Abstract—In the study of Marx’s capital accumulation theory, some important scholars, such as Luxemburg, Immanuel Wallerstein, David Harvey, Samir Amin, mainly from the geographical dimension to explore the spatial limits of capital accumulation. Actually, Marx also revealed the speed limit of capital accumulation, after a period of high-speed accumulation of capital, capital accumulation will inevitably lead to crisis and stagnation which will lead to the historical trend of the collapse of capitalism.

Keywords—Capital accumulation speed, Capital accumulation crisis, Capital accumulation stagnation

I. RESEARCH BACKGROUND

By analyzing the frequency of words in “Das Kapital”, we found that the concepts related to speed appeared 366 times. Marx used the concepts of “accelerating production”, “accelerating commodity circulation”, “accelerating capital concentration”, “accelerating capital accumulation”, “production stagnation”, “commodity circulation stagnation” and “market stagnation” to describe the irregularity of capital accumulation speed. But so far, some important scholars have obviously ignored the discussion of Marx’s Thought on the speed of capital accumulation.

In fact, since the global economic crisis broke out in 2007-2008, under the background of the world economy falling into general recession and stagnation, the speed of capital accumulation in western countries has undoubtedly become one of the focuses of the current era. Contemporary influential scholars such as Immanuel Wallerstein and Randall Collins discussed the possibility of capitalist collapse from the perspective of capital accumulation crisis. In the current complex international political and economic situation, to answer this theoretical problem, we need to deeply explore Marx’s thought of the speed of capital accumulation. Marx believes that under the capitalist private ownership, capital accumulation will inevitably experience from acceleration to stagnation. Therefore, the ultimate fate of capitalism inevitably lead to collapse due to long-term stagnation of capital accumulation.

II. ACCELERATION, CRISIS, STAGNATION AND REVOLUTION: THE CORE OF MARX’S THOUGHT OF CAPITAL ACCUMULATION SPEED

In Das Kapital, Marx reveals the general law of the speed of capital accumulation, that is, the life of industry is constantly changing according to the order of the periods of activity, prosperity, overproduction, crisis and stagnation. Western economist attributes the crisis and stagnation of capital accumulation to the normal phenomena in the economic cycle. They believe that through market regulation, expanding aggregate demand and entrepreneurial innovation, capital accumulation can get rid of stagnation and return to the accelerated track. Fundamentally different from this, Marx believed that the historical trend of stagnant capital accumulation was not the return of capital to the track of accelerating capital accumulation, but the proletarian revolution that ultimately led to the elimination of private ownership. In other words, capital accumulation from acceleration, crisis, stagnation to the revolution of capitalist ownership is an irreversible linear qualitative change process. Therefore, the highlight of revolutionary dimension is the fundamental feature of Marx’s thought of capital accumulation speed which is different from various western economic cycle theories.

A. Acceleration of Capital Accumulation

Marx believes that capital accumulation is embodied in endless money making. In the sense of typology, Marx divided capital accumulation into circular accumulation movement of industrial capital, commercial capital and financial capital.

1) Acceleration of industrial capital accumulation

According to Marx, there are two important reasons for the acceleration of industrial capital accumulation: one is the capitalists’ endless greed for profits; the other is the compulsory regulation of social necessary labor time on the acceleration of industrial capital production. Marx pointed out that the value of goods is determined by the time of social necessary labor, and labor is only calculated within the limit of social necessary time. Social necessary labor time is a kind of forced production speed, which is like a sword of Damocles hanging on the capitalist’s head, driving him to speed up the pace of production, thus accelerating the accumulation of
industrial capital. According to Marx, there are two main means to accelerate industrial capital accumulation: labor division and large-scale machine production.

First, in the era of Adam Smith’s workshop handicraft industry, labor division is an important means to accelerate the accumulation of industrial capital. Division of labor divides a complete production process into more links, so that individual workers repeat local operations, thus speeding up the pace of production. The division of labor has been further strengthened in the era of machine industry. Since the 20th century, the Ford manufacturing plant pursuing assembly line production and the Taylor manufacturing plant pursuing scientific time management have broken down the production process even more severely.

Second, in the era of David Ricardo’s machine industry, machine production has become the main lever to accelerate the accumulation of industrial capital. The decomposition of labor division to production process is limited, which determines its acceleration space is also limited. Therefore, the role of machines is to break through the acceleration limit of labor division.

2) Acceleration of Commercial Capital Accumulation

Accelerating the accumulation of commercial capital is a special functional department in charge of commodity circulation, which is separated from industrial capital. Its core function is to accelerate the circulation of commodities and realize the thrilling leap of commodities from G to G'. According to Marx, means of transportation and credit are important means to accelerate the accumulation of commercial capital.

First, rely on means of transport to accelerate the circulation of goods. Marx summed up the logic of accelerating commercial capital as “eliminating space with time”. Marx pointed out that using time to eliminate space means to minimize the time it takes to move goods from one place to another.

Second, rely on credit tools to accelerate commodity consumption. This is mainly reflected in the fact that banks can speed up the circulation of commodities by inventing various financial credit instruments and lending money to consumers who have no purchasing power. In the late capitalist society, consumer credit is mainly divided into instalments and subprime loans.

3) Acceleration of financial capital accumulation

Marx divided financial capital into three types: loan capital, stock capital and speculative capital. The flow of monetary capital itself can’t bring value-added, its value-added can only rely on industrial capital. We can see that with the development of capitalist credit system, part of monetary capital has completely separated from the field of production and become the speculative capital that only pursues profits. As speculative capital appreciation does not have the physical basis of industrial capital, its price appreciation in the form of securities assets is a false bubble. Historical experience shows that speculative capital is extremely unstable, and the collapse of the financial bubble will accelerate the outbreak of the economic crisis.

First, accelerate the accumulation of loan capital. Marx believes that the accumulation of industrial capital depends on the funds provided by banks. Therefore, the accelerated accumulation of industrial capital will inevitably promote the accelerated accumulation of loan capital. In Marx’s view, the essence of the accumulation of loan capital is a deduction of the surplus value extracted by the capitalists engaged in reproduction. Therefore, the accumulation of loan capital depends on the sacrifice of both industrial and commercial capitalists.

Second, accelerate the accumulation of share capital. Share capital is a kind of capital form that enterprises combine the scattered capital into group capital by issuing shares. Marx pointed out that if we have to wait for the accumulation of some individual capital to increase to the extent that we can build railways, we may not have railways in the world until today. But it was done in a flash by focusing on the stock companies.

Third, accelerate the accumulation of speculative capital. Marx believes that there is a wide range of speculative capital separated from the real economy. In Marx’s view, under the downward trend of general profit margins, it is bound to force a large number of real capital flows to the financial sector, and attempt to rely on speculation for capital accumulation, thus spawning huge financial bubbles. Marx believed that the capitalist financial system accelerated the outbreak of economic crisis.

B. The Crisis of Capital Accumulation

The root of economic crisis lies in the basic contradiction of capitalism, that is, the contradiction between socialized production and capitalist private ownership of means of production. Marx believed that the accelerated accumulation of capital led to the output of huge amount of goods, but under the private ownership, workers can only get the minimum wage to maintain their lives. This led to the proletariat’s lack of spending power. According to Marx, productivity grows in geometric progression, while market only expands in arithmetic progression at most. After a period of latent, the basic contradiction of capitalism eventually leads to the economic crisis of insufficient consumption and relative overproduction.

In order to deal with the crisis caused by relative overproduction, early capitalism often adopted the method of destroying a large number of commodities, trying to re balance the speed of production and consumption. In the period of monopoly capitalism, in order to solve the relative overproduction, capital must rely on the power of the state to expand geographically, establish colonies all over the world, and constantly find new consumer markets. However, once the world’s geographical space has been developed and utilized by capital, the basic contradictions of capitalism will be exposed in a more violent way. Marx pointed out that the reason why the economic crisis is more and more frequent and intense is that with the increase of the total amount of products, that is, with the growth of the need to expand the market, the world market has become increasingly narrow. In addition, since the early capitalist powers had already divided the World colonies,
the later capitalist countries would inevitably challenge the former colonial system and lead to the World War of re-competing for and redistributing the colonies. As Luxemburg said, the rise of militarism is a direct consequence of the crisis of capital accumulation.

C. Stagnation of Capital Accumulation

The stagnation of capital accumulation caused by the economic crisis has two manifestations: The first is the stagnation of economic activities. That is to say, the trading stops, the market overflows, the products are unsalable, the money is extremely tight, the credit stops, and the factories are shut down.

The second is the stagnation of national economic growth. That is to say, capitalism cannot realize the expansion of reproduction, and the national economy is in the state of zero or negative growth.

As capitalism is a dynamic process of capital accumulation, the stagnation of capital accumulation will have a devastating impact on the capitalist mode of production. Capital accumulation is a dynamic process. When the capital cycle ends, the value of capital disappears and the whole capitalist system collapses.

Marx not only revealed the direct cause of capital stagnation from the perspective of economic crisis, but also revealed the deep cause of capital accumulation stagnation from the general law of the declining capital profit rate. The proposition of declining capital profit was first put forward by Adam Smith and perfected by David Ricardo. Marx’s theory of surplus value scientifically reveals that the reason for the declining trend of capital profit rate is the continuous improvement of the organic composition of capital. According to Marx, the law of declining profit rate reveals that the real limit of capitalist production is capital itself. Thus it can be seen that even if there is no economic crisis in the short term, the speed of capital accumulation will stagnate in the long-term trend of capital profit rate decline.

D. The Revolution of Capitalist Ownership

Marx believed that the result of stagnant capital accumulation was the concentration of means of production and the socialization of labor, which was incompatible with their capitalist shell. This shell is about to blow up. The death knell of capitalist private ownership is about to ring. The dispossessed will be deprived. Marx pointed out that the bourgeoisie not only forged the weapon to kill itself, but also produced the modern workers, the proletariat, who will use this weapon. The historical mission of this class is to overthrow the capitalist mode of production and finally eliminate the class. Communists can sum up their theory in one sentence: to eliminate private ownership. Marx believed that the social possession of means of production could not only solve the problems of blindness, confusion and anarchy of capital accumulation caused by private ownership, but also promote the sustained and balanced development of productivity.

With the occupation of productive forces by the society, this sociality will be fully consciously used by the producers, and become the most powerful lever of production itself from the cause of chaos and periodic collapse. Therefore, through the revolution of capitalist ownership, human beings have really overcome the blind power of capital accumulation. For the first time, human beings can consciously and systematically control the speed of social and economic development. Engels commented on the role of public ownership of means of production in the progress of human civilization: “only from this time on, can people fully consciously create their own history; and only from this time on, the social reasons that people make it work are mostly and more and more achieve their expected results. This is a leap from the realm of necessity to the realm of freedom.”

In fact, Marx also made a remarkable empirical analysis of the proletarian revolution caused by the crisis and stagnation of capital accumulation by studying the French Revolution in 1848. Marx pointed out that the economic crisis and the resulting economic stagnation were the direct causes of the February Revolution. Marx pointed out that the occurrence of two world economic events accelerated the outbreak of general discontent and made anger develop into uprising. Before the outbreak of the February Revolution, private credit had been paralyzed, circulation had been impeded, and production had stagnated. The February Revolution is a bourgeois revolution in which industrial capitalist revolt against financial capitalists, while the June revolution is a proletarian revolution in which the proletariat directly confronts the bourgeoisie. Marx further pointed out that this was the first large-scale battle between the two classes that divided the modern society. This is a struggle to preserve or eliminate the bourgeois system. Although the revolution in June failed, the significance of the proletarian revolution for the progress of human history will never fade. Marx said that revolution is the locomotive of history.

III. CONTEMPORARY ENLIGHTENMENT: CAPITALISM IS BOUND TO DIE OUT IN THE LONG-TERM STAGNATION OF CAPITAL ACCUMULATION

As we all know, Marx and Engels reached a most important scientific conclusion in the Manifesto of the Communist Party: the death of the bourgeoisie and the victory of the proletarian is equally inevitable. This is the famous “Two Necessities” principle of Marxism. If we study Marx’s thought of the speed of capital accumulation, we will come to the conclusion that capitalism is bound to die out in the long-term stagnation of capital accumulation. Wallerstein believes that although the production for the purpose of pursuing profits has a history of thousands of years, this mode of production has never occupied a dominant position in these historical systems. Only capitalism regards the endless accumulation of profits as the fundamental feature of its own system. Wallerstein pointed out that the capitalist system has been maintained for more than 500 years, and the fundamental policy of endless capital accumulation has been quite successful. However, the historical stage based on this has come to an end, and the late capitalism is coming to an end. Andrew Kleiman made an empirical study on the change trend of American profit margin from 1929 to 2009. He believed that after the boom period of World War II, the capital profit margin of the whole economic system was indeed declining irreversibly. Robert Brenner
calculated the declining trend of manufacturing profit margin in the United States and Japan since the 1950s. Among them, the average profit margin of manufacturing industry in the United States has more than doubled, and the average profit margin of manufacturing industry in Japan has more than tripled. These empirical studies confirm Marx’s idea that the rate of capital profit keeps falling and the rate of capital accumulation tends to stagnate. The global financial crisis that broke out in 2007-2008 is the most serious crisis of capitalism since the great depression in the 1930s. Although the crisis is presented in the form of finance, the underlying law is still “relative overproduction”, that is, trying to expand credit consumption to alleviate the contradiction between the expansion of production and the relative reduction of consumption capacity, accelerating the real estate and finance The development of bubbles. But this contradiction is only temporarily covered by bubbles, and after a long period of accumulation and fermentation, the crisis finally broke out. After 10 years of evolution, the capitalist world has not recovered from crisis and stagnation, but has expanded into a structural crisis of capitalism along the path of financial crisis → economic crisis → financial crisis → debt crisis.

At the same time, contemporary capitalism also faces the absolute limit of capital accumulation caused by the crisis of population aging and ecological crisis. According to statistics, in 2014, the total population of 28 countries in the EU was 508 million, of which 18.5% were aged over 65, 19.9% were aged between 50 and 64, and 38.4% were aged between 50 and 64. The trend of population aging will inevitably lead to the extreme shortage of labor force, increase labor cost, and further reduce the profit margin of capital; and the ecological crisis will gradually become the same or even more serious problem as the economic crisis. As the existing capital accumulation models all go bankrupt, the speed of capital accumulation will inevitably further decline. The economic cycle theory of western mainstream economics interprets the capitalist economic crisis as a kind of normal economic fluctuation, and holds that capital can always overcome the crisis and stagnation, and then accelerate the accumulation again. This kind of circular movement, which only attributes capital accumulation to quantitative change, conceals a historical fact: the final result of the crisis and stagnation of capital accumulation is the qualitative change of capitalist ownership, which is an irreversible linear process.

Over the past 200 years, the world economic crisis has occurred more than 20 times, some of which directly triggered the proletarian revolution, some of which first broke out in war and then triggered the proletarian revolution. For example, the result of the capitalist economic crisis in 1847 was the final explosion of the French Revolution in June; The capitalist economic crisis of 1867-1868 first triggered the Franco Prussian War, and finally triggered the Paris Commune Revolution; the capitalist economic crisis of 1907-1908 first triggered the first World War, and finally triggered the October Revolution of Russia which opened a new era of human history in 1917; the capitalist economic crisis of 1929-1933 gave birth to the second World War, and finally the war. As a result, Eastern European countries including East Germany, Yugoslavia, Poland, Hungary, Romania and other countries, as well as China, North Korea, Vietnam, Cuba, Albania and other countries have embarked on the socialist road.

In addition to the proletarian socialist revolution caused by the economic crisis, the capitalist internal system of ownership has also made major adjustments in response to the economic crisis. From individual private capital to stock system, this is the first adjustment of capitalist ownership; from stock system to monopoly, this is the second adjustment of capitalist ownership; from private stock monopoly to capitalist state monopoly, this is the third adjustment of capitalist ownership; from capitalist state monopoly to international monopoly, this is the fourth adjustment of capitalist ownership. As a result, the capitalist ownership of means of production is becoming more and more like public ownership rather than private ownership. It is getting further and further away from the original private ownership and closer to public ownership. It can be predicted that capitalism will inevitably die out in the long-term stagnation of capital accumulation. The ultimate fate of capitalism is to be replaced by socialism.

IV. CONCLUSION

In conclusion, Marx revealed a basic economic law of capitalism, that is, the stagnation of capital accumulation and the collapse of capitalism is inevitable. There is no doubt that the world structure is in the historical process of accelerating the evolution, which has produced a large number of profound and complex practical problems and put forward a large number of theoretical issues to be answered. This requires us to strengthen the study of contemporary capitalism, analyze and grasp the various changes and their nature, and deepen the understanding of the regularity of the profound and complex changes between capitalism and international political and economic relations. In this instance, Marx’s thought of the speed of capital accumulation provides an important theoretical tool for us to observe and analyze the prospects of contemporary world economy.

REFERENCES