Industrial Equilibrium in a Business Economy

Are There Practicable Steps Toward an Industrial Equilibrium?[1]

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I

DISCUSSION of concepts is not a favorite pastime of Americans. We have a habit of forcing words to serve our practical ends, and we want them to be quick about it. In cases of doubt, we rely upon the context to supply the appropriate meaning. I share this prevailing distaste for meticulous definitions. There has been a deal of unprofitable wrangling about the meaning of economic "concepts." Not much knowledge can be spun from verbal discussions. Realistic study of actual processes is a far more promising, as well as a far more agreeable, activity.

Yet I cannot discuss the question, "Are there practicable steps toward an industrial equilibrium?" without inquiring what "industrial equilibrium" means. If you find my delving into the mysteries of that resounding phrase unprofitable, please ask your program committee why they left a practical question to the tender mercies of a theorist.

Since the Taylor Society is centering the present series of meetings upon "Recent Economic Changes," it is natural to turn to that book for an interpretation of the term. I find no reference to "industrial equilibrium," "industrial balance" or to "equilibrium" in the index to the fact-finding portion of this work, prepared by the National Bureau of Economic Research.[2] The only references to "balance" concern the "balance of trade" and the "balance of international payments." But the report of the committee which sponsored the study, headed by President Hoover and composed of eminent men of affairs like Mr. Lawrence, yields better results. This committee summed up their impression of the whole investigation as follows:

"... the outstanding fact which is illuminated by the survey is that we cannot maintain our economic advantage, or hope fully to realize on our economic future, unless we consciously accept the principle of equilibrium and apply it skilfully in every economic relation."

If you inquire what "the principle of equilibrium" is, you get help from other passages. Thus the committee says:

"To maintain the dynamic equilibrium of recent years is, indeed, a problem of leadership which more and more demands deliberate public attention and control. . . .

"Our complex and intricate economic machine can produce, but to keep it producing continuously it must be maintained in balance. During the past few years equilibrium has been fairly well maintained. We have not wasted the hours of labor by strikes or lockouts. Until recently we have not diverted savings from productive business to speculation. There has been balance between the economic forces—not perfect balance, but a degree of balance which has enabled the intricate machine to produce and to serve our people.

"As long as the appetite for goods and services is practically insatiable, as it appears to be, and as long as productivity can be consistently increased, it would seem that we can go on with increasing activity. But we can do this only if we develop a technique of balance."

This language seems clear. What we attained in large measure after the crisis of 1920-21, what we should seek to perfect, is a balance among economic forces—not a static, but a "dynamic equilibrium," for we wish to increase production and consumption. Yet in this sophisticated company I venture to raise questions which the President's committee forebore to discuss. Equilibrium and balance are metaphors when applied to economic activities. What meaning do they carry in this application? What are the "economic forces" which the committee would keep in balance? Strictly speaking, do we wish to establish equilibrium among these forces? Is business equilibrium compatible with industrial progress? With social welfare?

[1]Paper presented before a meeting of the Taylor Society, New York, December 4, 1929.

[2]The index is not infallible, however. There are brief references to economic balance in the last section of the last chapter.

II

In seeking answers to these questions, let me turn for a moment from the fresh realism of the sponsoring committee's report to the abstractions of economic theory. The concept of equilibrium has played a prominent role in our technical speculations. The most comprehensive, and yet the most compact, presentation of the idea is provided by the mathematical writers who have developed the methods devised by Leon Walras. One of the simplest recent expositions has been given by Gustav Cassel, the eminent Swedish economist. I can indicate what equilibrium means in Cassel's *Theory of Social Economy*, without going into details.

Take a market in which any number of goods are bought and sold. Call this number *n*. Then one can set up seven sets of simultaneous equations which will show how the prices of all these goods are determined—both consumers' goods and producers' goods, including among the latter the means of production which people sell to get money incomes. The first set of equations states that the demand for each good is a function of its own price and the price of every other good in the market. There are *n* of these demand equations, one for each of the *n* goods. A second set of equations, also *n* in number, states similarly that the supply of each good is a function of its own price and of the prices of all the other commodities. A third set of equations states that the unit price of each good equals the aggregate of the unit prices of the various means of production required to provide it, multiplied severally by the number of units of materials, labor, etc., used per unit of the product. I need not elaborate further. The essential points are (1) that the price of every one of the *n* goods is represented as influencing and being influenced by the price of every other good in the market, (2) that these prices settle at points which equate supply with demand, selling prices with costs of production, incomes earned with incomes spent (for saving is a form of spending). Of course, equating quantities means establishing equilibrium between them.

Cassel works out these results on the basis of certain conditions contrary to fact. For example, in his abstract world there is no ambiguity about costs of production; consumers know their own minds; there is free competition; the whole economy is stationary, or progresses at a rate which does not change; reactions of demand and supply upon price, of price upon demand and supply, take place immediately, or complete themselves within whatever period the discussion covers. The theory does not profess to describe actual economic processes. Yet it is believed to picture fundamental tendencies of the greatest significance for understanding actual processes. The economic theorist holds that, in fact, every element in modern business life influences and is influenced by every other element. Demand, supply, costs of production, incomes received and incomes spent mutually determine one another. Through the infinitely complicated business dealings going on at any time runs a gravitational pull toward equilibrium. Every departure from equilibrium which occurs—and there are countless "disturbing factors" in practical life—starts processes which tend to establish a new equilibrium. This gravitational pull toward equilibrium is nothing which anyone need plan for, any more than we need plan the orbits of the solar system. Equilibrium constantly tends to establish itself afresh whenever departures from it occur.

III

Besides the static theory of equilibrium, with its argumentative application to actual affairs, we have a more realistic type of theory concerned with the changes which are continually occurring in economic activities. Let me outline this view also, again with a high-handed neglect of details and qualifications.

The work of producing raw materials, fabricating them and distributing products, together with the incidental processes of transportation and storage, is carried on more and more by business enterprises. These enterprises must make profits to survive. An enterprise makes profits by buying and selling goods