

continuation of exclusion was demanded by the producers of similar products in France, who feared that the duties which would otherwise be applied might not be sufficiently high to permit them to retain their monopoly of the home market . . ."²¹ From this protective system, the Revolution of 1848 subtracted nothing. "Though the Republican Assembly of 1849 was elected by manhood franchise, it showed no particular disposition to commercial liberty. Whereas in England the extension of democracy led directly to greater freedom for foreign trade, in France it had no such result . . ."²² The legislature was controlled by the landowners and manufacturers, who were naturally hostile to reform. Since no popular demand for reform arose, it was in no way disposed to act.

Until the Cobden-Chevalier Treaty, then, France remained devoutly protectionist. "French manufacturers had enjoyed almost complete protection against foreign competition since the beginning of the revolutionary wars in 1792."²³ It is time to discuss the results of this system of protection. It is time to see whether it helped or harmed the French economy.

In the coal and iron industries, to begin with, the effects of protection were adverse. The absence of abundant coal deposits caused the price of that mineral to be high in France in the first place. Generous tariffs boosted the price even higher, so that coke cost twice as much in France as in England or Germany. This made it much less profitable for the ironmasters to adopt the efficient coke-smelting process, and hence put them at a disadvantage with respect to foreign producers. It is a testament to the efficiency of the coke process that it remained more efficient than the wood process, even with the artificially high price of coal. That is why "the demand for coal increased so rapidly that domestic producers could not expand fast enough to meet the needs, and large amounts continued to be imported from Britain, Belgium, and Germany despite the tariff."²⁴

The ironmasters didn't complain about the cost of coke because they also received protection. The price of iron was so high that even the most inefficient of producers could stay in the market without being compelled to modernize. Of the ironmasters of the Marne, Dunham says:

Thanks to their favored position, they had been able to use antiquated machinery, or sometimes to depend to a great extent upon hand labor by workers in households, such as had been prevalent in England at the beginning of her industrial revolution, sixty-five years before. Many of the iron foundries were situated in mountain districts, far from both railroads and markets because, under existing prices, they could still afford to burn wood instead of coal.²⁵

Thus protection prevented the rapid conversion to coke smelting. Not only did high tariffs keep coal artificially scarce, but they kept the price of iron artificially high. Hence, all penalties for antiquated production methods were effectively removed. No wonder ". . . the progress of metallurgy in France was almost completely checked."²⁶

Just as high coal prices hindered the development of the iron industry, so high iron and steel prices hindered the development of other important industries. In 1860, the Inspector-General of Mines, M. Combes, had occasion to investigate the cutlery industry of the upper Marne. He concluded that it was extremely inefficient. Testimony by the cutlery manufacturers themselves at government hearings in May, 1860, corroborated his opinion: "It was proved then that the cutlery industry had scarcely been touched by the industrial revolution and still used the old domestic system with the waste of time and effort involved in manufacturing on a small scale in the widely scattered homes of the master workmen."²⁷

Much more significant than a retarded cutlery industry was a stunted railroad system. Inefficient smelting and refining of iron made "the construction of railroads slow and expensive."²⁸ Hence the creation of a pervasive transportation network, the plinth of the development process, was retarded by the inefficiency of the iron industry. That is why Dillard feels "tariffs on coal and iron clearly worked to the disadvantage of French economic growth."²⁹

The picture in textiles is only somewhat less bleak than that in coal and iron. In the early nineteenth century, urbanization proceeded at a leisurely pace. Hence, the putting out system, employing very little machinery, accounted for most spinning and weaving. Change came first to spinning. In cotton, for example, most spinning was done in mills with machinery by 1860, even though such mills were not of great size. Weaving, however, was hardly touched. In cotton, "in 1860, with the exception of Alsace and of centers like Rouen, Lille, and Roubaix where

See footnotes at end of Appendix.