Professor Schumpeter’s Theory of Innovation

Paul M. Sweezy


Stable URL:
http://links.jstor.org/sici?sici=0034-6535%28194302%2925%3A1%3C93%3APSTOI%3E2.0.CO%3B2-0

*The Review of Economic Statistics* is currently published by The MIT Press.

---

Your use of the JSTOR archive indicates your acceptance of JSTOR’s Terms and Conditions of Use, available at http://www.jstor.org/about/terms.html. JSTOR’s Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at http://www.jstor.org/journals/mitpress.html.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

---

JSTOR is an independent not-for-profit organization dedicated to creating and preserving a digital archive of scholarly journals. For more information regarding JSTOR, please contact support@jstor.org.
PROFESSOR SCHUMPETER'S THEORY OF INNOVATION

PAUL M. SWEEZY

Harvard University

PROFESSOR Schumpeter is known primarily as a business-cycle theorist, but his fundamental interest is much broader than this reputation would suggest. A careful reading of his works clearly shows that the objective is nothing less than to lay bare the anatomy of economic change in a capitalist society. English and American economics, on the other hand, has traditionally been content to confine its attention to what may be called the normal functioning of the capitalist economy. Such an approach, of course, does not exclude treatment of the business cycle, but it does exclude the larger problems of change and development, which are customarily regarded as lying within the province of the economic historian. The most important part of Professor Schumpeter's theory of economic development which falls within the traditional scope of Anglo-American economics is that which is concerned with business cycles. Now I do not mean to suggest that there is any objection to regarding Professor Schumpeter as a business-cycle theorist, for he is certainly one of the most distinguished contributors to this branch of economics; but the circumstance should not be allowed, as it too frequently has, to obscure his no less distinguished and important achievements in clarifying the processes of economic change. In this paper I shall ignore business-cycle problems and attempt to bring into sharp relief Professor Schumpeter's views on the mechanism of economic change in the capitalist economy.

Professor Schumpeter's starting point is an economy from which change (though not growth) is assumed to be absent. In other words, the specific factor that causes change is abstracted. The resulting economic system is called the "circular flow" because it is found to run on, year in and year out, in essentially the same channels. The circular flow is in no sense conceived as an unrealistic construction; rather, it is an abstract construction which is intended to portray the consequences of a limited number of very real economic forces. From this point, the procedure is comprised of three steps: first, the causative factor of change — the entrepreneur or innovator — is analyzed as a pure type in abstraction from its economic environment; second, the factor of change is inserted into the model of the circular flow; and third, the interaction of the innovator with the forces at work in the circular flow is subjected to exhaustive analysis. What emerges is a process of development which displays the specific wave-like form of the business cycle.

This simplified version of Professor Schumpeter's method is intended to focus attention upon certain questions which are of crucial importance in any final evaluation of his theory. Has he really isolated and abstracted for analysis the primum mobile of change? Is the picture of the circular flow fully satisfactory? Is the result of joining the two elements a correct representation of the essentials of capitalist reality?

The causative factor in change, according to Professor Schumpeter, is "innovation," which is defined as "doing things differently in the realm of economic life." If this were interpreted to mean no more than that "the cause of change is change," it would, of course, be a mere petitio principii; but such an interpretation would be a misreading of Professor Schumpeter's meaning. Innovation is the activity or function of a particular set of individuals called entrepreneurs. The entrepreneur is a sociological type that can be isolated and investigated independently of the consequences which follow from the actions of the entrepreneur. Hence any suspicion of circular reasoning is unfounded. What are the characteristics of the entrepreneur? First, of course, the ability to appreciate the possibilities of an innovation; whether or not he is also the discoverer or "inventor" of the innovation is a matter of minor consequence. But even more

1 For the distinction between change (or development) and growth, see J. A. Schumpeter, The Theory of Economic Development (Cambridge, Mass., 1934), Ch. II.

important, the entrepreneur must be able to overcome the psychological and social resistances which stand in the way of doing new things; he must, in short, have the qualities of leadership. Thus the entrepreneur is not a social type *sui generis*; he is rather a *leader* whose energies happen for one reason or another to be directed into economic channels. This conception of the entrepreneur leads Professor Schumpeter to locate the source of economic change in the personality traits of a certain group of men, a group which is in principle drawn from all strata and classes of the population.

The plausibility of this diagnosis depends in large measure on Professor Schumpeter’s analysis of the circular flow. The conception of the circular flow is arrived at by simply abstracting entrepreneurs from the economic environment. We must not fall into the error of supposing that by taking away entrepreneurs we *ipso facto* eliminate change from the economy. The problem is precisely to show that by eliminating a certain type of individual we thereby eliminate the significant forces making for change. If this can be successfully proved, it is clear that we shall be left with the conclusion that entrepreneurs *are* the source of change: in short, the theory will be vindicated. If, on the other hand, the economy without entrepreneurs, i.e. without a certain type of person, still displays tendencies to change, then we shall have to re-examine our initial assumptions. Professor Schumpeter’s analysis is therefore designed to show that without entrepreneurs we have a stationary economy.

Professor Schumpeter’s idea of the circular flow is in most particulars similar to the Walrasian state of general equilibrium, or, what comes to much the same thing, Marshall’s conception of long-run equilibrium, which, though usually discussed with reference to a particular firm or industry, really implies an equilibrium of the system as a whole. Consumption motives dominate the economic subjects — this does not, of course, imply the acceptance of philosophic hedonism — and determine the allocation of resources to different branches of production. In one respect, however, Professor Schumpeter goes further than his predecessors in that he denies the existence, in the circular flow, of surpluses in the form of interest and profit. Land is privately owned and yields a rent, but in the absence of a positive rate of interest there is no basis for valuing land on a capitalized earning-power basis its value is theoretically “infinite,” which is only another way of saying that there is no market for land in the circular flow. The denial that surpluses (other than rent) exist in the circular flow has given rise to much controversy; many critics have suspected that there is something wrong with Professor Schumpeter’s reasoning at this point. This opinion seems to me to be in error: it is not the reasoning but the implicit assumptions on which it is based that account for the disappearance of the surpluses. For in effect Professor Schumpeter assumes that in the circular flow there is no special class of capitalists. Society is divided into two classes: landlords and others. Every one has equal access to “capital.” Under these circumstances, clearly, no surpluses can accrue to employers of labor; for if they did, the laborers would themselves turn employers and compete the surplus away. Hence all income flows to landlords or laborers, and there is no special employing function outside of the simple details of bookkeeping and disbursing incomes on pay-days.

The assumptions underlying the circular flow are certainly sufficient to produce a stationary economy, and, moreover, one in which income is entirely consumed with nothing left over for saving and accumulation. (The absence of saving follows from the assumption of the primacy of consumption motives. Where this assumption is made, one must insert the further postulate of time-preference in the Böhm-Bawerkian sense, in order to explain saving. Professor Schumpeter rightly rejects this conception of time-preference as arbitrary and unfounded.) If this were indeed the appropriate conception of the capitalist economy *sans* entrepreneur, then we should have to agree with Professor Schumpeter that the entrepreneur is the true source of change and, along with it, of the most characteristic features of capitalist reality, such as profits, interest, business cycles, etc. Thus, unlike many of his critics, I have no fault to find with the logic of Professor Schumpeter’s argument; on the contrary, it appears to me indisputable that on its own assumptions his theory of the mechanism of economic change is unassailable.
When we turn from the logic of the theory to its assumptions, however, there appears to be more room for doubt. For example, Professor Schumpeter's conception of the circular flow obviously is not the only possible picture of an economy from which the entrepreneur has been eliminated. We may start from a situation in which there are not only landlords but also capitalists, in other words a special class of individuals having exclusive control over the means of production other than land. (The capitalists may also be landlords, of course.) For institutional reasons, laborers find it impossible to gain control over means of production and hence are unable themselves to become employers. Under this assumption, a surplus in the form of profit and/or interest is a logical corollary. By adhering to the assumption of the primacy of consumption motives, we can still have a stationary economy that is in many respects similar to Professor Schumpeter's circular flow, but the justification for this assumption seems much less clear in this case than in Professor Schumpeter's. Let us examine the problem more closely.

It is extremely plausible to suppose that in a society based on the postulates of the circular flow the primary motive for all economic behavior would be the satisfaction of consumers' wants. The only class division is that between landlords and laborers. Moreover, since there is no market for land, the owners of land would constitute an hereditary aristocracy to which wealth as such would not be a ticket of admission. Differences in incomes between laborers would be based solely on differences in productive efficiency, since savings could not provide a source of income. Under these conditions the accumulation of wealth would appear to have little attraction: it would serve neither as a badge of social prestige nor as a source of income. Hence Professor Schumpeter is undoubtedly right to exclude saving and accumulation as significant factors from the circular flow and to treat them as phenomena which are the consequence of change rather than its cause.

On the other hand, if we take as our starting point a society with a class structure different from that underlying the circular flow, then the case for excluding saving and accumulation is very much weaker. Where there is a distinct employing class based on ownership of capital, in addition to landlords and laborers, a strong motive to accumulate wealth exists quite apart from any doubtful ideas about time-preference. No longer can it be argued that social power and prestige are the monopoly of an hereditary aristocracy; in fact, since along with a rate of interest goes the marketability of land, it is possible for any one with enough money to buy his way into the landlord class. But even more important is the fact that employers likewise constitute an upper class, which is based directly upon the possession of accumulated wealth. Furthermore, since this kind of wealth is measurable in abstract value units, it follows that the relative status of the members of the upper class can be exactly calculated. Under such circumstances the way to social preference and success is evidently to be sought by way of wealth accumulation; and, considering the fact that social status is essentially a matter of one man's position relative to others, there is no limit to the amount of wealth which it is rational to want to accumulate. It follows that in the kind of economy which we are now investigating there exist not only the surpluses from which it is possible to accumulate but also plenty of motives to accumulate: in one sense, indeed, it is not incorrect to say that the surpluses provide both the possibility of and the incentive to accumulation.

Professor Schumpeter's ordering of cause and effect may now be reversed. Instead of regarding surpluses and accumulation as the effect of change, we can look upon them as exercising a profound and steady pressure in the direction of economic change. The reasons for this may be briefly indicated.

First, accumulation in the absence of change tends to wipe out the surplus and hence to threaten the social position of the capitalist class; needless to say, no class tamely submits to its own extermination. Second, the individual capitalist who introduces new methods makes a larger surplus and hence can get ahead more rapidly than his fellows. Finally, the capitalist who refuses to enter the race for new and improved methods stands in danger of being eliminated by his more alert competitors. Thus we see that in a society with a

---

3 For a fuller exposition of the relation between accumulation and change, see Paul M. Sweezy, The Theory of Capitalist Development (New York, 1942), Ch. v.
capitalist class-structure by no means all social pressures standopposed to "doing things differently in the realm of social life;" on the contrary, the capitalist must adjust himself to a life of continuous change or run the risk of losing everything which gives him social prestige and power.

We see that the construction, on what seem quite reasonable assumptions, of an alternative starting point to the circular flow is possible. This economy can be made stationary for purposes of analysis by abstracting the *primum mobile* of change, namely, the accumulation of capital, just as Professor Schumpeter renders his economy stationary by abstracting the entrepreneur. But in our case it is clear that, in order to produce change, we do not require the insertion of a special sociological type which has the specific characteristic and function of being able to overcome resistances to innovation. There is no need to deny the existence of such resistances, but there is equally no reason to suppose that they are always, or on balance, stronger than the pressures to innovate which are generated by a capitalist class-structure. This becomes particularly clear in the case of a modern large-scale corporation or combine in which the process of innovation becomes highly institutionalized in the hands of staffs of research scientists, cost accountants, etc., and in which it might be extremely difficult if not impossible to find a Schumpeterian entrepreneur.

While the view of the innovation mechanism which has been suggested here differs in important respects from that adopted by Professor Schumpeter, it should not be supposed that the two are mutually exclusive. There is plenty of room for entrepreneurs of his type in the capitalist class-economy, and, obviously, any satisfactory theory must make a place for them. The rise of new firms and new fortunes, which was such a common feature of the capitalist economy of a generation or two ago, is probably best accounted for along the lines of his theory. But nowadays, when the appearance of important new firms is a rare event and when innovation is carried out largely by existing enterprises almost as a part of their regular routine, reliance on the volitional and spontaneous activity of the entrepreneur as an explanatory principle seems less and less safe. Professor Schumpeter himself might possibly agree with this conclusion, at least in part, since all his major works include suggestions that he regards his theory as more suitable to conditions of competitive than what he calls "trustified" capitalism. Of course in saying this I have no intention of imputing to him agreement with the alternative view of the innovation process which has been sketched in this paper.

In conclusion, let me attempt to sum up as concisely as possible what I conceive to be the essential point of this analysis of Professor Schumpeter's theory of economic change. I see no reason to find fault with his conception of innovation as a central feature of economic development; I should go further and say that any one who denied this part of his theory would be flying in the face of an overwhelming mass of obvious and indisputable facts. But his selection of the entrepreneur, a special sociological type, as the *primum mobile* of change can be called into question. We may instead regard the typical innovator as the tool of the social relations in which he is enmeshed and which force him to innovate on pain of elimination. This approach implies a different view of profits and accumulation from that of Professor Schumpeter. For him profits result from the innovating process, and hence accumulation is a derivative phenomenon. The alternative view maintains that profits exist in a society with a capitalist class-structure even in the absence of innovation. From this standpoint, the form of the profit-making process itself produces the pressure to accumulate, and accumulation generates innovation as a means of preserving the profit-making mechanism and the class-structure on which it rests. A different view of the business cycle is also implied, but, as noted earlier, that subject lies outside the scope of the present article.

*See, e.g., "The Instability of Capitalism," *Economic Journal*, xxxviii (1928), pp. 384–85. An even stronger statement to this effect occurs in Professor Schumpeter's latest work, *Capitalism, Socialism, and Democracy* (New York, 1942), pp. 152–34, which appeared only after the completion of the present article.