better coal, and even better wood. He was using water-frames while the Frenchman was still struggling with jennies. He was well informed concerning the kinds and qualities of French goods as well as the tastes and needs of French consumers. He faced no guild system or internal tariff barriers. His country was not on the verge of bankruptcy. No wonder Vergennes predicted the sudden influx of British goods would give a strong shock to French industry.

This strong shock was not unwelcome to the French statesman, however; he predicted that the shock was badly needed and would not destroy the French manufacturer. In this appraisal, he proved to be correct. Even in cotton, the vehicle of England's economic revolution, British imports did not kill the home industry but stimulated the adoption of the jenny and, to a lesser extent, the water frame. Broadly speaking, "no single branch of industry was ruined and industry in general seems to have been notably stimulated by the competition which induced French manufacturers to study and copy British goods with gratifying success." [43] Hence, Haight concludes that "no doubt the equalization of duties on manufactured articles operated to the immediate benefit of England, but it provided a much needed stimulus to the technical renovation of French industry and demonstrated, better than any amount of theoretical reasoning, the stifling effects of excessive regulation and organization." [44] France was on her way to economic revolution.

Unfortunately, the operation of this Treaty was arrested prematurely. In its paranoia, the Revolution reverted to the system of prohibitions which I have already discussed above. Early hopes for catching England evaporated. The free trade movement itself went underground until Michel Chevalier and Frédéric Bastiat formed a free trade association similar to the Anti-Corn Law League, and began to publish their *Libre-Echange*. In 1847, they proposed the abolition of all prohibitions, the abolition of all duties on foodstuffs and raw materials, the abolition of constraints on shipping, and the setting of a maximum duty of twenty percent, to be lowered to ten percent in one year. The plan never gained popular support and was not even presented to parliament until the Second Republic. By that time it had lost even its backers. Bastia, more afraid of the socialists than annoyed with the tariff, devoted all his energy to celebrating the virtues of a laissez-faire (as opposed to liberal) system. His association was disbanded and his newspapers ceased publication. Thus, when moderately free trade was proposed by Sante-Beuve, it was overwhelmingly rejected in pariliament.

The record of the Second Republic demonstrated that reform wauld have to come as a coup. That is in fact what happened, as I related above. The Cobden-Chevalier Treaty was negotiated privately, then secretly. It was never approved by parliament. And yet (perhaps therefore) its provisions were impressive. France was to eliminate all duties on foodstuffs and raw materials. By 1861, she was to permit all British goods to enter at a maximum rate of thirty percent. By 1864, that rate was to fall to 25 percent. Each nation granted the other most-favored-nation treatment. Specifically, the coal duty was to drop by one-half and the coke duty by two-thirds. British cast iron was to be admitted at 25 francs per hundred kilograms,[45] her machinery at fifteen francs per hundred kilograms, a reduction of 75 percent. Cutlery was taxed at an *ad valorem* rate of twenty percent. In textiles, most British cloths would be taxed at fifteen francs per hundred kilograms, and then at ten frances in 1864.

What were the effects of this comprehensive trade liberalization? Let us look, first of all, at the iron industry. Indeed, let us look at the producers in that industry who were most inefficient and would find it most difficult to adapt: the ironmasters of the upper Marne. Those establishments located high in the hills or deep in the forests refused to convert to coke and were, as a result, eliminated. The charcoal industry died and iron mining virtually ceased. But those establishments that were situated near the railroads or the canals, or were placed close to the river, survived and increased their output greatly after changing their equipment and improving their methods. Many learned to specialize in making cast-iron, and the manufacture of wrought- or weld-iron prospered. Rolling-mills were modernized, and produced large quantities of fine iron and steel . . . The manufacturers, in short, brought their equipment up to date and specialized in the production of goods of superior quality, especially in that of finished parts for machinery of all sorts and sizes.[46]

Thus, in 1912, the iron industry of the upper Marne had a far larger number of workers, a far higher volume of output, and a far better quality product than it did in 1860. It did suffer in the transition period, but after that, "the indus-

See footnotes at end of Appendix.