

The logic behind evolution of economic systems under uncertainty and the choice of a socialist market economy

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Abstract

Purpose – This paper aims to determine the status of the socialist market economy through a logical analysis of the evolution of economic systems in human society.

Design/methodology/approach – This paper presents an analysis of uncertainty and the functions performed by different economic systems in managing and resolving it, thereby explaining the evolutionary rationale behind economic system evolution.

Findings – Firstly, the socialist market economy empowers the market to play a decisive role in resource allocation, which serves as the foundation for activating individuals' motivation to engage in economic activities. Secondly, the socialist market economy adheres to the basic socialist economic system, which is the basis for the socialist market economy to stabilize the economy and society or to address the risk of economic uncertainty that may trigger macro-level inconsistencies in economic operations. Thirdly, the advantages of a socialist market economy in adapting to economic uncertainties do not arise spontaneously and must be exerted through continuous improvement of the socialist market economy.

Originality/value – The innovation of this paper lies in introducing uncertainty to clarify the logic behind the evolution of economic systems in human society and explaining the typical significance of the socialist market economy and its advantages in accommodating and resolving uncertainty.

Keywords Uncertainty, Economic systems, The socialist market economy

Paper type Translated paper

1. Introducing the question

The economic systems, which are the institutional arrangements at the operational level of human society and economy, have undergone a lengthy process of evolution in tandem with the development of human societies. Generally, the theories of institutional evolution include the understanding of the evolution in the economic system. Institutions or institutional evolution entered the research field of economists relatively early. There is research concerning institutional evolution, whether in institutional economics formed by taking institutions as the object or in economic thoughts containing the institutional study. Among them, Marx's research on changes in the economic institution and the institutional change theory of the new institutional economics are the most representative. When these two are compared, Marx's research deals with the basic economic system of human society. He believes that the social institution has undergone a continuous evolutionary process from low to high and followed a fundamental law, which shows a tendency determined by the contradictory movement between the productive forces and the relations of production.

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In this regard, Marx (2009a) points out, “In the social production of their existence, men inevitably enter into definite relations, which are independent of their will, namely relations of production appropriate to a given stage in the development of their material forces of production.” How was the conflict between productive forces and relations of production resolved? And how does the social form determined by this solution evolve? In this regard, Marx (2009a) further states: “Mankind thus inevitably sets itself only such tasks as it is able to solve, since closer examination will always show that the problem itself arises only when the material conditions for its solution are already present or at least in the course of formation.” If one can say Marx has provided a classical analysis of the evolutionary laws and development of macroscopic socioeconomic institutions, the new institutional economics in studying institutional change is mainly concerned with the mechanisms by which specific institutional changes happen. One explanation, as proposed by the new institutional economists Davis and North, argues that in cases where the potential increases in income resulting from externalities, economies of scale, risk and transaction costs cannot be internalized under the existing institutional structure, innovation in a new institution may provide access to these potential increases in income (Davis and North, 1994), which applies the costs and benefits of neoclassical economics to explain institutional change.

Marx’s explanation of the changes in human socioeconomic institutions by the principles of productivity and relations of production is more objective with a historical significance if compared with the new institutional economics’ explanation of the mechanism of institutional change realization using the cost-benefit scope. Although new institutional economics proposed a microscopic mechanism to explain institutional changes, it is not appropriate for describing the evolution of economic systems. Marx’s principle of productive forces and relations of production is the core proposition of historical materialism that he created, which is irreplaceable in revealing the development laws of human society. With his principle of productive forces and relations of production, Marx profoundly shows how the fundamental economic institution of human societies, marked by the relations of production, evolves with the constantly increasing level of forces of production. However, when the focus turns to the evolution of economic systems in human societies, economic systems based on certain relations of production are directly influenced by the nature of these relations of production and by the development level of the productive forces. Therefore, to explain the evolution of economic systems through the principle of productivity and relations of production, it is necessary to look for more specific mechanisms to understand the relationship between the two truly. Through retracing history, it can be concluded how the level of productivity corresponds to the nature of relations of production and even what the economic system is in correspondence to a certain level of productivity and the nature of relations of production. However, when grounded in reality and looking to the future, the actual situation is far more complex than the theoretical summary. This fact is a reminder of what Lenin said when he quoted Goethe: “Theory, my friend, is grey, but green is the eternal tree of life” (Lenin, 1995).

The most outstanding achievement of China’s reform and opening-up is integrating socialism with the market economy and establishing a socialist market economy. Such an economic system has created a miracle for China’s economy. Why is this economic system successful? There is no ready-made answer to this question in existing theories, and one can only seek its basis in the reality of China’s economy. This issue has been the focal point of Chinese economists during China’s reform of its economic system and has thus become a main line of China’s economic development. It has been attracting more and more attention from the international economic communities. Why did China choose the socialist market economy for its economic reform? Theoretical explanations are based mainly on China’s actual situation. The planned economy in China encountered setbacks because it outpaced the reality of lagging productivity. Therefore, adapting to the level of productivity in the

economic system reform naturally became an orientation. One of the first problems in reforming the planned economy is dealing with the commodity economy. As indicated in the *Decision of the Central Committee of the Communist Party of China on Economic Reform* adopted at the Third Plenary Session of the Twelfth Central Committee of the Party in 1984, the first step in reforming the planned economy is to overcome the traditional concept of opposing the planned economy to the commodity economy. The full development of the commodity economy is an insurmountable stage of socioeconomic development and a necessary condition for China's economy to achieve modernization. Only by fully developing the commodity economy can China truly invigorate the economy, encourage individual enterprises to improve their efficiency, operate flexibly and adapt sensitively to the complex and changing social needs. Administrative measures and directive plans alone are inadequate to achieve these goals [1]. Since the commodity economy is acknowledged as an insurmountable stage of China's socioeconomic development, market adjustment or market economy will inevitably intervene in China's economic operation and become a theme of China's economic system reform. Therefore, how to deal with the relationship between planning and the market? How to further explore the compatibility between socialism and market economy? All these require theoretical answers. In understanding this compatibility, contemporary scholars must begin with a statement by Deng Xiaoping in his 1992 Southern Tour Talks: "Whether there is more planning or more market is not the essential difference between socialism and capitalism. A planned economy is not equal to socialism, and capitalism also has planning; a market economy is not equal to capitalism, and socialism also has markets, and both planning and markets are tools to influence the economy" [2]. His words imply that planning and markets are not inherent features of a specific basic economic system in a particular society. Therefore, planning and markets can be combined perfectly in a socialist system. Since the market economy is also not exclusive to capitalism, there should be no obstacles to its compatibility with socialism.

The economic achievements attained during the establishment of the socialist market economy and the breakthroughs in comprehending planned and market economies have instilled Chinese confidence in the socialist market economy while providing a logical approach to understanding it. The current socialist market economy does not merely represent an option for China's economic system reform. The path of its formation embodies the logic behind institutional innovation. Based on reality, the economic system reform in China breaks the shackles of traditional economic theories. While exploring the path to socialism with Chinese characteristics, China finally established a new economic system, i.e., the socialist market economy, by searching for the laws of socialist construction. This new economic system is neither a stopgap nor a transitional measure. It is a new system with typical significance in the development of human society. To understand this, one must look beyond China's current circumstances and consider the logic behind the evolution of economic systems throughout human social development to seek the necessity of a socialist market economy.

This paper aims to determine the status of the socialist market economy through a logical analysis of the evolution of economic systems in human society. The innovation of this paper lies in introducing uncertainty to clarify the logic behind the evolution of economic systems in human society and explaining the typical significance of the socialist market economy with its advantages in accommodating and resolving uncertainty.

2. Uncertainty: significance as a fundamental scope for analyzing institutional changes

It is not a conceptual game to use uncertainty to analyze the logic behind the evolution of economic systems and find the reason for choosing a socialist market economy. It has a basis

in research methodology and historical laws. Theory and practice are intertwined in their relationship. New practices require new approaches to explain and guide them. When new theories are created to explain and guide new practices, however, such new theories become rigid quickly and lose their power in explaining and guiding the updated practices. At this point, achieving theoretical innovation is on the agenda. How can theoretical innovation be achieved? Among the numerous paths, one path has proven to be more effective in economic thought, namely, to propose a new scope that gives the new theory a broader and higher level of explanatory power. As Engels (2009a) suggested, "Every new aspect of a science involves a revolution in the technical terms of that science." Of course, achieving such a revolution in terminology is not often seen in the history of economic thought. Still, it should be pursued by all those engaged in the study of economics as the goal of their efforts. Adam Smith's efforts to introduce the concepts of division of labor and exchange into the study of economics and to construct a theoretical system of economics in this way originated classical economics. The division of labor, the exchange resulting from it, and the division of labor further determined by the exchange were the starting point for Smith to reveal the causes of the wealth of nations (Smith, 1974a). The vast system of economics constructed by Marx places its core on the theory of surplus value, and the concept of surplus value is undoubtedly a vital revolution in terminology achieved by Marx. With this concept, Marx revealed the laws of the capitalist economic movement and found the basis for the establishment of the socialist economy. As Engels (2009b) mentioned, "Marx also discovered the special law of motion governing the present-day capitalist mode of production, and the bourgeois society that this mode of production has created. The discovery of surplus value suddenly threw light on the problem, in trying to solve which all previous investigations, of both bourgeois economists and socialist critics, had been groping in the dark." In the subsequent development of economics, what can be called a revolution in economics was also accompanied by a revolution in terminology. For instance, introducing marginality into economics started a "marginal revolution." The concept of effective demand, applied by Keynes to macroeconomic analysis, led to the formation of macroeconomics. The idea of transaction costs was applied to the analysis of institutionalism, inducing a revolution in institutional economics and resulting in the emergence of new institutional economics. This path of theoretical innovation in pursuit of a revolution in terminology, shown by the history of economic thought, can also be applied to studying some economic facts. What is the logic behind the evolution of economic systems? The understanding of this question requires innovation in economic theory. When economic theory needs to explain the evolution of economic systems, its starting point is often the existing history and reality of the economic system. Suppose an economic theory is considered successful in revealing the laws of economic system evolution. In that case, its success must be finding a new concept to explain such laws. And when a new economic system emerges and does not take the corresponding form explained by existing theories, these economic theories require innovation. It becomes essential in this innovation process to propose or apply a new scope or terminology. Specifically, when confronting the socialist market economy that has gradually formed in China's economic system reform, it is impossible to find a ready-made basis in history and theory. Establishing a new explanation through a terminological revolution should be a path of theoretical innovation. Here the term "uncertainty" is proposed, which follows the logic behind theoretical innovation on the one hand; on the other hand, "uncertainty" reflects an essential characteristic of human society since its birth, which becomes a problem that human society strives to solve in the process of development and also a logical starting point for institutional construction or system formation.

"Uncertainty" is a problem that accompanies human beings. After the emergence of human beings in evolution, although they have created a miracle, they also have to face issues that did not exist before. The ancestors of human beings can be traced back to anthropoid

apes, which lived only as ordinary members of the Earth's biology. However, after the transformation from apes to humans, the status of human beings changed. On the one hand, humans distanced themselves from nature and were opposed to it; on the other hand, humans became increasingly social within themselves. Such a change stems from the qualitative change in the way humans survive. During the evolutionary process from apes to humans, many qualitative changes have occurred in humans. From a biological perspective, humans have a highly developed brain, complex abstract thinking, language, self-awareness and problem-solving abilities compared with their ancestors, the apes. Sociologically speaking, although they share the same social instincts as the ancient apes, they have "quantitative" and "qualitative" differences. Just as Engels (2009c) noted, "It has already been noted that our simian ancestors were gregarious; it is obviously impossible to seek the derivation of man, the most social of all animals, from non-gregarious immediate ancestors." Fundamentally speaking, these qualitative changes in human beings result from the fact that human beings chose to acquire the means of subsistence through labor. Because of labor, human beings are no longer ordinary animals integrated with nature. Labor separated human beings from nature. First and foremost, labor is a process between humans and nature. During this process, humans initiate, adjust and control the material transformation between humans and nature through their activities. As Engels (2009c) indicated, "Mastery over nature began with the development of the hand, with labor, and widened man's horizon at every new advance. He was continually discovering new, hitherto unknown properties in natural objects. On the other hand, the development of labor necessarily helped to bring the members of society closer together by increasing cases of mutual support and joint activity, and by making clear the advantage of this joint activity to each individual." Labor, the most crucial feature that distinguishes human society from apes, continuously promotes the development of human society. However, it also brings about another change that is less concerned about. Labor endows humans with a unique way of survival, which leads them into an uncertain world.

As for the ape ancestors of humans, they were a species of animals and included in the Earth's ecosystem, integrating with their surroundings. Adapting to the environment was a survival imperative for apes. Despite being subject to natural fluctuations and even disasters, their ability to survive remained relatively certain. Governed by the laws of nature, their survival strategies persisted for hundreds or even thousands of years unless they encountered significant environmental upheaval. In contrast, humans have relied on their own labor or social labor for survival since birth. Thus, they have achieved a transcendence over nature. Such a qualitative change in the meaning of human nature contains some uncertainties, mainly reflected in two aspects: One is caused by the opposition between humans and nature, as humans position themselves against nature. However, their level of productivity fell short, rendering it impossible for them to harness nature, making nature an uncertain object for humans. The other is the uncertainty of internal relations that may be triggered by the formation of social relations among human beings themselves. This possibility could materialize as a result of the level of productivity and the nature of production relations, which exhibit diverse manifestations across various stages of human social development. How to deal with the challenges posed by these uncertainties? This question has become a main line of development of human society. Either continuously improving productivity levels or constantly pursuing institutional changes and renewals can be deemed as options to cope with these uncertainties.

How to understand uncertainty? It is a phenomenon relative to human beings. Since both nature and human society follow specific laws, there seems to be no problem of uncertainty. The opposition between humans and nature creates a society. In this process, humans build connections between nature and humans and relationships within the human community. Such relationships originate uncertainty in the problems of whether humans can understand

nature and handle nature's challenges and whether humans can control the society they create. Therefore, uncertainty is not a problem of nature or society but rather an issue of humans confronting nature and society. The German physicist Heisenberg proposed the uncertainty principle in 1927, proving that there is a problem of indeterminacy of measurement in the world of particles. How is uncertainty related to law? According to Heisenberg, in the strict formation of the law of causality – if we have exact knowledge of the present, we can calculate the future – it is not the conclusion but a premise. It is a matter of principle that one cannot know all present details. This fact means that although laws determine the trajectory of things, human cognitive ability is limited. Therefore, uncertainty is not contradictory to laws, and its existence is a state relative to human ability. Uncertainty enters the perspective of economics to explain the occurrence of risk. Risk in economics usually refers to the uncertainty between the purpose of production and the outcome of labor, mainly referring to two aspects – the uncertainty of benefits and the uncertainty of costs or prices. Thus, what economists want to convey when talking about uncertainty is the concept of risk management, which refers to the phenomenon that economic entities cannot be certain about the future economic situation, especially the distribution range and status of profits and losses. Economists are concerned with uncertainty because uncertainty is ubiquitous in human economic activities, which has given rise to different attitudes toward uncertainty in economics. Represented by neoclassical economics, economists treat uncertainty as an abstraction when constructing the economic system, assuming that there is no uncertainty or that information is complete, thus attributing the ideal economic performance to the operation of a laissez-faire market economy.

In a free market economy, enterprises can maximize profits and consumers can achieve maximum effects. However, this economic theory is inconsistent with empirical evidence and lacks practical significance beyond its internal logical consistency and elegant systematization. In contrast, some heterodox economic theories can align with empirical evidence and unveil the underlying principles of economic functioning in reality. For example, Alchin, a representative of the new institutional economics, argued that profit maximization is meaningless when there is uncertainty. Because of uncertainty, there is no meaningful criterion for selecting decisions that maximize profits. The greater the uncertainty in the world becomes, the more likely it is that gains will be obtained by the lucky individuals who dare to take risks rather than those who are rational, meticulous and pragmatic. Uncertainty has been treated differently in economics as a starting point for different systems of economics. Nevertheless, its significance is not limited to this, as it can be used to explain the logic behind various economic systems implemented by human societies and the necessity of the socialist market economy in China.

3. Coping with and resolving uncertainty: the logical basis for the evolution of economic systems

Uncertainty is a common phenomenon that human beings must confront. In a certain sense, the advancement of human society stems from humankind's responses to challenges of uncertainty. To deal with the uncertainty in nature, people continually strive for progress in productive forces, and when faced with uncertainty in social relations, people construct or innovate particular system. In general, human beings cope with the uncertainty brought by nature and society through developing productive forces and reforming relations of production. Among them, the evolution of economic systems emerging in the development course of human society is a display of clues to cope with and resolve uncertainty through the evolution of the economic systems.

An economic system refers to the sum of the various mechanisms through which an economy (usually a country) formulates and implements economic decisions, also known as

the system of governance structure and operational mode of a country's national economy. As a systematic institutional arrangement, an economic system is always an organic whole composed of various specific economic systems in a certain way of connection. As an institutional arrangement for people to engage in economic activities, the economic system is primarily shown in the organic combination of resource appropriation and resource allocation methods. On these grounds, any economic system consists of three types of systems: the institutional arrangement of resource appropriation, the institutional arrangement of resource allocation and the support system of economic operation. While in terms of the components of the economic system, they include the ownership or property rights system of the means of production; the decision-making and profit structures; and the organizational, motivational, information and supervisory structures. From this perspective, the economic system is a comparatively complex system that can be analyzed from various perspectives. Economics has different perspectives in classifying economic systems. Based on how resources are allocated, the economic systems are divided into a self-sufficient economy under the pre-capitalist system, a market economy under the capitalist system and a planned economy practiced by the socialist system. The self-sufficient economy that occurs within household production is not significantly typical. It rarely involves commodity exchange, and although there is specific planning and decision-making, it is not apparent but relies more on custom or convention. This economy was the case in ancient agrarian societies and a peasant economy where families were self-sufficient, with men engaging in farming and women specializing in weaving. The first typical economic system of human society with significance is the market economy formed in the capitalist society and based on the developed commodity economy. The market economy is an economic system that utilizes the mechanism of market price, also known as the "invisible hand", to allocate resources. It sets its foundation on a developed commodity economy. In the commodity economy, the essential features lie in commodity relations and commodity exchange. Commodity exchange needs the premise of clear property rights. Every commodity owner makes economic decisions according to his independent property rights, deciding how to deal with and use his resources according to price signals. The price mechanism is like an "invisible hand" guiding self-interest-oriented individuals to optimize resource allocation according to price signals, thereby maximizing individual and collective interests. Western mainstream economics regards this system as the most efficient one, devoting every effort to constructing an economic system with the free market mechanism as the object of study. The planned economy is an economic system where the government's directive plans serve as the primary means of allocating resources. Based on the public ownership of the means of production, the government decides how to allocate resources through centralized decision-making and implements the decision by directive planning, which enables the state to control the whole process of production, distribution, exchange and consumption of products. The planned economy is an economic system established by the state power after establishing the basic socialist economic system. Its establishment has created a typical economic system for human society, thus forming a historical chain of economic systems consisting of self-sufficient, market and planned economy. The above is only a historical overview of economic systems in the development of human society. Why do economic systems undergo such an evolution in human social development? In the past, scholars' explanations using the principles of productive forces and relations of production, the basic viewpoints of Marx's historical materialism, were of methodological significance. However, in further understanding how productivity and relations of production determine the evolution of the economic systems, or understanding the mechanism of the evolution of the economic systems determined by productivity and relations of production, the introduction of "uncertainty" can depict the trajectory of the economic system evolutions and may be extended to explain why the socialist market economy is typical with significance.

The mechanism of economic system evolution can be understood as a set of principles behind constantly coping with and resolving uncertainties. The two types of uncertainties that humans face, generated by nature and society, are imbalanced, or in other words, they show different importance at different stages of human social development. In history, when the productivity levels in human society were still relatively low, the uncertainty faced by human beings mainly came from the external nature. Because when human beings no longer obtained the means of subsistence directly from nature but through their labor, they would inevitably be constrained by the production capacity. Therefore, in the case of relatively low production capacity, there was great uncertainty about whether humans could obtain the means of subsistence or get sufficient means to survive. To this end, the primary choice available to human beings was to increase their productive capacity. Replacing the previous fishing and hunting activities with agricultural production was the first step towards coping with external uncertainties by improving productivity. To some extent, improving labor productivity reduces the uncertainty brought to human beings by nature. Therefore, agriculture was the first form of human control over nature. After the emergence of agriculture, human beings no longer obtained the means of subsistence directly from nature as in the primitive era but actively produced the means of subsistence through the particular labor of man. This way of dealing with and resolving uncertainty by understanding natural laws requires a transformation in organizing production. The economic system of collective labor and equal distribution in primitive societies proved inadequate for this new mode of production, and family-based self-sufficient production was better suited to this mode of production due to the limited need for exchange. People were only required to contend with uncertainty arising from natural environmental factors rather than social ones. In the history of agricultural development, a self-sufficient mode of production has proven to be more resilient in the face of natural uncertainties. While it may seem paradoxical that individual households have limited power and that organizing larger collectives for production would be a better response, this can be explained by the fact that at lower levels of productivity, self-sufficiency is the most efficient approach. From the logic behind raising productivity levels in response to natural uncertainty, this subsistence mode of production or economic system is the most efficient option for coping with the uncertainty of nature.

With the accumulation and improvement of productivity, human beings have been constantly enhancing their ability to cope with the uncertainty of nature. Especially after the First Industrial Revolution (1760–1840), countries that took the lead in industrialization achieved a qualitative change in productivity. With this new progress in productivity, humans became increasingly dominant over nature and the ability to harness nature dramatically improved. Although humans were not completely free from the influence of uncertainty from nature, such uncertainty has significantly reduced. Correspondingly, another uncertainty confronting human beings has been growing in the capitalist society established after the First Industrial Revolution. It has become the most significant uncertainty they face. This uncertainty was generated and exacerbated by replacing the natural economy with the commodity economy. The simple form of commodity economy appeared at the end of the Primitive Society with the emergence of the social division of labor. In the long ancient society, it developed slowly and never became the dominant economic form of human society. After entering capitalist society, the commodity economy has become popularized and dominant. The universalization and dominance of the commodity economy have brought about a qualitative change in the operation of the social economy. People produce not to satisfy their daily needs anymore but to sell their products to others for value. Such an economic operation mode gives new forms of uncertainty within the society and enhances the uncertainty ever since. However, this uncertainty brings not only risks but also certain economic functions. The uncertainty inherent in the commodity economy activates people's incentives to engage in economic activity on the one hand; on the other hand, it

creates risks for commodity producers. Moreover, the two are interconnected, as commodity exchange brings risks to producers and generates pressure, which in turn activates people's motivation to engage in economic activities in the form of competition. The greater the productive capacity the producers have, the higher market risks they face, and they must further improve their competitiveness to reduce their risks. The capitalist society has achieved a leap in productivity by popularizing the commodity economy, which contains enormous dynamics. As Marx suggested, "The bourgeoisie, during its rule of scarce one hundred years, has created more massive and more colossal productive forces than have all preceding generations together" (Marx and Engels, 2009). What is the concealed secret behind this statement? To reveal it, one needs to understand the mystery of commodity fetishism. Marx (2009b) once indicated, "Whence, then, arises the enigmatical character of the product of labor, so soon as it assumes the form of commodities?" and "A commodity is, therefore, a mysterious thing, simply because in it the social character of men's labor appears to them as an objective character stamped upon the product of that labor; because the relation of the producers to the sum total of their own labor is presented to them as a social relation, existing not between themselves, but between the products of their labor." In this way, commodities under the conditions of the commodity economy have been alienated, resulting in the fetishism of commodities. With the emergence of currency, commodity fetishism induces the fetishism of money, which injects a powerful impetus for people to engage in economic activities because this new mechanism of commodity exchange has changed the goals people pursue. "The repetition or renewal of the act of selling in order to buy is kept within bounds by the very object it aims at, namely, consumption or the satisfaction of definite wants, an aim that lies altogether outside the sphere of circulation. But when we buy in order to sell, we, on the contrary, begin and end with the same thing, money, exchange-value; and thereby the movement becomes interminable" (Marx, 2009c). This dynamic mechanism embedded in the commodity economy stems not only from the changed goals in people's pursuit but also from the inherent uncertainty of the commodity economy. Commodity producers have independent property rights and decision-making capacities under the conditions of a commodity economy. What to produce, how much to produce and for whom to produce are all up to the commodity producers. However, they cannot decide whether the products they make can be sold as a commodity, as Marx (2009b) noted: "The leap taken by value from the body of the commodity, into the body of the gold, is, as I have elsewhere called it, the salto mortale of the commodity. If it falls short, then, although the commodity itself is not harmed, its owner decidedly is". This uncertainty in commodity production and commodity exchange, influenced by the fetishism of commodities and money, has nurtured enormous productive potential, which an institution or mechanism is needed to stimulate. A market economy is an institutional arrangement that can boost the productive potential hidden under this uncertainty. Adam Smith is the first economist to discuss the huge incentive effect of the market mechanism systematically. In a commodity economy, every commodity producer is a profit maximizer. Although they need to be recognized by others to achieve their interests, they are under the guidance of the invisible hand of the price mechanism and will try to accomplish a purpose that they did not intend to achieve, that is, "By pursuing his own interest he frequently promotes that of society more effectually than when he really intends to promote it" (Smith, 1974b). This statement means that the market economy provides a mechanism that effectively stimulates the enormous production potential embedded in the endogenous uncertainty of the commodity economy. However, this mechanism mainly releases the dynamics formed by micro-market agents based on the uncertainty of commodity exchange. The release of these dynamics is conducive to promoting the development of production and improving the level of productivity. Yet it accumulates the risks brought by the uncertainty in the macro realm, which is the unavoidability of the economic crisis that Marx discovered when revealing the laws of the

capitalist economic operation. The uncertainty endogenous to the commodity economy became polarized under the capitalist mode of production. Capitalist private ownership and the infinite desire to pursue surplus value have made capitalists respond to uncertainty by adopting discordant ways to minimize the risks they may encounter, such as extracting more surplus value from workers and accelerating the increase in the organic composition of capital to employ fewer workers, which eventually lead to a capitalist economic crisis with a relative surplus of workers, capital and products. This is the fate of the capitalist system and another manifestation of the failure of the market economy to respond effectively to the uncertainties in the macro realm, and perhaps this is the logical basis for the need to replace the market economy with a new one.

The market economy has its historical status and logical basis as an economic system built on the foundation of a developed commodity economy to accommodate the uncertainty in the micro realm inherent in the commodity economy. However, its inability to solve the economic crisis caused by the uncertainty of the commodity economy, or the economic crisis it endogenously triggered, dictated the need for a more efficient economic system to replace it. The planned economy was established with the mission of solving the failure of the market economy.

The planned economy in Marx's design refers to "carrying on their work with the means of production in common, in which the labor power of all the different individuals is consciously applied as the combined labor power of the community" (Marx, 2009d), which indicates that under the planned economic system, individual and social labor become identical and the uncertainty of the commodity economy disappears as a result. In a planned economy, the state organizes production and directly coordinates individual and social labor, thereby obviating the necessity for value realization. Therefore, producers within the state do not have to face uncertainty or bear any production risks. The most significant advantage of a planned economy in resolving uncertainty is its ability to eliminate economic crises. Centralized decision-making, economic planning and administrative orders can prevent overproduction, which is the logical basis for selecting the planned economy due to its advantages in resolving uncertainty within economic operations. However, in resolving uncertainty, the planned economy dissipates the inherent function of uncertainty in stimulating people to engage in economic activities. The state strictly regulates the entire process of economic operation, from plan formulation to execution and product distribution, which operates the economy explicitly from the beginning to the end, even with written documents. Therefore, the whole process of economic operation, both in the micro and macro realms, is free from uncertainty. Of course, problems or setbacks may occur in implementing the plans, caused mainly by external risks. The planned economy provides a set of mechanisms to address intrinsic uncertainty but fails to resolve the risks arising from extrinsic uncertainty. Therefore, the planned economy, which has been established to address the economic crisis caused by the operation of the capitalist economy, is conducive to solving the problem of intrinsic uncertainty in the market economy. But at the same time, it also dissipates the inherent function of uncertainty in stimulating people to engage in economic activities. As a result, the accumulated problems in the operation of the planned economy mainly present themselves as insufficient vitality and low efficiency. This is the fundamental reason why almost all socialist countries had to reform their planned economy after a long-term implementation. In other words, there is an objective basis for the planned economy to establish a new system to overcome the contradictions and crises of capitalist economic operation. The advantages of the planned economy in the implementation process, such as the concentration of power to handle major events, effective response to emergencies, and suppression of income distribution disparities, are sufficient to prove that it is also a typical economic system. However, some stringent prerequisites for implementing the planned economy, such as the highly developed productive forces and a significant increase

in people's consciousness, are not yet available in socialist countries. Therefore, the realistic basis for the planned economic system is not sufficient. In terms of coping with and resolving uncertainty, the system has to be reformed due to the lack of vitality and low efficiency caused by the absence of incentive mechanisms since the system dissipates the inherent driving mechanism of uncertainty that stimulates people to engage in economic activities.

The evolution of several major economic systems in human society, from a self-sufficient natural economy to a market economy and then to a planned economy, has been reflected in the choices made to address and cope with uncertainty in different aspects or dimensions. However, today's reality has generated new questions, the most prominent of which is the reform of China's economic system and the socialist market economy founded on this basis, which has gradually been established as a new economic system with a typical significance. Can the socialist market economy also be analyzed within the evolutionary logic behind economic systems to cope with and resolve uncertainty? The answer to this question could provide a new perspective for our understanding of the socialist market economy.

4. Adapting to uncertainty: the logical basis for the choice of a socialist market economy

The socialist market economy is a new economic system that China has explored after the reform and opening-up. According to traditional economic theory, this economic system is only transitional, and eventually, it will either return to a planned economy or move towards a market economy. Since traditional economic theories, especially Western classical and neoclassical economics, insist that the market economy must be based on private ownership, the market economy cannot combine or integrate with socialism due to the foundation of the socialist economic system being public ownership of the means of production.

After the reform and opening-up, China's economic system reform has been striving to explore the combination of socialism and a market economy, and many scholars believe that such a combination is feasible (Mei and Xiang, 2010). The underlying rationale is that China remains in the primary stage of socialism and it would be difficult to surpass the phase of developing a commodity-based economy. Furthermore, diverse forms of ownership coexist, and the division of labor remains an important means for developing productive forces in China, which provides a realistic basis for commodity production and exchange. Since the commodity economy is endogenous in the primary stage of socialism, market adjustment or market economy can naturally become an integral part of the operation of the socialist economy, and the combination of socialism and market economy has a realistic basis. Although such an explanation is practical, it has not been understood in the historical evolution of the economic system, making it challenging to discover the historical inevitability of the socialist market economy.

In coping with and resolving uncertainty, the economic systems of human society have evolved from a self-sufficient economy to a market economy and then to a planned economy. Throughout this progression, these economic systems have proved that they can only handle a particular uncertainty. The main goal of the self-sufficient economy was to cope with the external uncertainties human beings face. Although this problem was far from being solved, it still provided more guarantees than the fishing and hunting life in the Primitive Society. The market economy based on a developed commodity economy endogenizes a new uncertainty from the commodity economy, and this new uncertainty contains an incentive to stimulate people to engage in economic activities at the micro level and may cause economic crises of economic imbalances at the macro level. The market economy has a mechanism to unleash people's incentives to engage in economic activities, just as classical and neoclassical economics have always boosted that laissez-faire market adjustment can lead market entities, which pursue their own interests, to maximize the overall social welfare. The market

economy, however, is incapable of addressing macroeconomic imbalances, and its functioning inevitably triggers economic crises. This deficiency becomes the logical starting point for the formation of the planned economy and is also the issue that the planned economy system strives to address.

The planned economy did provide a solution to the uncertainty of economic operation, but it also eliminated the motivational mechanism inherent in uncertainties driving economic entities to engage in economic activities, which resulted in significant impacts on the national economy. The logic behind the evolution of economic systems under uncertainty has posed a new question, namely, whether a new economic system can be established to better cope with the problem of uncertainty, not only to unleash the motivation inherent in uncertainties to engage in economic activities but also to reduce the risks of macroeconomic operations, mainly economic crises, that uncertainty may trigger. The socialist market economy is a new system explored for this purpose.

Actually, how to overcome economic crises is not only a problem that socialism needs to solve instead of capitalism, but capitalism is also striving to find ways to solve the economic crisis. After the outbreak of the Great Depression of the capitalist system in the 1930s, the governments and economists of capitalist countries also explored ways to overcome the economic crisis, and the state intervention implemented for this purpose was the result of such exploration. However, there are significant differences between the socialist market economy explored in China's reform and the state intervention implemented by capitalist countries. A fundamental difference is that the implementation of state intervention by the capitalist countries lacks a realistic basis or that it cannot be inherently integrated with the economic base of capitalist private ownership, while the state regulation and control to solve the inconsistency of economic operation embodied in the socialist market economy has a solid economic foundation, i.e., the dominant position of the public ownership economy provides practical support for the state's macro-regulation of the socialist market economy and makes it endogenous. What are the unique mechanisms of the socialist market economy in adapting to uncertainty, and what effects have they shown? This is the logical basis for choosing the socialist market economy.

The advantages of the socialist market economy in adapting to uncertainty are not based on a certain theoretical basis but rather stem entirely from practical exploration. Problem orientation is one of the mainstays in establishing a socialist market economy, and it is also an important path of institutional innovation. After founding the new administration, the People's Republic of China established a highly centralized planned economy in imitation of the Soviet Union, which had its political and practical basis at the time. The regime established by the people under the leadership of the Communist Party of China, with Marxism as the guiding ideology, necessarily chose to follow the path of socialism. In the meantime, the reality of China's long-term division and fragmentation necessitated an urgent need for a centralized and unified system to stabilize the society and promote economic development. The goal of the highly centralized planned economy was to change China's economic backwardness as soon as possible and to achieve catch-up with developed countries through state-led development across all levels and sectors of the national economy, from micro to macro.

As mentioned above, the planned economic system offers an effective mechanism for resolving uncertainty. However, when uncertainty is resolved, the motivational mechanism embedded in uncertainty that spurs people to engage in economic activities also disappears. Although some alternative mechanisms have been established, their effects are neither significant nor sustainable. Thus, in terms of managing uncertainty, a planned economy only mitigates the uncertain risks while eliminating its inherent function to stimulate individuals to participate in economic activities. Such a defect caused the inefficiency of China's national economy and the lack of vitality of micro-economic entities. Therefore, the primary goal of

implementing economic system reform is to stimulate people's motivation for labor and enterprises' enthusiasm for production.

How to motivate people and enterprises? A simple approach was adopted in China. For instance, reforming the rural economic system involved contracting communal land to farmers. This contract responsibility system enabled farmers to bear land management risks based on the land property rights adjustment, thus greatly mobilizing farmers' enthusiasm in production and operation. With this sole change, China's agricultural production has achieved tremendous success and solved the long-standing food problem that plagued China in a short period. With the continuing expansion and deepening of reform and opening-up, commodity production and exchange have gradually become the most dominant economic relation in the operation of the social economy, and uncertainty has thus become a problem that China has to face.

On this premise, market adjustment played a partial role in resource allocation, activating people's motivation to engage in economic activities and thus injecting vitality into the Chinese economy. Just envision the immense production capacity that can be unleashed when the labor enthusiasm of every individual is motivated in a large country with a population exceeding one billion. To comprehend the miracle of China's economic growth following its reform and opening-up, one need only observe how industriously Chinese work.

China's sustained high-speed economic growth following the reform and opening-up was closely linked to the development of a commodity economy and introduction of market adjustment, which maximized Chinese people's enthusiasm in economic activities. However, this is only one aspect, and another aspect cannot be ignored – a stable economy and society by upholding the basic socialist economy may solve the uncertainties in macroeconomic operations. Perhaps the adoption of the basic socialist economy in the economic system reform was not intended to mitigate the risks posed by potential uncertainties in macroeconomic operations. Yet, it effectively fulfilled this function and even surpassed capitalist state intervention to some extent, owing to the basic socialist economy, namely, the public ownership of the means of production, especially the state-owned economy, not only provides the basis for state regulation of the economy within the socialist market economy but also effectively ensures the realization of state planning and reduces the costs caused by incoordination while integrating socialism and the market economy as an important intermediary for state regulation of the economy. This advantage indeed belongs to the socialist feature of the socialist market economy.

Perhaps the criteria for assessing the efficiency of an economic system should be revised. The evaluation should prioritize the efficiency of the economic system as a whole rather than that of individual components. It is unnecessary for each component to maximize its efficiency, as sacrificing some efficiency in certain factors may be more significant for improving the overall system's efficiency. Although it is not a logical necessity of traditional economic theory, the socialist market economy, as a choice based on China's history and reality, has responded well to uncertainties in the socialist commodity economy. It not only stimulates the endogenous motivation of people in the commodity economy to engage in economic activities but also effectively mitigates the potential uncertain risks of the operation of the commodity economy at the macro level. From this perspective, adopting a socialist market economy is intrinsically logical.

5. Conclusion

Among the various interpretations of the socialist market economy, a core issue is involved, namely, can socialism and market economy be combined? As China's economic success under a socialist market economy attracts increasing attention, another question arises. Is it also a typical economic system? In this respect, it is evident that the existing economic theories do

not provide a direct answer. This paper presents an analysis of uncertainty and the functions performed by different economic systems in managing and resolving it, thereby explaining the evolutionary rationale behind the economic system evolution. Building on this foundation, the author extends the rationale and finds evidence for the superiority of a socialist market economy in adapting to uncertainty. Specifically:

Firstly, the socialist market economy empowers the market to play a decisive role in resource allocation, which serves as the foundation for activating individuals' motivation to engage in economic activities. The market mechanism can incentivize and pressure people into participating in economic activities, thereby transforming economic uncertainty into a driving force.

Secondly, the socialist market economy adheres to the basic socialist economic system, which is the basis for the socialist market economy to stabilize the economy and society or to address the risk of economic uncertainty that may trigger macro-level inconsistencies in economic operations. The dominant status of public ownership of the means of production in the socialist basic economic system is the foundation of national economic planning under the planned economy, while it becomes the basis for macroeconomic regulation and control by the state under the socialist market economy. This not only solves the problem of lacking a foundation for capitalist state intervention but also provides an essential intermediary for the country's macroeconomic regulation and control, providing support for implementing national plans and bearing the necessary costs for resolving the incompatibility between socialism and the market economy.

Thirdly, the advantages of a socialist market economy in adapting to economic uncertainties do not arise spontaneously and must be exerted through continuous improvement of the socialist market economy. Therefore, deepening economic reform and improving the socialist market economy is a long-term undertaking. If the socialist market economy is a historical choice, then constantly improving the socialist market economy to adapt to economic uncertainty is an ongoing task that must be accomplished.

Notes

1. Decision of the Central Committee of the Communist Party of China on Economic Reform, china.com.cn, April 12, 2002.
2. Deng Xiaoping's Southern Tour Talks in 1992, www.qsttheory.cn, January 6, 2012.

References

- Davis, L.E. and North, D.C. (1994), "A theory of institutional change: concepts and causes", in Chen, X. (Ed.), *Caichanquanli Yu Zhidubianqian—Chanquan Xuepai Yu Xinzhidujingji Xuepai Yiwenti [Property Rights and Institutional Changes—A Translation of Essays of the Property-Right Economics and Neo-Institutional School]*, (Translated by Liu, S.Y., et al.), Shanghai Joint Publishing Company, Shanghai People's Publishing House, Shanghai, pp. 266-294.
- Engels, F. (2009a), "Preface to the English edition of 'capital'", in Central Compilation and Translation Bureau (Ed.), *Marx and Engels Collected Works: Volume V*, (Chinese Edition Translated by Central Compilation and Translation Bureau), People's Publishing House, Beijing, pp. 31-35.
- Engels, F. (2009b), "Speech at the grave of Karl Marx", in Central Compilation and Translation Bureau (Ed.), *Marx and Engels Collected Works: Volume III*, (Chinese Edition Translated by Central Compilation and Translation Bureau), People's Publishing House, Beijing, pp. 601-603.
- Engels, F. (2009c), "The Part Played by Labour in the transition from ape to man", in Central Compilation and Translation Bureau (Ed.), *Marx and Engels Collected Works: Volume VIII*, (Chinese Edition Translated by Central Compilation and Translation Bureau), People's Publishing House, Beijing, pp. 550-563.

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- Lenin (1995), "Letters on tactics", in Central Compilation and Translation Bureau (Ed.), *Lenin Collected Works: Volume III*, (Chinese Edition Translated by Central Compilation and Translation Bureau), People's Publishing House, Beijing, pp. 24-36.
- Marx, K. (2009a), "Preface to A Contribution to the critique of political economy", in Central Compilation and Translation Bureau (Ed.), *Marx and Engels Collected Works: Volume II*, (Chinese Edition Translated by Central Compilation and Translation Bureau), People's Publishing House, Beijing, pp. 588-594.
- Marx, K. (2009b), "Commodities", in Central Compilation and Translation Bureau (Ed.), *Marx and Engels Collected Works: Volume V*, (Chinese Edition Translated by Central Compilation and Translation Bureau), People's Publishing House, Beijing, pp. 47-102.
- Marx, K. (2009c), "Money, or the circulation of commodities", in Central Compilation and Translation Bureau (Ed.), *Marx and Engels Collected Works: Volume V*, (Chinese Edition Translated by Central Compilation and Translation Bureau), People's Publishing House, Beijing, pp. 114-170.
- Marx, K. (2009d), "The transformation of money into capital", in Central Compilation and Translation Bureau (Ed.), *Marx and Engels Collected Works: Volume V*, (Chinese Edition Translated by Central Compilation and Translation Bureau), People's Publishing House, Beijing, pp. 171-205.
- Marx, K. and Engels, F. (2009), "Communist manifesto", in Central Compilation and Translation Bureau (Ed.), *Marx and Engels Collected Works: Volume II*, (Chinese Translation Edition Translated by Central Compilation and Translation Bureau), People's Publishing House, Beijing, pp. 3-67.
- Mei, R.Z. and Xiang, H. (2010), "Guanyu shichangjingji yu shehuizhuyi jibenzhidu xiangjiehe wenti yanjiu zongshu [research survey on the combination of market economy and the basic socialist system]", *Xuexiao Dangjian Yu Sixiang Jiaoyu [The Party Building and Ideological Education in Schools]*, Vol. 28 No. 3, pp. 7-11.
- Smith, A. (1974a), "Division of labor", (Chinese edition translated by Guo, D. L. and Wang, Y. N.), *An Inquiry into the Nature and Causes of the Wealth of Nations: Volume I*, The Commercial Press, Beijing, pp. 5-12.
- Smith, A. (1974b), "Of restraints upon the importation from foreign countries of such goods as can be produced at home", (Chinese edition translated by Guo, D. L. and Wang, Y. N.), in *An Inquiry into the Nature and Causes of the Wealth of Nations: Volume II*, The Commercial Press, Beijing, pp. 24-43.

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