

CHAOS AND ORDER THROUGH FLUCTUATIONS IN GLOBAL CAPITALISM IN THE 21ST CENTURY

Yong Pil Rhee

Seoul National University
Shillim-Dong, Kwanak-Gu,
Seoul 151-748, Korea
rheey@plaza.snu.ac.kr

ABSTRACT

It is often suggested that capitalism is an unplanned economic system. In the absence of any overall mechanism for planning productivity, it is only through periodic recession that a market system can shutdown activities which have become obsolete or uncompetitive and redirect labor and capital into thrive upon innovation and the capability to leave the past behind. Thus capitalism can be not only a very powerful constructive force but also a destructive one. This global capitalism that is one of the driving forces of globalization to some extent is a very complex economic system. We do not know fully as yet how it works. It can be assumed that global capitalism is a complex form of economic system which may be a typical nonequilibrium system functioning in the globally turbulent situations among the capitalist nations.

Keywords: market system, global capitalism, chaotic functioning, crisis management, complex feedback functioning

Modern capitalism is the product of historical development of economic system in Europe. Capitalism takes different forms in different places in different times, but it is possible to identify certain key elements which together help to define it as a distinctive system. Thus we can define capitalism as a system in which individuals or combinations of individuals compete with each other to accumulate wealth by buying the rights to use land, labor and capital in order to produce goods or services with the intention of selling them in a market at a profit. In this sense capitalism is driven by the motive to accumulate profit. Given a system of private property and relatively free markets, the

Chaos and Order through Fluctuations

pursuit of profit brings entrepreneurs into competition with one another as each seeks to maximize profits by reducing the costs of land, labor and capital and by selling the finished product at the highest achievable price.

On the other hand, capitalism triggered the industrial revolution, and the ever increasing and urgent search for new products and for new technologies which can raise productivity and lower costs has continued to revolutionize the way that we live ever since. This perpetual search by capitalist firms for a competitive advantage means that the rate of change is for ever speeding up. Capitalist development has revolutionize the living standards which ordinary people now take for granted. Here we can say that capitalism is very powerful constructive force.

However, capitalism stands condemned, not for its failure to raise living standard, but its success in so doing. The triumph of capitalism at the end of the twentieth century turns out to have been a Pyrrhic victory, for what capitalism does best--stimulation of rapid growth--is apparently threatened by overpopulation, melting ice-caps, raising skin cancers, declining resources and a collapsing ecosystem, and most or all of this is the by-product of capitalism's success in generating economic growth.

Thus we can say that this dark aspect of growth is the result of destructive force operating in capitalist system. As Saunders pointed out, capitalism is not about to collapse, but in the West it is under considerable strain(Saunders, 1995, 105). These threats and tensions are the product of capitalism's success in establishing itself on a global scale. The difficulties which capitalism faces today are not the harbingers of its impending collapse, but are the problems associated with its ultimate triumph.

MARKET SYSTEM AS SOCIAL COORDINATOR

Market economy implies a self-regulating system of markets; in slightly more technical terms, it is an economy directed by market prices and nothing but market prices. Such a system capable of organizing the whole of economic life without outside help or interference would certainly deserve to be called self-regulating.

According to Polanyi, "Markets are not institutions functioning mainly within an economy, but without." They are meeting places of long-distance trade. Local markets

Chaos and Order through Fluctuations

proper are of little consequence. Moreover, neither long-distance nor local markets are essentially competitive, and consequently there is, in either case, but little pressure to create territorial trade, a so-called internal or national market (Polanyi, 1957, 58).

Long-distance trade often engenders markets, an institution which involves acts of barter, and, if money is used, of buying and selling, thus, eventually, but by no means necessarily, offering to some individuals an occasion to indulge in their alleged propensity for bargaining and haggling.

A market economy is an economic system controlled, regulated, and directed by market alone; order in the production and distribution of goods is entrusted to this self-regulating mechanism. An economy of this kind derives from the expectation that human beings behave in such a way as to achieve maximum money gains. It assumes markets in which the supply of goods available at a definite price will equal the demand at the same price.

While on the one hand markets spread all over the face of the globe and the amount of goods involved grew to unbelievable proportions, on the other hand a network of measures and policies was integrated into powerful institutions designed to check the action of the market relative to labor, land, and money. While the organization of world commodity markets, world capital markets, and world currency markets under the aegis of the gold standard gave an unparalleled momentum to the mechanism of markets, a deep-seated movement sprang into being to resist the pernicious effects of a market-controlled economy.

It can be said that capitalism as a mode of organizing social and economic life began not only in one minuscule corner of the globe but involved outward expansion, gradually encompassing ever-larger-areas of the globe in the network of material exchanges. This network developed over time into a world market for goods and services, or an international division of labor. By the end of the nineteenth century the project of a single capitalist world economy had been completed in the sense that the grid of exchange relationships now covered practically all the geographical areas of the world.

Following Immanuel Wallerstein, it is possible to call this international division of labor a capitalist world economy because its defining criterion was the production of goods and services for sale in a market in which the object is to realize the maximum profit. In a capitalist market it is the seemingly neutral forces of supply and demand that determine

Chaos and Order through Fluctuations

the price of a product, and thereby signal to the producers whether they should expand production, cut back on output, or change production techniques and cut their cost structure and so on. In other words, through the medium of Adam Smith's celebrated invisible hand, which already by the end of the nineteenth century had become a global invisible hand, human activities were pretty well coordinated across national frontiers.

As Lindblom points out, a market system is a method of social coordination by mutual adjustment among participants rather than by a central coordinator. We need, therefore, to understand the possibilities of coordination without a coordinator(Lindblom, 2001, 23).

It is true that the market system is a mammoth coordinator through mutual adjustment and is especially adapted to the difficulties of coordination in the face of scarcity. It is useful to think of the market system as though it were a political process--not governmental yet nevertheless fundamentally political. Societies are poised at the rim of disorder because of ever-changing conflicting aspirations for countless scarce objects and performances. To this explosive situation the market system brings a solution. It limits every person's claims to a sum of money obtainable by that person's offer of something of value on the market: a rule--look at it as a political rule--of *quid pro quo*. A potential for war of all against all is converted into a peaceful process--political accomplishment of extraordinary sweep and efficiency.

In our time the market system has become a global coordinator of cooperative performances of at least 2 billion people. No other method of social cooperation matches the market system in scope and detail. No government has ever organized so many people in such an articulated and detailed assignment of performances, which lock many millions of people into specified cooperating roles. Moreover, there exists a global market system but no world state(Lindblom, 2001, 41).

CHARACTERISTIC GLOBAL CAPITALISM IN INFORMATION AGE

The most striking development in the 1990's has been the emergence of monopoly capital and the universal market. In order to understand these relations it is necessary to scrutinize the larger political-economic system and its connections to the emerging information highway. It is evident that the economy of the United States and increasingly the world as a whole is dominated by a relatively small number of corporations. These

Chaos and Order through Fluctuations

dominant economic enterprises are currently struggling to utilize the new technology, which they in large part control, in order to amass still greater wealth and power.

Today's advanced capitalist economies remain highly polarized class systems. In the United States 94 percent of all financial wealth is owned by the top 20 percent of the population, leaving only 6 percent for the bottom 80 percent. In fact the top 1 percent of the population with 48 percent of total financial wealth owns eight times as much as the bottom 80 percent. Such concentration is not merely a national phenomenon. The largest 300 corporations in the world now account for 70 percent of foreign direct investment and 25 percent of world capital assets. In the United States a mere handful of firms now dominate the major media, and the same in telecommunications--and are expanding globally.

In the increasingly global monopoly capitalist order of today the role of price competition is much reduced in comparison to the nineteenth century area of freely competitive capitalism. In the earlier era--when each individual firm accounted for only a small share of the market--the chief weapons of competition were cutting costs and enhancing quality: by such means a firm could hope to survive and even expand its profits and market share. Ordinarily, no single firm could influence the market as a whole, which meant that price, output, and investment levels were determined by market conditions and not by individual capitals.

With concentration and centralization, however, all of this changed. As the number of competitors in key industries shrank to a mere handful (called "oligopolists"), competition became co-reflective. Serious price-cutting, of this kind that would threaten the existence of firms and thus generate price warfare among the large monopolistic (or oligopolistic) enterprises, came to be viewed as self-defeating and was effectively banned. At the same time competition over market share was magnified, in which the main weapons were product differentiation and a whole panoply of aggressive marketing techniques.

This political-economic response on the part of capital has done nothing to alleviate the general structural crisis in which it is caught. In the wealthiest economies, most markets are saturated and the artificial stimulation of demand through marketing has become a business necessity--a means of partially compensating for the overall deficiency of effective demand.

Chaos and Order through Fluctuations

As Dawson and Foster suggested, “likewise Bill Gates’s vision of friction-free capitalism is revealed, in the end, as little more than a vision of a more perfect and universal corporate-dominated market environment—one from which countless number of people with meager pecuniary resources will be effectively excluded. “We are all created equal in the virtual world,” Gates declares, but “virtual equality,” he concedes, “is far easier to achieve than real-world equity”(Dawson and Foster, 1998, 63).

The information highway will be grafted onto a global capitalist system already characterized by vast and growing inequality, economic stagnation, market saturation, financial instability, urban crisis, social polarization, graded access to information, ecological degradation, etc. The combination of marketing and the new information technology will enable certain firms to obtain higher profit margins and larger market shares, and will thereby promote greater concentration and centralization of capital. It will create a wider universe of commodity fetishism.

It will not, however, solve the major material crises of capitalist society(not even the deficiency of effective demand), and is indeed likely to make many of these contradictions more acute. Capitalism cannot sustain itself without marketing, but marketing at present levels increasingly threatens to consume the system. The world of perfect information envisioned by Gates is impossible in a social and economic order in which valued information is increasingly controlled and disseminated by monopoly capital.

CHAOTIC FLUCTUATIONS IN GLOBAL CAPITALISM

In the late 20th century, global capitalism was pushed by leaps in technology, the failure of socialism, and East Asia’s seemingly miraculous success. The plain truth is that market liberalization by itself does not lift all boats, and in some cases, it has caused severe damages to poor nations. Furthermore, multinationals have contributed to labor, environmental, and human rights abuses while they have pursued profit around the globe. For global capitalism to move into the next stage will require a much more sophisticated look at the costs and benefits of open markets.

Chaos and Order through Fluctuations

The extremes of global capitalism are astonishing. While the economies of East Asia have achieved rapid growth, there has been little overall progress in much of the rest of the developing world. Incomes in Latin America expanded by 75% during the 1960s and 1970s, when the region's economies were relatively closed. But incomes grew by only 6% in the past two decades, when Latin America was opening up. Average incomes in sub-Saharan Africa and the old Eastern bloc have actually contracted. The World Bank figures the number of people living on \$1 a day increased, to 1.3 billion, over the past decade.

The downside of global capitalism is the disruption of whole societies, from financial meltdowns to practices by multinationals that would never be tolerated in the West. Industrialized countries have enacted all sorts of worker, consumer, and environmental safeguards since the turn of the century, and civil rights have a strong tradition. But the global economy is pretty much still in the robber-baron age.

If global capitalism's flaws are not addressed, the backlash could grow more severe. Already, the once impressive forward momentum for new international free-trade deals has been stopped cold. An ambitious Multilateral Agreement on Investment, which would have removed all remaining restrictions on cross-border investment by corporation, fizzled last year. Apparently, there are hopes for a new global trade round through the World Trade Organization.

The longer-term danger is that if the world's poor see no benefits from free trade and IMF austerity programs, political support for reform could erode. The current system is "unsustainable," says United Nations Assistant Secretary General John G. Ruggie, who, as a political economist at Columbia University, examined how previous golden ages of global capitalism, such as the one at the turn of the 19th century, unraveled. "To survive," says Ruggie, "it must be imbedded in broader social concerns."

It all adds up to a breakdown of what was known as the Washington Consensus. The grandiose term refers to a worldview pushed aggressively by the U.S. Treasury, the IMF, and the World Bank in the early 1990's. This dictum held that all countries should open their markets to trade, direct investment, and short-term capital as quickly as possible. The transition would be painful, but inevitably, markets would achieve equilibrium, and prosperity would result.

Chaos and Order through Fluctuations

In hindsight, it was a naïve and self-interested view. Free capital markets, which have proven the most disruptive part of the formula, were largely championed by Wall Street--which saw new trading opportunities--over the objection of many economists. To be sure, developing nations badly needed to import capital and foreign financial knowhow to keep growing. But many nations simply couldn't handle the inflows. The results were huge white-elephant industrial and property projects that devoured funds and foreign-currency debt bombs that started exploding in 1994, first in Mexico and later in East Asia.

A more realistic view is now gaining hold. It begins with a similar premise: that trade and inflows of private capital are still essential to achieving strong, sustainable growth and to reduce poverty. But it acknowledges that multinationals--which account for the bulk of direct cross-border investment and one-third of trade--have social responsibilities in nations where the rule of law is weak. And it dispenses with the erroneous notion that open markets will magically produce propensity in all conditions. Even the IMF now warns that a high degree of openness to global capital can be dangerous for some development. "The IMF push for capital-market liberation for all nations was driven by financial market ideology," says former World Bank chief economist Joseph E. Stiglitz, now a vocal IMF critic. "They have conceded defeat, but only after the damage was done."

Even the orthodoxy that developing countries should quickly lower import barriers and slash the state's role in industry is being challenged. Before trade and foreign capital can translate into sustainable growth, governments first must deliver political stability, sound economic management, and educated workers.

East Asia's tigers had many of these features when they began their export drives; most of Latin America and Africa did not. "To get the benefits of trade and capital flows, you need a broader base of development," says Daniel Rodrik, a Harvard University economist whose research has raised hackles by suggesting that there is no automatic link between openness and growth in developing countries.

It can be said that as global capitalism has been rapidly dominating the entire mechanism of global economy through the emergence of monopoly capital and global market, the interactions between the advanced nations and the developing ones have been increasing.

Chaos and Order through Fluctuations

Thus the fluctuation of interactions may become so powerful, as a result of positive feedback.

THE POTENTIAL CRISIS IN GLOBAL CAPITALISM

It is suggested that capitalism has shown over the course of its entire history a remarkable ability to adapt to changing circumstance and is already beginning to show its flexibility in adapting to its biggest challenge. However, the potential crisis that global capitalism faced can be very stressful, which may be beyond the critical limit of normal functioning of the global market. From the hierarchical perspective of self-organizing system, it can be assumed that there are very complex interactions between global capitalism and its mechanism. As both global capitalism and its mechanism have been developing, the self-organizing system predictably involves some combination of increase in gross throughput.

The characteristic structural and behavioral patterns in capitalist system as a complex system are primarily a result of the interactions among the systems parts. Complex systems have basics of stability separated by a threshold of instability. This law means that some configurations of the system are stable and some are not. In complex systems, feedback loops are one of the major elements that make self-organizing work the way they do.

If one starts tracing out the chains of causality in some complex system such as ecology or capitalist system, the feedback loops quickly become very complex and interlocking. The peculiar behavior of self-organizing systems can be largely explained by invoking sets of interlocking feedback loops(Clemson, 1984, 34). The mechanism through which complex systems organize themselves is, to a large extent, through sets of interlocking feedback loops. The mechanism of system affects its institutions and the institutions affect its mechanism, and they tend to continue to interact until each is in some region of stability under the conditions provided by the other.

From the theoretical viewpoint of complex feedback functioning it can be assumed that capitalist system has both positive and negative feedback loops. A negative feedback loop is goal-seeking, tending to regulate the system towards some objective. A positive

Chaos and Order through Fluctuations

feedback loop is goal-divergent, tending to depart exponentially from some point of unstable equilibrium.

Now we can say that in the global capitalist system as a self-organizing system both negative and positive feedback loops interact. The former channel “deviation-counteracting” patterns of information, and the latter channel “deviation-amplifying” patterns that bring about situations in which “a small initial deviation, which is within the range of high probability may develop into a deviation of low probability. Any more away from its structural norms represents a real, or at least potential threat to the system. Yet some of these threats may turn out to open unforeseen paths of development.

In order to analyze the self-organizing behavior of global capitalist system, we have to look at the system from two different points view; how flexible they are in changing their internal structure, and how flexible they are in changing their pattern of interaction with global environment. Because a higher level of living system contains components made of systems at lower levels, and operation of the higher level, for example, and an adaptation, is more complex and can go no more quickly than its component parts.

Because the component parts are semiautonomous, a massive action of the entire capitalist system is also less probable in any given interval than an action of component subsystems. Therefore, by the above definition, higher-level systems may in general be said to be more loosely coupled to each than those at a lower level. Based on the above theoretical assumption, it is generally observed that the more complex the mechanism of capitalist systems in the rapidly changing environment, the more adaptive its functioning.

From the above theoretical viewpoint the main actors in the global capitalist system such as IMF, World Bank, and the U.S. have to perform their proper role for the survival of world economy through their responsible actions and policies toward the developing countries. Thus it can be assumed that global capitalist system as self-organizing complexity can smoothly overcome recurrent crises, which will led to order through fluctuations in interaction among the major actors in global capitalist system. In other words, global capitalist system should be maintained on the basis of complex feedback functioning, which will be the best form of crisis management for global capitalism.

Chaos and Order through Fluctuations

REFERENCES

- Clemson, Barry. (1984). *Cybernetics: A New Management Tool.*, Abacus Press, Turnbridge, Kent.
- Dawson, Michael and Foster, Bellamy John. (1998). "Virtual Capitalism: Monopoly Capital, Marketing, and the Information Highway," in *Capitalism and the Information Age*, (Robert W. McChensney, Ellen Meiksins Wood and John Bellamy Foster, eds.), Monthly Review Press, New York.
- Lindblom, Charles E. (2001). *The Market System: What It Is, How It Works, and What To Make of It.*, Yale University Press, New Haven.
- Polanyi, Karl. (1957). *The Great Transformation.*, Beacon Press, Beacon Hill.
- Rhee, Yong Pil. (1990). "Crisis and Order through Fluctuation in Capitalist System," *Proceedings of the 34th Annual Meeting of the International Society for the Systems Sciences*. 1:1-15.
- Rhee, Yong Pil. (2000). "Complex Systems Approach to the Study of Politics," *Systems Research and Behavioral Science*. 17:487-491.
- Saunders, Peter. (1995). *Capitalism: A Social Audit.*, Open University Press, Buckingham.