£15,973		100.0

Source: O'Brien (1988, p. 11)