

The Case for Economic History

By ARTHUR A. MANDEL

I

A LATE-COMER to the family of sciences, economic history has been disavowed by historians and economists alike. Its scientific character is still a matter of controversy. It is not history, claim the former. Nor is it economics, echo the latter. At best, they will call it a bad compromise of a bad history and an equally bad theory. Is this treatment justified?

No science is born into maturity. Historiography, the Nestor of the social sciences, can look back upon a continuous tradition of more than 2,000 years. And it took nearly two centuries to develop the tools of modern economic research. But it is hardly half a century since Schmoller and Sombart wrote their books and Ashley came to Harvard to occupy the first chair in economic history ever established. Economic history did not have the time to accumulate a fund of knowledge comparable to that of its wealthy parent-sciences. But this deficiency is self-eliminating with time.

There is, however, another difficulty, more important because it is permanent. It is not the youth of economic history but its very character which makes it a stepchild of the social sciences. It is handicapped with regard to both the high degree of factual accuracy required by historians and the equally high degree of theoretical accuracy required by economists.

If economics is the science which describes and explains the ways and means by which modern man makes his living, *i.e.* the conditions of production, distribution, and consumption of wealth; and if history is that branch of knowledge which describes and explains the course of human events in the past; then the task of economic history is to describe and explain the conditions under which man has made his living in the past. In other words, economic history takes its subject matter from economics, and its methods of documentation and interpretation from history.

As far as this definition goes, economic history stands on an equal footing with her sister branches such as political, legal, military, diplomatic, religious, aesthetic history etc. They all take their subject matter from their respective discipline and their methods from history.¹

¹ Needless to say: just as legal history cannot be written without a knowledge of law; or military history without a knowledge of strategy; or the history of art without a familiarity with the principles and the technique of aesthetics; economic history cannot (and should not) be written without a knowledge of economic theory.

However, it is the very subject matter of economic history which makes it the black sheep among the members of the history family. While only a selected number of mortals engage in politics, art, diplomacy, warfare etc., almost everybody is engaged in economic activities for the simple reason that we all must have our daily bread. To make a living has always been and unfortunately still is the main part of mankind's daily life. It consists of the billions of daily actions of the millions of common men, petty, obscure, anonymous actions of dull routine, going on without even being noticed.

What a difference from political history! The "*grands affaires*" of states and governments are keenly observed by the whole world and automatically recorded in official documents and headlines. Political events often reach a dramatic climax, wars and revolutions break out, blood runs, heads roll. No blood runs in economic history, although many tears. Here, the silent forces of history are at work, unnoticed but powerful like the erosive forces of nature that carry the Rocky Mountains into the sea. These economic forces affect everybody every day in every way. And although they run wild now and then in a spectacular way and like soil erosion cause dust storms and floods, they usually do not make enough noise to be observed and recorded for posterity.

This accounts for the fact that economic documentation is poor up to the nineteenth century. Public records were kept only when fiscal interests were involved such as in matters of tax revenue, coinage, custom duties etc. This is why we know so much more about foreign than domestic trade, about currency regulations than the actual functioning of the currency, about economic legislation than about economic life. A change to the better came only during the nineteenth century when, following the U. S. A. and Sweden, one country after the other began to take a census.²

Systematic recording of business activities started only toward the end of the last century with the coming of the modern corporations and their elaborate methods of bookkeeping. Not until then did we know much about price and output policies, and we are still in the dark about them because what lies behind such policies is kept "strictly confidential." The vast field of consumers' behavior has remained practically unexplored, mainly because of the lack of sufficient concrete data.

This scarcity of documentation makes it impossible for the economic historian to establish his sources with the same completeness and to make

² England 1801, France 1836, Belgium 1846, Italy 1861, Germany 1871, Russia 1897 (Encyclopaedia of the Social Sciences, vol. II, pp. 295 ff.)

his statements with the same precision as his more fortunate fellow-historians, to their great delight and ours, are able to do. And this handicap cannot be made up with time. The only thing we can do is to see to it that future generations should not find themselves at so complete a loss about our time as we find ourselves when we try to describe, for instance, the influence of variations in the quantity and value of money upon the volume of employment in the age of Mercantilism—to mention only one of a host of problems.

It is in situations like this that the professional economist hurries to the help of the historian. For the body of concepts and laws developed by economic theory is applicable not only to the present but also to the past.³

Like the palaeontologist who, out of a few fossils, is able to reconstruct the skeleton of a dinosaur, the economic historian can reconstruct out of a few characteristic indications the body economic of past generations with a fair degree of accuracy because economic theory enables him to arrive by inference at conclusions for which empirical evidence is lacking.⁴

Many historians will be inclined to brush aside the validity of such conclusions. There is no need, however, to handle individual items in economics as carefully as in history. What happens to the individual coins and bills, the material out of which they are made, the legal conditions under which they are produced and put in circulation, all this is only relevant insofar as it has a bearing upon the aggregate amount of money in circulation and, indirectly, upon the level of wages and prices and the distribution of the real income. Otherwise it remains part of numismatic and legal history. California businessmen, to take another example, may be a very different brand from their fellow-businessmen in the eastern United States. Yet, their economic actions can be brought down to the same denominator since they always will be determined by their common desire to maximize profits.

It is with these mass phenomena, the aggregates and averages, that the economist is concerned, not with the individual facts. The uniform ele-

³ Though not without limitations. These laws hold only true for ours, the capitalist system of economy. To analyse the profit chances of a Genoese "maona" in terms of the "marginal efficiency of capital" at a time when most trade was conquest and plunder, and "profits" were not a fraction but a multiple of capital; or to assess the income of labor in a socialist economy with the help of the "marginal productivity of labor" would make as little sense as to measure the profits of General Motors or the income of an automobile worker by the medieval yardstick of "just price" and "just wage." Feudalism was, and socialism, if it ever comes, will be an economic system of its own, and their history cannot be written in terms of the "laws of motion" of modern capitalism.

⁴ Earl Hamilton's inquiries into the development of prices in Spain from 1500 to 1800, and Joseph Schumpeter's "Business Cycles" are classical examples of this kind of economic history.

ments in the economic behavior of individuals and groups of individuals outweigh the dissimilarities.⁵ They follow a certain pattern which, derived by the means of logic, can be expressed in mathematical terms. The historian, too, often has to make generalizations based upon common sense and analogy. The economist does the same, only his generalizations take the more refined form of algebraic formulae and geometrical devices. Theoretical economics, therefore, is not an accuracy-Ersatz in economic history but makes a good amount of detailed accuracy unnecessary.

II

AVOIDING THE CLIFFS of Scylla means only to be drawn into the whirlpool of Charybdis. For, at this point, the economist will rise and argue: If the foregoing is true, that is if economic theory is really not just a substitute for empirical evidence, cannot all economic history or at least the history of capitalism be written in terms of economic theory? The answer is no. There are limitations to the use of economic theory in history, limitations drawn by theory itself.

The correctness of theoretical statements depends upon the purity of the underlying assumptions and the necessity of the conclusions. The former is achieved, in economics, by the elimination of all non-economic factors from consideration. Only economic factors are considered and these only after they have been purged of all irregularities. This process of isolation and simplification enables the economist to state his assumptions in the form of hypothetical premises, a procedure which, in turn, makes possible the necessity of the conclusion. What then remains to be done is to obey strictly the rules of logic. The conclusion is arrived at by way of a simple syllogism. For example:

Major premise: Supply curves have a rising slope.

Minor premise: Demand shifts upward.

Conclusion: The price level rises.

There is no ambiguity about this statement. The conclusion is a "must" and, as far as these prices are concerned, the only and exclusive one.

Economic history cannot achieve this high degree of precision. Theory can do it because it refers to hypothetical situations and observes the interaction of two or more hermetically isolated economic substances in the imaginary laboratory of "let's assume." History, however, refers to actual historical situations, and historical causation is not pure but mixed

⁵ This applies also to monopolistic competition. There is, of course, differentiation of products but the competitive policies of the firms look remarkably alike as, for example, their uniform reaction to a change in price adopted by one of them.

and complex. Economic history cannot give a purely economic answer to a purely economic question. Its inaccuracy is due to the inter-relation and inter-action of economic and non-economic elements in the flow of historical events.⁶

The attendant drawbacks of economic history are, however, partly offset by certain pitfalls hidden in the very procedures of theoretical analysis. Not only is the accuracy of economic theory due to its "splendid isolation" but the necessity of its conclusions follows from the one-way reasoning of the theoretical economist. Theory starts from assumptions and ends with conclusions. History starts from the conclusion, the concrete fact, and works its way back to the assumptions, the factors responsible for the facts. While only one conclusion is permissible, there may be many sets of assumptions capable of producing the same result. In the above example, prices rose because of a shift in demand. They could, however, as well have risen because of a shift in supply or a shift of both demand and supply. These shifts, in turn, may have been caused by a great number of circumstances such as an increase in the aggregate income of the buyers; a change in either the income distribution among the different buyers' groups or their preferences; a change in the price of complementary goods or substitutes; an increase in the cost of production due to various causes; a decline in output caused by a variety of possible factors: loss of man power and/or raw material sources, reduction of the number of competing firms, government controls or deliberate output restrictions by producers; and a dozen other causes and their various combinations. This accounts for the baffling variety of theories offered whenever a concrete economic phenomenon is to be explained.

Nor is the economist in a position to measure the specific gravity of the economic elements involved in a certain event as compared to the non-economic ones. This he has to leave to the historian. Moreover, the exclusion of the non-economic aspects creates the illusion of an economy functioning like an automatic mechanism whose actions and reactions are open to *a priori* judgment. The economist operates with probabilities and is unable to ascertain the existence of various elements in actual life. The danger of slipping from the narrow path of *sic rebus stantibus* into disregarding essentials and stressing trifles and then landing in the trap of *quod non est in diagramma non est in mundo* is only too obvious.

⁶ This holds also true for the theory of historical materialism, the view that all history is ultimately determined by the economic conditions of production. The elements of the "super-structure" would then act not as the ultimate but as proximate causes and still preclude theoretical accuracy.

Forecasts look very different at the time when they are made and at the time about which they are made.

Yes, economic history is less accurate than either history or economics. But factual accuracy is often irrelevant and theoretical accuracy partly an illusion. In combining the historical method with economic analysis, in applying economic theory to history wherever this is necessary, the economic historian is achieving a kind of systematic history which enables him to throw new light upon the past, to unveil the economic significance of historical phenomena, and to reach a degree if not of accuracy, of relevancy which remains beyond the reach of the historian or the economist left alone to their respective devices.

III

HOW ECONOMIC HISTORY secures this greater relevancy is illustrated in the following outline of the most controversial subject of early American history, the currency problems of the American colonies. It shows the services economic theory can render to history as well as its limitations.⁷

The basic fact of the monetary history of pre-revolutionary America is the inadequate supply of money caused by 1) the absence of gold and silver mines, 2) the adverse balance of trade with England which drained off all the specie received from other sources, especially the trade with the West Indies.

The constant complaints about this scarcity, however, conflict with the equally strong complaints about a superabundance of money and the waves of inflation brought about by frequent issues of paper money. Moreover, the facts are in contradiction with the classical theory that a money shortage should have resulted in a low level of prices and a high rate of interest. The former should have encouraged exports and discouraged imports, the latter attracted foreign capital. In other words, the colonies should have had an export balance of trade and an import balance of capital. As a matter of fact, there was some influx of capital but the balance of trade was adverse.

It is here that the historian has to come to the help of the economist. For the error is, of course, in the theory, not in the facts. While the classical theory was based on the assumption of perfect competition and free trade, the colonies actually operated under the restrictions of the British Navigation and Staple Acts strengthened, in the second half of the

⁷The data are taken from Charles J. Bullock "The Monetary History of the United States", London, Macmillan, 1900, and Curtis P. Nettels "The Money Supply of the American Colonies before 1720," University of Wisconsin Studies in the Social Sciences and History, 1934.

eighteenth century, by Britain's world monopoly in manufactured goods. Under these conditions, the capital imports were enough to offset the trade deficit but not sufficient to build up a stock of specie. And as for paper money, the evils of which were attacked by most writers, there is nothing wrong with paper money. On the contrary, had the colonies only followed the policies of the Bank of England instead of those of the English Land Bank, no harm would have resulted.

The historian on the other hand, is unable to give an answer to this controversy without the help of economic theory. Actually, it is not the absolute amount of money in existence (M) which is relevant but the amount relative to the volume of trade (T). Prices are related directly to M and inversely to T. In other words, prices will be higher, the more money is in circulation and the smaller the volume of trade, as expressed in the Fisher

Equation $P = \frac{MV}{T}$ (with V for the transaction velocity of M).⁸

What the colonies had to do in order to obtain better prices for their products and to improve their situation with regard to their British creditors, was to increase MV and keep T low. They tried the latter in narrowing the sphere of monetary transactions as much as possible by avoiding cash payments and sticking to self-sufficiency and barter. Make things yourself; if you cannot make them, trade other goods in for them at the country store or the trading post; pay taxes and fees in kind (the famous Harvard cow). All these were popular ways of keeping the volume of trade small. They were, however, not of great avail as trade was constantly expanding because of two factors: the steady increase in the volume of production caused by the growth of both population and productivity, and the growing commercialization resulting in an ever greater number of monetary transactions.

Nor could much be done in the way of increasing V because of the low density of population and bad transportation and communication facilities. The only remaining way, therefore, was to increase M. This was tried in several ways:

- 1) Adding commodity money to the metallic currency by granting legal tender to tobacco, rice, sugar, beaver skins, etc. and especially the wampum money of the Indians which did not suffer from the defects of other commodities such as spoilage, need of storage, transportation difficulties etc.

- 2) Making the available limited amount of gold and silver go farther. Since the official currency, the British sterling, was only a medium of ac-

⁸ Irving Fisher, "The Purchasing Power of Money," Macmillan, New York, 1911.

count, while the actual medium of exchange consisted of a variety of foreign coins, especially the Spanish silver dollar, the "piece of eight," the colonies had two ways to do this:

a) debasement of the pound by reducing its intrinsic value, *i.e.* increase M by decreasing the amount of silver per unit. The Boston Mint, established in 1652, did this in coining the "pinetree" shilling with 22.5 per cent less silver content than the standard British shilling. The resulting increase in the amount of money was, however, quickly offset by a corresponding raise in the price of imported goods. The mint was eventually closed because it violated the mint monopoly of the Crown.

b) devaluation of the pound in terms of the silver dollar, *i.e.* increasing M by raising the nominal value of the medium of exchange. This would have given the colonial trade an advantage over England since now the "piece of eight" would buy more in America. Britain, however, was not only able to prevent this but her position was strong enough to afford a lower exchange rate at home than in the colonies. The proclamation of 1704 fixed the exchange rate of the silver dollar in the colonies at six shillings, a generous margin above England's own four shillings six pence. Although even this ceiling was exceeded almost everywhere up to eight shillings, it did not help. For it did not work where it was most needed, namely to alleviate the debt burden of American businessmen. True, the colonies now gave more for the "piece of eight" but they did not receive more for it in England. As a matter of fact, they had maneuvered themselves into a situation of selling cheap and buying dear. What was intended to become a stimulus to American exports and to attract foreign coin turned into a competitive currency devaluation among the colonies themselves and the setting up of foreign exchange controls against each other.

3) Adding paper money. This, too, was done in two ways:

a) issue of government paper money. A sound idea but too much under the influence of fiscal needs and finally disallowed by the Crown as an infringement upon the royal privilege of coining.

b) issue of bank money. Unfortunately, this was done following the example of the English Land Bank. This early competitor of the Bank of England had the idea to back its note issues by land mortgages, *i.e.* short term liabilities against long term assets. In addition, it did not keep a specie reserve. The Land Bank broke down in the bubble of 1720. The same fate awaited the American land banks. Parliament extended the Bubble Act of 1720 to the colonies and put an end to this experiment of increasing M.

One more way was used to increase M. This was by adding to it a money substitute in the form of promissory notes which were passed on from hand to hand, a sort of domestic bill of exchange usually gathering a long list of endorsements. England did not oppose this practice, nor did it object to barter or commodity money. All other methods, however, after some initial success were either disallowed or defeated themselves.

*University of California
Los Angeles*

Mechanical v. Biological Brains

PROGRESS IN THE PRODUCTION of electronic brains threatens to develop a mechanism which will far excel man's biological one in important respects. During the past two years Prof. F. C. Williams of Manchester University, England, has perfected a machine to meet the requirements of university mathematicians which is able to retain for long periods electrical charges representing numbers. In short, it has a memory which lasts until these charges are cleared. It can recall how far it has progressed in a calculation so as to supply the next step; it can choose between two alternatives at a great number of points in an extensive chain of calculations.

Its valves, like nerve cells, not only store messages received, but can be inhibited in action, arranged to transmit messages in response to impulses from one or several other valves, or prevented from transmitting if the impulses fail to arrive. Its speed is several thousand times faster than that of the human brain. In a half hour it can solve a complex problem that would occupy an expert mathematician for several months. In June, 1949, it completed after a few weeks a problem started in the seventeenth century and still lying around unsolved!

The machine's memory *may* rely on the same mechanism as that of man. But extensive damage can occur to the human brain without loss of memory, while partial destruction of the machine is accompanied by a comparable memory loss. Of course the machine answers only set problems, cannot create its own, and will attempt the insoluble until stopped by the operator. It lacks opinions, emotions, and creative thought. Actually the living nerve cell and nervous impulses have no counterpart and are exactly like nothing but themselves. Nature's product still retains a uniqueness that mechanism cannot approximate.

T. SWANN HARDING

*USDA,
Washington, D. C.*