

"Destructive" and "Creative" Results of Dynamic Analytical Frameworks of Marx and Schumpeter

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Abstract: This study aims to analyze the destructive and creative results of Marx's and Schumpeter's analysis starting out from the argument that their analytical frameworks are dynamic. Capitalism involves economic and non-economic variables and hence is dynamic and instable. Because of this reason, a dynamic framework is embraced in this study which takes into account the changes in concrete historical time. Also paper argued that Marx and Schumpeter contend that the working of capitalism undermines its own institutional structure. In this regard, the paper seeks to establish connections between Marx and Schumpeter by their dynamic visions. In order to show these connections, in the first section of the study the historical materialism context of Marx is evaluated. The topic of the second section is the the creative actions which establish the dynamic framework of Schumpeter. In the third section, destructive and creative results of dynamic analysis of Marx and Schumpeter are examined.

Keywords: Historical materialism, Static and dynamic analysis, Creative actions, Instability

JEL Classification: B1, B3

Marx ve Schumpeter'in Dinamik Analitik Çerçevelerinin "Yıkıcı" ve "Yaratıcı" Sonuçları

Özet: Bu çalışma analitik çerçevelerinin dinamik olması düşüncesinden yola çıkarak, Marx ve Schumpeter'in analizlerinin yıkıcı ve yaratıcı sonuçlarını analiz etmeyi amaçlamaktadır. Kapitalizm, iktisadi ve iktisadi olmayan içsel değişkenleri dolayısıyla dinamik ve dengesizlikler içeren bir sistemdir ve bu nedenle çalışmada somut tarihsel zaman içindeki değişimleri dikkate alan dinamik bir çerçeve benimsenmiştir. Bununla birlikte yazıda Marx ve Schumpeter'in kapitalist sistemin işleyişinin kendi kurumsal çerçevesini yok ettiği düşünülmektedir. Bu çerçevede, çalışmada Marx ve Schumpeter arasında dinamik vizyonlarından yola çıkarak bağlantı kurulmaya çalışılmaktadır. Bu bağlantıyı ortaya koymak üzere çalışmanın birinci bölümünde Marx'ın tarihsel materyalizm kavramı değerlendirilecektir. İkinci bölümün konusu Schumpeter'in dinamik vizyonunu ortaya koyan yaratıcı eylemlerdir. Üçüncü bölümde ise, Marx ve Schumpeter'in dinamik analizlerinin sonuçları incelenmektedir.

Anahtar Kelimeler: Tarihsel materyalizm, Statik ve dinamik analiz, Yaratıcı eylemler, İstikrarsızlık

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1. Introduction

Static and dynamic analyses are mainly used in economic theories. In static analysis, historical changes are taken as given and abstract logical time is considered as timeless. Static analysis means a method that deals with economic phenomena that tries to establish relations between elements of economic system such as prices and quantities of commodities. Past and expected future values, lags, sequences, rates of changes, expectations are not take into account in static analysis.

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Walrasian general equilibrium analysis is the best known sample of the static theories. In the static theory of Walras, economic universe emerged in the form of a large number of quantitative relations between prices and quantities of consumable and productive goods and services (Schumpeter, 1954, p. 966). The main problem of the static theories is *exchange* rather than production and distribution.

Production process requires historical time and its results affect both theory and its implications. It is not possible to take technology and distribution as given in dynamic theories. In short, the factors which are exogenous in static theories become endogenous in dynamic ones. Because of these endogenous changes, it is difficult to reach exact pure results in dynamic theories as in static theories.

According to Schumpeter (1954), static theory involves higher level of abstraction and it may be a special case of dynamic theory. In other words, static patterns can be driven from the dynamic ones. The term *stationary state*, does not refer to a method or a mental attitude of analyst, but to a certain state of the object of analysis. Stationary state is “nothing but a methodological fiction” (Schumpeter, 1954, p. 964). Stationary state shows both endogenous and exogenous factors of the analysis. If exogenous factors are included in the analysis, method of the analysis becomes a dynamic one.

Dynamic analysis is related with *economic biology* and *evolution* because of its changing variables. The term evolution is used in both wider and narrower senses. In the wider sense, it contains phenomena that make an economic process non-stationary. “In the narrower sense, it comprises these phenomena minus those that may be described in terms of continuous variations of rates within an unchanging framework of institutions, tastes or technological horizons, and will be included in the concept of growth.” (Schumpeter, 1954, p. 964). When the parameters of the static analysis change, evolutionary process has to be taken into consideration. The basic fact is the changing characteristics of economic system rather than the method that analyst chooses. The choice of method depends mainly on both the theorist’s realization and his perception/*vision* in Schumpeterian sense (Shionoya, 1997).

In this study, Marx and Schumpeter’s dynamic analytical frameworks and their results in analyzing capitalist system will be evaluated. Capitalism is an unstable system by its nature and the instability of the system mainly depends on both economic and social factors. For this reason, dynamic reasoning gives a powerful hint for understanding capitalism.

2. Dynamic Analysis of Marx within the Context of Historical Materialism

The capitalism analysis of Marx is one of the comprehensive analyses which puts forward that the instability of the system depends mainly on its inner operation. The most important distinguishing characteristic of Marx’s method is its dynamic analytical framework. Although Marx adopted hitchless methods (i.e. simple production system) while analyzing capitalism in his different studies, it cannot be disregarded¹ that the vision of Marx is absolutely dynamic, especially as in his “historical materialism” context. It can be asserted that the historical materialism is Marx’s primary dynamic analysis which is constructed on his dynamic vision. General view of history includes discontinuities, interruptions and revolutions in historical materialism. It is possible to claim that historical materialism focuses on the sources of social transformations that should be explored in different production methods itself. Marx’s analysis of capitalism can be considered as the application of his historical materialism when especially inner dynamic contradictions of capitalism are taken into consideration.

Although there are many controversies on the meaning of the concept of historical materialism, two basic studies of Marx, *German Ideology* (1970) and "Preface" of the *Contributions to the Critique of Political Economy* (1970), have to be taken into account. In *German Ideology*, Marx and Engels point that "they have no history, no development; but men, developing their material production and their material intercourse, alter, along with this their real existence, their thinking and the products of their thinking. Life is not determined by consciousness, but consciousness by life" (Marx and Engels, 1970, p. 47).

Later, as emphasized in "Preface", relations of production (economic substructure) determine the consciousness of men (superstructure). It can be put forward that Marx points on three basic claims in "Preface". First of all, the relations of production constitute the "economic substructure" of society on which arises a "legal and political superstructure" and to which correspond "definite forms of social consciousness" (Marx, 1970, p. 20). The second claim is the idea which maintains that the production relations are not related with consciousness of men. "It is not the conscious of men that determines their existence, but their social existence determines their consciousness" (Marx, 1970, p. 21). The last claim which is more central within the scope of this study is that the social transformation depends on the conflict between production forces (the driving force of the evolution of societies) and production relations. "At the certain stages of development, the material forces of society come into conflict with the existing relations of production" (Marx, 1970, p. 21). Hence, it is possible to announce that the necessity of dynamic history conception stands out with this claim.

Notwithstanding, the idea of historical materialism explains whole human history in general evolutionary view. It is possible to say that historical materialism shows only the "skeleton" of history. (Krieger, 1962, p. 375). The categories of historical materialism can be regarded as questions which investigate historically differentiable forms and it can be misleading if these forms are perceived as "laws" or "canons" which have ability to give exact explanations about facts.

According to Marx, history which rises on conscious production activity, namely "labor process", is a process of the objectification of human beings essence. By this characteristic, history is the integral part of human life. In other words, this labor process is the only constant necessity in all types of societies. However, the specific forms of this process do change during history. On the contrary, a society gains distinguishing characteristics by this specific mode of production (Ozel, 2008).

Marx brings out in *Grundrisse* that, "some determinations belong to all epochs, others only to a few" (Marx 1973, p. 85). In other words, the difference between the "universal" factors which are viable in whole human history and specific factors which are viable in only specific periods/ages is very important in the general methodological view of Marx. This situation arises especially in his capitalism analysis. An idea claiming that Marx drives general evolutionary schemas about facts, disregards that Marx's main target is to analyze capitalism. Because, "investigation of history in Marx means investigation of prerequisite of capital" (Hunt 1984, p. 7). While analyzing capitalism, Marx firstly gives a historically specific definition of capitalism and then, by using this definition he takes on important chronological phenomena that are important for his capitalism concept. In this regard, patterns of Marx's theory are not selected accidentally (Hunt 1984, p. 7). Another point related with this idea is that the contradiction between production relations and productive forces, which are the machines of historical change, strengthens the view of technological determinism. However, it seems that rather than transition being an obligatory process, different organization forms in different societies depends on different production forces and relations (or economic and social factors). Therefore, dynamism in historical materialism cannot be defined as a social transformation hypothesis. This kind of

analysis does not provide general formulizations that are valid in all conditions. For example, the process of transformation from primitive societies to capitalism in the history of the West is specific to the Western world, not to the whole world history. By this conception dynamic character of historical materialism arises. This is valid for the analysis of the capitalist system which can be defined as the application of historical materialism.

3. Dynamic Analysis of Schumpeter within the Context of Creative Actions

In the *Theory of Capitalist Development* (1934), Schumpeter tries to construct the theoretical model of economic change. As it is known, the data which Walras uses are appropriate for only static analysis in his general equilibrium model. Schumpeter criticizes Walrasian model for excluding economic changes, especially technological ones from his static analysis. In Walras, technology and choices are the exogenous factors. According to Schumpeter, changes (including structural changes) in the economic system are different from both the circular flow mechanism and the convergence to the equilibrium process. It is possible to say that, Schumpeterian economic change (*development*) concept is endogenous and discontinuous. In other words, after disequilibrating economic change, it is impossible to return to the old equilibrium state which is destructed by the entrepreneur. This kind of change is realized mainly on the production sphere of the economy (Schumpeter, 1934, p. 45).

Economic change or in Schumpeterian words *development* is defined by carrying out new combinations. This concept contains five cases; the introduction of new goods, the introduction of new method of production, the opening of a new market, the conquest of a new source of supply and carrying out new organizations of any industry (Schumpeter, 1934, p. 66). Entrepreneur is the one who is the creator of innovations which bring about economic development (Guler Aydin and Kilic, 2008).

As it is known, it is assumed that all economic agents behave rationally in the circular flow mechanism. Any disequilibrium state in the economy is brought away by rationally behaving actors. But if innovative actions (economic change) are included in the system, it is impossible to consider the result of these innovations. It can be put forward that creative actions give rise to disequilibrating position in the economy and that rational actions provide equilibrium. Moreover, creative/innovative actions are related with unstable dynamics, whereas rational actions are related with stable static framework (Malerba, 2006, pp. 4-5). According to Schumpeter, traditional theory ignores many important problems. The difference between the theories can be defined by two complementary factors. First of them is the “vision” that gives general view of the theorist while examining the object, and the second one is his technique which conceptualizes his concrete hypothesis (Schumpeter, 1949; Guler Aydin and Dinar, 2007). In the first chapter of “The Theory of Economic Development”, Schumpeter examines the circular flow process which is similar to the circulation of the blood. However, Schumpeter says that “we abandon the analogy with the circulation of the blood” in a changing economy (Schumpeter, 1934, p. 61).

Schumpeter admires the perfect regulatory function of the pure static analysis of Walras. But, as pointed above, he criticize unchanging characteristic of Walrasian theory. Schumpeter tries to construct a model in a changing economy. In the first publication of the *Theory of Economic Development*, Schumpeter explores the difference between static and dynamic analysis and he constructs a powerful relation between the action of the economic actors and the type of the analysis. The *mass* type of action related with static and the *creative/energetic* type of action is related with dynamic analysis. The difference between the types of mass and creative action helps to apprehend the difference between Walrasian and Schumpeterian analysis (Schumpeter, 1934, pp. 92-93). Energetic actors resemble the *charismatic leader* of

Weber. These kinds of actors are responsible from the economic development by carrying out new combinations/innovations. By Schumpeter’s economic development analysis, it is possible to drive a powerful relation between the motivation of agents and the type of analysis. *Table 1* below shows this relation and tries to summarize the ideas of Schumpeter about static and dynamic analyses.

Table 1. The Comparision between Static and Dynamic Analysis on the Basis of the Action of Economic Agents

Static	Dynamic
Stationary state	Schumpeterian development
Equilibrium/convergence to equilibrium	Divergence from equilibrium/new equilibrium positions
Continuity and small changes on economic data	Discontinuity and structural changes
Predictable and calculability	Uncertainty and creative destruction process
Exogenous Growth	Endogenous innovative development
Mass action/entrepreneur in the position of director	Creative-energetic action/ entrepreneur in the position of leader
Consumer based analyses	Innovative entrepreneur based analysis
Studies with in the old norms and paradigms	Struggle of paradigms: new norms

Source: Andersen (1991).

Schumpeter tries to construct a dynamic analysis which includes *changes*. The drivers of these changes are *entrepreneurs*. But in Schumpeterian analysis, it is difficult to clear how these innovative actions take shapes and how they are produced. In *Development* (2005, p. 115), Schumpeter defines development as “transition from one norm of the economic system to another norm”. According to Schumpeter, this transition cannot be decomposed into infinitesimal steps. In growth, the structure of the economic order can change and the main difference between development and growth is the innovative characteristics of development. Development and the entrepreneur - the creator of development - are the main factors in the transformation of the system. At this point, the dialectical relation between *stability* and *innovation* may be considered as important. According to Schumpeter, economic issues can be characterized by three contradictory phenomena. i) The two contradictory real processes which are named *circular flow* or convergence to equilibrium and *changes in the parameters* of the system. ii) The two contradictory theoretical approaches, named *static* and *dynamic* and iii) Two different types of individual named *directors* and *entrepreneurs* (Schumpeter, 1934, p. 82). Table 2 summarizes relations between these three contradictory phenomena.

Table 2. Relations Between Contradictional Phenomena

	<i>Static</i>	<i>Dynamic</i>
<i>The real process</i>	Circular Flow	Development
<i>The theoretical approach</i>	Schumpeterian static analysis	Schumpeterian dynamic evolutionary analysis
<i>Two types of individual</i>	Directors	Innovative entrepreneurs

Source: Andersen (1991).

It is possible to claim that Schumpeter borrowed dynamic view from Marx, technology, institutions and industry from historical school and micro-based approach from the orthodox theory. According to Schumpeter, evolution is based on the reactions of individuals rather than the society or the nation. If Schumpeter’s dynamic view is evaluated, not only dynamic approaches of Marx but also his ideas on the relationship between capitalist evolution and the technological competition between firms can be discovered. In *Capital I* (1990), Marx draws attention to the advantages of the innovative firms and technology. Firms, which have the force of improving technology, increase their competitive position while others become weak. Schumpeter employs this argument of Marx while constructing his evolutionary view. According to Schumpeter, technological competition or dynamic competition is consistent with the capitalist system’s nature rather than the price competition because of the aim of increasing profit and capital accumulation. Schumpeter extended Marxian innovation argument by his development definition which contains new products, new raw materials, new markets and new organizations. Successful innovation means transformation of the nature in both Marx and Schumpeter. A new innovative action spreads to the industry, in other words, an innovation in a sector leads to other innovations or an innovation to the other sectors. (Dahms, 1985). At this point, the creative destruction notion of Schumpeter has to be taken into consideration. In the creative destruction process, old structure is destructed and new structure is constructed by dynamic competition which is related with the innovative actions of the entrepreneur. These destructive and creative results of dynamic capitalism and dynamic views will be examined in the section below.

4. “Destructive” and “Creative” Results

Capitalism is a dynamic and unstable system as pointed by Marx and Schumpeter. In other words, capitalism can never be stable because of its changing economic and social characteristics. This dynamic qualification of capitalism depends on three arguments. First of all, development arises from the economic system itself and all factors causing development are endogenous. Second, transitions appear not smoothly and these transitive changes are the base of instability of the capitalist system. Thirdly, main characteristics of the economic changes are structural and revolutionary. In other words, old norms or structures allow new radical structures.

Development arises in industrial and commercial spheres of the economy. The choices of the consumers are not the determinant factors of the development process. The notion of development is mainly related with innovation and entrepreneur. The reality of capitalism - in Schumpeterian sense - is creative destruction. With this notion, changes in the system arise by two different aspects; creative and destructive.

The creative characteristics of capitalism can be found in Marx’s *Grundrisse* (1973). According to Marx, capitalism revolutionizes the old economic system by destructing it. The arguments of Marx and Schumpeter about the revolutionary characteristics of capitalism are similar. Both accept the anarchic feature of the capital accumulation process. Economic change arises in the production sphere rather than consumption.

According to Marx, there is no qualitative difference between the capitalist and the landowners in an exchange economy. All different classes work for themselves and have their production factors. Free labor is not employed in an exchange economy. By this way, there is no surplus and distribution problem. The same analytical results can be found in the Schumpeterian simple production process however his institutional framework is different than Marx’s. In Schumpeter, capitalism differs from the other systems by the entrepreneurial credit phenomena. By this credit mechanism, entrepreneurs provide the redistribution of the resources. New

technology decreases the production costs and by this way, surplus income is generated. In other words, in capitalism surplus which is eliminated by competition is recreated by innovations. According to Marx, surplus arises from the difference between the production force of capital and labor.

Socialism is inevitable after capitalism in Marx. Destruction of capitalism is the result of the crises and class struggles but in Schumpeter, capitalism is a successful system which cannot destruct in the near future because of its creative functions. He relates monopolization, surplus and crises with innovations. Because of this reason, the destruction of capitalism depends on its creative property. Creative destruction process can be seen as a revolutionary process by means of destructing old forms and creating new ones. In a narrow sense, creative destruction process has the same meaning in both Marx and Schumpeter (Elliot 1980). Marx regarding the working of competition with its dynamic elements, and Schumpeter regarding the institutional collapse suggesting that the very success of capitalism is the basic cause of its failure (Ozel, 2009). Schumpeter defines entrepreneur as the driver of innovations but in trustified capitalism both competitive and creative structures of the system disappear because of the innovative actions of the big firms. "Capitalism, being essentially an evolutionary process, would become atrophic. There would be nothing left for entrepreneurs to do. They would find themselves in much the same situation as generals would in a society perfectly sure of permanent peace. Profit and along with profits the rate of the interest would convergence to zero." (Schumpeter, 1943, p. 131).

Marx characterized capitalism by the action of the capitalists who have the means of production. As the labor class is abstracted from the means of production, workers cannot become capitalists by solely having an entrepreneurial spirit. In the monopolistic capitalism, Schumpeter points to the rutinization of the entrepreneurial actions, while Marx makes emphasis on the centralization of the capital and innovations. Both take the destructive function of big firm on small size firms into consideration. This case is an elimination of small firms for Marx, rutinization of entrepreneurial action for Schumpeter. In both Marx and Schumpeter, the sociopolitical dimension of the centralization of the capitalism is important. The bureaucratization of both economic and social life depends on big firms in Schumpeter. In Marx, big firms transform both capital accumulation process and private property relations of the capitalist. According to Marx, the conflict between the social classes and the power of the labor class is the main transformative factor of capitalist conflicts. Nevertheless in Schumpeter, transformation and the destruction of capitalism primarily depends on both the rutinization of entrepreneurial actions and the institutional structure of the system. Although they have different ideas regarding the public policy and social transformation process, both Marx and Schumpeter share the same idea on the life of capitalism. In other words, capitalism cannot last forever in both Marx and Schumpeter because of its separated economic and social dimensions. In Schumpeter, rational capitalism rationalizes both the economic and social life. In the rationalization process, entrepreneurs and their innovative creative actions disappear (Heertje, 2006). By rutinization of the creative actions, capitalism loses its main dynamic factor. Other important destructive factors are the destruction of the protecting strata, the hostility of the intellectual groups and the anti-traditional characteristics of family life in rational capitalism in Schumpeter. "In the end there is not so much difference as one might think between saying that the decay of capitalism is due to its success and saying that it is due to its failure." (Schumpeter, 1943, p. 162).

5. Conclusion

In spite of their different visions, both Marx and Schumpeter focus on the unstable characteristic of capitalism. Their dynamic analytical frameworks are very valuable in defining the endogenous dynamics of capitalism. Both extend the pure theoretical framework with politics, sociology and even psychology. Table 3 given below tries to summarize the main dynamic analytical tools of Marx and Schumpeter.

Table 3. A General View to the Dynamic Analytical Frameworks of Marx and Schumpeter

	Marx	Schumpeter
<i>Capitalism</i>	Dynamic/unstable	Dynamic/unstable
<i>Competition</i>	Disequilibrating process	Disequilibrating process
<i>Structural Change</i>	Discontinuous/irreversible	Discontinuous/irreversible
<i>Destruction of the system</i>	Class struggle	Rutinization of entrepreneur
<i>Institutional transformation</i>	Socialism	Socialization and bureaucratization
<i>Main Motivation</i>	Increasing profit	Unhedonistic action motivations of the entrepreneur
<i>Characteristics of the system</i>	Conflicting	Successful but discontinuous
<i>Result in terms of individuals</i>	Objectification	Rutinization of the creative actions

Source: Guler Aydin, D. (2008).

The entrepreneur is the driver of both the economic development and the technological improvements in the analysis of Schumpeter. In Marx, the source of development is the accumulation process itself. For this reason, both Schumpeter and Marx focus on the instability of capitalism, but the causes of the fluctuations are different from one to another as it is seen in the Table 3.

The analysis of Marx rises on the contradictions between labor and capital but in the analysis of Schumpeter, the main analytic factor is innovations. In addition, in Marx, rising profit is the main the motivation factor of capitalist, however in Schumpeter, his entrepreneur has different motivation factors such as willing to success. For this reason, Schumpeterian entrepreneur cannot be seen as a hedonistic actor. Although, they take different inner variables into attention in their analysis, both Marx and Schumpeter define capitalism by the help of historical and sociological factors. Both extended the framework of the static analysis by paying attention to the political, historical and sociological variables. This kind of reason provides dynamic and evolutionary view while analyzing not only capitalism but also its functioning.

Shortly, although their different visions, different analytical tools both Marx and Schumpeter try to analyze unstable dynamic of capitalism by the help of not only economic but non economic factors. The changes in the capitalist system depend on the endogenous variables which are economic, political, physiological, historical and institutional. For this reason, the system creates mutual relationships among variables and dynamic and changing nature of capitalism can be analyzed under the holistic point of view. This kind of reasoning provides accurate analytical tools for the theorist and proper consciousness for individuals.

¹ In *Grundrisse* (1973:101) , Marx pointed that ...” whereas the method of rising from the abstract to the concrete is only the way in which thought appropriates the concrete, reproduces it as the concrete in mind”.

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