Mass Production and the Tariff

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ALL who have closely observed industrial progress in recent years, particularly since the war, must be impressed by the outstanding success of big-scale business. When we examine more closely the growth of the new scientific methods of mass production and mass distribution we discover not only that they are conquering the old industrial processes in the United States but that they must, inevitably, lay the course for the future industrial development of the world.

Mass production and mass distribution are also revolutionizing our thinking. Especially is this so in the field of economics. Economists as well as business men begin to see the implications, as well as the immediate results, of the new industrial methods. The relations between scientific mass methods and the economic structure of the world go far beyond the question of cheaper production through volume output. Mass production, for example, raises anew the question of world trade because the vastly increased volume of goods produces surpluses which cannot be marketed except in foreign lands. The surplus—that is, any general surplus—is relatively new to American industry. It is destined to change our views about tariffs. In the long run, we will change, through force of economic circumstances, from a nation of protectionists to a nation of low tariff advocates, or free traders.

I do not state this as an advocate of free trade myself. I am not now and never have been a free trader, but always have been an opportunist on tariff matters. I believe that conditions and not theories must determine tariff policies. In the present discussion, therefore, I shall merely undertake to show the inevitable relation between scientific mass methods and the tariff. I shall state the facts of cause and effect. I shall not argue the merits of the question one way or the other.

Mass Production Conquers Industry

By scientific mass production and mass distribution I mean the processes by which greatly increased quantities of articles are made at low cost through the practical elimination of overhead expense per unit. Specifically it is the process that Henry Ford inaugurated in the automobile industry and which now so dominates that field that three manufacturing concerns—General Motors, the Ford Company and the Chrysler interests—produce more than 80 per cent of the cars made in this country.

This mass principle has been extended to other fields and its penetration proceeds at a rapid rate. Mass production methods are now used in the manufacture of most of the commodities in wide demand and which are sold through such mass distributing organizations as Woolworth's, the Penney Dry Goods stores, the stores of the big mail order houses, the Atlantic and Pacific chain and similar concerns in every retail field.

The principles of mass production—at low cost per unit—which enable it to drive other methods out of competition, are axiomatic and quite simple. They are, briefly:

1. Scientific management and improved machinery increase the efficiency of labor and the output per man.
2. Simplification and standardization of products also adds enormously to the volume.
3. Overhead expense is reduced, through the volume of production, to the point where the charge against each unit is relatively small.

It is apparent that we cannot hope to compete against such methods if we plan to make only a few hundred or a few thousand articles. No automobile manufacturer can make a Chevrolet or a Ford automobile on a production schedule of 50,000 or 100,000 cars a year. He would have to make something over a million cars, even under the most scientific methods, to compete in price with the General Motors Company or the Ford Motor Company which have their overhead costs per unit cut to the bone and have, in addition, achieved other vast economies in the purchase of material, advertising and marketing.

THE WORLD ADOPTS AMERICAN METHODS

I do not see how the prediction that mass methods will dominate the world can seriously be questioned. It seems clear and simple that mass methods will come to all productive enterprises everywhere as they have to the automobile industry in the United States. Citroën in France and Morris in England have plants which are as modern and as scientifically organized as any American factories. Bata, in Czechoslovakia, is producing by mass methods shoes that sell in all parts of the world. These are but a few of a rapidly growing number of European industrialists who have already adopted the newest methods of production.

It is of no value to produce goods in great quantities, even though the production cost is low, if the goods cannot be sold. Mass production can live only if there is mass consumption—that is, only if the masses are able to buy the goods produced. Fortunately mass production produces consumers as well as products. Both are possible to mass production because:

1. With mass production employers can pay high wages because of the increased productivity of their employes—the difference between a high wage and a low wage tends to disappear in the cost of the average article when it is made in great volume.
2. Also, mass production makes its greatest total profit on the smallest profit per unit, and therefore thrives on low selling prices which create wider markets.

So, through low production costs and low retail prices, mass production enables manufacturers not only to pay high dollar wages but further to increase the buying power of the masses by increasing the amount of goods the consumers' dollar will buy.

CONSUMERS SET THE SELLING PRICE

One other point must be considered before mass production can be viewed in its international aspects—one that violates traditional concepts of economics. Under mass production the consumers and not the manufacturers set the final selling price. Under the old industrial methods where output was limited, factories produced only the number of products they thought they could sell. Then, roughly speaking, they computed their costs, added their profits and so established a selling price. Under scientific mass production and mass distribution the price that the public can pay determines the selling price. The manufacturer is compelled to produce in such volume that his lower costs and reduced overhead enable him to sell at the price the masses can afford.

Henry Ford's practice has been to establish first a selling price for his car that will be low enough to give him millions of purchasers. Then he devotes himself to working out economies in production that will make his costs low enough to permit him to sell at the established price and still make great total profits.

The cardinal principle of mass production is to fix the final price within the paying power of the mass of consumers, and constantly to reduce the price so as to reach additional millions of possible buyers who do not lack the desire, but only the means, to buy.

The opportunity for mass production and mass distribution in the United States is enormous. What the automobile industry has accomplished can be duplicated in the manufacture and marketing of all the basic commodities. Applied to the necessaries of life the new methods will bring prosperity far beyond what most of us have dreamed of.

But there is one very important reservation: the surpluses produced under mass production must be profitably exported. At this point we enter the realm of international trade and the tariff. There is no way to evade the issue because we cannot, as a practical matter, avoid the production of surpluses.

INDUSTRY NEEDS WIDE MARKETS

The United States has a greater domestic market than any other nation—a population of 120,000,000 consumers who are more prosperous than any people has been in the history of the world. Yet this great market cannot absorb all the goods we are able to produce. Competent authorities have estimated that our productive capacity, in existing industrial plants, will produce a surplus amounting to one-third of the total production in many lines. That compares with a ratio of one-seventh before the war.

The surpluses created by operating our plants at capacity must be sold in foreign markets. If they are not we have a period of super-competition in the domestic market which destroys profits, reduces wages, and creates widespread unemployment with grave social and political evils as a consequence. Europe is experiencing these evils today. We will experience them tomorrow unless the world is organized for efficient production and an orderly trade.

The joint salvation of the nations of the world lies in the exchange of their surplus goods. Here the problem of tariffs becomes vital because tariffs restrict trade. Business men recognize now that it is important to the United States for Europe to remove or lower its high tariffs against our goods. They will come to see that it is important for Europe—and the United States—that we lower our tariffs. If we do this two results will follow:

1. Europe can sell to us in greater volume, and so be able to buy our surplus goods on the export of which our prosperity depends.
2. Our cost of living will be substantially reduced, and our production costs will be lowered—which will enable us to compete more successfully in foreign markets.

MASS PRODUCTION NEEDS NO TARIFF

In such an arrangement, it is true, we give up something. We give up a certain amount of "protection." But the value of that protection is more apparent than real. Mass production, to which the world is coming, needs no tariff protection. On the contrary, it will benefit from low tariffs, or free trade. Under a very low tariff, which would reduce living costs and the costs of raw materials, Chevrolet and Ford automobiles, for instance, could be produced very much more cheaply.

The reduced selling price would not only tap a new market of millions at home, but would permit our manufacturers to export in greater quantities. At the lower selling price they could undersell European manufacturers even in their own markets, which are now "protected." American-made automobiles are handicapped by a tariff in England, for example, that amounts to 33⅓ per cent.

Regardless of what the rest of the world does, then, business men will come to see that it is distinctly to our advantage to have lower tariffs, with the resulting lower costs of living and lower costs of production. But this will prove to be a narrow view of the question. After all, it will be seen that other nations must be prosperous if we are to be prosperous.

The value of what I call "companionate prosperity" is, unfortunately, not yet generally understood. All the nations of the world are necessarily companions in prosperity and companions in adversity. Great as is our prosperity in the United States today, for example, few will deny that we should be even more prosperous if the farmers were more prosperous. Likewise, if the people of France have only enough buying power to obtain the bare necessaries of life, they cannot buy from Germany and England. That in turn reduces the prosperity of England and Germany, who do not buy as much from France as they otherwise would. So the people of France, by their own poverty, make themselves even poorer.

Tariffs Stunt Industrial Growth

These simple truths, when accepted, will clarify discussion of the tariff question. Europe, exclusive of Russia, is about the size of the United States. It is cut up into many nations, each with a tariff wall built on racial and political rather than economic considerations. Mass production does not thrive in such a setting because the most important factor—a large market—is not available. Goods do not move freely within Europe, cut up by tariff barriers, as they do within the boundaries of the United States with its 120,000,000 consumers.

Mass production in Europe has not made great headway—largely because of these handicaps. Manufacturers are forced to find their markets within their own boundaries and this limits production. Eliminate all trade barriers in Europe—all tariffs—and the markets of each nation—would immediately expand to include all Europe. Wages could go up and prices down under scientific volume production.

What would happen in the United States if each of the forty-eight states was shut off from the other by a tariff wall? Would our prosperity be as great if Detroit automobiles were subject to the interruption of numerous customs inspections at every state border and the tariff schedules of forty-seven different sovereignties? Suppose Pennsylvania could not ship its anthracite freely to other states, and the manufacturers of other states had to pay the increased cost of fuel due to their tariffs; suppose the iron and copper regions could not ship their ores and ingots freely, nor the forested regions their timber, nor Chicago its meat products, nor the Middle-West its grains and farm products without the hampering restrictions and increased costs due to the tariff walls in forty-seven other states. In such a world our great industries, based on mass production and mass distribution, could not have developed and we would not enjoy the great prosperity that has come to us in recent years.

HOW EUROPE CAN BE PROSPEROUS

Yet the picture of the United States divided by tariff walls is a fair picture of the difficulties in the way of Europe's industrial development. Until her tariffs are removed or lowered, we cannot expect Europe to become really prosperous. That is not the view of one who is speculating idly about tariff theories. It has been recognized by a distinguished group of bankers, of all nations, who, in 1926, joined in signing "A Plea for the Removal of Restrictions on European Trade." This remarkable document, which was signed by J. P. Morgan, Melvin A. Traylor, Albert H. Wiggin, J. J. Mitchell, and Gates W. McGarrah for the United States has not, unfortunately, received as much consideration from the politicians of all nations as it deserved. Its importance cannot be overestimated, for it proves the contention that business men have begun to realize that protective tariffs impose a heavy handicap on the prosperity of the world. The keynote of the manifesto was as follows:

"There can be no recovery in Europe till politicians in all territories, old and new, realize that trade is not war but a process of exchange, that in time of peace our neighbors are our customers, and that their prosperity is a condition of our own well-being. If we check their dealings their power to pay their debts diminishes, and their power to purchase our goods is reduced. Restricted imports involve restricted exports, and no nation can afford to lose its export trade. Dependent as we all are upon imports and exports and upon the processes of international exchange, we cannot view without grave concern a policy which means the impoverishment of Europe."

POLITICIANS WILL NOT HELP

There is no reason to be surprised that this statement of the case has not had more immediate results. Politicians will not act until forced to. The initiative must come from business men themselves; and they are not yet fully aware of the situation. But it is their profits, which are being curtailed by existing tariff policies. Business men have done many things that they did not expect to do when they realized it was to their financial advantage to change. Mass production, for the first time in the history of the world, has made it profitable to business to pay high wages and to sell cheaply. It permits the consumer rather than the manufacturer to set selling prices. It is not expecting too much that it will bring lower tariffs when the business men of the world recognize that high tariffs are detrimental to their economic interests.

Low tariffs will come as a practical phase of the evolution of business. It is too much to expect that the question can be dealt with effectively and settled as a whole at any international conference. Such conferences may be useful in hastening the day, but they will not settle the question all at once. Nor will abstract reasoning have much to do with the result.

COMPETITION WILL LOWER TARIFF

Low tariffs will come, as low prices did, through the force of competition. Ford forced the automobile industry into mass production, not by reasoning with his rival manufacturers that his methods were best, but by underselling them—and making more profits in addition. Tariff questions will likewise be settled not by acclamation, but by economic necessity. Big Business, which is dominating industrial life, always does, in the end, what is to its own interest. It will reverse itself on the tariff as it has on other problems, including shorter working days, higher wages, smaller profits and lower selling prices. In each of these instances present policy is the direct opposite of what it was twenty years ago. So it will be with the tariff.

As an illustration of how lower tariffs will come about, practically, let us consider the problem of the industrial rehabilitation in Europe. The nations of Europe cannot compete with the United States in manufacturing unless they adopt our methods of mass production. But mass production requires large plants and expensive machinery, as well as other capital investment. America is at the present time, the principal source of capital for European borrowers.

It is not reasonable to suppose that American bankers, interested in the continued prosperity of American industry, in which they have large investments, will long continue to loan to nations who maintain a high tariff against American products. That might be called a selfish measure. But another effect of the dependence on American capital will be to force trade agreements between the European nations themselves, as implied in the bankers' manifesto. Mass production cannot live without large markets, and capital is not going to invest in industrial enterprises that do not have an assured outlet for their surpluses.

Neither can business succeed, nor obtain capital at reasonable rate, if markets are insecure or fluctuate so widely as to make idle a great amount of machinery, building and capital, during the period of curtailed demand. Capital, therefore, will not go, at reasonable interest rates, to the manufacturers of countries whose tariff policies restrict trade.

Farmers a Force for Free Trade

Still another factor that is working for lower tariffs, in America at least, is our large farm population. Farmers have been taught to believe that high tariffs against manufactured products permit high wages to be paid, which in turn assures the farmer of a large domestic market for his products at a high price. The farmer is now wondering if the theory is sound. Once he learns the real results of mass production in raising wages and reducing prices he will see that his interest lies in the elimination of tariffs on manufactured goods which he must buy. He may also realize that his own salvation lies not in artificial restrictions and stimulants, but in applying scientific mass methods of production and distribution to farming.

In the ideal world of trade, in which there would be no tariff walls, the United States would have nothing to fear from the competition of any other nation. Then we would have applied to world production the principle of specialization that is now applied to industry within nations. America is an economic unit. No other nation possesses so many raw materials, power, resources, or specialized industries, plus an adequate system of transportation and communication.

Italy has no coal or iron, France has no copper, Germany has no wool, leather or cotton, England has little else but coal and iron. How then could any of these nations outstrip us industrially if we devote ourselves to improving our methods and extending our markets, instead of relying on the temporary and doubtful protection value of tariffs which, while they may at times serve an individual interest, can never serve the interests of the nation as a whole?