

Creative Destruction or Deficit Spending: Schumpeter Vs Keynes

Author's Details: ⁽¹⁾Manuela Ciani Scarnicci ⁽²⁾Antonella Laino
CES CRI University eCampus Como Italy

Abstract— *The Schumpeterian hypothesis tells us that there is a close relationship between innovation and market structure: only companies that have market power, at best the monopolist, can support the costs related to innovation, indeed, is the innovation itself determines that a monopoly position, the defence of which brings further innovation a virtuous circle. Also, after 2008 a lot of economists of the past made a comeback. Indeed, after this phase, everybody acclaimed John Maynard Keynes's theories (1883-1946). The crisis of 2011, with strong budgetary deficits of different countries, neglected Keynes's theories, not because these ones are wrong, but only because at the moment, they lack in applicability. In today's world, we need pragmatism. An author, on the other hand, who should be considered to urge the economy during this new crisis is Joseph Alois Schumpeter (1883-1950).*

Keywords: *Schumpeterian hypothesis, innovation, monopoly, deficit spending,*

I. INTRODUCTION

THE capitalistic economy it is a dynamic process, in which able leaders operate to develop innovation, that they allow to increase the market shares and to enjoy temporary monopolistic profits: such perspective is the greater incentive to the development of the innovation (Schumpeter 1934). In the contemporary economic literature refers to the Schumpeterian hypothesis referring to the existing correlation between being able of market and innovative ability to the enterprise. (Hammond 1984) The Schumpeterian hypothesis tells us that there is a close relationship between innovation and market structure: only companies that have market power, at best the monopolist, can support the costs related to innovation, indeed, is the innovation itself determines that a monopoly position, the defence of which brings further innovation a virtuous circle. In fact, once a company, through innovation, achieves a monopoly position, tends to reinforce this position, controlling and extending the period of benefit due to agreements with innovation and patents. Therefore, only the large firms are induced to seek innovation to increase and strengthen its market power, which is why the monopoly is more rewarding for the purpose of economic growth compared to the competitive market. (Schumpeter 1942) The creative destruction, highly creative entrepreneur and innovator, change the static equilibrium of the market and promotes the opening of new scenarios: this entrepreneur innovator, who manages to provide a product or a new process, it can operate for a period under conditions of monopoly making extra profits. In the standard growth model of creative destruction, growth is stimulated by technical progress, which consists of product innovations and process. (Caballero, Jaffe 1993). Any innovations, in fact, introduces a qualitative improvement and/o a decrease in cost of production, and this is the necessary condition for the next innovation at every stage of the innovation process, the innovative entrepreneur of successful exploits the competitive advantage and monopolize the market. (Anhion, Howitt, 1996) In

other words, Schumpeter contradicts the position of the classical economists according to which competition stimulates performance, arguing that the prospect of achieving a monopoly rent induces firms to invest in R & D and promotes, as well, dynamic efficiency, i.e., ability of the economic system to generate innovation. (Schumpeter 1934) By extending the interpretation of the initial positions of Schumpeter, it can get to support that innovation is the only factor that allows the firm to exit the competitive balance of long period, where the profit is zero, obtaining temporary monopoly positions. In the 1940s Schumpeter partially changes its positions, going to argue that the monopoly created by innovation tends to be transitory, but permanent, as businesses are encouraged to strengthen its monopolistic position, controlling the innovative application with oligopolistic arrangements, and/or patent protection and other barriers to entry. In addition, through the internalization of the research activity, generate further innovation that excludes others from access to technology. (Malerba 2000) In other words, the monopoly encourages innovation and provides the ability to implement dynamic efficiency: that this condition is more rewarding favours for economic development when compared to static efficiency of perfect competition. Ultimately, according to the approach of creative destruction, dynamic efficiency is highest with a competitive market 'dynamic' where, at least in the short run, the entrepreneur has market power. (Basile 2001)

After 2008 a lot of economists of the past made a comeback. Mankind always tends to seek the answer to what he already knows and so, given the similarities with the crisis of 1929, it was impossible not to draw on authors of the past for the 2008 crisis. Indeed, after this phase, everybody acclaimed John Maynard Keynes's theories (1883- 1946). Yet, the worsening of the public debt in 2011 and the flaring up of the economic depression, for countries like Italy, led to a progressive estrangement from the 'deficit spending' theory of Keynes. An author, on the other hand, who should be considered to urge the economy during this new crisis is Joseph Alois Schumpeter (1883-1950).

There is a significant difference between the two authors, but they both advanced theories on the boost of the economy. Since those theories are totally opposite, they help us understand the causes of the critics that Schumpeter directed to Keynes's theories in the 'Review of Keynes's General Theory,' divulged in the 'Journal of the American Statistical Association' in 1936. As a matter of fact, while for Keynes the economic push must arise from the State, Schumpeter overlooks into a capitalist frame, where the boosting factor is innovations created by the trendsetter entrepreneur. This theory would obviate the further weight of public finances. Nowadays, several governments touched by problems of public finances are applying a restrictive fiscal policy. This may obviously restore a part of the public debt, but in so doing, without including new efforts, another crisis is on the way. Hence, new solutions must be provided related to past theories, too; the one of Schumpeter, so to say,

could be regarded *ad hoc* not only for the Italian position but also for other countries. Moreover, if we consider that Italy has a plurality of SME with innovative features, the pre-condition is established automatically, because the Italian innovation is there, and represents a strong boost for economy although not yet adequate. That is why innovation should be guaranteed and encouraged.

II. INNOVATION, PROFIT, FINANCING AND MARKET STRUCTURE

When you decide to tackle the risk inherent in the introduction of a new production process, it proceeds in the idea that the entrepreneur can rely, at least for a short period of time, on obtaining an extra profit before the imitators 'reach': in other words, boost innovation derives from the existence of

rigidities which slow down the spread of new technologies; delete such rigidity is tantamount to destroying every incentive to innovate. (Schumpeter 1949). It is precisely the competitive dynamics of the process of 'creative destruction' that is lost when the innovation is reduced to a routine process. In this regard, Schumpeter argues that the profit is attributable to the normal return of a factor of production, but it is a premium paid transitional entrepreneur innovator award that 'disappeared' occurs when the effect of imitation. (Roncaglia, 1987)

It is not disputed the fact that research is a source of economic growth: empirical studies also show a high correlation between the extent of expenditure on research and development and productivity growth. (Gilbert, 2006). This is where you insert the Schumpeterian position that research, necessitating large amounts of capital can best be conducted by companies that have, or may enjoy with the innovation, market power.

Innovation produces profits and surplus remain unchanged until the contractor maintains a monopoly position, in other words, the temporary monopoly of the firm exists and is a cause and effect of innovation. (Chaitram,) When you define a new method of production, for example, the aim is to reduce the unit cost of production, maximizing output: this is especially true if you think the manufacturing sector where, unlike in the agricultural sector, there exists the possibility to expand production through the Division of labour,

thereby increasing scale efficiencies. (Schumpeter 1964)

A cumulative process of concentration of market power at enterprises continually at the forefront in technological change can be an element which promotes the financing innovations arising from internal sources, as mentioned, but also from sources from the banking system, prone to finance

enterprises large and solid. (Sylos Labini, 1970). Moreover, if we admit the possibility of financing with internal resources, innovations and if we consider the financial market is not perfectly competitive, since it is less costly internal financing than outside, we can get to argue that market power can be a decisive

element for the realization of innovation and, therefore, to consolidate in time a position of competitive advantage. There are at least three aspects of Schumpeter's thoughts that make us

understand how the shape of the market is essential for the development process: (Schumpeter 1984)

- the dynamic nature of the competitive process, which the author explicitly opposed to the static conception of competition developed by traditional marginalist theory

- the dynamic nature of market imperfections: these arise from the fact that the person who first introduces an innovation for some time may be able to control it is hindering the spread of the transitional nature of market imperfections

In line with what argued, Schumpeter is strongly hostile to antitrust policies, involving an ideological attitude towards hate an essential quality of entrepreneur innovator, i.e., its ability to evade, albeit temporarily, the

competition through innovation. (Egidi 1981)

The essence of the entrepreneur finds himself in search of new: only the profit that derives from innovation is the real benefit that it is for the entrepreneur. For this reason, the incentive to innovation must come from timely protection of same through patents and other similar rights in order to push the subject to

address the risk of significant investment that requires research. In particular, the strength of the protection of intellectual property determines the extent of the exploitation of the potential of the discovery by the inventor. Patent protection, therefore, essential to promote innovation, although this does not guarantee a

pension is perpetual, and increases forever, the common heritage of knowledge. (Bronwyn, Ziedonis, 2001)

We can go so far as to argue that to achieve the benefits associated with optimal firm size in order to encourage innovation; we should set up policies that promote the development of an industrial structure that fosters the creation of large ensembles, such as policies to support mergers.

An element in support of the Schumpeterian thesis lies in the fact that large firm or they can rely on significant market power, are more likely to support investments in R&D through self-financing (Kamien Schwatz, 1982), resulting from extra profit who perform compared to firm operating in perfect

competition, and through easier access to alternative channels of financing from third parties. (Cohen, Levin, 1989)

Recently, the model Dasgupta - Stiglitz, in accordance with the Schumpeterian view, argues that imperfect competition promotes technological progress: the research, in fact, is greatest in more concentrated markets, where large companies compete to grab the patent application, also because large firms can more quickly than others to turn innovation into product. (Dasgupta and Stiglitz, 1980) Still, Nelson-Winter model, used to study the relationship between progress and the market structure, confirms the Schumpeterian hypothesis that the market structure is not only cause but also effect of the innovative phenomenon.

In a nutshell, the model in question arrives that the rate of productivity growth latent, the difficulty to imitate and the uncertainty of the results of innovation activity affect the structure of the market. The model confirms the hypothesis that a given market structure is not only because of a high rate of innovation, but it is also a consequence of successful innovations. The model tells us that innovation is a cumulative process that requires intense interaction and that, therefore, it is more efficient if it develops within the same organization (for example a single company) or a highly concentrated network (an oligopolistic market). (Nelson and Winter, 1982)

III. WHAT DO WE MEAN BY NEW COMBINATIONS AND HOW THESE ONES MIGHT CREATE NOT ONLY ECONOMIC GROWTH BUT ALSO ECONOMIC DEVELOPMENT.

Economic life always tends to a balance, even if this isn't the predicted one. This applies both to Schumpeter's theories (Schumpeter, 2002) and to Keynes's ones (Ciani Scarnicci, 2012) where for the latter, it is mentioned the equilibrium of underemployment.

According to Keynes it is possible to come out from this situation thanks to the State 'deficit spending' intervention.; as for Schumpeter this balance could be modified thanks to various interventions; modifications, such as changes of natural and political conditions, wars or alteration in consumers' taste, are part of the static analysis of an economic system.

Schumpeter's theory concerns discontinuous changes, in relation to a productive revolution or incidents that arise in such situations. Revolutionary changes are the basis for the problem of economic development since an adaptation to continuing economic changes might lead to economic growth yet not to development. Economic development is not growing because qualitatively new phenomena are not incorporated.

When we mention economic development (Lombardi, 2011) and economic growth, we talk about two different phenomena.

Economic development not only considers the wealth of a nation, as does the economic growth instead but overlooks the wealth of a country on the basis of its inhabitant's welfare. Indeed, considering the economic policy, economic development can be defined as the efforts to improve the wealth and quality of life of a country.

Clearly, this is linked to the labour market and to the allocation of monetary income. There are also substantial differences with a measurement between economic growth and economic development: the first is measured by observing the progress of the real GDP or the GDP per capita; the second, with indicators such as literacy rate, life expectancy up to birth, etc. The economic development (Schumpeter, 2002) according to Schumpeter depends on previous developments too, and therefore any situation would have been different if it had started on a different basis.

Referring to what has been previously stated on the economic trend, it can be said that spontaneous and

discontinuous shifts do occur in the industrial and commercial sphere, and not in that of the consumer's needs.

Indeed, if the consumer's demand varies, firms will, therefore, adjust gradually without changing their course of action, though. This does not apply for innovations, as they do not answer the need of the consumer, and these are the discontinuous shifts which produce not only growth but also new economic development.

As we have said, the events which create growth are innovations and these, according to Schumpeter's definition (1947) (Osservatorio Imprese e Cultura, Cultura e competitività, 2003) concern: *new asset*, in terms of an asset not yet familiar to consumers or an asset already familiar but with a different quality. This is a phenomenon, which to date, could allow an economic growth but also an economic development. As for the first, we need only think of the new technologies, one of the few markets which still boast a strong growth rate.

For this final reason, we clarify that new combinations are realized in a different way by using existing supplies of the

economic system. When we speak about development, we consider that resources already used for different usages are to be employed, without considering the fact that these ones have changed their substance (Schumpeter, 2002).

What already said on the relationship existing between innovation, the basis for the economic development and its dual relationship with the labour market is the constituent element of differences which are evident between Schumpeter and Keynes. The qualms in the application of new combinations are determined from the fact that it's not possible to self-financing with proceeds of the previous manufacturer and this leads to the need of complying with credit (Schumpeter, 2002).

For a company which uses old combinations, credit might not be an essential element, yet for the new ones, it's the basic prerequisite. The link between financing, banks hence and innovative activity can be ascertained in the threshold of the first banking services like the German ones. Indeed, German joint banks were started with business activities. It's the expertise of banks that provide new buying power which enables to yield development.

The bank is in between those who want to introduce new combinations and whoever owns the means of production. Today, as in the period when Schumpeter theorized the relationship among banks, it still remains an ultimate element for new combinations. This topic remains so far, especially for the new rules of the banking system and with the doubtfulness of solvency, a minefield among companies and banks. A few small realities near the area succeed in overcoming these limits in a certain manner.

We refer to the easiest way to attain funds from the banking system so far, by banks particularly linked to their surrounding territory, and on how societies can help SMEs to avoid the risk of insolvent costumers and debt collection. All this might help companies which decide to carry out new combinations.

IV. THE INNOVATIVE ENTREPRENEUR WHO ACTS OUT - OF ROUTINE

What we said so far, justifies the reason why innovations must be preserved and encouraged. To know how to preserve and encourage them, we have to evaluate where they originate; according to Schumpeter (Schumpeter, 1993) it is 'the innovative entrepreneur.' The theory that the innovative entrepreneur is the man who undertakes innovations isn't only a theory. In fact, considering the aforesaid, we can comprehend how, for university researches too, the entrepreneur is able to implement the project of the new combination or to call for new research centers to find innovation. But being an innovative entrepreneur has got criticality, and it is necessary to work on them to protect and encourage innovation. In this case, Schumpeter's theory seems topical. The importance of defining the author's theories is determined by the fact that an entrepreneur who creates innovation isn't only a businessman.

The definition of an innovative entrepreneur is broader than the traditional one. Indeed entrepreneurs are all those people that reach new combinations. This allows to term this way managers or members of the Board of Directors and also individuals that do not have an enduring relationship with a single company. From another perspective, Schumpeter's definition of an entrepreneur might also be restrictive. As a matter of fact, Heads of a company, Executives or businessmen are not considered entrepreneurs if they

don't achieve new entrepreneurial initiatives and limit themselves quite simply to manage the company.

Hence, we can state that in Schumpeter's definition of entrepreneur the mere ownership of a company is not a decisive factor. Moreover, there is a contrast between the person who actuates the action of renewing and the risk holder. Think of a shareholder, he is owner and risk holder, yet he isn't an entrepreneur as his will generally isn't leading concerning the pronouncement of the company. On the latter peculiarity, we can see differences with other authors of the history, in particular, Jean-Baptiste Say and John Stuart Mill. The definition of entrepreneur made in 1834 by J.B. Say's in his work is: "the entrepreneurial office consists in combining, grouping cost effective factors." This agrees with that one of Schumpeter when we refer to unusual combinations but not when we talk of routine work. On a deeper level we note a great difference with the above-mentioned Schumpeter's definition, as according to Say, the entrepreneur is a chief of a company that produces on his own, both in small and large companies, who needs capital and tangible skills to perform his leading role. Hence according to Say the link between entrepreneur and ownership creates a strong distinction with Schumpeter's theory (Petretto, 2009).

Relating to the link between entrepreneur and entrepreneurial risks we can emphasize the theories of J.S.Mill who in his essay in 1848 imagines the entrepreneur as a founder who bears all entrepreneurial risks and has the task of organizing the company and provide capital. Here again, we ascertain how this definition is absolutely contrasting to the peculiarities of Schumpeter's entrepreneur (Petretto, 2009). Echoing Schumpeter's theory which creates a distinction between the entrepreneur and the owner of the means of production, this upsets what is his financial compensation, too. Indeed, the compensation of Schumpeter's entrepreneur is provided by the transitional surplus caused by the introduction of innovation, once all inputs have been compensated, including the entrepreneur's work itself, his interests and the entrepreneurial premium risk.

As previously said, these two compensations as for Schumpeter might not be set aside to the entrepreneur not being the owner of the capital. Evidently, also in Schumpeter's theories, we are aware that the ideal innovative entrepreneur is both a capitalist and a manager. Yet history teaches us that a lot of outstanding innovative entrepreneurs were not so. In order to understand what has been said we need only think of Thomas Watson of IBM and Ray Kroc of MacDonald's who are not founders of their companies but are fully credited as innovative entrepreneurs (Torrisi, 2002).

Following Schumpeter's information, we consider entrepreneur (Shumpeter, 1993) the person who fulfills a new combination and losses this definition as soon as he develops his own activity and complies with the circular free cash flow. The distinctive difficulty in being an innovative entrepreneur is determined by the fact that he acts out-of-routine, unlike others. If he were within a routine, he wouldn't need special skills above the average, as he would be part of a routinely work like the others and his task would only be that of correcting those who divert from the system.

What we said is suitable for economic life. Therefore, the effort is not being part of the routinely work but acting out-of-it.

Difficulties (Shumpeter, 1993), as was said, are specifically determined by the absence of routine. In fact, people are deprived of exact data and codes of conduct. The elements available are doubtful or verified after a time period or even only supposed.

Statistical expectancies too, might not help, as there isn't any historical series to be analysed; hence problems of expectancies arise. This applies, even more, when expected market demand is evaluated, as it isn't possible to realize how the market will respond to innovation. All this obviously doesn't help the banking system, which today, in particular, needs more than ever, exact data to decide whether to finance a project or not. In order to understand what we are talking about, let's consider that taking action pursuing innovation or conforming with custom is like building a new way or walking along a well-trodden one. Also, the entrepreneur's mind doesn't help; given the factual difficulties of undertaking new pathways, he prefers to follow walked ones earlier.

Moreover, the social environment doesn't help since it stands out against those who act out of schemes. This

implies obstacles which might also be political and legal ones, difficulties in finding cooperation or simply in

persuading consumers. Moreover, we can undergo resistances on the part of a more or less strong community on the basis of the evidence that the same one is more or less used to switches.

The more a society is primitive, the greater is its reticence towards changes. Yet this doesn't imply that in evolved societies contentions are not extant. The amazement facing change exerts a strain on an individual. Therefore, the innovative entrepreneur must fight against this kind of complications when he acts out-of-routine. This difficulty in making others accept the innovative entrepreneur's role is found in other economists such as Adam Smith (Smith, 1991).

In fact, in his theory too, the blame by the others is noticeable, and we might compare them to the witnesses of Smith's theory. The issues which the innovative entrepreneur might face could also be different, and they are the basis of those ones which according to Schumpeter might represent the failure of capitalism, such as for example an excessive bureaucratization of the function of the entrepreneur, the loss of emphasis on capital accumulation or the creation of monopolies. These issues so far, can be considered outdated since SMEs can count for innovation on University Research Centres, which allow, although with reduced funds, studying new combinations.

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