Essays on Marxian Economics in Japan

by Makoto Itoh

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Preface and Acknowledgments

World capitalism is suffering from the continuing inflational crisis and the subsequent depression that has become chronic. Confidence in a better world through capitalist economic growth has been generally lost. Experiments to push forward first Keynesian and then monetarist policies within the framework of capitalism proved one after another ineffective, if not totally harmful, in ending the disastrous coexistence of higher rates of inflation and chronic depression. Neoclassical economics, including Keynesian theory, has failed to offer the systematic bases for understanding what was wrong, let alone provide a true remedy. Its failure constitutes an important portion of a more general disillusion with technical bourgeois social science. Such disillusion may be one of the sources of the reappearance of a *fin de siècle* unrest among younger generations in all capitalist societies. As our century draws to a close, an uneasy feeling of proceeding along a blind alley will intensify, reflecting the real situation of capitalist economy.

Needless to say, the gloomy situation caused by the capitalist impasse should not be equated with the dead end of human progress itself. It is not surprising that younger generations in both western and third world countries have become increasingly interested in Marxism, attempting to find an alternative way out of the crisis in the future. Marxian economics can at least provide a sound basis for scientific studies of capitalism with all its historical specificities. Marxian theories of value and crisis, especially, unlike the neoclassicist theories of prices and economic growth, have a powerful potential in elucidating the historically limited features and the inner contradictions of capitalist economy.

Even though these theories do not supply a complete analysis of the current situation of capitalism directly, they can serve as scientific standards for empirical analyses. The more correct our understanding of these theories becomes, the less erroneous our understanding of the present world can be, avoiding too abstract, or too mechanical, or too fragmented approaches. In the long history of Marxism, however, the fertile ground of its basic theories has not been fully cultivated. For one thing, Marx's theories in *Capital* tended to be regarded by Marxians as too complete to be corrected anywhere, although Marx actually left us many important points to be finished up. Such a tendency was coupled with external anti-Marxian critiques repeated without understanding the tasks and the contexts of Marx's theories. It was intensified also by the sterilization of theory under Stalinism, a development which might well be related to current problematic situations in the Soviet-type societies, as Paul Sweezy points out in a new book entitled *Post-Revolutionary Society*.

The development of Marxian economics in Japan, which dates back to World War I, has been relatively immune from the fossilization of basic thought and theories. Even though the Soviet orthodoxy had a strong influence, rival schools of thought emerged and staged interesting debates as early as the interwar period concerning both the basic theories in *Capital* and the characteristics of Japanese capitalism as it developed after the Meiji Restoration of 1868. Since just after World War II, Japanese Marxian economics was allowed and able to revive in universities and has grown by both absorbing most of the important writings of foreign Marxists and by deepening domestic discussions. In particular, the growth of the Uno school, based on the late Kōzō Uno's works, was conspicuous in activating debates and research. Uno believed that the relative autonomy of Marxian studies in the social sciences is important for strengthening the foundation of socialist assertions and that such studies should be free from political control or the cult of any individuals. As we read in his *Principles of Political Economy*, Uno attempted to purify Marx's original theory of value and crisis in rewriting the whole theoretical contents of *Capital* into a more consistent and concise logical system.

When I first visited England and the United States in 1974 and began to communicate with western Marxists and students, I soon realized the need for and the importance of introducing Japanese contributions to Marxian economics to the western world. These contributions could be quite useful in broadening and deepening the scope of western studies, both methodologically and theoretically. However, a mere introduction of ready-made Japanese achievements did not seem sufficient in some aspects. Evolution of my own research seemed necessary in order to clarify the relevance of Japanese contributions to the recent western debates. Apart from my contributions to crisis theory, which were already published in Japanese by 1973 and are partly summarized in the fourth essay in this volume, additional examples of my own challenges to theory include the treatment of the transformation problem in the second essay; some points in the third essay, including a small note on the joint production problem; and an attempt to articulate the causes and the characteristics of the recent inflational crisis of world capitalism in the final essay. Although I am well aware that some portions of this book are still only a sketch for future elaboration (as for example section III of the fifth essay concerning the metamorphoses of crisis or the final essay itself), I hope that my challenges in these pages will add to the sound growth of Marxian studies both in Japan and in the rest of the world.

In writing the essays collected in this volume, my debts to a number of Japanese Marxian forerunners and colleagues are obvious. In addition, these essays could not be written without encouragement and generous assistance from a large number of friends in England and the United States. Meghnad Desai was the first who urged me to write an essay in English on Marx's crisis theory (the fourth essay) in 1974, and Jesse G. Schwartz kindly edited that manuscript for publication in the *Bulletin of the Conference of Socialist Economists*. "A Study of Marx's Theory of Value" was originally edited for *Science and Society* by David Laibman. "The Development of Marxian Economics in Japan" was written at the suggestion of Harry Braverman in 1975, when I outlined my ideas at a lunchtime meeting with the editors of

Monthly Review. My lecture courses, which were arranged by Anwar Shaikh at the New School for Social Research and by Jim Becker at New York University for the spring and summer terms of 1978, gave me a good opportunity to follow that suggestion, and Jim Becker's comments and editing were indispensable for improving the manuscript. "The Inflational Crisis of World Capitalism" was originally edited by Sue Himmelweit for *Capital and Class*. "Marxist Theories of Crisis" was prepared for the Oxford crisis conference arranged by Andrew Glyn, Bob Rowthorn, John Harrison and others in 1978, and was discussed with them at the conference. "Marx's Theory of Market Value" was written in collaboration with Nobuharu Yokokawa and was edited by Sue Himmelweit and Diane Elson for Elson's collection entitled *Value: The Representation of Labour in Capitalism*. I want to thank all of these people for their help in making up this book. I am also grateful to the publications mentioned for allowing me to reproduce the essays herein.

Many lectures and seminars I have given in England, the United States, Canada, and Europe, not to mention Japan, were encouraging for the birth of this book. I was particularly impressed among others by the number of reactions based on experiences similar to the controversy over Japanese capitalism (see the first essay), especially in the third world. My acknowledgments should be extended to the earnest students and other participants in such lectures and seminars as well as to the colleagues who organized those occasions. Finally, I am indebted to both Pete Burgess in London for editorial help and Karen Judd at Monthly Review for careful copyediting and handling of production.

Though I am surely responsible for whatever imperfections this volume may contain, I can scarcely feel this as my individual product. If the publication, like the birth itself, of this book helps to promote further international cooperations and communication between Japan and the rest of the world in the field of Marxian social science, I shall consider it a fortunate and useful contribution.

London, August 1980

1

The Development of Marxian Economics in Japan

Marxian economic research in Japan constitutes a rich academic tradition extending back over half a century. In terms of quantity, the numbers of Marxian and neoclassical economists are fairly evenly matched.[1] Many university economics departments offer both courses and teaching posts in Marxian economics, although courses are not usually designated by the term "Marxian." For example, students at the University of Tokyo begin with a course called Economic Theory I, which is based on Marx's theory, and one called Economic Theory II, which follows neoclassical principles.

In general, a knowledge of Marxist economics and a basic understanding of Marxism number among the almost essential prerequisites for membership in the Japanese intelligentsia. This perhaps explains why a relatively unspecialized Marxian theoretician, Shigeto Tsuru,[2] and a pure neoclassicist, Michio Morishima, should exhibit such a deep understanding of Marx's economic theories. Nevertheless, the mainstream of Marxian economics in Japan has remained almost totally unknown to western academic circles. Even though nearly all the important works of Marxist economics abroad have been translated or utilized by Japanese Marxians, the balance of trade has been very lopsided in this field.

The recent upsurge of serious Marxist research in the West seems to provide timely opportunity to present the West more and more of the Japanese Marxian contributions. Some have already been introduced to western readers.[3] The aim of this essay is to present an outline of the historical development of Marxian economics in Japan which may assist in expanding the range of communications between Japanese and western Marxian economists. Since it is clearly impossible to provide even a summary of the main works of Japanese Marxian economists in a brief space, I shall restrict myself to reviewing what have been the main issues among them. The history of Marxian economics in Japan can be divided into three main periods, with each of the world wars acting as the dividing breaks. However, my aim is not merely to present a chronology but to show how and why Marxian economics became so firmly implanted in Japan; to look at the major debates which characterized the interwar period; and to look at the relations between Marxists and the neoclassical school and examine how prewar debates have been continued and resolved, in particular in relation to the postwar Uno school to which I belong. I have sought to convey an objective view in which my own theoretical ideas are meant to provide a consistent outlook rather than to bias the study.

I. The Pre-World War I Period

The Meiji Restoration of 1868 ended the Tokugawa feudal system of rule, which had lasted since 1603, and initiated capitalist development in Japan. Faced with the necessity to confront other advanced capitalist countries that were already entering the stage of imperialism, Japanese capitalism took the path of rapid importation of highly developed industrial techniques. Theory in economics followed a similar pattern, and in a short period had imported a number of theories from the West. The classical school, the German historical school, the Marxian, and later the marginal utility school were all transplanted into Japan in more or less the same order in which they appeared in the West, although the time span was considerably condensed.

In the first two decades after the Meiji Restoration the classical school dominated. For example, E. F. Fenollosa (1853–1903),[4] who was invited from the United States to lecture on economics at the University of Tokyo after 1878, and his successor Inerivo Tajiri

(1850–1924), both used J. S. Mill's *Principles of Political Economy* (1848) as a textbook and emphasized the importance of Mill's theories. Yukichi Fukuzawa (1835–1901), the founder of Keiō University, along with Kōhei Kanda (1830–1898) and Ukichi Taguchi (1855–1905), also imported the classical theory, with its advocacy of political liberalism.[5]

However, classical economic theory was not well suited to the complicated and specific features of Japanese economic growth. Far from pursuing a policy of laisser faire, the Meiji government itself undertook the construction of modern factories, docks, and mines, which were then sold on very favorable terms to the leading capitalists (chiefly in the 1880s). Military expenditure and the expansion of markets into Korea and Manchuria following the Sino-Japanese War (1894–1895) and Russo-Japanese War (1904–1905) gave a strong impulse to the growth of capitalist industries. The index for the output of manufactures rose from 11.1 in 1890, to 42.4 in 1900, 73.9 in 1910, and 100 by 1914.[6] Despite this, by 1907 manufacturing accounted for only 15.1 percent of the working population, with 61.7 percent remaining in agriculture and forestry. A huge impoverished reserve army in the rural villages served to hold back the improvement of industrial workers' wages in the cities. In stark contrast to the rapid growth of capitalist production, peasants and wage workers continued to suffer poverty and insecurity. Labor unrest in the cities developed parallel with socialist ideologies, including antiwar campaigns, and at the turn of the century began to attract the attention of a wider public. The 1890s therefore saw a shift of focus from the universal features of the economic process toward an examination of its specific national and historical characteristics. In theoretical terms this meant a swing away from classical theories to the German historical school, which had attacked the former's universal claims. German professors K. Rathgen (1856–1921) and Ü. Eggert both taught in Japan, in 1882 and 1886 respectively, and together with Professor Kenzo Wadagaki (1890–1919) introduced the ideas of the German historical school at the University of Tokyo. A more systematic introduction of the ideas and methods of this school followed through such subsequent younger scholars as Iwasaburō Takano (1871–1949), Eizo Yahagi (1870–1933), and Tokuzo Fukuda (1874–1930).

The younger German historical school, which included Gustav Schmoller, Adolf Wagner, and Lujo Brentano, was particularly favored. In 1907 the Japanese Society for Social Policy was established in emulation of the German Verein für Sozialpolitik[7] established by this school. The society shared the younger historical school's emphasis on both a historical and an ethical approach, and pointed to the importance of social policies in mitigating conflicts between capital and labor, a point over which they clashed with both Marxism and the classical school.

Fukuda was a typical representative of the views of the Japanese Society for Social Policy. His lectures and seminars given at the Tokyo College of Commerce (later to become Hitotsubashi University) had a considerable influence on his audiences. Remarkably, Marxists were received with a tolerant attitude in the society, an atmosphere that helped to allow as members such leftwing theorists as Sen Katayama (1859–1933) and Hisashi Asō (1891–1940), who were already beginning to develop a more clearly socialist perspective.[8]

The socialist movement in Japan began to grow in the 1890s, under the impetus of labor unrest, attempts to establish trade unions, the movement for universal suffrage, and the antiwar movement, which had developed with and after the Sino-Japanese war. The first Japanese Social Democratic Party was formed in 1901 by Shūsui Kōtoku (1871–1911), S. Katayama, Isoo Abe (1865–1949), and others, although it was proscribed on the same day it was founded. The ideas of the German Social Democratic Party and of Christian Socialists such as S. Katayama (who had developed his ideas in the United States) were instrumental in prompting the formation of this party.

However, once the need arose for a theoretical basis for socialism the influence of Marxist ideas prevailed. For instance, *The Essence of Socialism* (1903) by S. Kōtoku, *Our Socialism* (1903) by S. Katayama, and *The Outline of Socialism* (1904) by Toshihiko Sakai (1863–1933) and Unpei Morichika all sought to introduce Marxist ideas as a foundation for socialism. The first translation of *The Communist Manifesto* (1848) prepared by Sakai and Kōtoku appeared in *Shūkan Heiman Shinbun* (Weekly Journal of the Common People) in 1904.

A summary introduction to the first parts of Marx's *Capital* was published by Hitoshi Yamakawa (1880–1958) in *Ōsaka Hemin Shinbun* (Osaka Journal of the Common People) in 1907. The study of Marxist economics therefore began in Japan as an attempt to establish a theoretical framework for socialism, and was pursued by active socialists outside of the academic environment.[9] Although progress was rapid, the main drive was still limited within the effort to import into Japan the bases of Marxism and Marxist economics.

In 1911, following the Taigyaku-Jiken treason trials of 1910, in which the accused were charged with a plot (largely a construction of the authorities) to assassinate the emperor, twelve socialists, including S. Kōtoku and U. Morichika, were executed. Subsequent years saw an intensification of the oppression of the socialist movement and the study of Marxist ideas, both of which entered a ten-year "period of winter."

II. The Fervent Debates of the Interwar Period

A. Background

The possibility of socialist revolution demonstrated by the Russian Revolution set in motion broad and powerful movements for socialism and a widening of democracy in a number of European countries. It also influenced the Japanese social and political climate, and dominant among the concerns of the 1920s was the movement for the establishment of universal suffrage.

Although World War I had acted as a vigorous stimulus to Japanese capitalism, pushing up the index of manufacturers five fold between 1914 and 1919, the postwar crisis of 1920, the financial crisis of 1927, and the world crisis of 1929 posed continuing difficulties for Japanese capitalism.[10] One response of finance capital, dominated by the Zaibatsu family, was to intensify the process of the formation of cartels, begun already after the Russo-Japanese war, into the development of monopolistic cartels.[11] At the other pole many small businesses suffered and workers and peasants experienced great hardships. The possibility of wages rising with any growth in industry that might occur was very much hindered by the persistence of a huge rural reserve army: agriculture and forestry still employed 47.8 percent of the working population in 1930 while manufacturers remained at 19.8 percent.

The basis for the revival of the socialist movement came with the rapid growth in trade unions, struggles between peasants and landowners, and the movement for universal suffrage. The Japanese Communist Party was formed in 1922, and although it was temporarily dissolved in 1924 it was reorganized under the direction of the Comintern in 1926. Two other political parties, the Shakai-Minshū Tō (Social Popular Front Party) and the Nihon Rōno Tō (Japanese Workers and Peasants Party) were organized at the same time. The two decades after World War I saw a revival and a continuous extension of active Marxian study, this time involving professors, younger teachers, and students in the universities as well as nonacademic socialists. During this period the foundations of a strong academic tradition in Marxian economics were laid. This period also saw the establishment of distinct departments of economics, separate mostly from the law faculties within which they had been housed previously. Academic posts for the study of economics increased also in those universities where no separate economics department existed. Many of these were filled by younger Japanese scholars, who were attracted by Marxist economics and who had studied for the most part in Germany, which exercised strong sway of the general cultural atmosphere over Japan at this time.

The interwar period saw the translation of a number of important Marxist works. The first complete translation of all three volumes of *Capital*, undertaken by Motoyuki Takabatake, was published between 1920 and 1924.[12] The world's first (at that time) complete collected works of Marx and Engels were also published in Japanese between 1927 and 1933, consisting of twenty-seven volumes comprising thirty-one individual books plus one additional volume. A ten volume collection of Lenin's works was also published in 1926–1927.

Three controversies acted as the central focus and further stimulus to studies in Marxian economics: value theory, ground rent, and the historical nature of Japanese capitalism.

B. *Theoretical debates on value theory*

The controversy over Marx's theory of value first involved a debate between Marxists and non-Marxists. In their attempt to answer the criticisms made by non-Marxists, the Marxists were obliged to pursue more systematic studies of Marx's theory, which in turn fueled debates among themselves.

Shinzō Koizumi's (1888–1965) article on the problem of the labor theory of value and the average rate of profit was the first and one of the most serious critiques of Marx's theory, although it was essentially a repetition of Böhm-Bawerk's criticism.[13] Seibi Hijikata and Yasuma Takada followed Koizumi in their criticisms. Counter-critiques aimed at defending Marx's labor theory of value were presented by H. Yamakawa, M. Takabatake, Hajime Kawakami (1879–1946), Tamizō Kushida (1885–1934), Moritarō Yamada, Chogorō Maeide (1891–1964), and Itsurō Sakisaka. Debates on value theory were particularly central from 1922 until about 1930.[14]

Initially, a number of Marxists argued from an incorrect interpretation of Marx's theory. For instance, Kawakami asserted that for Marx the concept of value referred to the sacrifice incurred by people in obtaining necessary goods. Although Kawakami wanted to provide a logically necessary, and therefore indubitable proof of the labor theory of value rooted in the essence of human activity, his interpretation of Marx's theory of value was wildly mistaken. Kawakami regarded the concept of value and hence the commodity economy as eternal features of human society, in exactly the same way as the classical school had done. In fact, Marx had endeavored to demonstrate the historical character of value relations and of capitalist production based on value relations through a critique of classical economics. Two years later T. Kushida pointed out Kawakami's misinterpretation of Marx's value theory and succeeded in persuading Kawakami to revise his position.[15]

As far as the theoretical consistency between the labor theory of value in Volume I of *Capital* and the theory of prices of production in Volume III was concerned, Kushida maintained that the former should not be regarded as a mere logical assumption. In his view, the relation between values and prices of production should be understood as a historical-logical sequence following the development from a society of simple commodity producers up to capitalist society. In this, Kushida reproduced the main point of Hilferding's anti-critique of Böhm-Bawerk, and this then became a standard interpretation of Marx's value theory until World War II. M. Yamada presented a similiar view in the same year, although Yamada and Kushida were later sharply opposed to each other in the controversy on the nature of Japanese capitalism.[16]

Originally, this interpretation of Marx's theory of value was presented by Engels in the supplement to Volume III of *Capital*, in which he points to chapter 10 of Volume III as being the "decisive passage." Engels criticized Conrad Schmidt's view of the law of value as a "scientific *hypothesis*, set up to explain the actual exchange process" and emphasized its historical and material basis by attempting to show how the law of value operated within a society of simple commodity producers (*Capital, III*: 895).[17] Not only Hilferding and some Japanese Marxists but also Russian scholars and some Western writers like Ronald Meek have adopted and amplified this position.[18] However, it has serious fundamental problems.

The cornerstone of Marx's law of value is the determination of the values of commodities by the socially necessary labor time required to produce them. If socially unnecessary labor time is expended in producing an excess of any given commodity its price must fall below its value, forcing a reallocation of quantities of social labor. Such readjustments on a social scale are indispensable for the complete working of the law of value.

Further, if the major part of social reproduction is under a communal system or political order which is external to the commodity economy, the exchange of commodities occurring at the fringe of society tends to represent a portion of (surplus) products, and can be repeated without the full exchange of equivalents compensating the labor time embodied in commodities. The attempt to demonstrate the law of value within exchange relations among simple commodity producers therefore logically has to presuppose *a society of simple commodity production* in which social reproduction is effected entirely by small, independent commodity producers. However, this conclusion contradicts the initial intention of the proponents of this view, since it seems to imply the existence of a classless society of commodity producers prior to a capitalist society. Marx would have regarded such a society as imaginary.

Moreover, if the law of value holds directly only in the pre-capitalist commodity economy, Marx's analyses of capitalist production throughout Part III of Volume I until the end of Volume II of *Capital* preceding his theory of prices of production must again be regarded as a somewhat hypothetical procedure. This cannot be a fully satisfactory interpretation of the theoretical system in *Capital*, as Marx's analysis of the capitalist production of surplus value is not a hypothetical model but a theoretical presentation of the real motion of capitalist production.

Even though these dilemmas in the theory of the historical-logical transformation of values into prices of production were not so clearly revealed in the interwar period, there were some Marxist economists who opposed this view. For instance. H. Kawakami and C. Maeide maintained that Marx's notions of commodities and values at the beginning of *Capital* should be understood as a logical abstraction, referring not to the precapitalist but to the capitalist economy. This interpretation seems more consistent with the methodological relation between the third volume of *Capital* and the first two. However, if the production processes behind commodity exchange are theoretically restricted to *capitalist* production from the outset, we encounter a further set of difficulties. Firstly, the character of the commodity economy is historically and spatially broader than that of the capitalist economy, a fact which cannot logically be grasped by this interpretation. Secondly, in attempting to avoid a hypothetical starting point and basing our theory on material reality, how can the equal exchange of amounts of labor between commodities be presented as the basic law of value if their actual exchange in a capitalist economy is dominated by prices of production? We find ourselves again in the original logical difficulty: to explain the actual process of exchange according to the law of value before explaining the prices of production. This was the starting point of the historical-logical explanation.

Either interpretation of the historical character of commodities at the outset of *Capital*—whether commodities come from simple commodity producers or from capitalists—therefore leads to certain dilemmas, which could not be resolved definitively by the contrary proposals made in the interwar period. We shall see further on how postwar Marxists have attempted to treat them.

Following the value controversy, a second major debate concerned Marx's theory of ground rent. An anti-Marxist critique once again provided the starting point. An article by S. Hijikata ("The Breakdown of Marx's Value Theory Viewed from the Theory of Rent") opened the conflict and was followed by a piece by Y. Takada ("The Value of Marx's Value Theory") extending the critique.[19] Their central claim was that there is an inconsistency between Marx's labor theory of value and his theory of differential rent. In the latter, productive conditions on the worst "marginal" land are seen as the regulator of the market value of agricultural products, whereas in the former it is the socially average amount of labor embodied in commodities which seems to determine their values. In the calculation of the values of ordinary commodities within the same industry, the surplus value obtained by capitalists with better than average technical conditions of production is to be regarded as containing transfers of surplus labor from capitalists with inferior technical conditions. In the case of the surplus profit which is transformed into differential rent, such transfers within the same industry do not exist, and Marx calls the source of differential rent a "false social value" (*Capital*, III: 661). Is this definition consistent with the theory of surplus value?

The responses of Marxists to such challenges as well as their own internal debates were centered on the controversy over ground rent from 1928 until about 1933.[20] The main Marxist contributors were H. Kawakami, Tsunao Inomata (1889–1942), T. Kushida, and I. Sakisaka. Their principal efforts were directed toward using Marx's theory to explain the source of differential rent and how landowners were able to obtain it. First attempts did not always correctly interpret Marx's own theory. For example, T. Inomata argued that average value governs agricultural products just as it does manufacturing products. He believed that the individual price of production of the worst land would regulate overall market value because this sort of land accounted for the bulk of cultivated land. Inomata's interpretation implied a complete denial of Marx's theoretical treatment of the specific restrictions upon the movement of capital imposed by the monopolizable different grades of land.

By way of contrast, Kushida tried to arrive at a specific determination of the market prices of agricultural products (and other products derived from land). He maintained that the substantial source of differential rent, especially in terms of physical products, lay in surplus labor within agricultural sectors. In contrast to the extra surplus value obtained by capital with better conditions of production in manufacturing, in the case of agriculture, where the least fertile land regulates market value, the source of differential rent which Marx called a "false social value" seems to lack a counterbalancing social substance in terms of surplus labor within the same sector. Kushida intended to solve this problem by assuming that the source of differential rent lay in physically visible agricultural surplus labor. This interpretation is seen to be unsatisfactory when we note that ground rent must be determined not in physical but in value or price terms. Kushida himself, following I. Sakisaka, later acknowledged that the monetary value of differential rent derived from other sectors.

In *Studies in the Theory of Rent* (1930) Sakisaka attempted to correct such confusions and argued that Marx's theory of differential rent in no way represents a negation of value theory but rather shows clearly how the law of market value (shown in chapter 10 of Volume III of *Capital*) operates in the particular context of the specific restrictions of different qualities of land. He also made it clear that differential rent was a form of the redistribution of social surplus value through commodity circulation. Sakisaka's work can be said to be the most consistent and highest achievement in this field before World War II.

Controversy over ground rent forced Japanese Marxists to study Marx's theory of market values. One logical problem that derived from these studies in the postwar period which is dealt with later was whether market value should be conceived as a social average of the individual values of commodities produced under different conditions of productivity or whether it can and should be reformulated so as to include the prices of agricultural products within a general theory of market value (or market prices of production).

In addition to these works on value and rent, the 1920s already saw Japanese Marxists turning their attention to theories of money, capital accumulation, reproduction, crisis, and imperialism. However, on the whole the studies of basic economic theories in the interwar period were still chiefly interpretive, although they were already reaching a very high level in some fields by the end of this period.

C. *The controversy over Japanese capitalism*

A third important controversy which took place between 1927 and 1937 was concerned with attempts to characterize Japanese

capitalism. The controversy took place entirely within the Marxist camp, and in fact produced a division into the Kōza-ha (feudalist) school and the Rōnō-ha (workers and peasants) school, involving nearly all Marxist economists in Japan.

Eitarō Noro (1900–1934), Yoshitarō Hirano, M. Yamada, Shisō Hattori (1901–1956), and Goro Hani were the main Kōza-ha scholars. Their views on Japanese capitalism were basically guided by the Comintern's theses of 1927, 1931, and 1932 on this question which were conveyed to the Japanese Communist Party (JCP).

The 1927 thesis, "A Resolution on the Problem of Japan," asserted that the strategy of social revolution in Japan could be broken down into two stages, the bourgeois democratic revolution and the socialist revolution. Nevertheless, it still eclectically characterized the Meiji Restoration as constituting the starting point for Japanese capitalist development. The 1931 thesis, "The Draft of the Japanese Communist Party's Political Thesis," defined the Meiji Restoration as a bourgeois revolution, and so proposed a direct advance to the socialist revolution in Japan. Finally, the 1932 thesis, "The Thesis on the Situation in Japan and the Task of the Japanese Communist Party," characterized the Meiji Restoration as a nonbourgeois reformation and reasserted the need to proceed through both steps, in even stronger terms, if anything, than the 1927 thesis. The Japanese Communist Party followed these theses and finally adopted the 1932 thesis as its basic strategy.[21] Kōza-ha scholars attempted to support this political position with their analysis of the development of Japanese capitalism.

In order to support the necessity for a future bourgeois revolution, Kōza-ha scholars were obliged to regard the Meiji Restoration as a mere reform of the feudal land system, and they had to show that a feudal or at least semifeudal exploitation of agricultural peasants still existed. The Japanese emperors since the Meiji era thus were seen in this scheme as existing within an absolutist monarchy whose social bases consisted of both feudal landowners and bourgeois capitalists.

For instance, E. Noro's anthology, *Historical Development of Japanese Capitalism* (1930), comprised revisions of his own earlier studies and adopted a feudalist standpoint. He also played a central role in editing the seven-volume *Lectures on the History of the Development of Japanese Capitalism* (1932–1933).[22] These lectures (Kōza) were a compilation of collected works by feudalist scholars and were the origin of their collective name, the Kōza-ha school. From them, M. Yamada's works were published separately, under the title *An Analysis of Japanese Capitalism* (1934). This provides a good illustration of the basic ideas of the school, stressing that the specific type of Japanese capitalism was based on semifeudal landownership, hence the semiserfdom in the agricultural villages.

The poor standard of living of tenant farmers and their high rent in kind, still amounting to about 50 percent of gross product, were features of Japanese society which seemed to conform with this view, which also drew support from the feeling of being in line with a Marxist orthodoxy closely related to the direction of the Communist Party. This perspective therefore became a dominant and orthodox position among Japanese Marxists and had a broad influence upon both the Japanese social sciences and historical analyses of modern Japanese society.[23]

In contrast to this "orthodox" Kōza-ha school, the Rōnō-ha school claimed that the Japanese economy had been developing as a capitalist society ever since the Meiji Restoration. The journal *Rōnō*, which was begun in 1927, was the central organ of this school. H. Yamakawa, T. Inomata, Kanson Arahata, and Mosaburō Suzuki (1893–1970) were the founders of the journal, whose contributors also included T. Kushida, I. Sakisaka, and Takao Tsuchiya.

The *Rōnō* group claimed that the Kōza-ha school had not recognized the actual development of Japanese capitalism but had merely statically drawn attention to its specific type. In addition they asserted that the Kōza-ha view of modern history was upside down in regarding landownership, rather than capitalist production, as the fundamental determinant of the character of modern Japanese society. In contrast, the Rōnō-ha school regarded the Meiji Restoration as a bourgeois revolution, and stressed the fact

that the peasantry was undergoing a process of decomposition into a class of wage laborers. The school's denial of feudal or semifeudal production relations in agriculture after the Meiji Restoration implied support for a direct advance to a socialist revolution in Japan. This view has served as a theoretical basis for the left wing of various socialist parties formed outside of the Communist Party.[24]

T. Kushida's *Agricultural Problem* (Volume 3 of *The Collected Works of Tamizo Kushida*, 1935), T. Tsuchiya's *Discourses on the History of Japanese Capitalism* (1937), and I. Sakisaka's *Problems of Japanese Capitalism* (1937) should also be mentioned here as being representative of the Rōnō-ha. Though sharp and clear in the critique they made of the Kōza-ha school, they were not as inclusive or systematic as their opponents. In addition, in contrast to the Kōza-ha, they tended to emphasize only the general character of Japanese capitalist development and neglect its specific features. For example, they explained the high level of tenant rent by the severe competition among peasant farmers rather than the existence of semifeudal coercive expropriation. However, this left unexplained why Japanese peasants should compete so vigorously to reduce their own living standards.[25]

From the methodological point of view, the debates between the Kōza-ha and Rōnō-ha exposed an interesting problem: how to analyze both the specific and the general character of Japanese capitalist development. Kōza-ha's repeated preparedness to subordinate Marxist analysis to the political positions of the Communist Party also posed a problem for the scientific autonomy of Marxian economics.

Although these major controversies failed to reach any conclusive solutions, they were very much the focus of Japanese academic and intellectual concerns in this period and served to stimulate and guide the studies of the majority of Japanese Marxist economists.

The progress of Marxist research was however interrupted once more by political repression. As early as 1928 the so-called March 15th case led to the expulsion of H. Kawakami from the University of Kyoto, I. Sakisaka and two colleagues from the University of

Kyushu, and Yoshitarō Omori from the University of Tokyo. In July 1936 some thirty Marxist scholars, many of them from the Kōza group, were arrested in the "Comm-Academia" case. Then, following the fascist escalation after the Sino-Japanese incident of 1937, the police made a mass arrest of some 400 Marxists (the 1937 Popular Front case), and later arrested a further forty-one Rōnō Marxists (the February 1938 case of the professors' group). Almost all Marxist economists were driven out of the universities,[26] while at the same time the study of Marxism became virtually impossible even outside of the universities, because of the severity of repression and censorship.

III. The Postwar Period

The dramatic historical experience of Japanese capitalism since World War II—heavy destruction, reconstruction, and the rapid growth up to recent times—can be observed in the index of manufacturing output (1934–1935 = 100):

1946	1950	1955	1961	1965	1970	1975
28.9	82.0	159.7	463.4	677.5	1409.0	1551.0[27]

Total national income surpassed that of West Germany in 1968, putting Japan in second place among the capitalist countries. With such growth, the share of the economically active population engaged in agriculture fell from 45.2 percent in 1950 to 12.6 percent in 1975.

U.S. aid programs introduced during the period of occupation (1945–1952) helped Japan to revive as a capitalist country. Since then the inflow of new industrial technology from the United States and its further refinement have produced a continuously high level of industrial investment. The low level of real wages, which at one time in the immediate postwar period fell to 28.1 percent of their 1934–1936 level, lagged behind the upswing of

productivity, enabling a rate of surplus value favorable to capital to be maintained until around 1970. A steady flow of cheap, adaptable, and hard-working labor from agricultural villages tended to check the rise of real wages in cities, and played an important role in encouraging rapid economic growth. U.S. spending within the global Cold War framework, especially military spending during the Korean War (1950–1953) and Vietnam War (late 1960s), was also of great assistance to Japanese industrial expansion.

However, all of the factors which had sustained rapid economic growth began to disappear, or were much weakened, by the end of the 1960s. With the tightening of the labor market a rise in real wages became unavoidable, and this increase began to outstrip rises in productivity.[28] This tendency, together with the increase in the prices of a number of primary products in the world market, began to squeeze the rate of profit at the beginning of the 1970s.[29] This development coincided with and formed one element in the excess capital accumulation of world capitalism in relation to both the restricted supply of labor power and inelastic supplies of primary products from developing countries. The fourfold increase in the price of Arabian crude oil at the end of 1973 was the final blow. These circumstances were accompanied by accelerating inflation attending the breakdown of fixed exchange rates in the international monetary system. With the uneven but sharp increases in market prices huge speculative stockpiling of primary and semi-finished products were undertaken by giant trade and industrial corporations, utilizing easily available credit. Excess capital accumulation with the rate of profit declining consequently led to the disruption and contraction of capitalist reproduction. This crisis was characterized by a superabundance of money as inflationary currency, together with a shortage of commodities—in contrast to the classical type of crisis in which excess capital accumulation caused a superabundance of commodities through absolute shortages in money markets (see the fourth and sixth essays). Japanese capitalism recorded a negative growth in GNP, with a fall of more than 20 percent in mining and manufacturing in 1974, the first such slump in the postwar period. Recovery in economic activity has been slow and bankruptcies have remained at high levels. Industrial investment has not yet been activated because of the excess of fixed capital, despite the government's attempts to stimulate it through Keynesian policies. Japanese capitalism has clearly entered a new phase of chronic difficulties, along with the rest of the global capitalist system.

The rapid economic growth led by the United States until the 1960s was in itself a powerful experience for the Japanese people. However, the fascist war and the defeat following it had also brought with them a profound shock, which was deeply felt in Japanese academic circles and produced a reorientation in a number of areas.[30]

A number of Marxist economists who survived the war returned to universities and were enthusiastically welcomed by students. The U.S. policy during the occupation was also initially tolerant to Marxists as one aspect of their democratization plans: the Marxists had been the strongest section of Japanese society in resisting the fascists. Even the Cold War purge of the left in 1950 was not sufficiently rigorous to exclude Marxists from the universities in Japan. The maintenance of academic autonomy within Japanese universities since the end of the war has preserved a liberal atmosphere within which Marxists could work.

Marxist economists were able to maintain and increase their numbers in university posts, and soon numbered more than a thousand professionally working academics. Open scholarship and free discussion created an exceptional environment within which Marxian economics could flourish. Up until the late 1960s this situation stood in contrast to the sterilization of theory that took place in the "socialist" countries under Stalinism, to the total destruction of Marxism and the Marxist tradition in Germany as a result of Nazi repression, and to the overwhelming weight of the neoclassical school in Anglo-American universities. Even economic historians in Japan have been influenced in a number of ways by Marxist economics (as in the case of the Ōtsuka historians,

see note 26), although they tend to combine the approach of the German historical school with their Marxist perspective.

A. *Neoclassical economics and Marxist economics*

One very conspicuous phenomenon in postwar economics in Japan has been the rapid growth in neoclassical economics that paralleled the revival and growth of Marxian economics. Based on the prewar attempts to introduce marginalist theories, many young scholars who went to learn in the United States continued to import and broaden orthodox U.S. academic teaching. Imitating the United States, the Japanese government has increased the role of neoclassicists in various governmental and administrative positions and advisory committees. The postwar increase in the number of university posts in economics also favored this school, creating a situation in which the number of neoclassical professors about equals the number of Marxians.

As far as theoretical considerations are concerned, the development of neoclassical and that of Marxist economics in postwar Japan have proceeded to a great extent independently of each other. There has been little theoretical interchange or debate. The debates of the prewar period constituted a watershed after which each school became more aware of its different tasks and methodologies. The main theoretical concerns of the Japanese neoclassicists have been to catch up with and integrate themselves into the Anglo-American academy, where there has been little exchange with Marxists until recently.

A few attempts have been made to combine Marxist and neoclassical economics, although these attempts have not produced a substantial degree of theoretical unification of the two schools. In their empirical research Marxists extensively make use of modern statistical data, and sometimes even use neoclassical technical terms to analyze actual economic situations. Conversely, most Japanese neoclassical economists are at least aware of Marxist viewpoints on various problems. However, in the field of basic theories the tasks and theoretical character of the two schools are too far apart to allow any organic unification. At most, Marxists have made use of some of the mathematical techniques developed by neoclassical economics. For example, Shinzaburo Koshimura's *Theory of Capital Reproduction and Accumulation* (1975) attempts to extend Marx's reproduction schemes into a disequilibrium type of crisis theory by using linear mathematical techniques. Nobuo Okishio also employs mathematical methods in his presentation of the quantitative relation between the rate of surplus value and the rate of profit: his discussion of the tendency of the rate of profit to fall also contains some interesting insights. However, Okishio's position seems occasionally to be of a neo-Ricardian variant of Marxism although his subjective intent is certainly purely Marxist.[31] This tendency may be the result of the fact that he confines his contributions to quantitative, mathematical problems. While Michio Morishima's *Marx's Economics* (1973) depends partly on Okishio's formulation of the rate of profit, his treatment of Marx's theory is entirely within the framework of western orthodox economics, especially his recommendation that we should substitute a von Neumann-type growth model for Marx's labor theory of value. His theoretical direction seems contrary to that of Okishio, and even more opposed to most other Japanese Marxian economists.

Obviously, such quantitative mathematical analyses of Marxist economics were, until recently, more accessible to western readers than were other types of Japanese Marxian works: however, they are not really typical of the mainstream of Japanese Marxian economics.

B. *Orthodox Kōza-ha school*

The majority of Marxist economists have followed in the tradition of the prewar Kōza-ha school, and are referred to as "orthodox," not merely because they constitute the majority but also because they have been more or less closely bound up with the orthodox line of the Japanese Communist Party. Their prevailing position

on postwar Japanese capitalism has fluctuated widely in accordance with the stance adopted by the party.

Just after the war, the neo-Kōza-ha school assumed the dominant position among the "orthodox" Marxists. Shirō Toyota and Shigeo Kamiyama were the leading figures: they argued that postwar land reform gave a new opportunity for the development of Japanese agricultural capitalism. Attempting to apply Lenin's theory of the two paths of capitalist development, expounded in *The Development of Capitalism in Russia* (1899), they proposed that the working class should support the U. S., rather than the Prussian, type of agricultural development. In effect, their position was an eclectic combination of old Kōza-ha (as applied to the prewar period) and Rōnō-ha (for the postwar period) views.

In his 1948 article, "The Historical Meaning of Land Reform," M. Yamada, a representative Kōza-ha theorist, acknowledged that postwar land reform had converted the agricultural land system from semifeudal into modern small-scale landownership. Hyakuju Kurihara's work, *A Treatise on Contemporary Japanese Agriculture* (1951), offered an even more decisive revision of the Kōza-ha theory. Supported by a rich empirical analysis, he maintained that the semifeudal landowning class had virtually disintegrated with postwar land reform, and that small farmers had consequently been put under the direct control of state monopoly capitalism, so that there could be no prospect of capitalist development in agriculture. This analysis was a conspicuous achievement among the Kōza-ha theorists.

However, if postwar land reform can be regarded as a bourgeois revolution, although one without the prospect of capitalist development in agriculture, should not the same criteria be applied to the Meiji Restoration? In both cases the decisive external political power came from above; in neither case were the farmer or the peasantry a revolutionary subject acting below. This treatment entangles this perspective in a logical inconsistency, does it not? Kurihara's serious studies failed to obtain the general support of other Kōza-ha scholars, and was in fact quite severely attacked by them.

Following the adoption of "The Present Claims of the Japanese Communist Party" as the new 1951 party program, under the direction of the Cominform, most Kōza-ha scholars began to criticize and reject both the neo-Kōza-ha and Kurihara positions from a standpoint very similar to that taken by the prewar Kōza-ha. According to the program, Japan had become a semicolony, subordinated to the interests of U.S. imperialism through the intermediary of the imperial absolutist bureaucracy, which still had its roots in semifeudal landownership.

As a consequence an anti-feudal bourgeois revolution should still take priority. An eleven-volume collection, *New Lectures (Kōza) on Japanese Capitalism* (1953–1955) was published to support the 1951 program. One representative author was Harumaru Inoue, who maintained in "Land Reform and the Semifeudal Character of Japanese Capitalism" (vol. 5) that postwar land reform was a mere formal alteration in the prewar semifeudal landowner system. As proof he referred to the untouched ownership of forest lands, the remains of tenancy lands of 2.45 acres or less, and the fact that the scale of farms was too small to enable farmers to maintain or increase their standard of living. Clearly none of these points can be regarded as scientifically conclusive when arguing for the existence of feudal or semifeudal coercive relations between landowners and small farmers.

This orthodox Kōza-ha view, represented by Inoue, was again short lived. It was too remote from Japanese agricultural reality and even had some destructive effects upon farmers' political organizations, as farmers could not effectively oppose the forest landowners or the much weakened arable farming landowners. In 1955 the Japanese Communist Party had to change strategy, immediately following the full publication of *New Lectures*. As a result, the collection immediately lost orthodox support and disappeared from the arena without producing a serious debate.[32]

After this Kōza-ha scholars seemed unable to offer a unified and systematic analysis of Japanese capitalism and their views became fragmented. Some moved toward reformism along with, or even more rapidly and radically than, the Communist Party: some variants of the state monopoly capitalism school evidenced this tendency. The theoretical prestige of the Kōza-ha declined after the latter half of the 1950s. De-Stalinization after 1956 contributed further to their lack of cohesion and accelerated the decline in their standing.

In the area of basic theory, Kōza-ha scholars incline toward doctrinal rather than original work, limiting themselves to extending prewar formulations. A good, typical work is the ten-volume *Marx Lexicon* by Kōzō Koruma, who originally stemmed from Rōnō-ha. This work is an extensive collection of classified quotations from Marx. In value theory these scholars have maintained the historical-logical transformation from values to price of production, as presented in Minoru Miyakawa's *Studies in Capital* (1949), Fumimaru Yamamoto's *Studies on the Theory of Value* (1962), and Yuichi Ōshima's *Theory of Prices and Capital* (1974). The fundamental theoretical difficulties within this view, discussed in the previous section, still seem to be unresolved.

In crisis theory, most of the works of the Kōza-ha school fall within the framework of the excess commodity theory based on the reproduction schemes. M. Yamada's *An Introduction to the Scheme Analysis of the Reproduction Process* (1931; rep. 1948) offered a prototypical underconsumptionist excess commodity theory. Misaburō Kawasaki's *Crises* (1949) and Motosuke Udaka and Katsumi Minami's "The Basic Structure of Crisis Theory in *Capital*" were among typical subsequent works.[33]

Capitalist accumulation is not feasible without relatively narrow limits on the level of workers consumption. Alternatively, narrow limitations on workers consumption can also be seen as the basis of both capital accumulation and, associated with this, crises. Nevertheless, as long as capital accumulation is able to carry on, the excess supply of means of consumption in relation to limited effective demand of workers in the consumption goods sector can be absorbed by the process of accumulation in the sectors producing means of production. Within capital accumulation there is a constant, anarchic movement of investment which follows fluctuations in market prices and profit rates, alternately producing and absorbing the oversupply of various commodities. This process represents a concrete capitalist mechanism through which the law of value operates. Excess supply, in relation to workers' limited consumption, does not necessarily become *generalized* overproduction.

But how and why should this capitalist process of the adjustment of demand and supply become totally paralyzed? And why should it break down with a cyclical periodicity? These are fundamental theoretical difficulties for the excess commodity theory of crisis, reflecting its neglect or insufficient attention to the role of excess accumulation of capital itself.

In order to overcome these difficulties Kōza-ha theorists have explored some additional causes for periodic imbalances by introducing waves of new and replacement investment in fixed capital into the reproduction schemes. As a result, they have tended to mix or combine a disequilibrium explanation with the underconsumptionist thesis. Naomichi Hayashi's *Studies in Business Cycles* (1959), Tatsuji Yoshimura's *A Study in the Theory of Crisis* (1961), Ryōzō Tomizuka's *A Study of the Crisis Theory* (1962), and Kiyoko Imura's *Theory of Crisis and the Industrial Cycle* (1973) are more or less representative.

Such attempts still leave the logical difficulties of this type of crisis theory unsolved because even a disturbance caused by an uneven motion of investment in fixed capital may be only partial, and possibly may be overcome as long as capital accumulation as a whole has not encountered any more fundamental difficulties.

In addition to theories of value and crisis, Marx's theory of credit and interest has become a popular subject since the 1950s, during which a Marxist working group, the Association for the Study of Credit Theory, was established: the group published four volumes of *The System of Credit Theory* (1956). Ichirō Kawai, Yoshirō Tamanoi, Yoshio Miyake, Nobuya Takagi, Eiji Ikukawa, and Shigeru Iida were the main personalities in the association, and they in turn encouraged a new generation of scholars in the field.

From the outset the study of credit was not confined to the Kōza-ha: a new school, led by Kōzō Uno—whom I shall come to later—also played an important role. Of the initiators of the association, Yoshirō Tamanoi belonged to this newer school.

Compared with Uno theorists, the Kōza-ha school were tied to a rigid interpretation of the letter of Marx's writings. However, such a perspective was of little use in clarifying theoretical problems in areas where Marx's own study was clearly unfinished. Although *Capital* did provide some fundamental material, and basic insights, these require completion within the framework of a basic theory. Kōza-ha scholars have concentrated too much on literal interpretations of Marx's statements and concepts of interest and credit, on the one hand, and have tended to apply them too directly to recent concrete situations, on the other. This is an illustration of the difficulties "orthodox" Marxist economists have had in overcoming their doctrinal traditions.

Nevertheless, Kōza-ha scholars' work in various fields has not been without its scientific value. After all, the exegesis and interpretation of such significant contributions as those of Marx is not completely without foundation. The work of these scholars has been indispensable in forming the broad educational background and basic common sense of Marxism and Marxian economics among postwar Japanese intellectuals. In fact, many fairly good introductory textbooks have been provided by Kōza-ha scholars, along with a large number of translations of Marxist works. For instance, full translations of all the volumes of the *Marx-Engels Werke* have been published, largely the work of Kōza-ha scholars. The existence and the activities of Kōza-ha scholars have therefore provided, in a sense, the general foundation upon which Marxist studies have been established in Japanese academic and social life.

C. *Rōnō-ha school*

Rōnō-ha scholars in the postwar period have been led, theoretically, by Itsurō Sakisaka, who has also played a central role in the

Socialist Association, formed in order to strengthen the Japanese Socialist Party, the second largest party in the Japanese parliament. The Rōnō-ha group maintains a considerable influence in the left wing of this party: for instance, Mosaburō Suzuki, a founder member of the prewar journal *Rōnō*, became chairman of the Socialist Party in the 1960s.

Sakisaka's view of the postwar land reform was that it represented neither a bourgeois revolution nor a mere reformation of a semi-feudal system of landownership, but was a reformation of modern, private landownership introduced at the expense of large landowners in order to mitigate the serious political crisis of the capitalist class. This view was sharply opposed to that of the Kōza-ha and was consistent with the prewar standpoint of the Rōnō-ha that the Meiji Restoration had been a bourgeois revolution. It also coincided with the political position of the Rōnō-ha and the left wing of the Socialist Party which, urged directly a socialist revolution in order to realize a more substantial democracy in Japan.

Although the Rōnō-ha analyses of Japanese capitalism were relatively correct and consistent, they still tended to avoid the problem of clarifying the specific character of its development, especially as far as the agricultural sector was concerned. In other words, they inclined toward a direct application of Marx's basic theory to Japanese capitalism.

In the field of basic theories, the works of Rōnō-ha scholars, like those of the Kōza-ha school, have been more interpretative than original. For example, Sakisaka translated the entire three volumes of *Capital* and Jirō Okazaki later made another complete translation.[34] In value theory, Sakisaka's three-volume *The Methodology of Political Economy* (1949–1950) and Takehiko Kwaguchi's *The History of Value Controversy* (1964) maintained the historical-logical view of the transformation of values into prices of production, following T. Kushida's prewar position on this point. In crisis theory, Shigeru Aihara presented a disequilibrium-type excess commodity theory based on his prewar work in *Accumulation and Crisis* (1948), which reviewed prewar European Marxist theories of crisis and criticized their logical weaknesses. It pointed out, for instance, that Henryk Grossmann's theory of crisis and breakdown, based on Marx's law of the tendency of the rate of profit to fall, had constructed a reproduction scheme in which it was improperly and mechanically assumed that both the rate of surplus value and the growth rates of constant and variable capital remained constant as productivity increased.[35] In the absence of such assumptions, the law of the tendency of the rate of profit to fall does not of itself necessarily bring about a breakdown of capitalism or a crisis, although it causes a slowdown in the pace of capital accumulation (see the fourth essay). Aihara's critique of Grossmann proved very definitive, and since then this type of crisis theory has found few supporters in Japan.

So long as Rōnō-ha scholars maintain an historical-logical approach to value theory, an excess commodity theory of crisis, and a tendency to interpret Marx rather than innovate, they remain basically quite close to the Kōza-ha school. As we have seen, the major difference between the schools centered on the methodological issue of applying basic Marxist concepts to the concrete historical development of Japanese capitalism. The methodological problems left unsolved in the debates between these schools, together with the main body of their interpretative works, have nonetheless served as essential bases for the more creative output of the Uno school.

D. Uno school

The most remarkable feature of postwar Japanese Marxian economic study has been the growth of the Uno school, based on the highly original works of Kōzō Uno (1897–1977). While partly incorporating some Rōnō-ha economists, the Uno school has become a major opponent of the orthodoxy of the Kōza-ha, and in doing so it has taken over the former role of the Rōnō-ha. Some Uno theorists have affiliated with the Socialist Association and have gained an increasing influence among the younger generation in the left wing of the Socialist Party. Uno theory has also attracted smaller groups of radical students and workers outside the Communist Party. There are probably around two hundred professional scholars who could be classified as Uno theorists—or about one-fifth of the total of Japanese Marxist economists.

Kōzō Uno was regarded as a member of the Rōnō-ha school during the prewar period, as he too regarded the Meiji Restoration as a bourgeois revolution. However, he did not join directly into the controversy on Japanese capitalism, but rather concentrated on the basic theories in *Capital* and his own studies in capitalist development in world history, which he pursued through extending Lenin's *Imperialism*. He first began to present his own original views after World War II.

One of Uno's basic assertions was that Marxian economics should be a relatively autonomous social science, independent of ideology and political claims. Naturally, socialist ideology should play an important role in exposing the limitations of bourgeois ideology and economics, but it could not in itself guarantee a correct understanding of social and economic relations under capitalism. Nonetheless, socialist ideology should rest on a correct scientific appreciation of the laws of motion of the capitalist economy.

In fact, the theoretical contents of Marx's *Capital* are not a mere assertion of socialist ideology: they constitute universally understandable scientific statements of the economic laws governing capitalist society. Economic studies based on *Capital* should also be regarded as scientific work which is open to correction and completion if incorrect or uncompleted: this also applies to the original works of Marx, Engels, and Lenin. The relevance of Uno's position in this respect is evident in view of the history of confusion in Kōza-ha orthodoxy and the worldwide sterilization of Marxism under Stalin. In fact, Uno was the first to criticize Stalin's incorrect notion that the law of value could be used in socialist countries as if it were a law of natural science. This was three years before de-Stalinization in the Soviet Union and Japan. Uno and his followers remained immune both from Stalinism and the confusion caused by its sudden collapse, as well as staying free from the fluctuations in the political lines of communist and socialist parties. Their principal aim has been to develop the scientific content of Marxian economics.

Uno claimed that Marxian economics should be broken down into three levels of research. The first would comprise the basic principles, which were derived from *Capital* and completed where necessary. The task of this basic level was to elucidate the purely economic laws of motion of capitalist production, based totally on a commodity economy. In this respect, Uno emphasized the importance of the historical development of the British economy, which up to the mid-nineteenth century was becoming a more and more complete capitalist society. Uno considered that such a tendency provided the basis for a materialist abstraction of a pure capitalist society, from which certain basic principles could systematically be derived.

The next level would develop a "stages theory of world capitalist development" on the foundation of these basic principles. This would involve the concrete examination of the historical development of the leading capitals, together with their main characteristic policies. Uno proposed three stages of capitalist development: mercantilism, liberalism, and imperialism. In the first stage, mercantilism, the leading capital was British merchant capital, based on the growth of the woolen industry. The second stage, liberalism, was dominated by British industrial capital, with its center in the cotton industry. In the third stage, imperialism, the different types of finance capital which appeared in Germany, Britain, and the United States with the development of the heavy industries assumed dominance.

Lenin's *Imperialism* (1917) summarizes this highest and final stage of capitalist development by observing concrete changes in industries, financial systems, and the world market together with changes in economic policies. The monopolistic organizations of finance capital cannot be understood without observing the particular historical changes taking place within industrial and financial processes in each domestic market, a market often separated from the competitive world market by state protectionisms. The imperialist antagonisms between the major capitalist countries which emerged before World War I were to be elucidated through concrete historical studies of their respective finance capitals. The study of imperialism requires not only an analysis of the general features of the leading capitals, but also a study of their national differences. Although Lenin's discussion occasionally proceeds as if his theory of imperialism could be deduced directly from Marx's theory of capital accumulation, his treatment of such concrete historical situations at the beginning of the twentieth century is not at the same level of investigation as the basic principles expressed in *Capital*.[36]

To come to a proper assessment of Lenin's contribution it is necessary to distinguish methodologically the levels of basic principles, on the one hand, and stages theory, on the other. Instead of viewing Lenin's *Imperialism* as a direct extension of *Capital*, on the same level as the latter, Lenin's work ought to be related to a more fully elaborated stages theory, which embraces the earlier stages of capitalist development, mercantilism, and liberalism. Uno's *Theory of Economic Policies* (1954) offers his own solution to the problem of a complete stages theory.

Uno's stages theory is not designed to deal with the historical development of an individual capitalist country, such as Japan, or with underdeveloped countries on the periphery of the capitalist world market. It also excludes the world economy after World War I, the reason for this being that after the war the economic policies of the capitalist states were no longer simply directed by the economic interests of the leading capitals, but also politically guided by the need to counter the external and internal "socialist threat." This period thus ceased to be one in which world history was simply capitalist history, and entered a transitional period from capitalism to socialism. Uno therefore maintained that the world economy since World War I and the development of individual capitalist countries like Japan must be analyzed together with their concrete historical situations at a third level of research. This level was to consist of empirical analyses of the current situation, based on both the principles derived from *Capital* and the stages theory.

This methodological differentiation of research into principles, stages theory, and empirical analysis was called the "three steps theory."[37] From Uno's point of view both the Kōza-ha and the Rōnō-ha were too hasty in the manner in which they applied the basic theories of *Capital* to Japanese capitalism. The Rōnō-ha tended to focus solely on the law of capitalist development as a process toward the creation of a pure capitalist society, based on the categories of *Capital*, and paid too little attention to its specific features, especially in the agricultural sector. Conversely, the Kōza-ha insisted on the singularity of Japanese agriculture as the semifeudal basis of Japanese capitalism, by directly contrasting it with the pure capitalist society described in *Capital*, where capitalist production dominates even the agricultural sector, as is presupposed in the theory of ground rent. The Kōza-ha scholars emphasized the gulf between Japanese reality and the theoretical content of *Capital* as providing proof of the semifeudal character of Japanese society.

However, inserting the stages theory between the basic principles and the empirical analysis of Japanese capitalism means that such one-sided conclusions can be avoided. Stages theory reveals that a country like Germany, which began industrializing by importing from Britain technologies requiring a higher organic composition of capital, accumulated capital with a relatively small number of wage laborers, and as a result left a considerable industrial reserve army of poor peasants in its agricultural villages. The specific character of German finance capital and its imperialist foreign policies are closely related to this path of development. By the same token, it is not surprising that Japanese capitalism, starting later than in Germany, was similarly faced for a long period with the socioeconomic problems generated in agriculture by the coexistence of a great number of poor peasantry and a highly concentrated Zaibatsu-type of finance capital. Uno's three-steps methodology is therefore helpful in coming to grips more properly with an analysis of Japanese capitalism and its agrarian problem. A large number of empirical analyses by Uno theorists on Japanese capitalist development and its agrarian problems, stimulated by this approach embody both theoretical and empirical criticisms of the Kōza-ha and Rōnō-ha schools. Among them are the brilliant works of Tsutomu Ōuchi, including *Agricultural Problems in Japanese Capitalism* (1948) and *A Treatise on Japanese Economy* (1962–1963), and the monumental thirteen-volume work by Mitsuhaya Kajinishi, Kiyoshi Ōshima, Toshihiko Katō, and Tsutomu Ōuchi, *The Development of Capitalism in Japan* (1954–1969).

In addition to these studies of local Japanese capitalism the younger generation of Uno scholars has undertaken further empirical studies of global development, especially of finance capitals, imperialism, crises and depressions, and the contemporary world economy.

Uno, on the other hand, concentrated on completing the theoretical system of *Capital* as the basic principles of Marxian economics. He rewrote the entire three volumes of *Capital*, first in two volumes, *Principles of Political Economy* (1950–1952), and followed in 1964 by a more compact work bearing the same title.[38] These intensive presentations of the essentials of *Capital* have become the central pivot around which have turned a great many postwar Japanese studies of economic theory, along with various debates on theories of value, money, accumulation, prices of production, ground rent, credit, commercial capital, and crises. Uno's own works and papers in these fields occupy the first six out of eleven volumes of *The Collected Works of Kōzō Uno* (1973–1974).

In value theory Uno offered a new perspective and a way out of the dilemmas inherited from the long history of previous debates. For example, the historical-logical transformation from values to prices of production had been presented by Engels, Hilferding, and many Japanese Marxists as demonstrating the actual materialist basis of the law of value, rather than as a mere hypothetical

presentation of the exchange of commodities at their values. However, this precapitalist commodity theory had to assume a hypothetical, classless, precapitalist society of simple commodity producers in order to show the social necessity of the law of value. In the face of such dilemmas some theorists have resorted to the capitalist commodity theory of value, interpreting Marx's labor theory of value at the beginning of *Capital* as an abstraction from a capitalist society. This interpretation also had to present the labor theory of value as an unproved hypothesis, however, since *capitalist production* cannot be explained theoretically at that initial stage. If Marx's labor theory of value is regarded as a hypothetical model, one might as well substitute it for more conventional models of price theory along neoclassical or neo-Ricardian lines of thinking.[39]

Uno sought to avoid a hypothetical approach, and attempted to show the actual social necessity of the labor theory of value. In a capitalist society based on the commodity form of labor power, all the means of consumption and production must take the commodity form. The value relations between commodities in such a society must therefore totally embrace and mediate the social relations of the amounts of labor crystallized in various objects. Value relations obtain a social substance in quanta of labor. As long as social reproduction is effected through value relations the latter must represent the social relations of the amounts of labor necessary to reproduce commodities. Uno maintained that the social inevitability of the law of value can be demonstrated firmly if it is related to the capitalist process of production. How then should we deal with Marx's theories of commodities and money and the formulas for capital which come before the exposition of the capitalist production process in *Capital?*

Uno discovered that the theories in Parts I and II of Volume I of *Capital* contain Marx's original theories of forms of value, and that these can be reformulated as theories of forms of circulation without referring to the substance of value as labor. This reformulation coincides with Marx's unique recognition that the commodity economy arose and developed as intersocial economic relations which remained external to the *social* processes within various political and communal orders for quite a long period in precapitalist formations. The historically specific character of capitalist society with its anarchical, atomistic mechanisms is very much a product of the fact that such originally intersocial economic relations were transformed into intrasocial relations based on the commodity form of labor power.

Uno's theory of value with his clarification of the forms of value therefore should not be seen as a mechanical separation of capitalist production and commodity circulation. It has profound implications for a correct understanding of the historical character of the commodity economy as well as that of capitalist production. In Uno's theory, the law of value is proved with reference to the social necessities arising out of capitalist commodity production, which also allows the historically broader character of a commodity economy to be articulated logically. The theory offers a new way of resolving problems and dilemmas left over from the capitalist commodity theory and the precapitalist commodity theory.

Works by the younger generation have followed Uno in this. For example, Kōichirō Suzuki's two-volume *Principles of Economics* (1960, 1962) and Hiroshi Iwata's *World Capitalism* (1964) attempt to broaden the methodological implications of the theory of forms of value.[40] Hideaki Ōuchi's *The Formation of the Theory of Value* (1964) and Tsuyoshi Sakurai's *The Theory of Prices of Production* (1968) apply Uno's views to the history of value theories and western debates on the transformation question. My own attempt to extend these works with introductory analyses of Marx's value theory is summarized in Chapter 2.

Marx's theory of ground rent also was discussed from a new angle by this group of theorists. For instance, Tsutomu Ōuchi and Hiroshi Hidaka, following Uno's theory of market value, maintain that differential rent can be understood as a direct extension, rather than a modification, of the market value or market price of production. The concept and the limit of absolute rent were also reinvestigated.[41]

Uno also reformulated Marx's excess capital theory of crisis in *Principles of Political Economy* and *Theory of Crisis* (1953). In contrast to the previously popular excess commodity theory of crisis, Uno stressed the importance of Marx's notion of the absolute overproduction of capital in relation to the working population (*Capital*, III: ch. 15). At the same time, he sought to refine further Marx's theories of capital accumulation in Volume I and the credit system in Volume III of *Capital* in order to provide a complete theory of cyclical crises. This was a powerful attempt to overcome the fundamental difficulties in the excess commodity theory of crises and base the logical necessity of sharp cyclical crises in fundamental principles. My own *Credit and Crisis* (1973) follows Uno's lead in this field, and is partly summarized in the fourth essay. The works of Uno theorists will doubtless continue to multiply, and their influence can be expected to grow, not only in Japan, but also in western countries.

IV. A Brief Conclusion

If we compare the development of the Japanese Marxian economics with the recent upsurge in its counterpart in western countries some interesting contrasts come to light. As indicated above, Japanese studies began before the systematic study of imported neoclassical economics. Japanese Marxians did not, therefore, engage in criticism of the neoclassicists as long as the latter refrained from attacking them. The major streams of Marxian economics were able to spring up and develop an almost purely Marxian scholarly tradition while concentrating on deepening Marxian economics itself. As a result, Japanese studies of *Capital* may be safely said to be the most advanced in the world.

In contrast, recent Marxian studies in the western capitalist countries have had to begin by tackling the overwhelmingly dominant neoclassical tradition. Western Marxians have had to overcome their own academic backgrounds in addition to facing criticisms of their work by orthodox neoclassical economists. This has undoubtedly made them better able to undertake critiques of current economics than the Japanese. On the whole, they also have been more qualified to develop quantitative investigations into some aspects of basic theories, and carry out empirical research utilizing modern mathematical techniques.

Needless to say, the different historical backgrounds and present differences between Japanese and western Marxians in no way lowers the need for their mutual communication. On the contrary, the differences between them, together with their common basic beliefs in the fundamental soundness of Marx's theories, give every indication that such communication will prove fertile. Although the language barrier is still very high, I hope that various efforts will follow to broaden and strengthen our international union in the scientific study of Marxian economics.

2

A Study of Marx's Theory of Value

Marx's theory of forms of value systematically distinguishes his labor theory of value from the classical theory.[1] Yet there remains even in *Capital* a sort of classical residue which prevents Marx's original theory of the form and the substance of value from being entirely consistent. Various confusions in the study of Maxian value theory, including the debates concerning the transformation problem, quite often originate from this classical residue in Marx. By facing the hidden root of such confusion we can try to clear them up, and thus complete Marx's value theory more systematically.

1. The Twofold Concept of Value

Marx's notion of value is twofold. His distinction between use value and value originates from the classical school; what is unique is his differentiation of the concept of value itself into the form and the substance of value. We can begin by comparing the first and third sections of chapter 1, "Commodities," of Volume I of *Capital*.

The first section is entitled "The Two Factors of a Commodity: Use-Value and Value (the Substance of Value and the Magnitude of Value)"; the third section is "The Form of Value or Exchange-Value." At first glance, Marx seems to treat the *substance* of value in the first section and its *form* in the third. But he does not actually start simply by defining or assuming the substance of value as crystals of abstract labor. Even in the first section, he attempts to

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show that the substance of value does exist behind the commodity form and exchange values. An interesting problem arises here concerning the logic and consistency of Marx's dual treatment of exchange value, in both the first and third sections.

Marx takes up the commodity form as the starting point of his systematic study of the law of motion of capitalist economy. For commodities are the basic, universal form of the wealth of capitalist society, and their specific character is essential to the historical nature of capitalist economy. Notice that the commodity form already contains within itself an historical and dialectical character.

This character of commodities does not appear so long as only one factor, their use value, is observed. Use values "constitute the substance of all wealth, whatever may be the social form of that wealth" (I: 36; 126). They are not peculiar to the commodity form. However, "in the form of society we are about to consider, they are, in addition, the material depositories of exchange-value" (I: 36; 126). This exchange value expresses, unlike the use value, the specific relation among commodities. In the next paragraph, Marx says, "Exchange-value, at first sight, presents itself as a quantitative relation, as the proportion in which values in use of one sort are exchanged for those of another sort." Thus, "the exchange-values of commodities must be capable of being expressed in terms of something common to them all" (I: 37; 127).

In order to find this common something, Marx abstracts from the use value of commodities, saying, "the exchange of commodities is evidently an act characterized by a total abstraction from use-value. Then one use-value is just as good as another, provided only it be present in sufficient quantity" (ibid). With this abstraction from use value, the common property in commodities is reduced to crystals of abstract human labor, as follows: "If then we leave out of consideration the use-value of commodities, they have only one common property left, that of being products of labour" (I: 38; 128).

In this process of logical reduction from exchange value to the substance of value, three points must be noted: (1) Marx supposes here that commodities are directly exchanged; he does not refer to

the difficulty of these exchanges; (2) Marx then abstracts from use values and leaves them out of consideration; and (3) the common property of commodities is found to be the embodiment of abstract human labor.

When we read the third section, however, we find that these three points are not so easily maintained. Here Marx attempts to show the necessity of the money form, or the price form, by following the logical development of the expression of value from its simplest, "elementary or accidental form." The simplest form of value appears as the value relation between two commodities. For example, 20 yards of linen are worth 1 coat, or 20 yards of linen = 1 coat. Even though this equation seems similar to the direct exchange relation between 1 quarter corn = x cwt. iron in the first section, the equation does not here express a direct exchange.

The linen expresses its value relatively in a certain amount of the use value of another commodity, say, 1 coat. The linen appears here in the relative form of value, putting the coat in the equivalent form. The fact that the linen "has a value is expressed by saying that the coat is directly exchangeable with it" (I: 55; 147). The linen, however, is not directly exchangeable with a coat. Its relative expression of value is not assured of realization.

The specificity of the use value of linen restricts its exchangeability as a value. In order to be directly exchangeable with a coat, the linen must be selected as an equivalent form of a coat. However, the value of a coat might well be expressed, not by the use value of linen, but by some other use value.[2] The desire of the owner of the linen to exchange it for a coat does not assure the reverse desire of the owner of a coat.[3]

Of course, once the latter wants to exchange his commodity, a coat, with the linen, he can do it easily and directly, as long as the owner of the linen expresses the value of linen in the use value of a coat. This direct exchangeability of a coat as an equivalent of linen is given only by an active expression of the value of linen in the relative form of value. The direct exchangeability of money with all other commodities is already intimated in this simplest, but dialectical, relation between the relative form and the equivalent form of value.

Thus, in this third section, (1) Marx does not suppose that direct exchanges between commodities take place easily in general. He shows, to the contrary, that a commodity which expresses its value in the relative form cannot have direct exchangeability. At the same time, (2) he does not put use value out of consideration here. The abstraction from use value is not as easy as it appeared to be in the first section. Finally, (3) Marx does not regard the common property of commodities only as the embodiment of abstract human labor here. He emphasizes that "commodities have a value-form common to them all, and presenting a marked contrast with the varied bodily forms of their use-values" (I: 47; 139). He means here the money form or the price form of commodities as the complete form of value, logically developed from the simple, elementary form of value.

From the point of view of the analysis of the value form in this third section, the reduction from exchange value to the substance of value in the first section now appears dubious. The exchange value of commodities should not be treated in terms of their direct exchanges, as proposed in the first section. Besides, as long as the value of commodities is immediately reduced to quanta of abstract human labor, by abstracting use value from exchange value, exchange value is treated only as an intermediary between use value and value.

In contrast, in this third section, exchange value is regarded as the necessary form of the relative expression of the value of commodities in terms of the use value of an equivalent commodity. This expression of value is inherent in the nature of value of commodities. Thus, exchange value as the form of value now appears as indispensable to the notion of value. It cannot be a mere theoretical intermediary, nor something external to the notion of value.

Marx himself seems to recognize the insufficiency in his treatment of exchange value in the first section when he says in the third section:

> When at the beginning of this chapter, we said, in common parlance, that a commodity is both a use-value and an exchange-value, we were, accurately speaking, wrong. A commodity is a use-value or object of utility, and a value. It manifests itself as this two-fold thing, that it is, as soon as its value assumes an independent form—viz., the form of exchange-value. It never assumes this form when isolated, but only when placed in a value or exchange relation with another commodity of a different kind. (I: 60; 152)

Why, then, did Marx need to correct his treatment of exchange value? Or, why did he leave behind the somewhat different treatments that I contrasted in discussing the first and third sections?

First, we must notice that the third section of the theory of value form was completed and inserted into its place later; it appeared for the first time in the second German edition (1873). In the first edition (1867), the analysis of the value form in the first chapter was not clearly written, and therefore Marx was forced to treat it again separately in the supplement to the first volume. Hence, as he says, he "completely revised" (I: 12; 94) this section by clearing up this double exposition. However, this theoretical progress does not seem to have extended fully to the first section.

Second, in contrast to the originality of Marx's value theory as presented in the third section, the exposition of value in the first section reflects a strong influence of classical economics, especially of David Ricardo's theory of value. Ricardo's discussion at the beginning of the *Principles* in some respects presents the labor theory of value in almost the same way as the first section of *Capital*,[4] since Ricardo, after observing the use values of commodities, analyzes exchange values as the direct exchange ratios between commodities of different use values, and then reduces the determinants of these exchange values to the quantities of human labor embodied in each commodity, by abstracting away use values from the exchange relations. The three points which characterize the first section of *Capital*, in contrast with the third, are clearly not original in Marx. Can we not say that they are the residue of classical theory in Marx's value theory?

Moreover, if we underline again the specificity of Marx's treatment of the value form in the third section, then the discussion in the first section must be regarded as clearly unsatisfactory. The notion of value is inseparable from the form of value. This is of special importance to the characteristically Marxian attempt to clarify the historical nature of value relations. The historically specific social relations between commodities require that the value relations logically appear only through the value form.

II. The Forms of Value

Even though the first volume of *Capital* is subtitled "Capitalist Production," ("*Der Produktionsprozess des Kapitals*" in the German original), the author does not analyze the production process of capital in the first two parts of this volume. Rather, he first treats the logical relation between "Commodities and Money" which yields commodity circulation (in Part I), and then "The Transformation of Money into Capital," which is based on commodity circulation (in Part II). Commodity, money, and capital are the basic circulation forms in a commodity economy. And their logical relations are shown to be the development of the forms of value.

The analysis of capitalist production as the production process of surplus value first begins with Part III. "The Buying and Selling of Labour-Power" as a commodity, which appears in chapter 6 of Part II, gives the essential historical premise for capitalist production. However, commodity, money, and some sorts of capital (such as merchant's or usurer's capital) can appear without this premise. They exist in the commodity economies, which are more or less common to various stages of the process of social production.

The historical singularity of capitalist production appears when the forms of value which constitute the commodity economy in

general encompass the *social* labor process. At the same time, the labor time embodied in each product must be dealt with entirely through the value relations in this capitalist economy. The forms and the substance of value are thus connected with social inevitability in a capitalist economy.

Such a *social* inevitability of the connection between the forms of value and the social labor process is not guaranteed in the commodity economy in general. In all societies except the capitalist one, the bulk of the labor process is organized not by value forms but by some kind of communal or political order. In such societies, trade in commodities is only partial and often represents primarily the economic relation *between* communal societies. Material reproduction in such societies, unlike in a capitalist society, can be maintained without serious disturbance, even when commodity trade does not guarantee the labor time necessary to reproduce each commodity.

The theoretical difficulty of showing that the substance of value is the labor time socially necessary to produce each commodity, by abstracting use value from exchange value, as we saw in the first section of the first chapter of *Capital*, reappears here. On the one hand, value relations in a commodity economy should be analyzed in their historical character, which is not confined to their appearance in a capitalist system of production. On the other, the *social* inevitability of regulating value relations according to the labor time embodied in each commodity cannot be shown logically without considering capitalist production.

Thus, the direct reduction from exchange value to the social substance of value in the first section of *Capital* contained not only some inconsistency with the analysis of value form in the third section, but also insufficiency of logical proof of social inevitability. Unlike the theory of forms of value, it was not essentially Marx's original logic but rather a sort of residue of the classical value theory.

Is it not possible to clear up the inconsistency and purify Marx's original theory of the forms of value without referring to the substance of value prior to demonstrating the law of value as the motive force of capitalist production? This is the heart of the extended discussions on value theory among Japanese Marxian economists inspired by Kōzō Uno's works.[5]

At first sight, the forms of value might seem inseparable from, and only deducible from, the substance of value, which is the crystallization of social labor. But the social labor process cannot in itself yield the forms of value, because it is not the specific basis of the commodity economy alone, but is common to all forms of society. Even the social division of labor is not a sufficient condition for the existence of a commodity economy (cf. I: 42; 132).

As Marx points out, the exchange of commodities first begins on the boundaries of communal societies (I: 87; 182). The historical nature of the commodity economy is to develop originally as an economic relation between societies. It comes from the outside, not from the inside, of the social labor process. Even though it originates in ancient history, it is not "the everlasting Nature-imposed condition of human existence" (unlike the case of the social labor process). Hence it can be eliminated again in a socialist society. Thus the forms of value are theoretically separable from social relations in labor quantities. They are neither the general form of labor products nor inherent in them.

Even in capitalist society, where all products of labor take the value form, there exist some things which are given the commodity value form but are not labor products. At least one central commodity, labor power, cannot be dismissed as a minor exceptional case.

Thus it is not unreasonable to isolate the theory of the forms of value and the analysis of the substance of value, and, prior to analyzing capitalist production, to treat the former without reference to the latter. Although such a treatment might appear at first sight to be a deviation from the labor theory of value, it is not. On the contrary, such an approach strengthens the logical necessity of the labor theory of value in the analysis of capitalist production by eliminating some of the weaknesses or difficulties to be found in the early sections of *Capital*.[6]

When abstracted as the notion of form, value appears qualitatively to be the common necessity for commodities to be exchanged with other commodities. Quantitatively it represents the social standard relating to exchange ratios among commodities, as will be shown more concretely in the process of our investigation.

By following the logical development of the forms of value, from its simplest form noted above, we can reach the "money form" or the "price form" as the completed form of the value expression of commodities. In this form, the commodity gold is placed in the position of the "universal equivalent form of value" by all other commodities, and given the monopoly of direct exchangeability with all others. In spite of their qualitative difference as use values, commodities now express their qualitative uniformity as values in the price form. The quantitative difference in their values gets relative but uniform expression in their prices.

Notice that prices are not outside of Marx's notion of value, but rather are indispensable for its development as the forms of value. The expressions of values in prices are given privately and anarchically, and therefore cannot directly be socially objective. However, the function of money, not only "to supply commodities with the material for the expression of their value" (I: 94; 188), but also to serve repeatedly "as a means of purchase by realizing the price of the commodity" (I: 115; 211), forces adjustment of the levels of prices. The owners of commodities must cut down their prices when purchase is not prompt enough, and vice versa. By compelling the owners of commodities to revise their prices, the repetition of purchase reveals the gravitational center of prices, and thus measures values of commodities through fluctuation of their prices.

In this sense, the form of the measure of value should be found, according to Uno, in the repetition of the function of money as the means of purchase. The anarchical form of the measurement of values in the commodity economy is shown in this way. At the same time, there must be a certain objective relation in the values of commodities which is independent of mere changes in market prices, if the repetition of purchases is to reveal the standard level around which prices fluctuate. Even as the forms of value are observed only in the circulation process, the function of money reveals a "hidden" objective regulator of fluctuating prices.

This objective regulator of value relations from beneath the process of circulation is also reflected in the fluctuation of the necessary quantity of money functioning as the circulating medium. While serving repeatedly as the means of purchase, money allows for a certain degree of social circulation of commodities; here it plays the role of medium of exchange for the owners of commodities. Within this circulation of commodities "the total quantity of money functioning during a given period as the circulating medium, is determined, on the one hand, by the sum of the prices of the circulating commodities, and on the other hand, by the rapidity with which the antithetical phases of the metamorphoses follow one another" (I: 121–22; 217–18), not vice versa.[7]

As long as the quantity of the circulating medium is adjusted according to changes in the sum of prices (which depends on the quantities and the price levels) of commodities, other forms of money must exist outside the sphere of commodity circulation. Such forms as hoards, means of payment, and universal money (or world money) on the one hand supply the means for adjusting the quantity of the circulating medium. On the other hand, these forms of money appear, on the basis of commodity circulation, as the independent and absolute form of value in the commodity economy.

It is natural for money to be used to increase itself in relation to commodity circulation, when it thus appears as the representative and absolute form of value. Therefore, this independent form of value as money, which is accumulated outside of the circulation of commodities and which is the final result in the development of the economic forms through commodity circulation, becomes "the first form in which capital appears" (I: 146; 247).

When money is used to buy in order to sell dearer, it is converted into capital. As Marx formulated it, "M—C—M′ is therefore in reality the general formula of capital as it appears *prima facie* within the sphere of circulation."[8] In the case of interest-bearing capital, "the circulation M—C—M′ appears abridged" in the form of M---M′. Marx does not place capital directly as the means of exploitation of the wage laborers in the production process. Even the notion of "surplus-value" is shown here in the form of the increment of the money, ΔM, beyond the original sum advanced, M, and not directly as the embodiment of the surplus-labor.[9] In this way, Marx extends his theory of the forms of value to "The General Formula for Capital" in Part II, chapter 4. Capital appears here in the form of endless expansion of value, repeating the metamorphosis of M—C—M′.

This formula for capital can logically be deduced in particular from the last form of money, namely "universal money" (or *Weltgeld*), which appears theoretically between the plural spheres of circulation of commodities. For, since universal money can easily be converted into the form of merchant capital, M—C—M′, it is advanced in order to get surplus value in money form, utilizing the different levels of prices between the various circulations. However, the source of the surplus value in this form of capital is entirely outside of its movement. The fluctuations of prices across various spheres of circulation occur externally for this capital, and make it more or less speculative. It also attempts to utilize the fluctuations of prices; i.e., it does not hesitate to make use of any opportunity to buy cheaper and to sell dearer.

In order to be able to expand his trade at a crucial time, the merchant capitalist borrows money, which remains idle for a certain period and pays interest. Thus the form of interest-bearing capital, M---M′, can appear based on the form of merchant capital. In this form, a certain amount of money is lent for a certain period and returns with a surplus. The source of surplus value as interest is substantially external to its form. Capital in this form becomes indifferent to the source of surplus value, and will lend to anyone in need of money who will pay interest.

Thus money is transformed to the form of merchant capital and then to the form of interest-bearing capital in principle. But as long as capital in these forms lacks the inner source of surplus value, its expansion of value is not certain, nor is there a guarantee of its continuance on an expanding scale. Therefore capital cannot be fully established as the self-expanding motion of value.

The emergence of the form of industrial capital is logically required in order to overcome such limitations in the forms of capital and the value relations in commodity circulation. However, it cannot appear universally in all spheres of circulation nor extend through the whole world of commodities. It can emerge only within the spheres of commodity circulation where a special historical-social condition exists: that is, the commodity form of labor-power, or free labor in the well-known double sense. Therefore, unlike the forms of merchant capital and interest-bearing capital, the emergence of this form of capital is limited to a certain period in the long history of commodity economy and also to certain spheres of circulation in the universal area of the world of commodities.[10]

However, in commodity circulation where such a specific precondition is given, the form of industrial capital, M—C---P---C′—M′, appears, connecting both circulation and production. Under this motion of capital, not only the inner source of surplus value but the social inevitability of the law of value will be revealed clearly. We can now go on to examine the substance of value through the form of industrial capital, which is the last form of the logical development of the forms of value.

III. The Substance of Value

In the labor theory of the classical school, the distinction between the social labor process, which constitutes the common element in all forms of society, and the value relation characteristic of a commodity economy, was not made clear. The social relations of labor quantities were always considered only as value relations.

This limitation is the result of the failure of the classicists to understand the historical character of commodity economy and capitalist society. The theoretical misconceptions of both the forms of value and the labor process are closely correlated.

In contrast, Marx considers "the labour-process independently of the particular form it assumes under given social conditions" (I: 177; 283) and shows clearly that "it is the everlasting Nature-imposed condition of human existence, and therefore, is independent of every social phase of that existence, or rather, is common to every such phase" (I: 184; 290). This notion of the labor process, together with the notion of forms of value, is crucial in Marxian theory, for the historical nature of capitalist production is thus clearly revealed.

However, in his consideration of the labor process in the opening section of Part III, Volume I, Marx tends to regard the labor process only as the production of use value.[11] The character of labor which creates use value is useful, concrete labor. Should we then believe that the laboring activity which is common to every social phase is confined only to this determination of concrete labor? How about a different character of labor, namely, abstract labor?

In any type of society, the total quantity of social labor time must somehow be allocated to the various kinds of concrete productive activity. The social division of labor in general represents not only the social organization of qualitatively different varieties of concrete labor, but also the quantitative division of abstract labor into the necessary branches. In section 4 of the first chapter, "The Fetishism of Commodities and the Secret Thereof," Marx makes very clear that such a division of labor time into various necessary branches does exist under any form of production, taking as illustrations Robinson Crusoe's experience, medieval European society, the patriarchal peasant farm, and a community of free individuals under socialism.[12]

Thus it appears that abstract human labor, *together with* its concrete character, constitutes the common material basis for all societies. In fact, every sort of useful, concrete labor is composed of different kinds of partial labors, which must be performed continuously by changing the concrete forms of labor; the human ability to perform any sort of useful labor is also the basis of this process. So concrete labor is always nothing but the concrete forms of abstract human labor.

However, in the section on "The Labour-Process," Marx refrains from treating abstract labor. He treats abstract labor as the substance of value and surplus value in the next section, "The Production of Surplus-Value." This treatment gives the impression that abstract labor, unlike concrete, can appear only under value relations. It is neither correct, nor consistent with the position expressed by Marx in the section on "Fetishism." What was wrong?

We must go back again to the first and second sections of the first chapter of *Capital*. Marx there reduced the notion of value to the crystals of abstract labor without the mediation of the forms of value. Even though Marx's distinction between concrete and abstract labor is original, he tends to identify the latter directly with value relations in a way which is similar to the classical value theory.[13] In the second section of the first chapter, only the concrete character of labor is treated "independent of all forms of society." The logical separation of abstract labor from the value relation is made difficult from the beginning by Marx's discussing the substance of value prior to the theory of forms of value.

The purification of the theory of forms of value, as we have seen, is also useful for solving this difficulty, and it enables us logically to discern both abstract and concrete labor independently from value relations.

In a capitalist economy, all the social relations of labor quantities must be dealt with entirely through value forms. Therefore, value forms acquire a social substance in the quantitiative relations of labor time. The law of value, which shows that value relations are regulated on the basis of the socially necessary labor time embodied in commodities, appears as socially inevitable.

When we examine further the social relations of labor time under value forms as the substance of value, we must clearly

distinguish the specific character of the commodity ***labor power*** from all other ***commodity products***. Let us investigate first the substance of the value of this particular commodity, since it is a basic condition for capitalist production to maintain labor power as a commodity.

Labor power cannot be produced in the labor process. It is essentially the subject and not the object of the production process in any form of society. Capitalist production must give a value form to labor power and must be able to buy it in the market just like any other commodity. But the value form of labor power lacks the substance of value as the embodiment of labor time because it is not the product, but the subjective force of human labor.[14] What relation, then, does the value form of labor power bear to the social substance as materialized labor time?

Labor power exists only as an ability of living individuals. These living individuals as laborers must consume a certain quantity of means of subsistence to maintain their life and labor power. These means of subsistence represent the embodiment of a certain quantity of labor time necessary to produce them.

The social total of the value of labor power as a commodity, given to wage laborers in the form of a certain amount of money, must be just sufficient to acquire those means of subsistence necessary to sustain their labor power. Thus the value of labor power relates to and is regulated by the substance of value as the labor time embodied in the necessary means of subsistence. If the labor time necessary to reproduce the means of subsistence is reduced by the improvement of productivity, and if the necessary quantity of means of subsistence is not altered, the substantial value of the labor power is proportionally reduced.

However, the quality and quantity of the necessary means of subsistence which represent the standard of living of wage laborers are not determined technically. "A historical and moral [not in an ethical but in a social sense] element" (I: 171; 275) enters here into the determination of the value of labor power.[15] Even though Marx does not directly refer here to the class struggle (unlike his treatment of the length of the working day in chapter 10 of Volume I), we can see that the results of the pressures of the organized labor movement form a part of such a historical and moral element in the history of capitalism. Obviously the standard of living is not a physical minimum nor an unchangeable standard in the long run. But we can safely regard it in the short run as a steady level of living, represented by a certain quality and quantity of necessary goods.

After buying labor power as a commodity by paying (or, more exactly, promising to pay) its value, the capitalist can use that commodity and realize its use value. The use value of labor power is the human ability to labor, and cannot be realized except in the labor process, producing labor products. These products produced by the laborers cannot belong to them according to the rule of commodity economy. Marx explains the reason very clearly, when he says, "the product is the property of the capitalist and not that of the labourer, its immediate producer. Suppose that a capitalist pays for a day's labour-power as its value; then the right to use that power for a day belongs to him, just as much as the right to use any other commodity, such as a horse that he has hired for a day" (I: 185; 292).

Together with all commodity products, the capitalists get the total social labor time embodied in them as the result of the production process. This total labor time, which is embodied in the commodity products as a whole, forms the substance of their value, and comprises at least two different portions; namely, the labor time which is transferred from the means of production consumed in the production process, and the labor time which is newly added by the laborers in the same process. A part of the labor time newly added is necessary to restore the substance of value which is given to the laborers as the value of their labor power. Another part is the surplus labor time, and forms the substance of surplus value.

The part of capital represented by the means of production is called constant capital, because the substance of its value is merely transferred to the new products. In contrast, the value of capital

advanced to acquire labor power is called variable capital. The use value of labor power which is obtained by paying its value works threefold. It transfers, restores, and creates the substance of value of constant capital (c), variable capital (v), and surplus value (s). Therefore, by utilizing labor power as a commodity, capital can produce surplus value and expand its value *socially and internally*. The motion of capital to expand its value by itself is thus established in capitalist production on the basis of the commodity labor power.

Let us proceed to the substance of value of the commodity products. Just like the commodity products as a whole, each commodity product contains the substance of value, which is composed of $c + v + s$, on the average determined by the representative technology in each industry.

It is commonly believed that prices directly proportional to the substance of value of commodity products—and therefore equal exchanges of labor time among them—should be presupposed in order to clarify the fundamental mechanism of the capitalist production relation. I would like to challenge this common belief. In fact, the entire analysis above did not presuppose the equal exchange of labor time embodied in the *commodity products* through their prices. Such a presupposition was logically unnecessary as long as the investigation was concerned with the substance of value of labor power and the substance of surplus value.

Of course, there must be a certain standard level of price of each commodity as the form of its value which is maintained through the fluctuating market price; such a standard price is revealed, or measured, by a function of money, as discussed in section II above. On the other hand, a certain amount of labor time must be incorporated in each commodity product as the substance of its value. Therefore, on a given technical basis of production, there must be a stable correlation between the standard price as the form of value of each commodity and the substance of its value.

The regulation of the value of labor power, as we have seen, already implies the logical necessity of such a stable correlation between the form and the substance of value in each commodity, since wage laborers could not be guaranteed the acquisition of the necessary labor time for reproducing their labor power through the money wages which they receive as the form of value of their labor power, were it not for such a stable correlation in the means of subsistence as commodities. Further, stable relations between the standard price and the substance of value of the means of subsistence are maintained only when similar stable relations also exist in the means of production.

However, these correlations between the form and the substance of value need not be a matter of direct proportionality. The standard prices of commodities can stably represent quantities of embodied labor time which are not directly proportional.

In contrast, in the case of labor power a sort of equal exchange of labor time should take place between labor power as a commodity and the necessary means of subsistence, as we have seen. The law of value of labor power contains, in a sense, the equal exchange of labor time as its social substance. This point must have been the basic core which supported the labor theory of value as the equal exchange of labor quantities since the classical school. It should be noted here that labor power appears as the only "simple commodity" under capitalist production. Labor power is not produced by capital; its reproduction does not bring any surplus value. The labor time embodied in the necessary means of subsistence is simply consumed, and must be given repeatedly as the substance of the value of labor power. The labor time necessary to reproduce labor power, given in the form of means of subsistence, cannot be transferred or increased through the consumption of the laborers. Hence, a sort of equal exchange of labor time must be repeated here.

The logic of reproduction of the commodity products is quite different. Labor time as the substance of value is directly incorporated in them through their production process, and composed of three different parts, namely $c + v + s$, as we have seen. Can the reproduction of each commodity be maintained, when unequal exchanges of embodied labor time through prices are taking place repeatedly?

The answer must be positive, within a certain limit. When such unequal exchanges of labor time bring to a capitalist more in total than the embodied labor time in his commodity product, he has no problem continuing commodity production. He restores the substance of value of his advanced capital $(c+v)$ and obtains more of the substance of surplus value (s) than he extracted in his own production process. In contrast with this, when unequal exchanges of labor time bring less than the labor time in a commodity product of a capitalist, the limit within which he can continue his commodity production becomes a problem.

It is not difficult, however, to see that the maximum limit is given by the amount of the surplus labor time (s) in a unit of his commodity product. In other words, the amount of money obtained by selling a commodity must be at least enough to buy againt the elements of production consumed in its production, as long as the commodity must be reproduced in given technical conditions. Therefore, even when the standard price is not directly proportional to embodied labor, at least the labor time which represents $c + v$ must be regained as the result of exchange through such prices.[16] Thus the substance of value as the labor time embodied in each commodity has a sort of elasticity in its regulation of the exchange ratios with other commodities within the range of s.

Of course, capital cannot function as capital without obtaining surplus value. As the result of commodity exchange, each capital must be able to retain at least some portion of the surplus labor time embodied in its commodity product. Therefore, in the concrete motion of capital, the range of the elasticity of the regulation of exchange ratios by the substance of value must be smaller than s. In order to clarify further the principle of the distribution of surplus value among capitals through competitive prices, we must examine the theory of prices of production, which shows the concrete relation of the form and the substance of value in commodity products.

IV. Prices of Production

Marx begins his theory of prices of production by examining "Cost-Price and Profit" in the first chapter of Volume III of *Capital*. It is remarkable that he attempts here to consider the value relations in the form of value as prices. He defines the cost price as follows: "This portion of the value of the commodity, which replaces the price of the consumed means of production and labour-power, only replaces what the commodity costs the capitalist himself. For him it, therefore, represents the cost-price of the commodity" (III: 26). In this cost price the different functions of constant and variable capital in the production process are put out of consideration. Such a treatment is reasonable because "stepping beyond its inner organic life, so to say, it [capital] enters into relations with outer life, into relations in which it is not capital and labour which confront another, but capital and capital in one case, and individuals, again simply as buyers and sellers, in the other" (III: 44).

Corresponding to this, "Surplus-value itself does not appear as the product of the appropriation of labour-time, but as an excess of the selling price of commodities over their cost-price, the latter thus being easily represented as their actual value *(valeur intrinsèque)*, while profit appears as an excess of the selling price of commodities over their immanent value" (III: 44). Thus the surplus value is observed here through price relations as an excess of the selling price over the cost price.

When surplus value is regarded as an excess above the cost price, it seems to spring equally from all the different elements of capital. And further, the surplus value is regarded as the product not only of the portions of capital which enter into the cost price, but of the advanced aggregate capital including the fixed capital. Thus the selling price appears to be composed of cost price and profit.

In his theory of the forms of value in the first two parts of Volume I of *Capital*, Marx showed the logical necessity of the price form of commodities, and showed also the form of surplus value as the increment of money beyond the original amount of money advanced. Here he seems to develop concrete forms of value and surplus value as cost price and profit in relation to the selling price and the advanced aggregate capital. The price form of surplus value as profit, which appears as an excess of the selling price beyond the cost price, is the basic form of the capitalistic principle of distribution of the surplus product.

The efficiency of the expansion of value by each individual capital is measured in the process of competition by comparing the total profit realized in a certain period, say a year, with the aggregate advanced capital in terms of price. This rate of profit on capital operating under representative technical conditions in each branch of production tends to be equalized to form a general rate of profit as long as competition among invested capitals is repeated freely. And competition is inseparable from capitalist production based on an anarchical commodity economy.

Therefore, the standard price, to which the fluctuation of the market price gravitates in the process of competition among capitals, must be composed of the cost price and the average profit, which means the proportional allotment of the general rate of profit to a unit of a commodity product. As such, the standard price appears concretely as the price of production.

As a concrete form of value, the price of production is measured directly by a quantity of money just like the cost price and the profit. At the same time, however, it represents the concrete form of the regulation of price by the substance of value, as we shall see below.

In general, prices of production cannot be directly proportional to the labor time embodied in commodities. Therefore, they bring about the unequal exchange of labor times. But this inequality in the exchange of labor times embodied in commodities is allowed only so long as there is surplus labor. In contrast, the portion of labor time which represents $c + v$ must be restored to just the same amount through exchanges of commodities at prices of production. The cost price in the prices of production "always must repurchase the elements of production consumed in its manufacture" (III: 28) along with the amount of labor time embodied in them. The average profit added to this cost price represents and mediates the capitalistic redistribution of surplus labor time embodied in the surplus products.

If we keep in mind the distinction between form and substance of value, we can be certain that the prices of production as the concrete, developed form of value and the substance of value as the embodied labor time in each commodity are quantities in different categories. The physical amount of gold in which prices are expressed and the labor time incorporated in commodities are, in a sense, incommensurable. The exchange between commodity products takes place according to their prices, gravitating toward the prices of production which are regulated from behind by the labor time embodied in commodities.

Once the distinction between the different dimensions of the form and the substance of value is clarified, the theory of prices of production can no longer mean a theory of an alteration of the exchange ratios from an equal to an unequal exchange of labor time. Prices of production must not be a revision of the law of value. They show rather the concrete form of the working of the law of value itself.

Almost all discussions of the transformation problem have tended to miss this point, along with the distinction between the form and the substance of value. They presuppose that the substance of value as the quantity of labor embodied in commodities can directly be a sort of price, *i.e.*, the value price. We must recognize, however, that such misconceptions originate in part from Marx himself. In spite of his attempt to create both the theory of forms of value and the theory of prices of production as the concrete development of the form of value, Marx did not entirely free himself from the classical residue in his value theory, as we have seen. As a result, the price form still tends to be regarded somewhat as a formal presentation of the substance of value, mediating the equal exchange of labor time according to the law of value. On this

premise of value prices it is inevitable that his theory of prices of production should still leave at least one controversial problem. Because Marx starts by defining the cost price of a commodity as the total value, $c + v$, of the factors of production consumed in its manufacture, the result of the transformation of the values of these factors into the prices of production must be clarified.[17]

This problem has been widely argued since Paul Sweezy raised it anew, utilizing Bortkiewicz's treatment.[18] Let us examine first the Bortkiewicz-Sweezy solution. Suppose there are three main departments of production, i.e., I produces means of production, II means of subsistence for workers, III consumption goods for capitalists. If c_i, v_i, s_i represent respectively the value of constant capital consumed, the value of variable capital, and the surplus value in Department I, etc., then the relation of simple reproduction in terms of value is shown as follows:

$$\begin{aligned} \text{I.}\quad & c_1 + v_1 + s_1 = c_1 + c_2 + c_3 \\ \text{II.}\quad & c_2 + v_2 + s_2 = v_1 + v_2 + v_3 \\ \text{III.}\quad & c_3 + v_3 + s_3 = s_1 + s_2 + s_3 \end{aligned} \tag{1}$$

Another notation r represents a general rate of profit. The portion of value of fixed capital which is not consumed within the period of our observation, say a year, is left out of consideration for the sake of simplicity. Marx's definition of the prices of production in this case can be expressed as follows:

$$\begin{aligned} \text{I.}\quad & c_1 + v_1 + r(c_1 + v_1) = P_1 \\ \text{II.}\quad & c_2 + v_2 + r(c_2 + v_2) = P_2 \\ \text{III.}\quad & c_3 + v_3 + r(c_3 + v_3) = P_3 \\ & \text{where } r = \frac{\Sigma\, s_i}{\Sigma\,(c_i + v_i)} \end{aligned} \tag{2}$$

In order to convert the cost prices into prices of production, Bortkiewicz and Sweezy introduce three unknowns, x, y, z, which are the ratios of the price of production to the value of the commodity products of Departments I, II, III. For instance, the price of production of the means of production is x times its value. Then, the equations in terms of the prices of production should be:

$$\begin{aligned} \text{I.}\quad & c_1x + v_1y + r(c_1x + v_1y) = (c_1 + c_2 + c_3)x \\ \text{II.}\quad & c_2x + v_2y + r(c_2x + v_2y) = (v_1 + v_2 + v_3)y \\ \text{III.}\quad & c_3x + v_3y + r(c_3x + v_3y) = (s_1 + s_2 + s_3)z \end{aligned} \tag{3}$$

There are four unknowns (x, y, z, r), and three equations. For a unique solution we need either one more equation or one less unknown. Bortkiewicz and Sweezy recommend reducing the unknowns by making $z = 1$. The reason is given as follows:

> The number of units of labor necessary to produce one unit of the money commodity would provide a direct link between the two systems of accounting. Let us assume that the value scheme has been cast in money terms and that gold, which we will classify as a luxury good, has been selected as the money commodity. Then one unit of gold (say one thirty-fifth of an ounce) is the unit of value. For the sake of simplicity we will also suppose that the units of other luxury goods have been so chosen that they all exchange against the unit of gold on a one to one basis: in other words the unit value of all luxury goods, including gold, is equal to one.[19]

This suggests an interesting issue. The logical distinction between the form and the substance of value could have been utilized here to clarify the nature of the problem more completely. It is important that the prices of production are measured in terms of money, or physical units of gold, as long as they are the concrete form of value. The money commodity, gold, serves as the measure of value. But the physical amount of gold cannot be the unit of the substance of value as abstract labor which is counted by hours. If equations (1) represent the substance of value counted by labor hours, a certain number of hours of labor time, say two, not necessarily one, may be incorporated in one unit of gold (say one thirty-fifth of an ounce, named a dollar). Then one unit of gold may correspond to two units of the substance of value, and z becomes ½, instead of 1. The scale of the coefficient z is determined by the technical conditions of production when the scale of unit of the money commodity (one thirty-fifth of an ounce of gold in our example) is given. Whatever the scale of z may be, once it is given, equations (2) can be solved essentially in the same way. Other conditions being equal, the coefficients x, y vary proportionally to z.

The number of labor hours embodied in commodity products in a year and the number of units of gold (dollars) which express their total prices of production cannot coincide, because they are incommensurable. This does not mean the negation of the Marxian labor theory of value, so long as the logical relation of the substance and the form of value is borne clearly in mind.

However, Sweezy's explanation cited above is not clear enough on this point to settle the problem. Although he recognizes the role of the money commodity as the measure of value in prices, his explanation sounds, on the one hand, as if the substance of value expressed in the equations (1) were counted also by units of gold (dollars), saying "that the value scheme has been cast in money terms" or "one unit of gold . . . is the unit of value." On the other, it seems to imply that prices can be measured by the units of labor through the "link" of the money commodity. In any event it is not able to refute the common view that the transformation from value to prices of production means the alteration of exchange ratios from value prices. The error of confusing the form and the substance of value remains, and causes further confusion.[20]

Aside from the propriety of putting $z = 1$, which we debated above, there is no guarantee that total prices will coincide with the total value in the Bortkiewicz-Sweezy solution, except for the exceptional case where the organic composition of capital of Department III equals the social average. Besides, if the organic composition of capital in the gold industry diverges from the average of Department III, the total profit and the total surplus value cannot be equal in this solution. Therefore, the solution seems to contradict Marx's own assertion that there should be equality between the total value and the total prices of production, and between the total surplus value and the total profit.

J. Winternitz presents an alternative solution by adding a fourth equation, $\Sigma(c_i + v_i + s_i) = \Sigma(c_i x + v_i y + s_i z)$. Instead of making $z = 1$, he maintains the equality between total value and total prices of production.[21] This device, however, cannot normally ensure equality between total surplus value and total profit.

In order to satisfy this condition, R. L. Meek substitutes $\Sigma s_i = \Sigma s_i z$ as a fourth equation. In addition, he asserts that the organic composition of capital in Department II should be equal to the social average, so that the ratio $\Sigma(c_i + v_i + s_i)/\Sigma v_i$ can be equal to the ratio $\Sigma(c_i x + v_i y + s_i z)/\Sigma v_i y$.[22] The last condition is included in order to ensure that the relative share of wage labor in the total value produced should not be changed by the transformation from values to prices of production. However, it is doubtful whether the organic composition of capital of Department II really always equals the social average. If not, must the relative share of wage laborers vary substantially under the prices of production from their share under the value relations? Furthermore, it is clear that Meek's solution is not necessarily compatible with the assertion that total value should equal total prices of production.

According to F. Seton, all the conditions, including (1) $z = 1$, (2) $\Sigma(c_i + v_i + s_i) = \Sigma(c_i x + v_i y + s_i z)$, and (3) $\Sigma s_i = \Sigma s_i z$, can be simultaneously satisfied when the organic composition of capital in Department III is equal to the social average.[23] But because such a supposition lacks generality, Seton's solution may cause doubt as to the general appropriateness of Marx's labor theory of value.

Is there anything wrong with the direction of these solutions, proposed before 1960? In the recent rekindling of the debate among A. Medio, D. Laibman, M. Desai, A. Shaikh, and D. Yaffe,[24] the following points are stressed.

(1) Unlike the neoclassicals or neo-Ricardians, the Marxian theory of value is not merely a theory of the relative prices of commodity products. It is primarily a theory of the production process of surplus value, which is the economic basis of the relationship between capitalists and laborers.

(2) On the common basis of this recognition, the distinction of dimensions and tasks between the theory of value and the theory of prices of production is newly emphasized.

(3) And further, the notion of value is extended so as to include not only value itself as the embodied labor time, but also exchange value or form of value as the labor time which is obtainable through money prices or money prices of production.

While underlining the first point, Medio introduces Sraffa's theory of the standard commodity in order to fix a linkage between value and price of production.[25] However, his "average commodity" ω^* cannot serve as the real standard of prices, since the composition of capital of the ω^*-industry cannot generally coincide with that of the gold industry. Besides, his solution implies the negation of Marx's propositions concerning equality between total value and total price, and between total surplus value and total profit. The negation of these propositions is attendant also upon Laibman's solution, which keeps the rate of exploitation constant between the systems of value and of price.

Desai attempts to avoid such a direct negation of Marx's propositions by laying stress on the second point, namely the incommensurability between value and price.[26] In contrast, Shaikh and Yaffe try to prove equality between total value and total price by developing the third point. It is remarkable, however, that not only Desai but also Shaikh and Yaffe cannot yet place the money prices of production as an essential extension of the notion of value or as the concrete, developed form of value. The notion of value, including the exchange value or the form of value, still tends to be confined solely to the dimension of the substance of value. As a result, money prices are regarded as if they are something merely accidental, at the exterior of the value relations.

I do not think that such a tendency and its results are the correct way to develop Marx's original theory of the form and the substance of value, while I appreciate the recent consideration of the three points summarized above. We must recognize the money prices of production as the unfolded, concrete form of value. Even though they belong to a dimension different from the substance of value, we must make clear how they represent and mediate the substance of value. If our path of investigation is correct, we may more satisfactorily apprehend the true meaning and consistency of Marx's propositions as to equality between total value and total price, and between total surplus value and total profit.

In order to pursue these points, let us return to the Bortkiewicz-Sweezy equations and attempt to reform them. As long as simple reproduction is assumed as a sort of simplified input-output model, the substance of value counted by labor hours should have the quantitative relations expressed in equations (1). However, the equation, for instance, $c_1 + v_1 + s_1 = \Sigma c_i$ in (1) should not be interpreted as the expression of exchange of commodities at their value price. It expresses the fact that the substance of value incorporated in the means of production must be used to replace the means of production consumed in all the departments, regardless of the exchange-ratios or relative prices among the commodity products of these departments. If we write a_i for the sum of $c_i + v_i + s_i$, it is sufficient to suppose that a certain level of standard price corresponds to a_i, in order to study the social mechanism of the production of the surplus value. In the theory of prices of production, equation (3) can be used to make these standard prices more concrete in the sphere of capitalist competition.

In solving the equations, z need not be equal to one, as we have seen. The other conditions being unchanged, the absolute level of the general rate of profit r, and the *relative* magnitudes of x:y:z are indifferent to the scale of z in these equations. Suppose z equals ½, instead of 1. We can borrow a numerical example from Bortkiewicz and Sweezy, reducing z to ½.

We must compare three tables. Starting from the substance of value incorporated in commodity products, we pass through the corresponding prices of production, and finally reach the substance of values acquired by each department, by following the social exchanges of capitalist commodities in the form C′—M—C. The first and third table should be counted by labor hours, say billions of hours. The second is counted by units of gold, say a billion times one thirty-fifth of an ounce (named billions of dollars).[27]

Table 1
The Substance of Value Produced (a_i)
(billions of hours)

Department	c_i	v_i	s_i	a_i
I	225	90	60	375
II	100	120	80	300
III	50	90	60	200
Totals	375	300	200	875

$s_i/v_i = 2/3$

Table 2
The Prices of Production (P_i)
(billions of dollars)

Department	$c_i x$	$v_i y$	p_i	P_i
I	144	48	48	240
II	64	64	32	160
III	32	48	20	100
Totals	240	160	100	500

$p_i = r(c_i x + v_i y)$, $r = 25\%$, $x = 0.64$, $y = 0.533$, $z = 0.5$

Table 3
The Substance of Value Acquired (a'_i)
(billions of hours)

Department	c_i	v_i	s'_i	a'_i
I	225	90	96	411
II	100	120	64	284
III	50	90	40	180
Totals	375	300	200	875

$s'_i = p_i \div 1/z = \Sigma s_i \times p_i/\Sigma p_i$, $a'_i = c_i + v_i + s'_i$

It is no longer any wonder that no equality obtains between total value and total price, or total surplus value and total profit, in Tables 1 and 2. For they belong to different orders and are counted by the different units. It is possible to presume the labor quantities directly proportional to the numbers in Table 2. However, these labor quantities which are presumably directly proportional to quantities in Table 2 do not represent the actual substance of value acquired by the prices of production. As long as capitalists in each department must continue their production, they must reinvest the money obtained by selling their commodity products at the prices of production, and must repurchase the factors of production consumed. In this case, the cost prices ($c_i x + v_i y$) in Table 2, after being realized in money, must be spent to restore the substance of value in the means of production (c_i), and to pay the wages by which the same number of laborers as were employed must be able to obtain the substance of value in the means of subsistence (v_i), as shown in Table 3. Each of the items of c_i and v_i, and therefore also their totals in Table 1, can and must reappear in the same amounts in Table 3, through the selling and buying of commodities at their prices of production.

Corresponding to this, the surplus labor time embodied in the surplus products remains the only social substance of value which is disposed of in the form of profit. $\Sigma s'_i$ must always be equal to Σs_i. However, unlike the case of c_i and v_i, the portion of the substance of value in s_i need not be restored in the same amount in each department. Competition among capitals, equalizing the rate of profit in the form of prices of production, enforces the redistribution of the substance of the surplus value. Assuming here simple reproduction and the unique organic composition of capital (or the unique product) in Department III, the substance of surplus value is redistributed in proportion to the relative magnitude of p_i in Table 2. Adding this result s'_i to c_i and v_i, we get the substance of value actually acquired (a'_i) by the prices of production in Table 3.

As a result, Departments I, II, III respectively exchange the total quantities of 375, 300, and 200 with 411, 284, and 180 (in billions of hours) through the prices of production. Therefore, in Table 3, the equalities between a'_1 and Σc_i, a'_2 and Σv_i, and a'_3 and Σs_i disappear. This is no problem because Table 3 shows the result, not the starting condition of the exchanges. Its s'_i is simply consumed by capitalists. And c_i and v_i are used to reproduce the same result as in Table 1 ($c_i + v_i + s_i$) in the following period.

Thus it is already clear that the prices of production as the form of value shown in Table 2 are fundamentally regulated by the substance of value shown in Table 1. Even though they are in different orders and nominally unequal, total prices and total profit are nothing but the representation of the total substance of value or of surplus value in the concrete form of value. The intermediary form of value as prices of production cannot alter the total substance of value and of surplus value which is produced and exchanged. Thus the intention of Marx's propositions concerning the equality between total value and total prices and between total surplus value and total profits is not undercut but rather is proved by the distinction between the substance and the form of value.

The basic logical structure of Tables 1–3 remains unchanged even if the model is extended to n sectors. Especially if capitalists in each sector consume the same composition of commodities (keeping to simple reproduction), all the relations between the substance of value produced and acquired through the prices of production will be of the same character as before. When the composition of commodities consumed by capitalists in each sector becomes unequal, s'_i cannot necessarily be proportional to p_i. This will also cause a change in a'_i. But all the other items will remain unchanged, including $\Sigma s'_i$ and $\Sigma a'_i$. The same will be true when some portion of the surplus value disposed of through p_i is used to expand the scale of reproduction.

A changing technical condition of production, represented in the organic composition of capital or in the composition of inputs in each sector, is difficult to handle with the type of analysis presented above. In fact, a theoretical confirmation of the level of the prices of production becomes in a sense impossible at a time when the basic conditions expressed in Table 1 are in the process of reconstruction. The regulation of the prices of production by the substance of value presupposes, then, a stable technical condition for a period, even if it is very short.

However, the Marxian theory of value, including the theory of prices of production, cannot be a mere static theory. Even given stable technical conditions, the anarchical competition among capitals causes incessant fluctuations in market prices. Prices of production appear only as the gravitational center of such deviating fluctuations in market prices. From the point of view of the substance of value, such deviations in market prices from prices of production cause changes only in s'_i, and correspondingly in a'_i.

The deviation of market prices from prices of production does not mean a negation of the working of the law of value. It forms rather a necessary part of the concrete mechanism of the law of value. The regulation of prices of production by the substance of value requires the allocation of the socially necessary quantities of dead and living labor to the various branches of production. Such an allocation of labor quantities can be achieved by the anarchical market economy under capitalism. The incessant fluctuation of market prices, representing the anarchical disturbance of the labor allocation, guides capitals to correct the disturbance.

Thus, the form of value as prices divides itself concretely into fluctuating market prices and central prices of production. Both of them constitute, as the concrete forms of value, the necessary mechanism of the regulation of the substance of value. The elasticity within the range of s, as we have seen, allows and necessitates the anarchical disturbance and adjustment of the labor allocation through such concrete forms of value.

At the same time, we must notice that the adjustment of the allocation of labor through market prices, gravitating to prices of production, can proceed only on the basis of the availability of labor power as a commodity at a certain level of value. Once this availability is lost, all the capitalistic mechanisms of the law of value become unsustainable. The disturbance cannot remain within the

scope of the distribution of the surplus value produced. The production of surplus value itself will become difficult. When such difficulties develop to the point of crisis, even the value of capitals representing constant and variable capital will be destroyed.

It is the task of the theory of crises to analyze why and how such a crisis necessarily occurs, and how in principle capital can overcome such a critical disaster. The logical relations of the form and the substance of value concerning both labor power and commodity products should be studied more concretely in the theory of business cycles, which includes the inevitability of cyclical crises. Thus, as I will discuss in detail in the fourth essay, the Marxian theory of value must be developed systematically into the theory of crisis, which should in turn be completed consistently with the theory of value.

3

Marx's Theory of Market Value

1. *The Problems in Marx's Theory of Market Value*

After transforming values of commodities into prices of production in chapter 9 of Volume III of *Capital*, Marx goes on to discuss market value in chapter 10, under the heading "Equalization of the General Rate of Profit Through Competition. Market Prices and Market-Values. Surplus Profit." This complex chapter starts off with a review of the logical relation between values and prices of production. According to Marx's transformation procedure:

> In the case of capitals of average, or approximately average, composition, the price of production is . . . the same or almost the same as the value, and the profit the same as the surplus-value produced by them. All other capitals, of whatever composition, tend toward this average under pressure of competition. (III: 174)

Simultaneously, "the sum of the profit in all spheres of production must equal the sum of the surplus value, and the sum of the price of production of the total social product equal the sum of its value" (III: 173). Then Marx suggests, "The really difficult question is this: how is this equalization of profit into a general rate of profit brought about, since it is obviously a result rather than a point of departure?" (III: 174)

Marx seems to answer this question near the end of this chapter, observing that it is capitalist competition which equalizes different

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rates of profit in value terms into a general rate through redistribution of capital. We read:

> If the commodities are sold at their values, then, as we have shown, very different rates of profit arise in the various spheres of production, depending on the different organic composition of the masses of capital invested in them. But capital withdraws from a sphere with a low rate of profit and invades others, which yield a higher profit. Through this incessant outflow and influx, or, briefly, through its distribution among the various spheres, which depends on how the rate of profit falls here and rises there, it creates such a ratio of supply to demand that the average profit in the various spheres of production becomes the same, and values are, therefore, converted into prices of production. (III: 195)

Should we understand from this exposition that the allocation of dead and living labor regulated by capital will be changed when values are converted into prices of production? If the equilibrium ratio of supply and demand of each commodity under value relations differs from that under prices of production, can we still regard the former as an actual framework for the analysis of capitalist economy, not as a mere imaginary assumption without actuality? These problems throw us back to a more fundamental point, i.e., how to prove the real relevance of the equal exchange of abstract labor embodied in commodities. Marx refers to this point just after his question about the formation of a general rate of profit, by asking: "How does this exchange of commodity at their real values come about?" (III: 175)

To answer this, Marx presents a model of exchange by simple commodity producers where "the labourers themselves are in possession of their respective means of production and exchange their commodities with one another" (ibid.), and he proceeds to reach a famous statement that "the exchange of commodities at their values, or approximately at their values, thus requires a much lower stage than their exchange at their prices of production, which requires a definite level of capitalist development" (III: 177).

Engels in the "Supplement to Capital, Volume Three," and then Rudolf Hilferding in his anti-critique of Böhm-Bawerk extended this view and asserted a historical-logical transformation theory from values into prices of production.[1] However, the historical-logical transformation theory could not be a final solution. First, simple commodity producers cannot dominate a whole society, unlike capitalist producers, and as a result their exchange relations are not necessarily regulated by *socially* necessary labor expenditures. Secondly, Marx's *Capital* from Part III, Volume I onward, clearly analyzes capitalist production, and not a precapitalist economy, on the basis of the law of value. Marx's treatment of cost prices in his theory of prices of production also remained incomplete, as Bortkiewicz pointed out.[2]

In order to overcome these transformation problems, I believe that it is essential to clarify and utilize Marx's original distinction of the forms and the substance of value. We have to observe the prices of production as a developed form of value, and study how they are determined by the dimensionally different quantity of abstract labor time embodied in commodities, as the social substance of value. The role of prices of production in mediating the social distribution of the labor amounts also has to be clarified. This perspective has been elaborated in the second essay, and will not be repeated here, as our topic in this essay is not transformation problems as such. But as we shall see later, it is important to review Marx's theory of market value in this context, considering its logical relation with the proper theory of prices of production.

After reconsidering the case of the exchange of commodities at their real values, Marx then moves on to investigate how the unique market value is determined in the case where individual values of the same kind of commodities are unequal because of the differences in their conditions of production. This investigation of market value occupies the major portion of chapter 10. Marx's attempt to formulate a theory of market value, however, was not fully completed. In particular, he seems to leave us with two contradictory theories.

One of them defines market value as determined directly by the

technically average conditions of production. For instance, Marx says in this context:

> On the one hand, market-value is to be viewed as the average value of commodities produced in a single sphere, and, on the other, as the individual value of the commodities produced under average conditions of their respective sphere and forming the bulk of the products of that sphere. (III: 178)

In this definition the market value is regarded as the average of different individual values of commodities produced under different conditions of production, or as the individual value of commodities produced under average and dominant conditions of production. This can be called the "technical average" theory of market value. Strictly speaking, the average and the dominant (or most common) conditions of production are not always equal. However, they are regarded as normally identical. In this theory the situation of demand and supply in the market does not play any role in determining the level of market value, though it causes fluctuations in market prices around the center of gravity of market value.

In contrast, Marx's second theory gives demand an important role in determining the market value. Marx says for example:

> if the demand is so great that it does not contract when the price is regulated by the value of commodities produced under the least favourable conditions, then these determine the market-value. This is not possible unless demand is greater than usual, or if supply drops below the usual level. . . . if the mass of the produced commodities exceeds the quantity disposed of at average market-values, the commodities produced under the most favourable conditions regulate the market-value. (III: 179)

In this context, "it is one of the extremes which determines the market value" (III: 185), not the technical average condition of production. We can call this the demand and supply theory of market value.

Throughout chapter 10 of the third volume of *Capital*, Marx repeatedly states these two different theories. In which direction should we complete Marx's theory of market value? Or can we unify Marx's intentions expressed in the two theories? Finally, how should we reconcile the theory of market value with the theory of prices of production? We shall investigate these points by reviewing Japanese debates on this issue.[3] We hope that our investigation will clarify an important aspect of Marx's value theory, and also give an essential theoretical foundation for the theory of ground rent which has just begun to attract the attention of western Marxists.

II. The Technical Average Theory of Market Value

If the ratio of demand to supply determines the level of market value, it may obscure the determination of value by the quantity of abstract labor embodied in the production of the commodity, and it may resemble the marginalist demand and supply theory of price. In order to avoid such a position, the majority of Marxists have traditionally preferred Marx's first definition of market value and interpreted the market value as determined by the average labor time technically necessary to produce a given commodity. This type of interpretation is presented for instance by Itsurō Sakisaka and Masahiko Yokoyama in Japanese debates. According to this technical average theory of market value, changes in the relation between demand and supply can bring about only deviations of market prices from market values, so long as the conditions of production remain unchanged. For us, this interpretation raises the question of whether Marx simply made a mistake in presenting the second theory of market value, or whether we can make consistent Marx's two theories of market value.

Various attempts have been made to answer these questions. Yokoyama gives one of the most orthodox interpretations, relying on Rozenberg.[4] According to Yokoyama, Marx's second type of explanation really concerns a case where the market value is changed by a shift in the ruling technical conditions. It is consistent with the first type of explanation in a case where the increased social demand is satisfied overwhelmingly by the increased supply of commodities produced under the least favorable conditions so that the commodity produced under this condition now forms the bulk of the production of the commodity; or, conversely, where overproduction excludes commodities produced under worse conditions so that the most favorable conditions become those under which the bulk of the commodity is produced.[5] This is an attempt to give a consistent interpretation to Marx's second theory of market value from the viewpoint of the technical average theory, but it cannot provide a substantial integration of Marx's different views. Firstly, the least or the most favorable condition of production cannot be a single regulator of market value in the technical average theory, insofar as other conditions do still exist. Secondly, this assertion is easily criticized as an arbitrary interpretation, because Marx himself does not refer to the alteration of the proportional weight of the worse or the better conditions of production in his second theory.

In order to make the explanation entirely consistent with the determination of market value by the technical average of conditions of production, Fumimaru Yamamoto came up with the ingenious suggestion that the term "market values" in Marx's second theory must all be misprints of "market prices."[6] If this is true, there is no "second theory" and Marx's position is simply reduced to the proposition that the alteration of the relation between demand and supply affects only the market prices, not market values. However, Yamamoto could give no bibliographical evidence for his misprints theory, and, perhaps not surprisingly, he could obtain no followers for this interpretation.

Yuichi Ōshima attempted to be less one-sided.[7] He argued that Marx's first theory should be regarded as the general theory of market value, whereas the second theory should not be abandoned but located as a special theory to analyze such cases as monopolistic pricing, some aspects of industrial cycles, and the logic of differential rent. However, even in this interpretation, the general and the special theories are not integrated; they are just separated into the different cases. And the technical average theory is regarded as the general theory of market value without taking the role of the market into consideration. In this way, the importance of Marx's considerations and intentions shown in his second theory is not yet fully vitalized.

III. *Uno's Theory of Market Value*

The first and the second theory of market value originally coexisted without a clear inner relation in Marx's discussion. In the first theory Marx defined market value entirely on the basis of the static combination of conditions of production, without considering the fluctuation of demand and supply in the market, whereas in the second theory Marx seemed to claim that changes in the ratio between demand and supply immediately determined the regulative condition of production for market value. As a result, the fluctuation of market values was not easily distinguishable from that of market prices.[8] Attempts merely to add together the two theories or to maintain the first theory as it stands both have been more or less unsatisfactory. We have to try to develop the theory in the direction for which Marx was searching in his dual notion of market value.

The notion of *market* value should not be a merely static and technical definition of value but should be related to the dynamic of the market. At the same time, market value must be presented as the regulator of market prices through the fluctuations of the market. A complete notion of market value must satisfy these requirements. From such a point of view, Kōzō Uno attempted a more substantial reconstruction of Marx's dual theory by suggesting the notion of market value as "social value determined through the mediation of market."[9] To quote Uno further:

> The market-value as the gravitating center of market price is determined on the basis of an equilibrium of demand and supply. This means that the supply of a commodity increases in relation to the demand for it when the market price raises above the center, and decreases in the reverse case. Thus, the determination of the market-value of a commodity depends upon the condition of production under which the supply of the commodity is adjusted to the fluctuating demand.[10]

In this view, the motion of demand and supply in the market, observed in Marx's second theory of market value, is not related to the fluctuations of market price alone. On the contrary, through the fluctuations of the market price the commodity economy reveals anarchically under what conditions of production the necessary amount of commodities for the social demand is supplied, showing the level of market value as the center of the gravitation of market price. (In general, there is no reason to suppose here that the regulative condition of production normally will be one of the extremes, "on the margin.") Of course, the market value itself also changes when the regulative condition of production changes. However, such a shift of market value cannot be observable directly in a commodity economy, but must be sought out through the anarchical fluctuations of market price. We see here how the commodity economy actually makes the social value apparent via the motion of market competition while various individual values exist corresponding to the different conditions of production.[11] At the same time, the theory of market value also shows the adjustment mechanism of the distribution of socially necessary labor to each sphere of commodity production, by indicating how to clarify the social standard of conditions of production in each sphere through the anarchical motion of market prices. Uno's theory of market value makes clear these important aspects of value theory as an extended unification of Marx's dual theory of market value.

Let us proceed to the next problem, namely: What are the differences in conditions of production which should be discussed in the theory of market value? Three kinds are conceivable. The first are differences which appear in the process of technical improvements of the method of production. The second are differences in the cost and the conditions of production of the commodity, even on the same technical basis, caused by differences in the scale of capital. The third are related to the different and restricted natural conditions represented by land.

Clearly, the first sort of differences in production conditions contain substantially the same problem which is discussed in the theory of extra surplus value in the first volume of *Capital*. This sort of differences appears and disappears from time to time in the process of technical progress, leading Uno to suggest at times that they should be regarded as a special case in the theory of market value. Opposing the orthodox technical average theory of market value, Uno asserted that differences in natural conditions of production (i.e., land) are directly related to the general theory of market value. He located the theory of differential rent as an extended development, and not as a revision, of the theory of market value.

But if technical differences in method of production are strictly regarded as a special case, does Uno's theory of market value not then come to depend too much upon other specific differences in conditions of production, such as the scale of capital or the grade of land? In our opinion, Uno's notion of market value instead shows the general formal determination of social value via the market, which is broadly common to *all* three sorts of differences in production conditions. In this reformulation, the mere average of individual values cannot anymore correctly define market value. However, we think that the variant on the "technical average" theory which defines market value as regulated by the technically dominant or most common condition of production can still be substantially relevant to this reformulated theory normally in the first two cases. For the production condition under which the supply of the commodity is adjusted to the fluctuating demand ordinarily appears as the dominant and most common condition,

in the case where it relates either to the technical conditions or to the scale of capital. In contrast, in the case of the restricted natural conditions of production in land, the marginal worst condition which is necessary to satisfy the social demand becomes the regulator of market value. Therefore, the theory of competition among capitals requires here a specific theory of ground rent, which shows the same form of regulation as market value with the specific social substance in differential rent.

In order to clarify further the nature of the social substance of value in these different cases, we have to investigate the substance of the extra surplus value due to uneven technical progress and the substance of the extra profit which is converted into differential rent. The technical average theory interpreted the extra surplus value acquired by capitalists with superior technical conditions of production as substantially a transfer of value from the other capitalists in the same sphere operating under production conditions worse than average. However, this interpretation is obviously inapplicable to the case of differential rent, where the worst marginal land regulates the market value, so that all the commodities produced on better land have a higher market value than their individual values. In this case, the balance between the market value and the individual value does not seem to be mutually canceled by the transfer of the substance of value within the same sphere of production. Hence Marx called this balance which is converted to differential rent "a false social value" (*Capital*, III: 661). It is a difficult problem for the technical average type of market value theory to explain the social source of this "false social value." But before discussing this problem further we shall investigate the logical relation between the theory of prices of production and that of market value.

IV. Prices of Production and Market Value

The critical question here is whether to pose the determination of market value as something quite separate from the determination of price of production. The technical average theory of market value makes such a separation because it does not take the role of the anarchic market process into account in the determination of market value. But in our view there are not two separate mechanisms. Rather there is a single process of competition in which both intra- and intersectoral competition play a role and which determines what Marx called "market prices of production" (*Capital* III: 198). It seems to be clear, both from the title and the structure of chapter 10, Volume III, that Marx also intended to treat market value in relation to the theory of prices of production.

Uno's theory of market value helps to clarify this point. According to Uno, the representative condition of production, which determines market value, is discernible only through an anarchic process of intrasectoral market competition. The pinpointing of this representative condition of production is necessary for intersectoral competition between capitals. Only with reference to such a standard in each sector can profit rates across sectors be compared, and dynamic allocations of capital tending to equalize those rates take place. At the same time, intrasectoral competition would be extremely limited and ineffective without intersectoral competition, and thus the latter is a necessary aspect of the determination of market values.

The theory of prices of production is in comparison more basic than the theory of market value in developing the law of value as the capitalist law of social reproduction. Nevertheless, the theory of the formation of prices of production through capitalist competition cannot be complete insofar as it lacks a theory of competition in each sector. Hence the theory of market value should be discussed later than the theory of prices of production, and should be regarded as an integral extension of the theory of prices of production.

Then, should we follow Marx and Uno in presenting market value first before defining market prices of production, as if market value were treatable separately from intersectoral capitalist competition? In this respect, we would like to agree with the suggestion raised by Tsuyoshi Sakurai and more definitely proposed by

Kōichirō Suzuki that intrasectoral capitalist competition should not be discussed as a matter of market value but rather as a matter of market price of production from the beginning.[12]

Needless to say, even with an integrated theory of prices of production and market prices of production, we see that capitalist competition to equalize the rate of profit across industrial sectors does not eliminate but necessarily brings about the extra profit to capitalists with better conditions of production than the standard, and therefore representative, conditions in each sector. We can now observe the substance of value obtained in the form of such surplus profit from a new angle. In contrast to the case of the technical average theory of market value, we need not limit the substantial source of extra profit gained by individual capitals using improved methods of production to the surplus labor extracted in the *same* sector of industry. The substance of this extra profit can be the transfer of surplus labor extracted in other industrial sectors just as the substance of some portion of average profit, insofar as the substance of extra profit is analyzed in the theory of market prices of production. At the same time, such a source of extra profit becomes logically conceivable even in the case where capital of worse than the standard condition of production does not exist, and therefore where there is no countervailing transfer of the substance of value within the *same* industrial sector. This is also true of the substance of the extra profit which is converted into the differential rent. Marx called such portion of value "false social value" or "what society overpays for agricultural products in its capacity as consumer" (*Capital*, III: 661). This can not mean in principle a creation of the substance of value by capitalist competition, nor a deduction from the substance of value of labor power. Therefore, the substance of the differential rent should be regarded as the transfer of a part of social surplus labor to landowners through capitalist competition to determine the market price of production of agricultural products.[13]

We must certainly clarify the different historical meaning and function of the two kinds of extra profit discussed above. The former, which must be investigated also as the matter of extra surplus value, presented in the first volume of *Capital,* serves as an incentive to improve methods of production and thus to generate the social production of relative surplus value. As Uno suggests, it may contain the socially necessary labor cost of improving and renewing production methods, a cost which is more or less common to all forms of society, and certainly to a socialist society. In contrast, the extra profit which is converted to the differential rent does not have this sort of positive role in increasing productivity, nor does it have a common basis in other forms of society. In that sense, differential rent can simply be eliminated under socialism, where the total labor embodied in agricultural products is directly estimated by the actual number of labor hours. Marx's designation of "false social value" is somewhat relevant in this view.

Thus, the same form of market price of production contains and deals with different kinds of social substance under the same mechanism of capitalist competition. Therefore, the distinction between the form and the substance of value is important here, just as in the theory of prices of production. In order to clarify fully the form and the substance of the law of value in capitalist competition, the theory of price of production and the theory of market value should not be separated but integrated, and as we have discussed, the latter should rather directly be the theory of market prices of production. The historically specific function and mechanism of capitalist production as a whole can better be analyzed in this way on the basis of value theory. At least we can now clearly dispel the somewhat mystical notions that when labor is combined with improved production methods it creates extra surplus value by *intensified* labor, or that "false social value" in agriculture is *created* in the process of capitalist competition.

4

The Formation of Marx's Theory of Crisis

Marx's theory of crisis in *Capital* forms a focal point of his systematic critique of classical economics, in which capitalist economy is regarded as the ultimate natural order of human society. Unlike the classical school, Marx treats the law of motion of capitalist production scientifically, with its historical forms and mechanisms. Without such a systematic theory we cannot clarify the logical necessity of cyclical crises, which reveal the contradictory nature of capitalist economy in all its interrelations.

In dealing with such complex phenomena, determining the level and the empirical basis of abstraction is particularly important. The crisis theory in *Capital* was developed in order to prove the inevitability of cyclical crises at the level of basic principle. Its empirical basis was the typical cyclical crises in the middle of the nineteenth century, the most suitable historical foundation for elaborating the principle of crisis.

If we were to take as the basis of abstraction the whole history of crises, including the immature crises of the mercantalist age, we would either have to deal with excessively variegated factors (often not exclusively economic factors, such as wars) affecting the course and phases of crises, or we would have to resort to excessively abstract formal factors, in order to prove not only the possibility but the logical necessity of cyclical crises. Kōzō Uno's systematic division of levels of study of Marxian economics into principles, stages theory, and empirical analysis is essential here. Studies

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of the role of economic crisis throughout the world history of capitalism, comprising the three stages of mercantilism, liberalism, and imperialism, belong to another, higher level of research, that is, stages theory, rather than to the level of principles of political economy, which are developed in the theoretical system of *Capital*. The firmer our understanding of the principle of crises, the better will be our ability to formulate a stages theory of crisis, or further, to analyze the critical situation of contemporary capitalism. It is therefore necessary to recognize, even in our age, the importance of Marx's crisis theory, abstracted from the typical cyclical crises of the mid-nineteenth century.

I. Two Types of Crisis Theory

However, Marx's crisis theory is not fully complete. In particular, it contains two different types of theory which are not easily reconciled with each other. We can call these "the excess capital theory" and "the excess commodity theory."

For instance, in the third section of chapter 15 of Volume III of *Capital* Marx tries to show that "a steep and sudden fall in the general rate of profit" due to "absolute over-production of capital . . . in a ratio to the labouring population" (III: 251)[1] brings forth cyclical crises. In this context, excess commodities in the market and difficulties of realization of surplus value are regarded as the result of the falling rate of profit caused by the excess accumulation of capital.[2] Marx's attempt in *Capital* to develop a business cycle theory along this line can be observed also in his theory of capital accumulation in Volume I (see I: 612–20, 632–33, 762–71, 784–85; see also II: 410–11, 486–87), and in his credit theory in Volume III (see III: 513–14).

In contrast with this, in the first section of the same chapter 15 of Volume III, Marx looks for the restriction to capitalist production in the difficulty of realizing surplus value in the circulation process, as follows:

> The conditions of direct exploitation, and those of realising it, are not identical. . . . The first are only limited by the productive power of society, the latter by the proportional relation of the various branches of production and the consumer power of society. [Along with the increase of production of surplus-value, there is an increase in] the contradiction between the conditions under which this surplus-value is produced and those under which it is realised. (III: 244–45)

Also, in chapter 30 of Volume III Marx points out that the "disproportion of production in various branches" and the "restricted consumption of the masses" as opposed to development of productive power, are the ultimate reason or cause of crises (III: 484). In these places, he considers that crises occur from the overproduction of commodities beyond demand, due to either the disproportion among production branches or the restricted consumption of the masses. Excess capital and the fall of the profit rate are seen as results of this process.

Needless to say, both capital and commodities are generally in excess in crisis periods. But it is important to discern which of these is the fundamental cause of economic crises. The excess capital theory and the excess commodity theory are logically opposed to each other at this point. We cannot keep both theories if we seek to prove the logical necessity of economic crisis in the principle of political economy.

Why do these two different types of crisis theory coexist so uneasily in *Capital*? In which direction, and how, should Marx's crisis theory be completed? I will try to give an answer to these questions by reviewing the formation of Marx's crisis theory from the *Grundrisse* to *Capital*.

II. Crisis Theory in the Grundrisse

In "The Chapter on Capital" in the *Grundrisse* (which is the first manuscript for *Capital* written in 1857–1858), Marx develops his theoretical studies of crisis mainly at the beginning of section 2, "The Circulation Process of Capital," and in the analysis of profit theory in section 3, "Capital as Fructiferous."

At the beginning of section 2 of the *Grundrisse*, in contrast to Volume II of *Capital*, Marx treats the selling of commodity products by capital, i.e., C′—M′, as an important restriction on the motion of capital, saying:

> It is forgotten that, as Malthus says, "the very existence of a profit upon any commodity pre-supposes a *demand exterior to that of the labourer who has produced it*," and hence the *demand of the labourer himself can never be an adequte demand*. Since one production sets the other into motion and hence creates consumers for itself in the *alien* capital's workers, it *seems* to each individual capital that the demand of the working class posited by production itself is an "adequate demand." On one side, this demand which production itself posits drives it forward, and must drive it forward beyond the *proportion* in which it would have to produce with regard to the workers; on the other side, if the demand *exterior to the demand of the labourer himself* disappears or shrinks up, then the collapse occurs. (323; 420)[3]

Marx supposes here that commodity production by capital as a whole must exceed the proper proportion for consumers' demand, and emphasizes that "the final product finds its limit in direct and final consumption" (323; 421). It must be noted that Marx does not yet discuss the logical necessity of economic crises in cyclical form. He tends rather to maintain in the *Grundrisse* that economic crisis is almost equivalent, or leads directly, to the final collapse of capitalist production, basing himself on an excess commodity theory of an underconsumptionist type.

Marx is here apparently trying to follow and develop the crisis theory of Sismondi and Malthus, who opposed Ricardo's classical theory. Marx contrasts Sismondi with Ricardo as follows:

> Those economists who, like Ricardo, conceived production as directly identical with the self-realisation of capital . . . have therefore grasped the positive essence of capital more correctly and deeply than those who, like Sismondi, emphasized the barriers of consumption and of the available circle of counter-values, alhough the latter has better grasped the limited nature of production based on capital, its negative one-sidedness. The former more its universal tendency, the latter its particular restrictedness. (314; 410)

Surely, Sismondi and Malthus tried to show the inevitability of general overproduction, and therefore the particular restrictedness of capitalist production, whereas economists like Ricardo emphasized one-sidedly the adjustment of demand and supply on the basis of the law of value, denying the possibility of the general overproduction of commodities. According to the labor theory of value of classical economics, the values of yearly commodity products and revenues, such as the wages, profits, and rents necessary to buy them, always equal each other in total, for both are determined by the total quantities of yearly social labor. Extension of the scale of production by capital increases both the supply of and the demand for commodity products equally in total value. Sismondi and Malthus opposed this theory by in effect throwing overboard the labor theory of value, arguing that various forms of revenue stemmed independently from capital, labor, and land, and they thus questioned why the total of these revenues should be sufficient to buy the total supply of the yearly products of labor. Here the social relation of production and consumption, or that of supply and demand, is separated from the inner co-relation with social labor, and only the external balance at the surface of circulation is called into question.

Malthus, for example, said, "If production be in a great excess above consumption, the motive to accumulate and produce must cease from the want of an effectual demand in those who have the principal means of purchasing,"[4] and he maintained that this difficulty might be overcome through the "unproductive" demand of landowners, etc.[5] Sismondi advanced an underconsumptionist theory a little earlier and rather more decisively than Malthus. According to him, the accumulation of capital causes the contraction of consumption demand through both substitution of laborers (and farmers) by machines in the process of centralization of production, on the one hand, while it results in the increase of commodity products without regard to the scale of consumption demand, on the other.[6] Consequently, "the superabundance of production, that goes beyond consumption,"[7] must occur.

In order to make clear the restricted character of capitalist production and the inevitability of general overproduction, which is neglected by classical economics, Marx emphasized, as we have seen, the difficulty of realization caused by the restriction of consumption demand. He thus extended the line of thought of Malthus and Sismondi. His intention was to develop, along with the labor theory of value of the classical school, the crisis theory of the anti-classical (or counter-classical) school, in order to criticize the harmony postulated by the classicists.

Up to this point, the crisis theory of an underconsumptionist type elaborated in the *Grundrisse* tends to lack the inner relation to the working of the law of value. However, in contrast to Sismondi and Malthus, Marx does not abandon the labor theory of value, but attempts to develop it systematically as the law of motion of capital, with its historical forms, by criticizing the limits of the classical theory of value. At the same time, he criticizes the excess commodity theory of an underconsumptionist type to the extent that it is inconsistent with the law of motion of capital based on the law of value.

For instance, Marx says, criticizing Proudhon, that it is superficial to deduce the necessity of overproduction from the fact "that the worker cannot buy back his product" (326; 424). He goes on to consider the interrelations between the various sectors which produce raw materials, machinery, workers' necessaries, and surplus products. In this rudimentary formulation of a reproduction scheme, he shows how commodity products of each sector can be bought and consumed as either constant capital (which tends to be neglected by the classical economists), variable capital, or surplus value. Thus, when the inner relation between production and consumption of commodity products is observed on the basis of the law of value, it becomes clear that the extension of capitalist production brings forth not only an increase of consumer demand by the workers, but also an increase in the demand for means of production. This calls into question his previous notion that general overproduction occurs because "the final product finds its limits in direct and final consumption." Marx ends his discussion here, suggesting that the main point is not in merely the balance between production and consumption, but rather the restriction to the value increasing process of capital. Marx writes as follows:

> *general over-production* would take place, not because relatively *too little* of the commodities to be consumed by the workers or too little of those to be consumed by the capitalists had been [consumed], but because too much *of both* had been produced—*not* too much for *consumption*, but too much to retain *the correct relation between consumption and* value increasing; *too much for* value increasing.[8] (346–47; 442–43)

What, then, does too much production for "value increasing" mean? This problem is not yet presented in the *Grundrisse*. However, there is another sort of attempt to approach the logical necessity of crisis in section 3 of "The Chapter on Capital"—namely, the attempt to construct a crisis theory in relation to the law of the tendency of the profit rate to fall.

Profit theory in the *Grundrisse* still lacks a theory of prices of production. The concepts of profit and profit rate are shown simply in terms of the ratio of total social surplus value to total value of capital. Marx then goes on directly to the theory of the tendential fall of profit rate:

> Presupposing the same surplus-value, *the same surplus-labour in proportion to necessary labour*, then, the *rate of profit* depends on the relation between the part of capital exchanged for living labour and the part existing in the form of raw material and means of production. Hence, the smaller the portion exchanged for living labour becomes, the smaller becomes the rate of profit. [And the increase of productivity in the process of capital accumulation

> expresses itself] as a diminished proportion of the capital exchanged for living labour relative to the part of capital existing as constant value. (633; 747)

Basing himself on this notion of the tendency of the profit rate, Marx continues his discussion as follows:

> Beyond a certain point, the development of the powers of production becomes a barrier for capital; hence the capital relation becomes a barrier for the development of the productive powers of labour. . . . The growing incompatibility between the productive development of society and its hitherto existing relations of production expresses itself in bitter contradictions, crises, spasms. (635; 749; see also 636; 750)

Marx's discussion here is different from Ricardo's theory of the falling tendency of the profit rate. Ricardo thought, assuming the rising tendency of the price of corn because of the diminishing fertility of the land, that "with the progress of society the natural price of labour has alway a tendency to rise,"[9] and that "the natural tendency of profits then is to fall."[10] Against this, Marx attempts to show that it is not a natural factor like fertility, outside capital, but the increasing process of productive power inside capital that causes a falling tendency of profit rate. This was a theoretical achievement, related to his discovery of the principle of reproduction of constant capital, which had been neglected by the classical school.

However, there remain fundamental questions as to whether this tendency of the profit rate to fall due to the rising composition of capital indeed brings forth crises when it passes "beyond a certain point." On the one hand, it is difficult to explain the cyclical nature of crises directly from this, as this is not a cyclical but a long-term movement. Further, the tendential fall of the profit rate does not necessarily imply a crucial obstacle to capital accumulation. This is because the tendential fall of the profit rate due to the rising composition of capital may occur even though the absolute volume of surplus value is increasing. Depending upon the production of relative surplus value, the absolute volume of surplus value can go on increasing and capital accumulation can also continue even though at a diminishing pace.[11] On this point, Marx's theory of the tendential fall of profit rate is clearly different from that of Ricardo, which contains a formal necessity for an absolute reduction of the volume of profit, though basing it on the incorrect presumption of the incapability of an increase of productivity in agriculture.

If the process of the tendential fall of the profit rate includes occasional, sudden, and sharp declines in the profit rate which cause cyclical crises, we should make clear just why they must occur. We see that Marx's excess capital theory of crisis was still far from complete in the *Grundrisse.*

III. *Crisis Theory in* Theories of Surplus Value

Theories of Surplus Value is edited mainly from nos. 6–15, no. 18, and partially nos. 21–22, among the twenty-three notebooks which were written during 1861–1863 as the second manuscript draft for *Capital.* It shows in a number of ways the development of Marx's theoretical progress from the *Grundrisse* to *Capital.* As for crisis theory, the discussion in *Theories of Surplus Value* is concentrated in chapter 17, "Ricardo's Theory of Accumulation and a Critique of It (The Very Nature of Capital Leads to Crises)."

The main emphasis of Marx's discussion is still on the excess commodity theory, as in the *Grundrisse.* He says, for example, "The mere (direct) *production process* of capital in itself, cannot add anything new" regarding the explication of crisis. For the problem of realization which causes crises "can only emerge in the *circulation process* which is in itself also a *process of reproduction* (513; 513).[12] It shows the development of "the *possibility* of crisis, which became apparent in the *simple metamorphosis* of the commodity," gaining its "content" or "basis" through the motion of capital (508–11; 507–11).

Marx here still retains, in part, the underconsumptionist type of view to explain the necessity of crisis, saying "over-production arises precisely from the fact that the mass of the people can never consume more than the average quantity of necessaries, that their consumption therefore does not grow correspondingly with the productivity of labour" (469; 468). However, he puts more stress on the disproportionality type of crisis theory, reflecting the progress of his enquiry into the intersectoral relations among capitals.

While criticizing Ricardo, who, admitting the possibility of partial overproduction, rejected the possibility of general overproduction of commodities, Marx says, "For a crisis (and therefore also for overproduction) to be general, it suffices for it to affect the principal commodities" (506; 505). Pointing out that if cotton cloth were overproduced, it would affect not only workers in this sector, but also spinners, cotton growers, engineers, and iron and coal producers, Marx maintains, "If over-production has taken place not only in cotton, but also in linen, silk and woollen fabrics, then it can be understood how over-production in these few, but leading articles, calls forth a more or less general *(relative)* over-production on the whole market" (523–24; 523). He continues:

> Since, however, capitalist production can allow itself free rein only in certain spheres, under certain conditions, there could be no capitalist production at all if it had to develop *simultaneously* and *evenly* in all spheres. Because absolute over-production takes place in certain spheres, relative over-production occurs also in the spheres where there has been no over-production. (532; 532)

Thus Marx asserts that disproportional and partial overproduction, which is regarded by Ricardo as being always adjusted through the motion of capital, necessarily leads to general overproduction and crisis through intersectoral influence when it occurs in the leading commodities. Marx's excess commodity theory of crisis became diversified, adding this disproportionality type to the former underconsumptionist type of view.

Even though Marx still lays stress on the difficulty of realization in the circulation process, outside of direct production, he now comes to regard the circulation process also as a part of the reproduction process, including relations among various branches of production. This seems to suggest that he is seeking to discover the obstacle to capitalist production arising from inside the reproduction process of capital itself. At the same time, he no longer views crises one-sidedly as standing in opposition to, and only destructive of, the law of value or the law of motion of capital. He indicates not only that crises occur as a breakdown of the equalization process among capitals based on the law of value, but also that "the crisis itself may be a form of equalisation" (522; 521). Crisis theory is about to be separated from the so-called breakdown theory, and to be developed as the concrete form of reproduction or accumulation theory.

However, the process of capital accumulation, while incessantly causing anarchical disproportions in the distribution of labor quantities among various branches of production, can usually adjust these disproportionalities through competition, with the credit system among capitals synchronizing with the motion of market prices. This shows the concrete forms of the regulation of the law of value in the ordinary process of capital accumulation.[13] Therefore, even granted the anarchical nature of capitalism, it is still difficult to explain why serious disproportionalities, including an overproduction of "leading articles" sufficient to cause a general crisis, must necessarily occur and furthermore be cyclical. Such serious disproportionalities seem unlikely to occur without the appearance of some unusual special difficulty inside the process of capital accumulation as a whole. How then can such an unusual difficulty occur which cannot be overcome without a sharp crisis?

While the excess capital theory of crisis could provide an answer, in *Theories of Surplus Value* this type of theory is hardly developed. Marx raises the following question, however, which relates to this point.

Ricardo denied the possibility of general overproduction of commodities, not merely because of his acceptance of Say's theory of demand and supply, but because of his understanding that an excess of capital accumulation could not occur except in the too-distant future or in a situation too accidental and particular to be treated in principle. This view, even though in a sense logically consistent, clearly did not accord with the real development of capitalism after Ricardo's time. Nevertheless, his successors continued, inconsistently, both to deny the possibility of general overproduction of commodities and to explain the cyclical crises from the excess of capital.

> What then would Ricardo have said to the stupidity of his successors, who deny over-production in one form (as a general glut of commodities in the market) and who, not only admit its existence in another form, as over-production of capital, plethora of capital, over-abundance of capital, but actually turn it into an essential point in their doctrine? . . . [Crises must be clarified so as to contain both forms of over-production. Therefore] the only remaining question thus is: what is the relation between these two forms of over-production? (497; 497)

A page later he summarizes: "The question is, therefore, what is the over-abundance of capital and how does it differ from over-production?"

Marx still does not investigate the important question he raises in this passage, but goes on to discuss the excess commodity theory as we have seen. Thus what the overproduction or plethora of capital really is is still remains to be answered.

Marx's theoretical research prior to and including *Theories of Surplus Value* seems to lack the foundations to answer this question in two respects. On the one hand, in order to clarify the distinction and relation between the overproduction of capital and the plethora of capital, the latter being, as he says in *Capital*, "an expression used only with reference to the interest-bearing capital, i.e., moneyed capital" in the money market (III: 476), a theoretical treatment of the working of the credit system is clearly indispensable. Marx noticed from the beginning the important role of the credit system in the motion of capitalist economy, and pointed out already in the *Grundrisse* that the tendency of capital to reduce the circulation period formed "the fundamental determinant of credit and credit contrivances of capital" (551; 659). He also pointedly remarked in another place in the *Grundrisse:* "In a general crisis of over-production the contradiction is not between the different kinds of productive capital, but between industrial and loanable capital—between capital as directly involved in the production process and capital as money existing (relatively) outside of it" (316; 413). Then, in *Theories of Surplus Value,* along with his development of a disproportionality theory, he begins to pay attention to the fact that the chain reaction resulting from the fact that capitalists are unable to clear their bills through commercial credit mediates the outbreak of crises (512; 511). But Marx's theory of interest up to *Theories of Surplus Value* does not yet contain a systematic investigation into the credit mechanism; there is only an elaboration of the abstract form of interest-bearing capital, presupposing the existence of moneyed capitalists outside the industrial enterprise. It became indispensable for Marx to expand his work decisively beyond "capital in general" in his original plan [14] in order to make clear the motion of capital in business cycles through the credit system.

On the other hand, a correct theory of the capitalist law of population in the process of capital accumulation was also indispensable, primarily to clarify the relationship of overproduction of capital to the laboring population. Marx worked on such a theory in chapter 18 of *Theories of Surplus Value,* pointing out that "with the accumulation of capital a change takes place in its organic composition and the constant part of the capital grows at a faster rate than the variable" (II: 564; 562), and that "machinery always creates a relative surplus population, a reserve army of workers" (556; 554). However, unlike his exposition in *Capital,* Marx here almost neglects cyclical changes in the formation and absorption of the relative surplus population, stressing only the former. Thus his study of the capitalist law of population was too rudimentary to support the excess capital theory of crisis at this point.

IV. *Completion of the Crisis Theory in* Capital

The excess capital theory in *Capital*, clarifying what the overproduction of capital is in relation to the laboring population, is of great importance. It not only clears up the question of the overabundance or plethora of capital in *Theories of Surplus Value*, but in effect formulates a new crisis theory entirely unique to *Capital*.[15] Although it is still presented as if it were a discussion "under the extreme conditions assumed" (III: 255) in Part III of Volume III of *Capital*, it is not at all an accidental idea, but a logical outcome of Marx's theoretical development from *Theories* to *Capital*. For it is connected with and presupposes, on the one hand, the investigation into the credit system in Part V of Volume III, where the distinction and relation between overproduction of capital and plethora of capital are clearly observed, and on the other hand, the progress in the theory of the capitalist law of population in Part VII of Volume I, where the cyclical changes involving the formation and absorption of relative surplus populations are taken into consideration.

However, as it is formulated in *Capital* for the first time, this type of crisis theory, which focuses on "the absolute over-production of capital," is not sufficiently complete as regards its full meaning and logical necessity. In *Capital* we still find an excess commodity theory of crisis, which is an extension, as we have seen, of the effort in the *Grundrisse* and *Theories* to develop the crisis theory of Sismondi and Malthus, while criticizing the limitations of the classical school. There thus appears in *Capital*'s crisis theory a kind of anti-classical residue, which seems to take intermediary factors or results of crises for causes. This theory has fundamental difficulties in proving the cyclical nature and logical necessity of

general overproduction, particularly with relation to the working of the law of value, on the basis of which capital adjusts the ceaseless disequilibrium between the supply and demand of various commodities as long as competitive capital accumulation goes on as a whole.

The essential weakness of the excess commodity theory stems from its basic effort to look for capital's difficulties not within the process of production, but rather in circulation. In contrast, the excess capital theory in *Capital* shows how "the real barrier of capitalist production is capital itself" (II: 250), moving through the processes of both production and circulation. Marx's attempt to clarify the logical necessity of cyclical crises should thus be completed by developing the latter, not the former, type of crisis theory.[16]

The excess capital theory in *Capital* is, however, still incomplete in several respects. As we have mentioned, in contrast with *Theories*, *Capital* deals with the changes in the absorption and displacement of relative surplus populations in its theory of the capitalist law of population. Marx no longer considers only the mechanism of the creation of the relative surplus population. For instance, in the first section of chapter 25 of the first volume of *Capital*, which deals with "the general law of capital accumulation," Marx discusses "the increased demand for labour-power that accompanies accumulation, the composition of capital remaining the same." But he does not fully make clear the theoretical necessity and meaning of this section. After the second section of the same chapter he emphasizes, rather independently of the first section, the "progressive production of a relative surplus-population or industrial reserve army" which accompanies the "relative diminution of the variable part of capital simultaneously with the progress of accumulation" as "the general law of accumulation." The definition of the capitalist law of population, as a result, still lays too much stress on the progressive formation of surplus population.

It is possible that Marx was strongly impressed by the existence of various forms of a massive reserve army in the British economy of his day, and he cites them to illustrate his theory of relative surplus population. Although this analysis of concrete forms of the reserve army is important for the study of British capitalism of that period, it should also be noted that these forms of the reserve army include not only the relative surplus population produced inside capitalist production but also the surplus population resulting from the decomposing processes of small commodity producers and peasants. If we use the levels of principles, stages theory, and empirical analysis that Kōzō Uno suggests, we should not include the latter portion of surplus population in elucidating the basic principle. In order to make clear the basic principle of capitalist economy, we must concentrate entirely on the law of motion of capitalist production, without referring directly to the relations with various other types of producers.

Besides, it seems theoretically improper not to consider the specific restriction of fixed capital while treating changes in the method of production under capitalist accumulation and its influence on the laboring class. In this sense, the theory of capital accumulation should have been placed not at the end of Volume I but after "the turnover of capital" in Volume II, thus theoretically aligning the reproduction of capital with the theory of reproduction schema. Industrial capitalists normally have fixed capitals in their production processes, making them function as a part of profit-yielding capitals. And they convert surplus value into capital, successively, privately, and on small scales, on the basis of their already existing means of production.[17] The accumulation of capital under these conditions proceeds normally in a capital-widening rather than capital-deepening fashion, on the basis of already existing methods of production. Attempts to gain extra surplus value through adoption of superior methods of production are narrowly restricted, and undertaken only partially in such a process. Thus in a period of prosperity it is unlikely that capital will strive to produce relative surplus value and to create a relative surplus population by scrapping and replacing existing fixed capitals.[18]

Marx also says, when he explains the notion of the absolute

overproduction of capital, that the expansion of relative surplus working time "would not be feasible at any rate in the case when the demand for labour were so strong that there were a tendency for wages to rise" (III: 251). If in principle we consider the process of capital accumulation in relation to the existing fixed capital, the increase of demand for labor power that accompanies accumulation under the same composition of capital will appear not as an accidental, but as a necessary process in periods of prosperity. "A steep and sudden fall in the general rate of profit" due to a rise in wages would no longer be a mere inference "under the extreme conditions assumed," but would be seen as a necessary logical result of capitalist accumulation in the period of prosperity.[19] The fundamental weak point of capitalist production which must treat human labor power as a commodity without being able to produce it as a commodity comes here to be crucial to capital accumulation.

However, why cannot overaccumulated capital be laid aside partially "unused" without causing a sharp crisis? Or why cannot capital slow down the pace of accumulation as the profit rate falls, converting prosperity into stagnation without a drastic crisis? These questions still remain to be solved after we have proved the logical necessity for overaccumulation of capital to occur. An understanding of the working of competition through the commodity market and of the credit system among capitals is essential to answer these questions. Marx's contribution in Part V of Volume III of *Capital* is absolutely essential here, although it seldom has been treated as an indispensable part of Marxian crisis theory except in the Japanese Uno school.

We cannot deny that the theoretical systematization of the credit mechanism, which Marx attempted for the first time in Volume III of *Capital*, is far from complete. Credit theory, including business cycle theory, is clearly the most unfinished subject in all of *Capital*. In particular, the credit system is not yet fully abstracted as an inner mechanism of capitalist production. Marx recognized that the credit system is formed to utilize idle capitals or to shorten the unproductive circulation period in the turnover of capital, as we have seen in the *Grundrisse* and as we can also see in Volume II of *Capital*. However, when he oberved the working of bank credit, Marx laid stress on "money capitalists" and other depositors, outside the ranks of industrial and commercial capitalists. Though various sorts of depositors such as mere money capitalists do exist in the real capitalist economy, the principle of the credit system should be abstracted from these outside factors in order to clarify the substantial function of the credit system, which is to facilitate the setting in motion of idle elements of capital which necessarily result from the turnover of capitals. The regular movement of the money market through the business cycles is really determined by movements in the mutual utilization of these idle elements of capital.

We must notice here that Marx's inclination to emphasize "moneyed capitalists" in credit theory comes not only from the insufficiency of theoretical abstraction but also from the theory of interest within the framework of "capital in general" expounded in the *Grundrisse*.[20] The credit system in principle ought to be regarded as a purely internal mechanism of capitalist production, not relying on outside money lenders or "moneyed capitalists" who have no substantial function in furthering capitalist production. Therefore, the commercial credit which "the capitalists engaged in reproduction give to one another" in the form of bills of exchange should be treated as "the basis of the credit system" (III: 479). Bank credit, then, is the discounting of bills of exchange brought by industrial and commercial capitalists, and it depends on funds formed out of both the deposits of these capitalists and the return payments for their matured bills.[21] The ability of banks to expand credit elastically by means of issuing bank notes or bankers bills is ultimately regulated by the movement of these funds originating from capitalists engaged in reproduction.

As Marx points out, "If we observe the cycles in which modern industry moves . . . we shall find that a low rate of interest generally corresponds to periods of prosperity or extra profit, a rise in interest separates prosperity and its reverse, and a maximum of interest up to a point of extreme usury corresponds to the period of crisis" (III: 360).

In periods of prosperity, "the ready flow and regularity of the returns, linked with extensive commercial credit, ensures the supply of loan capital in spite of the increased demand for it, and prevents the level of the rate of interest from rising." This is the only period during the course of the business cycle when "a relative abundance of loanable capital coincides with a real expansion of industrial capital" (III: 488). This situation changes at the end of the period of prosperity, when overaccumulation of capital occurs.

Marx points out in the context of the excess capital theory the remarkable interrelated changes among wages, profits, and interest:

> The demand for labour-power can increase because the exploitation of labour takes place under especially favourable circumstances, but the rising demand for labour-power, and thus for variable capital, does not in itself increase the profit; it, on the contrary, lowers it *pro tanto*. But the demand for variable capital can nevertheless increase at the same time, thus also the demand for money-capital—which can raise the rate of interest. The market-price of labour-power then rises above its average, more than the average number of labourers are employed, and the rate of interest rises at the same time because under such circumstances the demand for money-capital rises. . . . If wages should rise for some reason during an otherwise unfavourable state of business, the rise in wages would lower the rate of profit, but raise the rate of interest to the extent that it increased the demand for money-capital. (III: 513–14)

The rising demand for money capital in the face of a falling rate of profit due to a rise in wages becomes an inevitable result of the capital accumulation process when the excess capital theory is properly extended. However, if industrial and commercial capitals continue to sell their products as before, paying their matured bills, thus forming disposable funds usable by the banks in turn, the banks can expand their credit elastically to meet the rising demand for money capital. Besides, in this case it is also possible that capitalists will reduce their investment because of the reduction in net profit, without any serious collapse in the chain of credit. Thus in order to prove the theoretical necessity of a sharp crisis, a little more concretization seems indispensable.[22]

Marx emphasizes in several places how the speculative use of credit raises the rate of interest. He points out that a high rate of interest "can be paid (and this is done in part during times of speculation) not out of the profit, but out of the borrowed capital itself, and this can continue for a while" (III: 512–13).

> The supply of an article can fall below average, as it does when crop failures in corn, cotton, etc. occur; and the demand for loan capital can increase because speculation in these commodities counts on further rise in prices and the easiest way to make them rise is to temporarily withdraw a portion of the supply from the market. But in order to pay for the purchased commodities without selling them, money is secured by means of the commercial "bill of exchange operations." In this case, the demand for loan capital increases, and the rate of interest can rise as a result of this attempt to artificially prevent the supply of this commodity from reaching the market. The higher rate of interest then reflects an artificial reduction in the supply of commodity-capital. (III: 514–15)

Marx does not make clear why such speculative operations become so widespread at the end of prosperity periods. Nor does he attempt to clarify the relation between overproduction of capital and the heightening of massive speculation. However, it is not difficult to find the logically necessary relation. When wages rise due to an overaccumulation of capital, this not only squeezes the general rate of profit but also necessarily affects market prices of commodities in two ways. First, the prices of commodities produced by sectors having a lower organic composition of capital (i.e., more labor-intensive sectors) must rise continuously as long as wage costs rise under the equalization of the profit rate, as Marx points out in chapter 11 of Volume III of *Capital*. Secondly, the increase in demand for means of consumption following the rise of wages may raise some prices of consumption goods or goods used to produce them if the supply of these goods cannot be promptly adjusted, as is often the case with agricultural products.

In the middle period of prosperity, market prices fluctuate only within a narrow range around steady prices of production based on a steady wage level, while capital-widening accumulation continues to depend on relative surplus population. At the end of prosperity, on the other hand, market prices of some commodities inevitably rise as the result of overaccumulation of capital. Therefore, unusual speculative stockpiling of these commodities is carried on by industrial capitals, and especially by commercial capitals, which fully utilize the elasticity of the credit system.

However, when subjected to such massive speculative operations, the elasticity of credit diminishes. More commercial exchange bills are issued and brought to banks to be discounted. The maturity period of bills is prolonged and payments are delayed or are made only by new borrowing. Along with the rising demand for money capital to meet additional payments for wages, such a speculative demand never fails to tighten the money market through a relative diminution of reserve funds in banks, which results in a rise in interest rates. The drain of gold reserves from the central bank in the money market demonstrates this tendency of the credit system most strikingly at the critical point in the last stages of prosperity.

Thus, overproduction of capital necessarily causes three related difficulties for the capitalists: increasing wages, falling profit rates, and rising interest rates. The problem of overproduction of capital in relation to the laboring population is expressed in a shortage of loanable money capital. The net profits of industrial and commercial capitalists are drastically squeezed by a rise of both wages and interest. In particular, the tightening of credit is fatal to speculative stockpiling operations, which also face a general decline in real investment from net profits. It soon becomes not only difficult but positively unprofitable to maintain speculative stockpiling, in view of the rising cost of interest.

Sacrifice sales must begin in order to pay matured bills. Breakdowns of large-scale speculative operations are ordinarily the most concrete moments of turning prosperity into sharp crisis. The conflict of the opposite movements in the general rates of profit and interest thus brings about the collapse of the credit system.

The beginning of cyclical crisis is usually heralded by the collapse of speculation among commercial capitals engaged in large-scale wholesale trade. For at the end of prosperity, speculative stockpiling utilizing credit has been developed most intensively and on the largest scale in this area, and therefore the shock of tightening credit or a rising rate of interest is also most serious here. On the other hand, the collapse of speculation by these commercial capitals results in serious shock to both the commodity market and the money market.

Marx points out that crises begin this way, saying, "Crises do not come to the surface, do not break out, in the retail business first, which deals with direct consumption, but in the sphere of wholesale trade, and of banking, which places the money-capital of society at the disposal of the former" (III: 304). At the same time, more or less speculative overtrading, not only by commercial capitals but also by industrial capitals, on the basis of overaccumulation of capital comes to be untenable and begins to break down. Collapse of speculative stockpiling causes a sharp decline in the market prices of commodities which have been maintained and raised by speculative operations. The basis of credit relations, which have presupposed a certain level of market prices, is destroyed. A chain reaction of insolvency appears. All the capitals and banks restrict new credit severely in order to secure their own reserves of payment, in spite of a sharp increase in demand for money capital to pay old debts.

Thus the interest rate reaches its maximum again as soon as the new crisis sets in. "Credit suddenly stops then, payments are suspended, the reproduction process is paralysed. . . . a superabundance of idle industrial capital appears side by side with an almost absolute absence of loan capital" (III: 488).

The collapse of the commodity market and general difficulty in selling accompany the shrinkage and collapse of credit. The stoppage of credit disturbs and shrinks production throughout whole

branches, for "the entire continuity of the reproduction process rests upon credit" (III: 490) in capitalist production. Marx describes the outcome of the absolute overproduction of capital:

> The chain of payment obligations due at specific dates is broken in a hundred places. The confusion is augmented by the attendant collapse of the credit system, which develops simultaneously with capital, and leads to violent and acute crises, to sudden and forcible depreciations, to the actual stagnation and disruption of the process of reproduction and thus to a real falling off in reproduction. (III: 254)

Employment of laborers must also be sharply reduced, with the falling off of reproduction through the collapse of the credit system. A large number of laborers are forced to be unemployed. A sharp decline in wages occurs. The consumption demand of laborers is reduced. The chain of difficulties in selling capitalist commodities is completed. The coexistence of a superabundance of idle industrial capital and an unemployed "excess" laboring population becomes inevitable as a result of the absolute shortage of loan capital. Capital values in the form of credit documents, commodities, and physical factors of production are destroyed. The contradiction between capitalism's relations of production and its increase of productive power is clearly revealed.

However, it must also be noted that capitalist production does not end its existence with a mere economic crisis. In principle, the phase of crisis necessarily changes into depression. The anarchic and uneven destruction of capitals gives some capitals a chance to preserve a portion of their value. Reproduction under capital is resumed by such capitals. But it is not easy for capital to get out of the depression, for the anarchic and uneven destruction of capitals during the crisis has caused a distorted proportionality between branches of production. This is difficult to readjust immediately because of the immobility of the existing fixed capital. The credit system is formed in principle to facilitate the mutual motion of circulating capitals, and it is almost useless in mobilizing the values of fixed capitals existing in the production processes. Therefore, even though loanable money capital becomes plentiful, reflecting the "contraction and paralysation of industrial capital" (III: 485), it cannot play a positive role in removing the fundamental difficulty of depression. The superabundance of idle industrial capital, unused loan capital, and unemployed laboring population, or, low rates of profit, interest, and wages, coexist, unable to combine in this period.

Throughout the period of depression, however, "the fall in prices and the competitive struggle would have driven every capitalist to lower the individual value of his total product below its general value by means of new machines, new and improved working methods, new combinations" (III: 255). Besides, in contrast with the prosperity period, the existing fixed capitals are in general no longer profitable, and so there is pressure to depreciate them in order that they may be renewed as soon as possible. When most capitals in the main branches of production come to depreciate a large proportion of the value of their fixed capitals and amass their own money capital sufficient to invest in new equipment, then they can adopt new methods of production through renewals of fixed capitals. These renewals of fixed capitals occur competitively and hence simultaneously at the end of the depression.

Capitals which succeeded in adopting new methods of production are able to resume active accumulation even under the reduced levels of market prices of production. At the same time, the proportionality among branches of production is fundamentally readjusted through the process of renewals of fixed capitals, because capitals can move freely to invest the whole of their value in the most promising branches during that process. A distorted proportionality between branches of production is thus restored corresponding to new relations of production.

Not only these relations among capitals, but also productive relations between capital and wage labor, are renewed. On the one hand, the value of labor power is reduced through improvements in methods of production, and the rate of surplus value is increased to extend the basis of accumulation of capital. On the other hand,

the organic composition of capital is raised to create a relative surplus population, which forms the fundamental condition for capital to reach a higher level of accumulation of value than in the former period of prosperity. All this clearly reveals the historical character and alienated nature of capitalist development: the rising composition of capital necessary to achieve a relative surplus population is realized in the depression phase, when labor has been made superabundant by the crisis.

Once relations among capitals and between capital and labor have been reorganized, corresponding to the new value relations based on the new level of productive power, capital resumes its expansion with a restored rate of profit. Trade in commodities increases smoothly, and the credit system expands elastically.

Thus, the industrial cycle (or business cycle), composed of three phases of prosperity, crisis, and depression, runs its course anew. Each phase becomes the cause of the successive phase in turn, and "the same vicious circle would be described once more under expanded conditions of production, with an expanded market and increased productive forces" (III: 255). "This industrial cycle is of such a nature that the same circuit must reproduce itself, once the first impulse has been given" (III: 489). The "life-cycle" of fixed capital in the essential branches of industry "furnishes a material basis of the periodic crisis" (II: 186); in particular it is a decisive determinant of the time length of the circuit of business cycles, for the simultaneous renewal of fixed capitals in the main branches is the starting point for every new prosperity phase.

The inner contradiction of capitalist production, which comes from the difficulty of treating human labor power as a commodity, and which bursts out in periodic crises through competition and credit among capitals, is given an actual solution in the course of industrial cycles. Nevertheless, it cannot be a fundamental solution, and so it must be constantly repeated in these cycles. Cyclical crises not only reveal the contradiction in the motion of capital, but also form a necessary part of the mechanism of capitalist development. The supply of the labor power commodity, the basic condition for capital accumulation, is secured in principle through the development of the capitalist law of population in the form of business cycles.

Business cycles, including periodic crises, at the same time constitute the mechanism for adjusting value relations between capital and wage labor and among various commodity products. The regulation of the values of commodities in accordance with the labor quantities which are socially necessary to reproduce them, along with the adjustment of the allocation of social labor necessary to maintain the reproduction of commodities, is carried through in the course of industrial cycles. Thus industrial cycles form the most inclusive mechanism for the operation of the law of value as the law of motion of capital.

Therefore, the systematic development of the value theory in *Capital* must include a crisis theory, and the crisis theory should in turn synthesize the concrete mechanisms of the law of value as the law of motion of capital. The crisis theory in *Capital* in effect also summarizes the fundamental critique against the classical school, which regarded the necessity of general overproduction or crisis as inconsistent with their law of value.

Even though still incomplete, the essential points necessary to elaborate the excess capital theory of crisis are already present in *Capital*, as we have seen, through the theories of accumulation, profit, and the credit system. Apart from the concrete historical studies of crises which should belong to different, higher levels of research, such as stages theory or empirical analysis of contemporary capitalism, Marx's crisis theory can and should be completed in principle. To leave the incomplete parts of its theory untouched does an injustice to the scientific achievement of *Capital*. In particular, it is essential to complete Marx's excess capital theory of crisis together with his credit theory, in order not merely to overcome the crucial limitations of both classical and anti-classical theory, but also to provide a sound theoretical standard for analyzing the contradictory movement of capitalism, with its changing phases of economic and social crises through world history and in our own age.

5

Marxist Theories of Crisis

There are a variety of Marxist theories of crisis. Why are they so hard to unify? Is it not possible to maintain all of them as different models which can be selected and applied depending on the circumstances? In what direction and how should we complete Marx's theory of crisis? I shall attempt to provide some answers to these questions, beginning with a review of the principal Marxist theories of crisis. Since my own view is based on one particular theory, and not a mixture of various types, it is also necessary to demonstrate how we can treat the seemingly disparate phenomena of crisis that characterize the development of capitalism from the standpoint of one theory. While attempting to be consistent in my position I shall try to explain as objectively as possible the source of the diversity within Marxian crisis theories and how this problem can be overcome.

1. The Diversity of Crisis Theories

Marx's own theory of crisis was not fully complete even in *Capital*. In fact, as I have shown in the previous chapter, Marx left behind different types of theory. Most attempts by Marxists to deal with this legacy have tended to develop one type, at the cost of neglecting, negating, or combining the remainder.

These attempts can be divided into two major types, according to the way they view the cause of crisis. One is based on the excess commodity theory and the other on the excess capital theory of crisis. The former emphasizes the logical process which creates an excessive supply of commodities in relation to demand, and regards the excess of capital evidenced in the falling rate of profit as a product of this. In contrast, the latter stresses the motion toward the excess accumulation of capital which is expressed in the decline in the rate of profit, and sees the general overproduction of commodities as a result rather than a cause. These two different notions are not easily reconciled logically.

Each major type also exhibits two additional sub-branches. The excess commodity theory has a disequilibrium version and an underconsumptionist version, while the excess capital theory embraces one variant based on shortage of labor power, and a second based on the rising composition of capital.

A. *The excess commodity theory*

The disequilibrium variant. M. Tugan-Baranovsky was the first to expound the Marxist disequilibrium theory of crisis in *Industrial Crises in England* (1894), an analysis extended by Rudolf Hilferding in *Finanzkapital* (1910). Tugan maintains that a completion of Marx's reproduction schemes would show that the market is not limited by the amount of social consumption, since the market for the means of production expands in the process of accumulation.

According to this view, Sismondi, the Narodniks, and a part of Marx's own underconsumptionist view were incorrect. "The market is always insufficient for capitalism, not because the number of consumers is too small, but because the proportionality of allocation of production cannot be realized at all in the conditions of capitalist economy."[1] However, this leaves at least two problems unresolved: Why should the partial overproduction caused by disequilibrium as a result of anarchy in the allocation of social labor spread to the type of generalized overproduction that characterizes a crisis? And why do crises occur periodically?

Tugan attempts to answer the first problem by pointing to the interrelations between the prices of commodities established in the circulation of money and credit. To deal with the second problem, he introduces the demand and supply effect of the cyclical pattern typical of the large-scale constructions of fixed capital which absorb loanable capital funds.

Hilferding acknowledged Tugan's recognition of the importance of Marx's reproduction schemes for crisis theory, and adduced Marx's statement (neglected by Tugan) to the effect that a crisis was possible if the equilibrium conditions in the reproduction scheme were broken. According to Hilferding, "if equilibrium is destroyed, a crisis can occur even in simple reproduction."[2] Following Tugan, Hilferding elaborates the effects of the gestation period of fixed capital. Although Tugan could not use Marx's analysis of the credit system in Part V of Volume III of *Capital*, Hilferding was able to employ it in an attempt to locate properly the role of credit in industrial cycles. This is one of Hilferding's important contributions. He had a tendency, however, to mix up the workings of the long-term capital market with those of the short-term money market, which had been Marx's prime focus.

The underconsumptionist variant. In opposition to Tugan-Baranovsky's and Hilferding's disequilibrium theory, Karl Kautsky, Rosa Luxemburg, and Nikolai Bukharin were advocates of the underconsumptionist theory. Kautsky states, for instance, that "the underconsumption of the exploited cannot now be cancelled by the corresponding personal consumption of the exploiters. Here is a ground for the incessant pressure toward overproduction in the present mode of production. . . . This is, in short, so far as we see, the crisis theory which is generally recognized by 'orthodox' Marxists and was founded by Marx."[3] However, Kautsky does not entirely dismiss the disequilibrium theory. In particular, in a review of Hilferding's crisis theory, he wrote:

> three elements are to be distinguished in the study of crisis. . . . Marx's theory of crisis consists exactly in a summary of a synthesis of various elements, each of which is by itself insufficient for the explanation of the inevitable and incessant repetition of crises. These three elements are first, the anarchy of commodity production, then the underconsumption of the laboring masses, and

finally the variation in the conditions of growth of each of the various components of social capital.[4]

Thus Kautsky adopts a multicausal position within the excess commodity theory.

Rosa Luxemburg did not follow such a position. She considered that Marx's schemes of reproduction gave rise to the illusion that accumulation proceeded smoothly in each of the departments of production, of means of production (Department I) and means of consumption (Department II). Her explanation of this apparently balanced process was that the schemes abstracted from the special difficulty which existed in real expanded production—namely, the source of the money needed to realize surplus value. "The difficulty had been that for the purpose of accumulation, part of the surplus value is not consumed by the capitalists but added to capital in order to expand production, giving rise to the question of buyers for this additional product. The capitalists do not want to consume it and the workers are not able to do so."[5] Capitalist production cannot solve this problem within its own confines and must increasingly acquire external markets in the course of its imperialist expansion. Thus Luxemburg's underconsumption theory serves directly as a basis for her analysis of imperialism.

However, to cite a previous contribution of my own, "Luxemburg was not correct in considering the reproduction scheme in the circuit of money capital, instead of in the circuit of commodity capital as Marx. The apparent difficulty of realisation, which according to her logic, becomes in effect inevitable for extended reproduction in general, comes also from this incorrect treatment."[6] For Marx, the money necessary to realize surplus value together with other value components appears as the means of circulation mutually expended by capitalists. Bukharin criticized Luxemburg from a different angle. He opposed Luxemburg's claim—partly derived from Tugan—that Marx's reproduction scheme in Volume II of *Capital* "contradicts" the underconsumptionist notion to be found in Volume III. If carefully studied, the reproduction schemes show, contrary to what Tugan thought, that "a specific level of the production of means of production corresponds to a quite specific level of the production of the means of consumption; in other words, the market of means of production is connected with the market of means of consumption."[7] Anarchic capitalist accumulation is "unavoidably heading towards situations in which production, driven beyond the *limits* of the required proportion, comes into conflict with *social consumption*."[8] In a capitalist society where labor power exists as a commodity, "the contradiction between the use value of the commodity and its exchange value appears in the shape of the contradiction between the production of surplus value which strives for boundless expansion, and the limited purchasing power of the masses, who realise the value of their labour power. This contradiction finds its solution in crises."[9]

Bukharin thus purified the Marxist underconsumptionist theory by locating the fundamental contradiction in the inner production relation between capital and wage labor, rather than in the external relation between capitalist production and external markets or in the mere disproportion between individual branches of production. In doing so he claimed that his theory coincided with the positions of Marx, Lenin, and other orthodox Marxists.[10] Paul Sweezy followed this line in his own theoretical work as well as in the theory he developed with Paul Baran.[11]

Bukharin's purified presentation of the underconsumptionist theory also makes its weaknesses more easily apparent. Bukharin could not give an adequate answer to the problem of why the limited consumption of the working class under capitalism should give rise to periodic crises, though he himself attacked Luxemburg's inability to show the cyclical character of crises. In addition, it was difficult to demonstrate why out of logical necessity the decreasing consumption of the working class should give rise to an acute collapse in the process of accumulation, when accumulation seemed to be compatible with the "law" of relatively decreasing consumption at other periods. In order to solve these difficulties, postwar Japanese "orthodox" Marxists have attempted to combine disequilibrium factors, such as the imbalances between the depreciation and the replacement of fixed capital, with the underconsumptionist theory. Meghnad Desai's efforts to unite Luxemburg's approach with the excess capital theory of crisis (based on rising organic composition of capital) are another example of recent attempts to overcome these problems.[12] Even including these recent attempts, however, the excess commodity theory of crisis has been neither successful nor persuasive in resolving the fundamental difficulties. But notwithstanding Bukharin's claim to orthodoxy, there has in fact been another powerful current in Marxist crisis theories, in the shape of the excess capital theory, which also has two variants.

B. *The excess capital theory*

The labor power shortage theory. Otto Bauer was the first major theorist to attempt to extend Marx's theory of excess capital accumulation in relation to the working population into a theory of crisis. Criticizing Luxemburg's assertion that surplus value cannot be realized within the extended reproduction scheme, Bauer presented a model within which, given the correct premises, we can understand "that the value of the whole products from both sectors is sold without disturbance, and that the total surplus value is realized not only in the first but also in each following year."[13] The main characteristics of Bauer's model of the reproduction scheme are as follows: (i) variable capital v increases at 5 percent a year so as to keep pace with a similar growth ratio of population; (ii) as the organic composition of capital rises, constant capital c increases at 10 percent a year; (iii) the rate of surplus value s' is unchanged at 100 percent; and (iv) a portion of surplus value from Department II is transferred to be invested in Department I in order to maintain such growth ratios in v and c.

Bauer claims this model shows the untenability of both disequilibrium and underconsumptionist theories of crisis but does not exclude crisis as originating in the overaccumulation of capital in relation to the working population. There is no "organ" to adjust the pace of accumulation to that of population growth in a capitalist society, unlike in a socialist society. When the pace of accumulation is slower the increase in the number of unemployed pulls down wages, raising the rate of surplus value and reaccelerating accumulation. This produces a "situation of overaccumulation" which Marx defined in Volume III as "the absolute overproduction of capital." Bauer added: "This point marks the absolute limitation of accumulation. When accumulation arrives there its adaptation to population growth results in a devastating crisis which is accompanied by the sudden idling of capital, a massive destruction of values and a sudden fall in the profit rate."[14]

While it is noteworthy that Bauer saw that Marx's excess capital theory of crisis can be connected with the limitation of the working population,[15] he discussed this theory in relation to the schemes of reproduction. He failed to clarify Marx's important contributions to this type of theory expressed in the analysis of "The General Law of Capitalist Accumulation," chapter 25 of Volume I of *Capital*, and in the analysis of the credit system in Part V of Volume III.

Paul Sweezy, after discovering the inner logical relation between Marx's theory of capital accumulation in Part VII of Volume I and Marx's notion of the absolute overproduction of capital in chapter 15 of Volume III, estimated that this relation already constituted "a well-articulated theory of crises."[16]

Kōzō Uno attempted to complete this type of crisis theory and extended his prewar preparatory articles written in the 1930s.[17] In Uno's view the absolute overproduction of capital can be said inevitably to arise when what Marx characterized in chapter 25, Section 1 of Volume I as "the increased demand for labor power that accompanies accumulation, the composition of capital remaining the same" is regarded as a main feature of the smooth expansion of reproduction as in a phase of prosperity, when existing fixed capitals are generally not renewed. The change in capital accumulation toward a higher organic composition of capital occurs when such a widening expansion of social productive power encounters limits in the size of the working population. This change cannot take place through a smooth alteration in technology. When the accumulation of capital turns into excess accumulation, the rise in wages pulls down the rate of profit, while at the same time the workings of the credit system inevitably produce a rise in interest rates and a shortage of loanable capital. This is a point at which Marx's contributions to the basic theory of credit systems can be used to prove the logical necessity of acute, general crisis. As I discussed in the last chapter, Uno's position, even if not fully complete in all aspects, seems to me the most promising way to arrive at the basic principles underlying cyclical crises.

The profit squeeze approaches proposed more recently by such western Marxists as Andrew Glynn and Bob Sutcliffe, Bob Rowthorn, Radford Boddy and James Crotty, and John Harrison[18] seem to be quite close to, and probably reducible to, an excess capital theory of crisis based on the shortage of labor power, if one turns to Marx's own crisis theories for a basic theory to support these approaches. However, these studies are more directly concerned with the analysis of recent crises compared to Uno's approach, which primarily attempted to complete Marx's crisis theory on the empirical basis of the typical cyclical crises of Marx's own era. At the same time, the recent contributions emphasize the role of class struggle rather than changes in the labor market in the process of capital accumulation as the cause of a rise in wages, and also tend to concentrate on the secular rather than the cyclical character of crisis.

The rising composition of capital theory. Another type of the excess capital theory of crisis regards Marx's law of the tendency of the rate of profit to fall due to rising organic composition of capital as the fundamental cause of crises. This variant originally was formulated by Erich Preiser, who claimed that "the absolute crisis of capitalism in general will be present in the moment when capitalists give up production" as a consequence of the tendency of the rate of profit to fall. "Therefore, the fall in the profit rate is the most inherent restriction to the capitalist mode of production, and

the law of the falling rate of profit explains the necessary fate of this historical form of production, its inevitable development into socialism."[19] According to Preiser, the necessity of such a breakdown must be periodically overcome through the "devaluation of capital," which serves to establish the necessity of crisis.

It is extremely difficult to deduce the inevitability of cyclical crises from Marx's law of the tendency of the rate of profit to fall, however. Firstly, the law applies not to a short-term, cyclical movement but to a long-term tendency in the rate of profit. Secondly, this tendential fall may be accompanied by an increase in the absolute volume of surplus value and a continuation in capital accumulation, although at a diminished pace. Therefore, as I pointed out in the previous essay, "if the process of the tendential fall of the profit rate includes occasional, sudden, and sharp declines in the profit rate which cause cyclical crises, we should make clear just why they must occur."

In fact, Preiser's numerical example assumes a fall in the rate of surplus value from 50 percent to 25 percent on the assumption that "wages become higher as a result of competition between capitalists."[20] However, this phenomenon must itself be explained, by a theory of a shortage of labor power, for example. Toward the end of his paper Preiser discusses how the falling rate of profit exacerbates the overproduction of commodities which follows from the overproduction of capital through increased competition in the sphere of circulation. At this point Preiser's excess capital theory tends to be reduced to the excess commodity theory, with competition functioning as the mediating process.

Henryk Grossmann's *Das Akkumulations–und Zusammenbruchsgesetz des kapitalistischen Systems* (1929) is a more thorough attempt to "reconstruct" the breakdown (and crisis) theory based on the law of the tendency of the rate of profit to fall. Grossmann takes Bauer to task on two counts. Firstly, there remained an inconsistency between a reproduction scheme in which the organic composition of capital rises and a theory of excess capital in relation to labor shortage since, as Marx discussed in chapter 25 of

Volume I of *Capital*, relative surplus population is progressively generated if capital accumulates with a rising organic composition of capital. Secondly, and more seriously, Bauer concluded that capital accumulation can proceed as long as its pace is commensurate with population growth, without fully pursuing the results of his own schemes.

Grossmann arrived at his key conclusion by extending Bauer's reproduction scheme from the original fifth year up until the thirty-sixth year. In the course of this extension he discovered that the portion of surplus value consumed by capitalists began to decrease after the twentieth year, reached a minimum of 11,141 in the thirty-fourth year, and disappeared entirely after the thirty-fifth year. Grossmann concluded, "The system cannot therefore but break down! . . . The invading crisis of the system represents the breakdown of the expansion of value, of valorisation. From the thirty-fifth year, any further capital accumulation is pointless for the capitalist class—on the above premises."[21] At the same time the crisis provides an opportunity to transfer the control of the production system to the working class, while accumulation creates a crisis with a further decline in the rate of profit through making idle the additional workers and capital. Crises lessen the burden of excess capital but as the accumulation process proceeds, following its resumption after each crisis, the necessity of breakdown increases. "Marx's breakdown theory is thus the indispensable basis and premise for his crisis theory, since a crisis shows, according to Marx, the tendency toward breakdown which is merely provisionally interrupted and not fully developed."[22]

However, all that is required to render Grossmann's breakdown theory untenable is to remove the fixed premises of Bauer's extended reproduction scheme, which Grossmann took as his basis. Firstly, the assumption of a constant rate of surplus value of 100 percent is inconsistent with increasing productivity. Secondly, the increase of variable capital of 5 percent a year and of constant capital of 10 percent ought to be seen as reducible in the context of the long-term tendential fall in the rate of profit, although the constancy of these growth rates (or at least their maladaptation to movements in the rate of profit) was indispensable for Grossmann's conclusion, i.e., the disappearance of capitalist consumption. What *can* occur when these ratios are reduced is simply the slowdown of accumulation, reflecting the altered ratio between the dead and living labor, yet still allowing an increase in the absolute amount of value available for capitalist consumption and accumulation.

Marx's own presentation of the law of the tendency of the rate of profit to fall in *Capital* is not linked so directly to the logical necessity of capitalist breakdown and economic crises, especially in comparison to the way the same law is presented in the *Grundrisse*. Grossmann's attempt to "reconstruct" Marxist theories of crisis therefore seems unpersuasive, both in terms of its own internal logic and its interpretation of Marx.

This type of crisis theory has never been able to gain strong support among Japanese Marxists, and has long since ceased to play a role there. However, some influential Marxist economists in the western world continue to hold that the law of the tendential fall in the rate of profit constituted the basis of Marx's theory of crisis. An example is Maurice Dobb, who considered that "it seems clear that Marx regarded this falling profit-rate tendency as an important underlying cause of periodic crises, as well as a factor shaping the long-term trend."[23] Dobb tried to combine this with other types of crisis theory by assuming varying circumstances. Ernest Mandel's multicausal approach, which still emphasizes the underlying role of this tendency, seems to be derived theoretically from Dobb's treatment of crisis theory.[24] Further, Paul Mattick depends almost entirely on the rising composition of capital theory of crisis and appears to follow Grossmann's approach; David Yaffe has recently attempted to extend this type of crisis theory, as have Mario Cogoy and Paul Bullock; and Anwar Shaikh's review of crisis theories also favorably estimates this approach.[25]

It is thus evident that there are still a considerable number of theories maintained by Marxists, often in opposition to each other. Is it possible to construct an approach which can overcome this diversity on scientific grounds? My own studies in the following sections naturally are oriented toward my own theoretical position: nevertheless, I hope that my presentation and critiques will prove useful in yielding a deeper understanding of different positions and assist in creating a firm basis for unification in the future.

II. Completing the Basic Theory of Crisis

A. *The empirical basis of abstraction*

As we saw above, Marxist studies in the field of crisis theory began and were pursued in a period when capitalism had already moved into its imperialist stage. In this period the growth of huge fixed capital in the heavy industries and the increasing role of the capital market exercised a great influence on the course and phases of cyclical crises. In comparison with the liberal stage, the chronic tendency toward the generation of excess capital in the forms of idle fixed and money capital militated against generalized prosperity and led to a greater irregularity in the phases of industrial cycles. At the same time, capitalist development began to manifest its inner contradictions in the form of external imperialist conflicts in the world market. Imperialist world war and the beginnings of breakdown in the capitalist world system became major concerns of Marxists.

Under these circumstances, Marx's theory of crisis was regarded as offering a direct theoretical access to the understanding of the new features of capitalist development. In most cases, attempts to clarify Marx's basic theory of crisis have been continuously intermingled with the observations of new phenomena. It is therefore quite important to consider from what historical stage of capitalism we should abstract the basic theory of cyclical crises. Can we extend the empirical basis of abstraction into the imperialist stage in attempting to complete Marx's theory of crises?

For example, since Tugan and Hilferding there have been a number of attempts to introduce the effect of the gestation period of massive fixed capital and the role of the capital market into the basic explanation of periodic crises. However, such studies have tended to neglect how the construction of such massive fixed capital may have influenced the whole character of industrial cycles. They have also obscured the decisive effects of the operation of the credit system in bringing about an acute, general paralysis of reproduction in the course of typical cyclical crises. This has tended to be regarded as a secondary problem, as Hilferding quite explicitly stated.[26]

Attempts to deduce the necessity of imperialism or of the breakdown of capitalism directly from the basic theory of crisis have also been unsuccessful. Rosa Luxemburg was a typical example: on the one hand she was unable to articulate the historically specific changes in capitalist development which necessitated the imperialist policies culminating in World War I, and on the other, she distorted the basic principles underlying the capitalist economy in order to facilitate the deduction of the abstract necessity of imperialism. At the same time, she largely put out of consideration the periodicity and sharpness of crises.

A reading of Luxemburg's *The Accumulation of Capital*, Hilferding's *Finanzkapital*, and Lenin's *Imperialism*, in that order, shows that with the establishment of the stages theory of imperialism Marx's crisis theory fell more and more into disuse as a direct starting point. This would seem to suggest that studies to work out the stages theory of imperialism together with more concrete analyses of contemporary capitalism operate in a different dimension to works directed at completing Marx's basic theory of crisis. Only after clarifying the dimensional difference of these various levels can we proceed to complete and apply Marx's basic theory of crisis as the scientific foundation of a stages theory of capitalist development or more actual empirical analyses.

B. The requirements of the basic theory of crisis

Although unfinished, Marx intended to show in *Capital* how the autonomous motion of capitalist production causes general, acute crises with a regular periodicity. The contradictory character of capitalist production is most clearly present in cyclical crises, where the process of valorization in the motion of capital necessarily results in a sudden destruction of capital values. The theory of crisis must clarify the basic inner contradiction of capitalist production together with the concrete mechanisms of its motion. However, the outbreak of crisis as a result of the self-destructive motion of capitalist accumulation does not in itself imply the final collapse of the capitalist system. In fact, crisis itself serves as an important phase in which capitalism arrives at a real solution to its contradictions in the form of industrial cycles which permit the advance to higher levels of accumulation. The solution cannot be fundamental in character as is shown in the inevitability for crises to repeat themselves.

A prerequisite for an exhaustive set of basic economic principles is that they are able to explain the logical necessity of sharp, generalized crises which are repeated in industrial cycles, understood as the concrete form of motion of the contradiction within capitalist production. At the same time, crisis theory should be consistent with the working of the law of value, since it is such a fundamental element in the organic system of the explanation of the principles of capitalist economy. Further, the theory of crisis must elucidate the concrete mechanisms through which the law of value asserts itself in a capitalist economy. Basically, the law of value shows how the varying amounts of socially necessary labor required to produce commodities regulate prices. Crisis theory must be able to clarify how regulation through the law of value becomes first severely distorted, then subsequently restored as the prices of labor power and other commodities fluctuate in relation to each other within the course of capital accumulation. It is essential to bear these requirements in mind in attempting to complete Marx's theory of crisis as found in *Capital*. In my

opinion they are not arbitrarily derivable from the theoretical system to be found in *Capital*, especially if we regard the cyclical crises of the mid-nineteenth century as the essential empirical basis of our abstraction.

When referred to these requirements, the excess commodity theory does not lend itself easily to demonstrating the logical inevitability of actute, general, and *periodic* crises. The supply of and demand for commodity products can be adjusted according to the operation of the law of value, as long as capital accumulation proceeds. All that the excess commodity theory of crisis can show are the possibilities of crisis: this type of theory does not present a more *basic difficulty for capital accumulation* prior to an oversupply of commodities. The excess capital theory was proposed in order to overcome such limitations, especially in relation to the operation of the law of value.

Nevertheless, the rising organic composition variant of the excess capital theory has a basic difficulty in showing at what point a clear limitation on capital accumulation makes itself felt, such as "the absolute over-production of capital" defined by Marx.[27] Three options remain: either to rely on some arbitrary specific premises (as in the case of Grossmann), to combine some other crisis theories (Preiser, Dobb, and Mandel), or to show only an abstract need mitigate the law of the tendency of the rate of profit to fall through crisis (Yaffe and Bullock).

In contrast, the labor power shortage variant of the excess capital theory seems able to overcome such defects or inconsistencies and to offer the greatest hope of satisfying all the requirements for a basic theory of crisis. Recent western analyses of the profit squeeze type (Glynn, Sutcliffe, Rowthorn, Boddy, Crotty, Harrison) can utilize this type of crisis theory as a basis for pursuing particular lines of research. However, if the power of trade unions to squeeze the rate of profit through class struggle is generalized into the basic factor causing crisis, rather than Marx's overaccumulation of capital in relation to the working population, it may become difficult to explain the cyclical and acute character of crisis. The basic principle of cyclical crisis should rather be clarified on the empirical basis of the mid-nineteenth century, when trade unions were not yet *generally* established.

C. *The basic contradiction of capitalism and the aim of socialism*

How we conceive the fundamental cause of crises in the basic theory is closely related to our understanding of the basic contradiction of capitalist production. From the viewpoint of the excess capital theory, the excess commodity theory of crisis mistakes the intermediary factors or the results for the causes of crisis.

The disequilibrium type of crisis theory regards the anarchical character of capitalist production as its basic contradiction. In this view, socialism figures as a system to overcome the limitations of capitalism by the social control of the imbalances between sectors. According to Hilferding, the development of finance capital implies a movement toward greater control within the framework of capitalism, revealing the possibility of an "organized capitalism." Other key implications of socialism and the socialist movement are inclined to be left out of account in this view.

Marxist underconsumptionists criticized this notion and asserted that it was the limited consumption of the working class in relation to the increasing productive forces which constituted the basic contradiction of capitalism. Lenin's definition of the "contradiction between the social character of production and the private character of appropriation" should be seen as being subsumable within this perspective.[28]

The task of socialism is then seen as the socialization of the character of appropriation and an increase in the consumption of the masses. This view tends to locate the basic contradiction within distribution rather than in the production process. Such problems could be redressed even by Keynesian policies, as long as the importance of the redistribution of income and the generation of effective demand is kept in the forefront. In fact some theorists of

state monopoly capitalism, such as K. Zieschank, endorsed the possible effectiveness of Keynesian anticyclical and anticrisis policies.[29] Paul Baran and Paul Sweezy also seemed to subscribe to this view, although Sweezy appears to have amended his position since the publication of *Monopoly Capital* (1966). A socialist policy to abolish the underconsumptionist contradiction in "socialist" countries could also be realized under state bureaucratic rule, leaving a whole series of forms of alienation in the production process and social life quite intact.

The excess capital theory of crisis criticized the excess commodity theory and located the basic contradiction of the capitalist economy in its production process and in capital itself. However, it is not clear what the socialist solution would be in the case of the rising composition of capital variant, as the reduction of living labor in relation to dead labor together with the slowing down in the pace of accumulation of amounts of labor, expressed in the tendential fall in the rate of profit under capitalism, must remain and continue, even after the capitalist mode of production has been discarded.

By contrast, the labor shortage type of crisis theory states clearly that the commodity form of labor power is the essential basis of capitalist production and the root of its contradiction. Some Marxists make the criticism that this type of theory basically ascribes crises to the working class and the increase in their wages. In fact, the opposite is the case: the theory emphasizes that it is capital and its accumulation which produces shortages of labor power and crises. The theory also shows how difficult it is for workers to maintain any substantial increases in the value of labor power, through a rise in v/s, which may be only tentatively realized in the last phase of prosperity. Only in this phase, when capital is overaccumulated, can increases in real wages be sufficient to prompt crises; under certain circumstances increases in real wages may assist in mitigating the effects of depression. The fundamental aim of socialism should therefore be the abandonment of the commodity form of labor power. Once the direct producers are restored as the subject, rather than the object, of production, the increase in productive power could be adjusted to the number of workers, rather than the converse. This change would certainly make it possible to increase the living standards of the working class and abolish the misallocation of labor power which exists under capitalism. However, all such changes and readjustments must be regarded as a corollary of the abolition of the commodity labor power as the final, and highest, form of the alienation of exploited workers to be found in class societies. Socialism must be "an association of free individuals" (*Capital*, I: 78; 171), not a society controlled and governed by state bureaucrats.

In sum, while it is important to avoid being oversimplistic, we can see that each type of crisis theory tends to enable one to project a specific image and conception of socialism, just as a negative film creates a particular positive photograph.

D. *The relevant theoretical parts of* Capital

In the long history of Marxist crisis theory almost all excess commodity theorists have utilized and attempted to extend the reproduction schemes of *Capital*. Ever since Tugan's disquisition the main concern of this stream of crisis theory has been to show how and why the equilibrium conditions in the reproduction scheme could be broken. However, since the disequilibria which may occur in the reproduction scheme as a result of the anarchical motion of capital can also be readjusted through the anarchical workings of the process of capital accumulation, given that the latter continues as a whole, the schemes can only show that crisis is *possible*.

If the basic theory of crisis is to prove the logical inevitability, and not the mere possibility, of crisis, the reproduction schemes cannot in principle be tailored to fit this requirement. As Mandel recently reminds us, following Rosdolsky, "the function of the reproduction schemes is thus to prove that it is possible for the capitalist mode of production to exist at all."[30] Uno also pointed

out as early as 1932 that the task of the reproduction schemes is to show how the basic process of capitalist production can be formulated in terms appropriate to the social material basis common to all societies. The reproduction schemes, therefore, "can never clarify the necessity of crisis in such a sense that capitalist production has a barrier in capital itself."[31]

In fact, the reproduction schemes presuppose that labor power is always obtainable and do not deal with the capitalist mechanism through which the necessary number of the sellers of labor power is reproduced through capital accumulation. If we compare the theory of capital accumulation in the first volume of *Capital* and the theory of reproduction schemes in the second, it is the former which actually deals with the specific character in the reproduction process of the capitalist mode of production.

The widespread misapprehension that the reproduction schemes can embrace the total process of capitalist reproduction seems to have prevailed among Marxist excess commodity theorists. This misconception about the limitations of the reproduction schemes has been a major source of both the popularity and the continued lack of success of the excess commodity theory.

Even the excess capital theory was influenced by this trend, and both Bauer and Grossmann formulated their studies on the basis of the reproduction schemes. The recent abandonment of the reproduction schemes by excess capital theorists must be viewed as a positive step. The proper emphasis, as Sweezy has indicated, is to look in the direction of the theory of capital accumulation. If we examine the way in which fixed capital acts to impede the change in methods of production, the logical necessity of the "absolute over-production of capital" becomes quite apparent. Even though the chapter in Volume III of *Capital* where this concept is introduced is entitled "Exposition of the Internal Contradictions of the Law," a careful reading will uncover that its logical contents are mostly taken not from the law itself, but the process of capital accumulation underlying the law. The theory of crisis based on the rising composition of capital possibly may have been overly influenced by the title of this chapter, especially with the added temptation of the exposition of the theory of profit in the *Grundrisse* which became generally available to recent theorists.

In addition, Marx's investigations into the credit system in Part V of Volume III of *Capital* are quite important. Without an analysis of the workings of the credit system, the acute and general character of cyclical crises is not fully explicable. One touchstone by which to judge the correctness of crisis theories should be how they are able systematically to integrate Marx's contributions on credit theory. Hilferding, and recently Bullock and Yaffe, constitute exceptions as far as this aspect is concerned in western literature.[32] However, their treatments of credit contrivances still function more as supplements to their crisis theory and remain somewhat confused as regards the appropriate historical basis of abstraction. My own view, based on Uno's work, is that it is necessary to rely on both the proper excess capital theory and the appropriate empirical basis of abstraction which Marx took—the mid-nineteenth century—in order to elucidate the basic theory of the structure and working of the credit system in the process of regular industrial cycles.

III. *The Metamorphoses of Crisis*

A. *The relevance of the multicausal approach*

A number of Marxist theorists have adopted multicausal approaches, attempting to combine various types of crisis theory. Kautsky, Preiser, Dobb, and Mandel are representatives of this current, although Kautsky differed fundamentally from the other three. Two major reasons suggest themselves as to why this approach has cropped up repeatedly in the history of Marxist crisis theory. Firstly, Marx's own crisis theory contained various different views, each of which seemed insufficient in itself to prove the

logical necessity of crises. Secondly, the history of capitalism itself seems to exhibit a variety of types of crisis.

However, I am not convinced. If Marxists wish to advance from a mere interpretative position to a more creative one they should first attempt to investigate which of Marx's crisis theories was the most accurate and consistent, then select the best approach and try to complete it. If each theory is inadequate on its own, how can their combination in a multicausal approach satisfactorily prove the necessity of crises? And if the determinant of the pattern of crisis is left to varying historical circumstances, the basic theory of political economy still must explain how the autonomous accumulation of capital will repeat similar patterns of industrial cycles with periodic crises. The typical cyclical crisis between the 1820s and 1860s did in fact repeat itself in a very similar pattern, although each was attended by particular historical circumstances.

We can, therefore, extract a fully determinant principle of cyclical crises from Marx's historical period. Such a basic principle is indispensable for the analysis of the different features which marked the historical metamorphoses of crises. It is at least partly due to a confusion of levels of research between basic theory and concrete analysis which leads those who take a multicausal approach to treat various historical periods of capitalist development directly and simultaneously by assembling an abstract theoretical tool box comprising a number of possible models.

Even in studies of actual crises we should not arbitrarily use different types of crisis theory in a multicausal way. Historical studies of crises undertaken with a multicausal approach have a tendency to become fragmentary and lack a dialectical unity. An outline of the major features of the metamorphoses of crises will show the possibility of a more unified approach to actual empirical analyses from the viewpoint of our own basic crisis theory.

B. *The typical cyclical crisis*[33]

In the phase of liberalism the leading capital was British industrial capital, centered around the cotton industry. Capital accumulation in this stage fluctuated in typical cycles with a duration of almost exactly ten years: crises occurred first in 1825, then 1836, 1847, 1857, and 1866. These cycles not only showed a similar periodicity, but also repeated the same course. A full-scale prosperous expansion was followed in the last phase by massive speculative trading, leading into an acute crisis comprising the trinity of a commercial crisis, money (or credit) crisis, and industrial crisis. A depression then followed lasting three or four years, forcing those capitalists still in business to completely renew their methods of production.

The cycle of prosperity, crisis, and depression was not a mere domestic movement of British capitalism. The overaccumulation of British industrial capital occurred not only in relation to the domestic labor market but also to the inelastic supply of raw materials and foodstuffs from abroad. The central cotton industry always suffered from increases in the price of cotton and in wages in the last phase of prosperity. The rate of profit would begin to fall: then massive speculative stockpiling would spread in response to the hope of gaining from increases in the market prices of raw cotton, cotton goods, and corn. The large-scale wholesale merchants in particular activated such speculative trading by utilizing the elastic expansion of the credit system. However, this uneven, speculative development together with the decline in the rate of profit restricted and tightened first the commercial and then bank credit. The rate of interest had to rise. The external and subsequent internal drain of gold reserves from the Bank of England both reflected and sharply increased the tightening of the money market.

The failures of the large wholesale speculators became inevitable under these circumstances and generally initiated the associated breakdown of the commodity market and money market, paralyzing capitalist reproduction. In the same way that overaccumulation of capital occurred in relation to agricultural products from abroad, speculative overtrading, the credit expansion, and their successive breakdown also extended to the world market, and were not confined to the British domestic market. However, the fluctuations in prices and the credit system on the world market were not independent but totally determined by the accumulation of British industrial capital. Viewed from the inner logic of British capitalism, the forms of international trade and finance were not incompatible with the inner economic order: they simply had a quantitative effect on the amplitude of cycles of British capital accumulation in this period. This is why it is possible to abstract the principle of cyclical crises as a wholly determinant principle of the movement of a capitalist society without explicit reference to concrete international relations.

Railway construction, whose develoment was related to the role of the capital market, was confined largely to Britain until the 1840s and then spread abroad after the 1850s, adding its influence to the features of crises. However, it remained as primarily an amplifier as long as the British cotton industry still dominated the course of industrial cycles.

Cyclical crises were the most conspicuous manifestations of the inner contradiction of capitalism in its liberal stage. The long-wave theory recently presented in Mandel's *Late Capitalism* should not obscure the unified nature of this stage, with its characteristic regular cyclical crises. The long-wave theories rather should be seen as attempting to generalize the historical experiences of the great depressions at the end of the nineteenth century and in the 1930s. I strongly doubt if they can be proved as a constituent element of Marx's basic theory of crisis.

C. *The great depression*[34]

Beginning in the 1860s and definitely by the 1870s, a shift took place in the structure of capital accumulation which was determinant for the pattern of industrial cycles: the British cotton industry acquired a technical maturity which removed it from its central role in industrial cycles. The new dominant ways of accumulation were to be found in British overseas investment, railway construction abroad, and the iron and steel industry connected with it. Capital accumulation for railway construction on the continent and in the United States grew in excess of the labor market and the productive capacity of coal and iron at the beginning of the 1870s. The sharp increase in costs terminated the construction of many prospective railway projects. The speculative expansion in capital markets which had taken place to finance them collapsed in 1873 causing the acute money crisis in Austria, the United States, and Germany, where banks were directly involved in the finance of capital markets and railway construction. However, the extreme tightness of the London financial market which created the severe difficulties for the foreign financial centers enabled England to escape an acute money (credit) crisis this time. Return flows of exported capital from abroad mitigated the critical shortage of loanable funds in London. In addition, British banks were not directly involved in long-term loans for railway construction or in overseas capital markets, but concentrated on their role as the short-term discount market at the financial center of world trade.

The indecisive character of the crisis meant that a huge amount of fixed capital was carried over in British industries with little destruction. Excess capitals in the form of excess capacity forced industrial capitals into severe competition with each other. The difficulties in depreciating and replacing the excessive fixed capitals, especially in heavy industry, made the depression more long lasting and were added to by the existence of large-scale investment in new equipment through joint stock companies. The prolonged depression in capital acumulation deepened so much that productivity growth in British industry stagnated completely in the 1880s and British industries began to lose their leading position. In my view, these difficulties in capital accumulation in British industries lay at the heart of the great depression between 1873 and 1896. Britain still held the overwhelming share of the world trade in industrial products and occupied the leading position in technology, although its own stagnation caused it to lose this position by the end of the period.[35]

The prolonged depressed state of manufacturing made it difficult to relieve the crisis in European agriculture. The recoveries both at the beginning and at the end of the 1880s were feeble, with an uneven and speculative character from the outset; each ended with the similarly indecisive crises of 1882 and 1890. Even though these crises seem to fit the excess commodity theory it is important to realize that it was the chronic excess capital existing in the central industries and financial markets which determined the nature of the recoveries and of the following crises. The inner contradictions of capitalist production could no longer be resolved through cyclical economic crises but took the form of the *chronic* existence of excess capital.[36] It was this change in the substructure which brought about the shift from the economic policies of liberalism to the expansionist policies of colonialism, together with protectionism (except for Britain).

It is remarkable that the metamorphoses of industrial cycles caused basically by the growth of fixed capitals occurred prior to the establishment of monopolistic finance capital which itself became secure just after the turn of the century. In fact, it was these metamorphoses which necessitated the growth in monopolistic finance capital, as well as changes in the main direction of economic policies, and not vice versa.

Once the productive power of heavy industry in the United States and Germany had caught up with and then surpassed that of Britain, the growth of U.S. and German capitalism was able to override the depressive influence of the stagnant British economy and terminate the great depression. British industries also gradually shifted to the production of higher grade or specialized products to meet the new situation on the world market. The increase in productivity of gold mining with the development of the South African gold industry tended to push up price levels of commodities, further stimulating capitalist accumulation.

However, this did not fundamentally resolve the difficulties of coping with the existence of large-scale fixed capitals. The chronic tendency to generate excess capitals in the forms of both excess productive capacity and superfluous money capital was continuously reproduced with different features even after the great depression. The monopolistic organizations of finance capital, which had been formed at the industrial center to escape the general difficulties of this tendency in fact reinforced them on the one hand, while transferring the difficulties onto the non-monopolistic sectors on the other. These circumstances inevitably led to the vigorous advancement of national imperialist trade and economic policies, culminating in World War I.

In my view, which differs from Uno's theory at this point, it is probably possible to formulate a basic principle of metamorphoses of industrial cycles caused by an increase in fixed capital. The most fundamental changes to be clarified in such a principle are the chronic existence of excess capital, the subsequent uneven and speculative character of the prosperity phase and the inability of the crisis to resolve the structural difficulties for a full recovery.

However, while a principle of metamorphoses of industrial cycles can be formulated, it must be more abstract than the principle of typical regular industrial cycles extracted from the liberal stage. Since industrial cycles based on chronic excess capital cannot be repeated in a stable, regular course, in contrast to the previous typical cycles. The initiating factors for recovery and prosperity tended to be exterior to the central industries, and the direct causes of prosperity and the elements in its collapse therefore become diversified from period to period. These historical changes in the concrete phases of industrial cycles ought to be studied both at the levels of stages theory and of more concrete empirical analysis. My own judgment is that the excess capital theory as I have formulated it is quite effective as a basic principle from which to study these historical changes and their interrelationships beginning with the great depression, as outlined above.

D. *The great crisis*[37]

The great crisis which began in the autumn of 1929 does not seem amenable to the labor shortage variant of excess capital theory. Throughout the 1920s European and even U.S. capitalism was characterized by relatively high levels of unemployment. Wage rates consequently stagnated. The expanded agricultural production outside Europe during World War I became excess production when European agricultural output recovered. Agricultural distress spread throughout the world economy from the beginning of the 1920s. In addition, the capitalist world lost the Russian market. Accumulation, in particular in industrial capital, tended to stagnate.

All these features prior to 1929 seem to favor the excess commodity theory of the underconsumptionist or disequilibrium type. However, behind the seeming imbalances between the demand and supply of various commodity products there were more fundamental difficulties of capital accumulation in the central industries and financial markets. In the actual circumstances of this period the difficulties of capital accumulation which finally generated the great crisis were deeply linked to the outcome of World War I.

Productive capacity in the heavy industries, which had been fully utilized and much expanded during the war, appeared as excess fixed capital once the war had ceased. In the case of the U.S. economy this excess capital, such as in the steel industry, was absorbed to a certain extent by the new automobile industry and the construction boom. The development of the auto industry and the construction boom were initiated by the mobilization of the increased monetary assets acquired by various social classes during the war. However, the growth of automobile production and the construction boom were still insufficient to bring about the full utilization of fixed capital in the basic heavy industries. The result was a restrengthening of the monopolistic behavior of finance capital; in the case of the steel industry, price competition caused by the new market had already ended by 1924. This affected the newly developing automobile industry, and the prices of cars actually rose rather than fell with the increased productivity in the late 1920s.

Monopolistic control of the market aggravated the deadweight of excess fixed capital by restricting the scale of production, and as a consequence industrial investment in plant and equipment began to stagnate from the middle of the 1920s. This in turn made it difficult to alleviate unemployment and the distress in agriculture. In the meantime, those monetary assets which even workers and peasant farmers had managed to acquire during and just after the war were more and more centralized to the upper strata of the capitalist class and became excess money capital. At this time there were few paths by which American excess money capital could be exported to the developing countries since world agriculture was itself in severe crisis on the one hand, and on the other, there were no effective political means to induce U.S. capital to export to the agricultural countries.

Unable to be absorbed by domestic productive investment, a part of American excess money capital was exported to Germany, once the postwar acute inflation had been brought under control. Germany also had to absorb American capital at higher than average rates of interest in order to meet reparation payments, chiefly to France and Great Britain. The burden of reparations and the related high level of interest were major obstacles to the economic recovery and the growth of German capitalism. However, the recipient countries were not much better off. They also had to pay off their war debts, mainly to the United States. In the case of Great Britain, the prewar gold/sterling parity was reestablished in the interests of financiers, adding to industrial stagnation by increasing the price of British exports and then necessitating higher interest rates to attract short-term loans from abroad to balance Britain's international account. These factors accentuated the restriction of productive investment due to the excess fixed capital and the monopolistic organization of finance capital in Europe at this time. Under such circumstances, American export of capital to Europe was not very effective in activating the fresh accumulation of industrial capital or feeding expansion.

Through the chain of war reparation and war debt payment, American capital export in fact served to reproduce the existence of

excess money capital in an international roundabout, with flows leading back to the United States. American excess money capital also was used in the domestic market to support the more-or-less speculative building boom through the provision of mortgage loans; then at the end of the 1920s it became increasingly centralized in the capital market when American finance capital promoted the second merger movement, which absorbed a lot of excess monetary assets. The speculative development at the last phase of prosperity this time took a pronounced financial form through speculation in the joint stock market. The centralization of money capital into the New York capital market tended to cut back the export of American capital to Germany and destroy the chain of international monetary payments which had characterized the relative stability of the 1920s. From the end of 1928 the short-term rate of interest went up in every central financial market in the world, further restraining capitalist industrial activity. In the United States the rise in rates of interest especially hit capitalist operations in long-term construction and in speculation in the capital market in the last stage of their development.

The breakdown of speculation in the New York joint stock market which began in the autumn of 1929 resulted in an acute financial crisis. The decline in the prices of stocks and real estate produced waves of failures in speculative operations and repeated runs on banks. In order to obtain the necessary means of payment, nonmonopolistic commodity products were sold by cutting prices. The collapse of financial markets and such commodity markets reacted upon each other and reduced effective demand and the volume of production. In contrast, the prices of monopolistic products were not substantially reduced, a function of the fact that monopoly capitals greatly decreased production in order to maintain monopolistic prices. Not facing strong trade unions, American monopoly capitals could do this fairly easily by drastically cutting back on employment. The general overproduction of commodities became significant once the earnings of workers and farmers fell drastically along with the contraction of capitalist reproduction.

Since the financial transactions of European countries had depended greatly on U.S. loans and capital export, the U.S. financial crisis destroyed the international monetary and financial system which had been an essential part of the relative stability of the 1920s. With the paralysis of the financial centers, the European capitalist countries were also precipitated into a deep crisis more or less similar to that in the United States. The agricultural crisis in the peripheral countries of the world economy increased sharply. The international gold-exchange monetary system of the 1920s could no longer be maintained: with its collapse the major capitalist countries moved toward block economics, with each key currency having its own market territory. The historical necessity of World War II was directly rooted in the development of such antagonistic block economies generated by the great crisis.

Thus behind the seeming imbalances of supply and demand of commodity products it is essential to see the excess capital which increased during the 1920s in the shape of both excess fixed capital, reinforced by the activity of monopoly capitals, and excess money capital, especially in the United States. Excessive money capital, real capital, and the supply of labor power could not be organically linked in this period, as occurred through the fundamental renewals of fixed capital in the typical industrial cycles of the mid-nineteenth century and would occur through U.S. politico-military expenditure after World War II. Incapable of absorption in productive expansion, excess money capital was utilized in speculative mortgage loans and speculative operations in the capital market, and thus played an important role in shaping the acute crisis. Compared with the typical cyclical crises or with the outset of the previous great depression, or even with the process of recent world crisis which I shall examine in the next essay, the great crisis after 1929 cannot be so easily explained by a direct application of the labor power shortage type of excess capital theory of crisis. However, if we are flexible in using this type of crisis theory as a basic principle, and include its treatment of the phase of depression and the associated accumulation of money capital and real capital, we

can arrive at an understanding of the historical inevitability and specific character of the great crisis in concrete terms. Such an elastic application of our basic theory should not be equated with a multicausal approach, where each factor tends to be regarded as more or less independent and inaccessible to systematic unification within one basic principle or in actual historical analyses. The viability of the excess capital theory must also be judged by a concrete analysis of the recent economic crisis of world capitalism.

6

The Inflational Crisis of World Capitalism

I. *The Inflational Crisis of the 1970s*

Modern capitalism after World War II was often viewed as a successful system, able to avoid economic crises and maintain employment and income growth through the effective operation of Keynesian policies. Such a view seemed adequate in the 1950s and 1960s when the capitalist countries kept on a path of relatively sustained and stable economic growth. Of course, even in the United States, which was the leader of the postwar world economy, there were economic recessions, such as in 1953–1954, 1957–1958, 1960–1961, and 1969–1970. However, they did not become very deep and were soon overcome. Especially in the 1960s, the U.S. economy appeared to prove the success of Keynesian financial policy (called the New Economics) under the Kennedy and Johnson administrations.

A radical change occurred in the 1970s, when world capitalism suffered a generalized serious economic crisis. Let us review the outline of its process in chronological order.

The International Monetary Fund (IMF) system, which had worked on the basis of the convertibility of dollars into gold, at least when requested by foreign public authorities, finally collapsed when Nixon entirely stopped this convertibility in August 1971. Even though many people anticipated an immediate disturbance in the world economy, the business activities of major capitalist countries rose in 1972 and 1973. The system of floating exchange rates was celebrated as succeeding in making Keynesian policy

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universally more elastic by removing the restrictions of the international balance of payments. But meanwhile, inflation within capitalist countries was accelerated through increases in their money supply consequent upon a rapid growth of international liquidity.[1] At the same time, a sharp rise in prices began, especially in basic raw materials such as agricultural products, nonferrous metals, rubber, and petroleum. The annual rate of increase of wholesale price indices of all major capitalist countries except West Germany was already exceeding 10 percent before the autumn of 1973. A vicious inflation was beginning to appear.

After the petroleum price was quadrupled by OPEC in four months from October 1973, the rate of increase of wholesale price indices of capitalist countries (including West Germany) gained speed in 1974. The increase of consumer prices followed and reached an annual rate of more than 10 percent in these countries (except West Germany). Under these circumstances, the economic activities of finance capitals could not avoid acute disturbances.

After June 1974, when the Herrstadt Bank became insolvent in West Germany, various banks, such as Hessenlandes Bank, Frankfurthandels Bank (in West Germany), Lloyds Bank International, London County Securities (in Great Britain), Union-Bank (in Switzerland), Franklin National, and U.S. National Bank of San Diego (in the United States), made big losses and/or fell into similar difficulties. Stock market indices of major countries fell sharply. Universal unrest spread over all money and capital markets. At the same time, financial policy was forced to tighten generally in order to check inflation. Thus credit mechanisms became extremely stringent everywhere, pushing up interest rates.

This very tight financial situation coupled with disturbed price relations increased the number of failures and the severe difficulties of business enterprises. The contraction of reproduction began to accelerate. The scale of production of countries within the Organization for Economic Cooperation and Development (OECD) fell 13 percent between the end of 1973 and the autumn of 1975. The unemployed of the six major capitalist countries reached

14 million even in the official data. The quantity of international trade was reduced by 10 percent in 1974–1975. World capitalism had clearly fallen into its biggest and longest economic crisis of the postwar period, a crisis which can be properly called "inflational crisis."

It is obvious that Keynesian policy had failed to achieve its aim of preventing or avoiding the increase of unemployment, the decrease of effective demand, and the vicious inflation of this period. Indeed, did it not in fact worsen the situation?

Hence a great loss of confidence in every capitalist government occurred regarding the operation of economic policy. This loss of confidence deepened the theoretical crisis of neoclassical economics. Neoclassical theory was not only unable to offer in practice effective means for preventing or mitigating the economic crisis, but was also found theoretically incapable of providing an analytical basis for understanding why such an inflational crisis should occur. The so-called neoclassical synthesis was already losing its prop of microeconomic price and capital theory during the 1960s through the criticisms of neo-Ricardians and Marxians. The recent discredit to another prop in the form of macro-Keynesian theory seems to dissolve any remaining basis of that shallow synthesis. The mainstream of modern economics is showing evidence of its narrow limitations, imposed by the weakness or rather absence of theories of value and crisis within it.

II. How to Apply Marx's Theory of Crisis

The position of Marxian economics is quite different. Unlike the neoclassical theory, it does not regard the capitalist system as given and eternal, nor does it attempt to supply political means to maintain the present system. It rather aims at a critical analysis of the inner contradictions and their development which are characteristic of past and present capitalism. Marx's theory of crisis in *Capital* can serve as a proper basis for such an analysis.

However, Marx's theory of crisis in itself remains incomplete and contains views not easily reconcilable, as I discussed in the fourth essay. A correct understanding of the characteristics of modern capitalism and its recent crisis may not be attained, if the incorrect side of Marx's crisis theory is used, or if the basic theory is applied too directly, without specifying the concrete conditions of recent world capitalism.

For example, Paul Baran and Paul Sweezy's *Monopoly Capital* (1966) seems to have generalized the apparent success of U.S. spending policy in the 1950s and 1960s, saying that the increasing economic surplus under monopoly capital can be absorbed by the sales effort of giant corporations and especially by government civilian and military expenditures. Such an analysis leads to the conclusion that there is now only a slim prospect for revolutionary action by the proletariats of advanced capitalist countries, and that any expectation of world revolution must be situated with the resistance movements and revolutionary wars of the underdeveloped countries.

The excess capital theory of crisis, which Sweezy once attempted to extract from *Capital* in chapter 9 of his *Theory of Capitalist Development* (1942) is not at all utilized here. The excess commodity theory of the underconsumptionist type, which is not original to *Capital*, is applied to deduce the tendency of the surplus to rise under monopoly capital. As a result, a more fundamental difficulty of coping with the excess of *capital itself*, not merely of an economic surplus nor of commodity supply, cannot be studied in its concrete development. Especially because the seeming stability of U.S. capitalism in the 1960s is overgeneralized as a theoretical model of the monopoly capitalist system, the concrete, and therefore historically tentative preconditions which enabled the pressure toward the outbreak of overaccumulation of capital to be absorbed tend to be unduly overlooked. Thus, it is no wonder that Baran and Sweezy's *Monopoly Capital* is hardly applicable to the process of world capitalism in the 1970s.

Another example of applying an inadequate side of Marx's theory of crisis are the works of David Yaffe and Paul Bullock.[2]

They properly reject the excess commodity theory of crisis, but develop the excess capital theory directly from the law of the tendency of the rate of profit to fall, not relating the notion of overaccumulation of capital to rising wage rates. However, the law of the tendency of the rate of profit to fall due to the rising composition of capital does not in itself prevent the process of capital accumulation. The increase of the volume of surplus value based on the production of relative surplus value and its conversion into capital can continue under the working of this law. Thus Yaffe and Bullock's attempt to deduce the necessity of economic crisis from this law seems to show only an abstract need for capital to mitigate the decreasing pace of accumulation. As long as it is directly based on such a crisis theory, their analysis of modern capitalism tends to reduce all the concrete developments of world capitalism to an abstract result either of the law of the tendency of the rate of profit to fall or of the uncertain need to resist it. Therefore, historically specific preconditions, the inevitability and meaning of the postwar boom, and its recent collapse tend to be left outside their main concerns.

As I discussed in the fourth essay, Marx's theory of crisis must be completed as a theory of excess capital wherein the notion of overproduction of capital is in relation to the laboring population; this to be done in close connection with Marx's theories of capital accumulation and the credit system. Applying this crisis theory, a better analysis of the inflational crisis of recent capitalism will be attained.

However, a basic theory of crisis at such a research level of basic principle should not be applied directly to the concrete analysis of recent capitalism. Nor must the latter be treated as if the former were the final aim. Uno's systematic division of levels of research in Marxian economics into principles, stages theory, and empirical analysis is very relevant here.[3] In a study of recent capitalism at the level of empirical analysis, the concrete, historical situations of the *world market* and their dynamic changes should be taken into consideration, together with the study of theoretical notions at the more basic levels.

III. The Overaccumulation of World Capitalism

In the analysis of the recent inflational crisis from the point of view stated above, we must notice the following historical facts.

Inflational policy by means of currency control originates in the highly nationalistic attempts to relieve the effect of the great depression of the 1930s by the segregation of foreign and domestic economic relations. Therefore, Keynesian inflational policy was originally most suitable to the U.S. economy which was the most self-reliant. All the other capitalist countries, as most radically shown in Nazi Germany, politically organized their foreign territories into blocs while tightening direct control of their domestic economies. However, after World War II, when the politico-military blocs were dissolved, the inflational policy of the United States could no longer as a political device give complete priority to the domestic economy.

The U.S. government then had to mobilize its inflational financial expenditure, primarily in order to maintain and build the whole capitalist world as a "free" world bloc against various attacks from socialism. World War II itself was already complicated, including socialist and anti-socialist elements in both international and domestic relations. Hence the U.S. government successively spread a huge amount of dollar funds over the postwar capitalist world, in the forms of aid programs for European and Japanese capitalistic reconstruction, development aid for underdeveloped countries, and military expenditure to maintain military alliances and bases and further to carry out anti-socialist wars. For example, the sum total of U.S. aid, such as the Marshall Plan, during 1946–1952, reached $35.9 billion, the foreign expenditure of the U.S. government even excluding military aid during 1952–1960 was $41.5 billion, and the Vietnam War expenditure of the United States until 1975 amounted to $139 billion.

In contrast with the world capitalism of the 1920s, where war debts and reparations formed heavy burdens, the economic reconstruction and growth of West European countries and Japan after World War II was clearly facilitated by such successive showers of dollar funds. Capitalist countries other than the United States could supplement their foreign exchange reserves rather easily, while operating Keynesian inflational economic policies, keeping fixed exchange ratios under the IMF system with the dollar as the key international currency.

The politico-military spending of dollar funds was also useful for U.S. finance capital, which had enormously increased productive capacity during the war, to deal with its excess capital in international relations. As long as U.S. finance capital maintained its competitive export superiority, the spending of international dollars brought favorable repercussions on effective demand for U.S. exports. As for the effect of military spending on U.S. domestic employment, Sweezy calculates that at the end of 1970 the number of people in the military forces (3.1 million) and in the military industry (3.0 million), plus the indirect effect of their employment, probably amounted to 22.0 million, and that if we add to it the unemployment of official statistics (7.9 million), the total number of people who might have been unemployed without the military spending reaches 25.6 percent of the whole laboring population, a ratio above the highest unemployment ratio (24.9 percent) reached during the great depression of the 1930s.[4] We must notice here that the seeming success of Keynesian policy was closely related to such anti-socialist military expenditures.

However, even such an enormous supplement of effective demand through politico-military spending could not fundamentally remove those restrictions on new investments in industrial equipment imposed by the excess of fixed capital built up by U.S. finance capital during and after the wartime expansion. Thus, U.S. equipment investments have tended to stagnate since the end of the 1950s. A third large-scale merger movement in U.S. history took place in the 1960s, reflecting such a stagnant tendency of industrial real investment. The movement reinforced the stagnation of equipment investment by stiffening the monopolistic character of U.S. finance capital.

In contrast, West European (in particular West German) and

Japanese capitalism showed a rapid reconstruction and growth, continuing active equipment investment until the 1960s. In these areas, the industrial equipment damaged and superannuated during the war could easily be abandoned and renewed. New industrial technologies, together with such new industries as petrochemicals or electronics, developed in the United States during and after (partly also before) the war, were imported continuously, increasing productive power. Besides, the burden of military expenditure was small in West Germany and Japan. Relatively cheap labor power was available from agricultural areas in Japan and from nearby countries of the Common Market for West Germany. As long as these conditions held West Germany and Japan maintained rapid economic growth.

In such an asymmetrical process, the international hegemony of U.S. industry was obviously diminishing during the 1960s. The U.S. share of industrial exports went down from 28.7 percent in 1957 to 18.9 percent in 1970, when it was surpassed by that of West Germany. The Japanese share also doubled from 5.5 percent in the same period. In addition, the U.S. economy saw the acceleration of inflation in the latter half of the 1960s, aggravated by the Vietnam War. Therefore, the surplus of U.S. international trade balances fell radically, from $6.68 billion in 1964 to $0.63 billion in 1968, and reversed to become a loss in 1971.

At the same time, the U.S. lost large amounts of international balances due to government expenditure and the export of private U.S. capital. Hence the supply of U.S. dollars under the IMF system, promising convertibility of $35 into an ounce of gold, was losing its former substantial basis in the form of the big surplus of U.S. international trade balance. The international gold rush and the dollar crisis became serious at the end of the 1960s, and the IMF system with the fixed exchange ratios finally collapsed in 1971.

Thus, on the one hand, the international mechanism which enabled the seeming success of Keynesian policy among advanced capitalist countries until the 1960s was not simply a universal welfare system to assure employment, but largely dependent on

U.S. politico-military spending of dollars to counter socialism. On the other hand, the unequal development among the advanced capitalist countries through such dollar spending under the IMF system made it more and more difficult to maintain that same international system which had served to cope with the excess capital of world capitalism. In this sense the postwar international economic and monetary system until the 1960s basically included a contradictory motion toward self-destruction, despite its apparent stability.[5] The collapse of the IMF system at the beginning of the 1970s symbolizes the breakdown of an apparently stable international mechanism of world capitalism.

From that time on, under floating exchange rates, a massive speculative outflow of U.S. funds to escape the devaluation of the dollar, together with the loose inflational policy of other capitalist countries aimed at adjusting exchange rates as advantageously as possible for exports, very much accelerated inflation and caused a sharp speculative boom until 1973. This seems to form in a sense the last speculative phase of prosperity, after the relatively prosperous accumulation of world capitalism in the 1960s had almost reached its limit. Underneath the process, however, there were still two more basic difficulties, along with the imbalance among the advanced capitalist countries stated above.

One of them was the overaccumulation of capital in relation to the working population within the advanced capitalist countries. Through the continuous economic growth in the 1960s, a relative shortage of labor power was appearing toward the end of the period. Profit rates of the advanced capitalist countries began to be narrowed by rising wage rates. For example, the pressure of wages in the U.S. economy, which was aggravated by the direct and indirect absorption of labor power for the Vietnam War along with stagnant productivity, has markedly increased unit labor costs and has decreased the capitalist share (as corporate profit) since 1966.[6] Labor shortage began to be generalized even in Japan at the end of the 1960s, continuously pushing up the real wage rate. Thus, a more important capitalist basis for continuous economic growth was already disappearing.

Under the circumstances, the inflationary policy could not be effective in suppressing the real wage rate. It turned out to cause a vicious inflation instead of real economic growth.

The other basic difficulty was the universal overaccumulation of capital in advanced countries in relation to the supply of the primary products from underdeveloped countries. The underdeveloped countries had greatly increased their production and export of raw materials and foodstuffs, encouraged by their shortage during and just after the war. Their supply became relatively in excess in the 1950s because, on the one hand, agricultural production in Western European countries had been restored under a protectionist policy, and on the other, substitute raw materials were widely developed by the petrochemical industries.

The terms of trade of the underdeveloped to the developed countries more and more turned for the worse until the end of the 1960s. Unlike the industrial commodities produced by capitalist firms, most primary products are produced by various types of noncapitalist producer such as small peasants, who cannot elastically reduce their supply even under unfavorable market conditions. Small peasants often increase the production and the supply of farm products, even by cutting down their own consumption, in order to secure necessary money income when the prices of their products are falling, and thus are forced through commodity relations to make their overall position worse. In addition, productivity in underdeveloped countries tended to stagnate. Therefore, the unfavorable motion of the terms of trade to underdeveloped countries directly caused economic difficulties in these countries. A serious shortage of foreign currency prevented their governments from taking effective policy action to relieve these difficulties. The frequent occurrence of economic and political crises in the underdeveloped countries since the latter half of 1950s was inevitable.

Already in the interwar period the agricultural problem, which appeared as a general oversupply of farm products, formed an important focus of the world economy. It reappeared in the 1950s as the north and south problem, having the west and east problem behind it. Even though the old colonies had obtained political independence, their economic situation could not easily improve, so long as they were being exploited through commodity relations. The stable economic growth of advanced capitalist countries in the 1960s, while on the one hand causing such economic difficulties in underdeveloped countries, utilized them as an essential premise on the other.

But dialectically, the continuous economic growth of advanced countries in the 1960s worked also in ways destructive to this premise, by absorbing the excess supply of primary products. At the outset of the 1970s the prices of these products began to rise sharply. The inelasticity of their supply compared with capitalist products intensified the rise in their market prices. Industrial accumulation of finance capital in advanced countries became overaccumulated in relation not only to their domestic labor power but also to the supply of primary products from underdeveloped countries.

The Organization of Petroleum Exporting Countries (OPEC), which had been said to be ineffective for the ten years since its start, was enabled in such circumstances to raise the price of crude oil every year since 1971, and became so successful as to be able to increase its price four times in the few months after the autumn of 1973 when the fourth Middle East war broke out. Not only had all capitalist countries converted their main energy source from coal into petroleum during and after World War II but their industrial raw materials had also become highly dependent on the petrochemical industries. Hence a rapid rise in the petroleum price, together with the rising prices of various other primary products and labor power, dealt a heavy blow to capitalist production in advanced countries generally, substantially squeezing the profit rate. The overaccumulation of world capitalism was just breaking out.

IV. The Breakdown of the Relative Stability of Postwar World Capitalism

The typical economic crises of the mid-nineteenth century, from which the basic principle of capitalist crisis should be abstracted, occurred when British industrial capital became overaccumulated in relation to both the domestic laboring population and the foreign supply of agricultural products. As the cotton industry was a decisively leading sector, the relative shortage of cotton and a rise in its price along with a rise in wage rates squeezed the profit rate of British industrial capital in the last phase of prosperity and also caused large-scale speculative trading on the basis of the expansion of the credit system, which in turn inevitably became tightened through the reduction of reserve funds in the banks. Thus, the difficulty of overaccumulation of capital developed into the basic raising of the prices of labor power and raw materials, the contrary downfall of the profit rate, and a rise in the interest rate. Then a sharp crisis had to occur, usually starting from a collapse of large-scale speculation in the wholesale trades.

The overaccumulation of capital today, substantially very similar to the basic process of such a classic type of crisis, appeared at the beginning of the 1970s as an inevitable result of the economic growth of the 1960s in advanced countries. Its development overlapped the collapse of the international U.S. dollar spending mechanism in the form of the IMF system, which had served to support the apparent success of Keynesian inflational policies among advanced countries in the 1960s. Under such circumstances, speculative trading in raw materials and related products on the basis of the overaccumulation of capital greatly increased. The money supply of capitalist countries, and therefore also the elasticity of credit expansion, were enormously expanded, no longer restricted by the fixed exchange rates of the IMF system; rather their expansion was accentuated by mutual competition to float exchange rates in as favorable a way as possible for each nation's exports.

Especially after the end of 1973, when the price of crude oil was pushed up, the inflation connected with speculation became universally vicious. In the classic type of crisis, excess accumulation of industrial capital converted its inner difficulty into a shortage of loanable money capital, and thus caused a sharp destruction of reproduction in forms of both absolute scarcity of money and superabundance of commodities. In contrast, the disturbance of reproduction appeared this time in the utterly reverse forms of superabundance of currency and scarcity of commodity goods, for the inflational credit expansion still continued. Even though industrial firms nominally gained high rates of profit, they were forced to reduce substantially their production activity, as it became difficult to obtain means of production due to the run on goods caused by the rapid devaluation of currency. At the same time, workers' real income, and hence their effective demand, began to fall, since in addition to the violent rise of consumer prices, work hours and employment decreased.

The tight money policies, which were adopted and strengthened after the end of 1973 in order to curb the vicious inflation, also accelerated the reduction of effective demand from both production and consumption. Speculative trading, expecting the expansion of effective demand, was losing its substantial basis, and got into difficulties from the financial side as well. The number of commercial and industrial firms, especially of middle and smaller size, that were either nearly insolvent or really bankrupt, increased in 1974. As we have seen before, even bank failures began to spread over Western Europe and the United States in the summer of 1974, and all stock exchange markets collapsed. A universal crisis of confidence appeared in the financial mechanism of world capitalism. As a result the economic activity of capitalist countries deteriorated further in 1975, decreasing work hours and employment yet more.

It is clear that since 1973, overaccumulation of world capitalism has translated its own inner difficulties into an inflational crisis. Nevertheless, the process of this inflational crisis lacks the full violence and decisiveness of the classic type of crisis or the great crisis of 1929. Just as the process of overaccumulation of capital and the development of its difficulties were accelerated by inflational policies, the destruction of excess capitals in the economic crisis has been held back also by an inflational money supply. Even under the tight money policy, necessary money for settlement has often been supplied to various firms as an emergency relief directly and indirectly from commercial and central banks. Government expenditure has also tended to be maintained at a high level, the shortage of taxes being supplemented by borrowing money in various forms. There is no doubt that such inflational financial policies together with the large accumulated reserve funds of finance capitals have prevented the economic crisis from taking the more drastic forms of chain reactions of insolvencies and sacrifice sales.

However, the indecisiveness of the crisis by no means assures the smooth recovery of economic activity. On the contrary, it may delay the disposal of excess capital based on superabundant equipment for production and make the successive depression chronic. We have such an historical example in the great depression of 1873–1896, which started just a hundred years ago with the British economy at its center. The way out from that great depression was found in a new development of capitalism to form finance capitals and imperialist foreign policies; but a similar way out or a new style of capitalist system is fundamentally unobtainable from our present capitalism.

Of course, the business activities of capitalist countries can be more or less improved by shifting the economic difficulties both to their own workers in the form of a reduction of real income and to the developing countries in the form of reduced prices paid for primary products. In fact, the U.S. economy, which realized the former shift most radically, and which had the advantage of least dependence on the imported crude oil among the advanced capitalist countries, was the first to stop its downward spiral in the summer of 1975, and it began to recover its business activities, if only very slowly, utilizing also the exchange rates floating in a direction advantageous for its exports. Japan and Western European countries followed.

However, this recovery cannot be a reconstruction of the stable economic growth mechanism of world capitalism of the 1960s. Even in the United States, private investment in plants and equipment has scarcely been activated. The superabundance of fixed capital in the form of idle capacity, which had been accumulated through the continuous economic growth prior to the beginning of the 1970s, now in turn prevents such basic investments. The same is true also of other capitalist countries. Under these circumstances, Keynesian devices are narrowly limited, on the one hand by fiscal crises of the states, and on the other by the risk of fueling inflation again without substantial improvement in economic activity. The recovery of international trade also cannot be smooth. The newly deepening economic crisis in the developing countries of the south, except the oil producing countries, does not directly improve but rather tends to aggravate the economic situation of advanced countries in these present conditions. The recovery and improvement of real incomes of workers in capitalist countries will now clearly be very difficult.

The conflict between capitalists and workers cannot but increase universally. Keynesian policy can no longer in general be effective. Labor disputes may now depressively react upon the economic process of capitalist countries. Thus the recent inflational crisis and the successive chronic depression clearly show the breakdown of the relative stability of postwar world capitalism until the 1960s. They are certainly putting heavy burdens on the capitalist class. But the labor movement and political parties based on it are also facing more and more critical problems of how to overcome politically the severe economic situation.

Sweezy, substantially correcting his former conclusion in *Monopoly Capital*, wrote in 1972: "We are presently entering a period in which the working class in the advanced capitalist countries will once again become revolutionary" after the past hundred years of nonrevolutionary reformist period. "Up to now

the working classes of the advanced capitalist countries have gotten off relatively easily, but henceforth it is probable to the point of near certainty that the burdens of the system's disintegration will fall even more heavily on their shoulders."[7] I would like to acknowledge that the process of world capitalism is endorsing this revised perspective of Sweezy's. At the same time there is no doubt that both the relevancy and the task of Marxian economics in studying the historical limitation of the capitalist economy, systematically, on the basis of its principles, are growing decisively.

Notes

For books and articles published in Japanese, I have translated the titles into English.

1. The Development of Marxian Economics in Japan

1. Similar estimates are made from different data both by Shigeto Tsuru, "Survey of Economic Research in Postwar Japan: Major Issues of Theory and Public Policy Arising out of Postwar Economic Problems," *American Economic Review* Pt. II (June 1964): 79 and by Thomas Sekine, "Uno-Riron: A Japanese Contribution to Marxian Political Economy," *Journal of Economic Literature* 13, no. 3 (September 1975): 847–48. The term "neoclassical" is used broadly to include Keynesians.
2. See his contribution to Paul Sweezy's *The Theory of Capitalist Development* (New York and London: 1942), especially Appendix A.
3. See, for instance, Sekine's introduction to Uno's theory in the work cited in note 1 above as well as the rest of the chapters in this book.
4. E. F. Fenollosa later became famous for introducing Japanese traditional arts to the West and as a founder of Japanese modern art education.
5. The translation of J. S. Mill's *Principles of Political Economy* was undertaken by Hayashi during 1875–1876; that of Adam Smith's *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776) was begun by Ishikawa and Saga in 1884. David Ricardo's *On the Principles of Political Economy and Taxation* (1817) was introduced a little later. Cf. Yoshirō Tamanoi, *Economics in Japan* (Tokyo: 1971).
6. The Nagoya Koshō index quoted here is from Tsutomu Ōuchi, *A Treatise on Japanese Economy*, Vol. 1 (Tokyo: 1962), p. 135.
7. See Erich Roll, *A History of Economic Thought* (Englewood Cliffs, N.J.: 1942), pp. 307–9, on the younger German historical school.
8. One example is Iwasabrō Takano, who later founded the Ōhara Institute of Social Problems, which served as a good shelter for a number of able Marxist economists in the 1930s. It was probably not the strength but the feebleness of Japanese socialism which explained why the Japanese Society for Social Policy, unlike its German counterpart, made room for Marxists in this period.

9. There were no independent faculties of economics in state universities and teaching posts were very restricted in this period.
10. The Nagoya Koshō index of mining and manufacturing production jumped from 100 in 1914 to 487 in 1919, but fell to 453 in 1924 and only climbed back to 540 by 1929. With the onset of world crisis, mining and manufacturing production fell by 31.4 percent during 1929–1931, but recovered rapidly and climbed to 74 percent above the 1929 level by 1935. This rapid recovery and growth depended largely on the military expansion following the Manchuria Incident of 1931. Cf. T. Ōuchi, A *Treatise on Japanese Economy*, pp. 168, 233, 259–60.
11. Finance capital became dominant in the stage of imperialism, taking over from the industrial capital of the liberal stage, as pointed out by Rudolf Hilferding, in *Das Finanzkapital* (Berlin: 1910; rep. ed. 1955) and V. I. Lenin, in *Imperialism* (Petrograd: 1917; rep. ed. 1969). However, Hilferding's definition of finance capital as "capital controlled by the banks and utilized by the industrialists" contained an overgeneralization of the dominant role of the banks in his period, especially in Germany. Paul Sweezy has properly criticized this in chapter 14 of *The Theory of Capitalist Development*. However, I cannot subscribe to Sweezy's proposal to substitute finance capital by the notion of "monopoly capital," as the latter misses the important financial form and functions of giant industrial corporations in capital markets. The notion of finance capital is quite tenable if we redefine it in accordance with the actual development of joint-stock industrial capital; that is, on the basis of a refined theory of joint-stock capital as the last and highest form of capital. In the case of prewar Japan, Zaibatsu families governed various business corporations including big trading, banking, and mining corporations, through central holding companies.
12. Three other independent translations of *Capital* by K. Matsuura, C. Ikuta, and Y. Yamamoto were published almost simultaneously in 1919 and 1920, although none got beyond Part III of Volume I. In 1927 yet another translation, also up to Part III of Volume I, was published by H. Kawakami and M. Miyagawa. This new edition, together with the former Takabatake edition, are estimated to have sold over 300,000 copies by the mid-1930s. A translation by Fumio Hasebe of the entire first volume was published in 1937, and completed for all three volumes in 1950. Two other complete three-volume translations by I. Sakisaka and J. Okazaki, were added in the postwar period. By the end of the 1950s an estimated 1.5 million copies had been sold. Cf. Kōichirō Suzuki, *Das Kapital and Japan* (Tokyo: 1959). Translations of Lenin's *Imperialism* were published in 1924 by S. Aono and 1929 by Fumio Hasebe. A translation of Hilferding's *Das Finanzkapital* by K. Hayashi was published in 1927.
13. Shinzō Koizumi, "The Problem of the Labour Theory of Value and the Average Rate of Profit: A Critique of Marx's Theory of Value," *Kaizō*, February 1922. For Böhm-Bawerk's criticism of Marx and Hilderding's counter-critique see Paul Sweezy, ed., *Karl Marx and the Close of His System by E. von Böhm-Bawerk and Böhm-Bawerk's Criticism of Marx by R. Hilferding* (New York: 1966).
14. Takehiko Kawaguchi, *The History of Value Controversy* (1964) lists 45 main articles which accompanied the debates of this period.
15. Hajime Kawakami, "Marx's Labour Theory of Value: On Professor Koizumi's Critique," *Studies in Social Problems* 39–41 (November 1922, December 1922, January 1923); Tamizō Kushida, "A Study of Marx's Concept of Value: Some Questions on Dr. Kawakami's 'Value Theory as Human Sacrifice,' " *Journal of Ohara Institute for Social Problems* 3, no. 1 (January 1925).
16. Maritarō Yamada, "The Contradiction in Value Theory and Its Solution," *The Journal of Economics* (Tokyo) 4, no. 2 (November 1925).
17. All references to *Capital* refer to the English editions by International Publishers, Vol. I, 1965, Vol. II, 1961, and Vol. III, 1966. Marx himself seems to have raised a certain methodological problem here when he asks, just after his presentation of prices of production: "But how does this exchange of commodities at their real value come about?" (III: 1975). Marx's references to the working of the law of value in the precapitalist commodity economy follow this, quoted by Engels in his supplement.
18. See for example USSR Academy, Institute for Economic Research, *Textbook of Economics* (Moscow: 1954); Ronald Meek, "Some Notes on the Transformation Problem," *Economic Journal*, March 1956, and *Economics and Ideology and Other Essays* (London: 1967).
19. S. Hijikata, "The Breakdown of Marx's Value Theory Viewed from the Theory of Rent," *The Journal of Economics* (Tokyo) 6, no. 4 (1928); Y. Takada, "The Value of Marx's Value Theory," *Keizai-Ronso* (Kyoto) 30, no. 1 (1930).
20. I. Sakisaka's *Studies in the Theory of Rent* (Tokyo: 1930) lists more than forty articles involved in this debate.
21. Even though the leaders of the Japanese Communist Party played a certain role in formulating these theses, the Comintern's direction was always decisive. The inconsistent and variable directions partly reflected the unstable politics and posts of the Comintern leaders of this period. George M. Beckmann and Okubo Genji, in *The Japanese Communist Party 1922–1945* (Stanford: 1966), point out that Bukharin appeared to be the key spokesman for the 1927 thesis, Safarov and Volk for the 1931 thesis, and Kuusinen for the 1932 thesis.
22. Noro became the chairman of the Communist Party in June 1933, was arrested in November of the same year, and died in jail in February 1934.
23. As the editor writes in his introduction to James W. Morley, ed., *Dilemmas of Growth in Prewar Japan* (Princeton: 1971), many Japanese historians, such as Shigeki Tōyama or Kiyoshi Inoue, clearly reveal the Kōza-ha influence in their works.
24. Two examples are the Japan Masses Party *(Nihon Taishūtō)*, formed at the end of 1928, and the National Masses Party *(Zenkoku Taishūtō)*, formed in

July 1930. Beckmann and Okubo, estimating the political influence of Rōnō-ha, write as follows: "The *Rōnō-ha* never became a political force because it never developed any organization or program. It tended instead to represent only a point of view—one whose influence was confined largely to intellectuals," (Beckmann and Okubo, *Japanese Communist Party*, p. 137). This underestimates Rōnō-ha's role in the left wing of the Japanese socialist movements: since the war the Rōnō-ha has exercised considerable influence on the left wing of the Socialist Party.

25. Further bibliographical details of Kōza-ha and Rōnō-ha are available in Yasukich Yasuba, "Anatomy of the Debate on Japanese Capitalism," *Journal of Japanese Studies* 2, no. 1 (Autumn 1975).
26. There were two exceptional cases where partly Marxist views were able to survive in academia during World War II. One was Hisao Ōtsuka's and his colleagues' studies in modern European economic history; the other, Kazuo Ōkōchi's studies in social policies and labor problems. In both cases Kōza-ha-type views were combined and in a sense disguised with the approaches of the German historical school. For instance, H. Ōtsuka emphasized the autogenous growth of British capitalism from inside the independent yeomanry, supporting Kōza-ha's position on the necessity of a bourgeois revolution to create a free middle class of farmers as a prior condition of real modernization. Kōhachirō Takahashi, who joined the debate on the transition from feudalism to capitalism with Maurice Dobb and Paul Sweezy, and Tomoo Matsuda, who specialized in Germany, were the first major followers of Ōtsuka and they influenced many younger scholars in economic history after the war.
27. Indices are from T. Ōuchi, *A Treatise on Japanese Economy*, p. 282, and from the data of Japan's Economic Planning Agency, Bureau of Research, *Summary of the Economy (Keizaiyōran)* (Tokyo: 1977), p. 5. Data given below are also from these sources.
28. The annual rate of increase of real wages in manufacturing went up to 9.4 percent between 1966 and 1973, as against 3.8 percent for the period 1961–1966. As a result, the index of real wages rose 43.8 percent between 1968 and 1972, in comparison to an increase of productivity of 37 percent for the same period.
29. The share of corporate income in national income decreased annually from 15.4 percent in 1970 to 8.1 percent in 1973, while the share of wages and salaries increased from 44.6 percent to 50.0 percent in the same period.
30. Martin Bronfenbrenner, "The Vicissitudes of Marxian Economics," *History of Political Economy*, Fall 1970, is probably correct in pointing out the general Japanese feeling that "capitalism means war" (p. 220), and citing this as a prime reason why Marxism is so popular in Japan. What Bronfenbrenner misses in his article is that the disastrous Pacific war gave the Japanese a deep impression of historical change within the social system, and that in Japan there has been a broad academic conviction of the relevancy of Marxism in the clarification of the historical character of capitalism.
31. For instance, Okishio has shown in "Values and Prices," *Research in Economics* (University of Kobe), March 1955, that the total amounts of dead and living labor embodied in a unit of each product can be deduced by solving simultaneous equations representing the production functions for all the industrial sectors. This contribution, however, can easily be interpreted as akin to Ricardianism as long as Okishio defines the labor quantities obtained as directly being values. In this definition, the historically specific conditions under which labor quantities become the substance of values are not brought to light. Another example may be Okoshio's denial of Marx's law of the tendency of the rate of profit to fall, in *Marxian Economics* (1977) and other writings. His analysis implies that capital in terms of embodied labor cannot be accumulated on the basis of a given laboring population beyond a certain limit connected with an initial general rate of profit. Whereas Marx's theory of capital accumulation may seem to be threatened by such an approach, Okishio's treatment of the selection of new methods of production is grounded on too narrow a premise of equilibrium prices and neglects the effect of the collapse of market prices on capitalist motivation in the depression phase. Another example of his work is "A Mathematical Note on Marxian Theorems," *Weltwirtschaftliches Archiv* 91 (1963).
32. On postwar land reform see also Tsuru, "Survey of Economic Research in Postwar Japan."
33. Motosake Udaka and Katsumi Minami, "The Basic Structure of Crisis Theory in *Capital*," *Tochiseidoshigaku*, July 1959.
34. Just prior to Sakisaka's translation, published between 1947 and 1956, Fumio Hasebe's full translation was completed. Okazaki's was published between 1965 and 1967, so there are now available three different complete versions as well as the prewar Takabatake edition.
35. Cf. Henry Grossmann, *Das Akkumulations–und Zusammenbruchsgesetz des kapitalistischen Systems* (1929), a classic source from which David Yaffe revived this type of excess capital theory of crisis based on the tendency of the profit rate to fall. David Yaffe, "The Marxist Theory of Crisis, Capital and the State," *Bulletin of the Conference of Socialist Economists* 1, no 4 (Winter 1972).
36. Marx refers to various concrete historical facts and data in *Capital*, but these are treated as empirical illustrations or supplements to his theories. It is clear that theories in *Capital* have a more abstract, general character than they do in *Imperialism*. Various attempts to deduce theories of monopoly capital and imperialism directly from *Capital* have missed the necessary distinction between the different levels of research. As a result, there has been a tendency either to distort basic principles (as in Luxemburg's interpretation of the schemes of reproduction), or to substitute new laws or theories for those in *Capital* (such as is at least partly true of Baran and Sweezy's *Monopoly Capital*).
37. The same Japanese word *dankai* (steps, or stages) is used by Uno in the expressions of both the stages theory (of capitalist development)—*dankai ron*—and the three steps theory (of levels of research)—*san dankai ron*. The latter is more fundamental, implying the former as a necessary component.

David Gordon, "Up and Down the Long Roller Coaster," in Union for Radical Political Economics (URPE), *U.S. Capitalism in Crisis* (New York: 1978), showed the first western attempt to utilize Uno's stages theory based on Sekine's introduction (see note 1), although Gordon's interpretion seems to have a somewhat institutionalist flavor. Uno's stages theory does not treat the institutional background like the stage in the theatre, as something independent of the main actors, i.e., capitals. He composes his stages more organically on the basis of historical changes in the character of the leading capitals.

38. This 1964 version of Uno's *Principles of Political Economy*, translated by Thomas Sekine, is now available in English (Harvester Press, 1980).
39. For instance, M. Morishima and G. Catephores, "Is There an 'Historical Transformation Problem'?" in *Value, Exploitation and Growth* (London: 1978), seem to imply such a direction. After criticizing the historical-logical theory of transformation from values to prices of production, Morishima and Catephores conclude that "for Marx value and abstract labor were indeed logical abstractions" (p. 197), and that Marx's simple commodity production model was a "hypothetical abstract model for explaining phenomena of exploitation in the capitalist economy" (p. 198). However, these assertions are not persuasive since firstly, the theory of exploitation in a capitalist economy is quite understandable even without recourse to such a hypothetical model of simple commodity production, and secondly, Marx's concept of value is indispensable for the very analysis of the capitalist process of production. The labor theory of value should not be seen as an unreal, hypothetical model counterposed to the actual existence of prices of production. See also Meek's anti-critique in *The Economic Journal* 86 (June 1976), although except for some interpretative points, I do not agree with Meek's position. Nor do I think that the essential problem here can be solved by mere interpretative debates on Marx's theory.
40. Their approach, which I find attractive, emphasized the methodological implications of the commodity economy spreading throughout the world market in contrast to the partial character of capitalist production comprising the central core. They stressed these implications for the formulation of basic principles, stages theory, and analyses of contemporary capitalism.
41. Tsutomu Ōuchi, *Land Rent and Land Ownership* (1958), and Hiroshi Hidaka, *Studies in the Theory of Land Rent* (1962). Both assert that Marx's definition of the limit of absolute rent at the level of value of agricultural products is cast in doubt by progress in the theory of prices of production. This does not mean that the theory of absolute rent has to be abandoned, a concern raised by Robin Murray, "Value and Theory of Rent, Part I" *Capital and Class* 3 (Autumn 1977). It is suggested that the limit of the rise in prices of agricultural products, caused by the landowners' restriction of capital investment on land in the case of absolute rent, is given theoretically by a possible additional capital investment on land already leased and cultivated.

2. A Study of Marx's Theory of Value

1. Criticizing the classical school, Marx says:

> The value-form of the product of labour is not only the most abstract, but is also the most universal, form taken by the product in bourgeois production, and stamps that production as a particular species of social production, and thereby gives it its special historical character. If then we treat this mode of production as one eternally fixed by Nature for every state of society, we necessarily overlook that which is the differentia specifica of the value-form, and consequently of the commodity-form, and of its further developments, money-form, capital-form, etc. (*Capital*, I: 85n; 175n).

Hereafter references to *Capital* Vols. I and II include volume and page only, in which the first page cited refers to the editions by International Publishers (1965, 1961), the second to the Penguin edition, published by Vintage Books in the United States. The text remains as per the International edition. For Vol. III only the International edition (1966) is cited.

2. I do not think that there is "no doubt [that] the expression 20 yards of linen = 1 coat, or 20 yards of linen are worth 1 coat, implies the opposite relation: 1 coat = 20 yards of linen, or 1 coat is worth 20 yards of linen" (I: 49; 140). If the former expression necessarily means the latter, the polarity of the relative form and the equivalent form of value, which Marx emphasizes here, becomes ambiguous.
3. Marx emphasizes the role of the owners of commodities in chapter 2 of Volume I, "Exchange." However, in order to understand why the value of linen should be expressed by the use value of a coat, making coat directly exchangeable with it, we can suppose the role of its owner behind its relative form of value. We see such a treatment in Kōzō Uno's works, e.g., *The Theory of Value* (1947), *The Principles of Political Economy* (2 vols., 1950, 1952), and *The Principles of Political Economy* (1964; English edition, 1980).
4. Of course, we must not miss the differences between Marx and Ricardo which are apparent from the very beginning of their theoretical systems:

(a) Marx makes clear from the outset that his object of study is the capitalist economy and that that study must begin with the commodity form, whereas Ricardo's attention is limited to the determinants of the magnitude of value.

(b) Hence, Marx, unlike Ricardo, notices the historical character of the difference between use value and exchange value.

(c) Ricardo could not clarify the division of the form and the substance of value. Therefore, he did not distinguish exchange value and value, but used both terms almost synonymously in contrast with use value.

5. Among his eleven-volume collected works, the first four, which include the books cited in note 3, relate more or less to this point.
6. G. Pilling's, "The Law of Value in Ricardo and Marx," *Economy and Society* 1, no. 3 (1973) is one of the rare articles in the English literature which

emphasizes the significance of Marx's originality in his theory of forms of value. But his consideration seems to me still to go only half way. As long as he treats the exchange value or the form of value as the "phenomenal form" or "appearance" of value as a social relation of labor quantities, he leaves untouched the difficult problems which we have seen above concerning *Capital*. For example, how shall we understand the historical character of the "essential" value relations in social labor quantities at the beginning? Obscurity on this point relates to the first point of S. de Brunhoff's critiques of Pilling in "Marx as an A-Ricardian: Value, Money and Price at the Beginning of *Capital*," *Economy and Society* 2, no. 4 (1973).

7. Thus under the gold standard, "since the quantity of money capable of being absorbed by circulation is given for a given mean velocity of currency, all that is necessary in order to abstract a given number of sovereigns from the circulation is to throw the same number of one-pound notes into it, a trick well known to all bankers" (I: 120; 216). At the same time, the *over issue* of the incovertible bank notes leads to inflation, instead of a proportional increase in the production and circulation of commodities.
8. This follows from his analysis: "Buying in order to sell, or, more accurately, buying in order to sell dearer, M—C—M′, appears certainly to be a form peculiar to one kind of capital alone, namely merchants' capital. But industrial capital too is money, that is changed into commodities, and by the sale of these commodities, is recoverted into more money. The events that take place outside the sphere of circulation, in the interval between the buying and selling, do not affect the form of this movement" (I: 155; 256).
9. "The cotton that was bought for £100 is perhaps resold for £100 + £10 or £110. The exact form of this process is therefore M—C—M′, where M′ = M +ΔM = the original sum advanced, plus an increment. This increment or excess over the original value I call 'surplus-value' " (I: 150; 251).
10. I would like to add the spatial limitation here to the historial limitation emphasized by Marx. The motion of capital, originating from the expansion of value through circulation, dominates the production process, even under capitalism, only as the means of increasing value in money terms. Therefore, capital tends to organize only the easiest industrial branches as its means of movement, leaving such difficult branches as agriculture to other modes of production. As long as international trade can be carried on in the commodity form, capital can utilize foreign agricultural products as if they were produced within its own production process. It does not and need not aim to organize all branches of production or the production process of the whole world as its own production process.
11. The title of this first section in the English edition by Progress Publishers, "The Labour-Process or the Production of Use-Values," underlines this point more than the original German title, "*Arbeitsprozess*."
12. See also Marx's letter to Kugelmann, July 11, 1868, in *Selected Correspondence* (New York: 1935), pp. 245–47.
13. The assertion that the abstract character of labor is peculiar to a commodity economy depends on this treatment of Marx's. See, for example, Chapters 11 and 14 of I. Rubin, *Essays on Marx's Theory of Value* (Detroit: 1972; translated from the Russian edition of 1928). However, in making such an assertion, Rubin is forced to recognize another characteristic of labor which serves as the common basis of all concrete labor. He attempts to show that "physiologically equal labor," and in particular "socially equalized labor," should be regarded as a common basis separate from the notion of abstract labor. But such a separation is confusing. For Rubin's "socially equalized labor" must have an abstract character and count only quantitatively, in contrast with concrete labor.

    Even though the abstract character of labor becomes recognizable only when the value relation has encompassed the essential part of the social labor process, abstract labor must have existed in all forms of society. We can clarify the historically specific way of dealing with social labor quantities through value relations only after discerning both abstract and concrete labor as the common basis of all forms of society.
14. Marx shows the value of labor power at first as follows: "The value of labour-power is determined, as in the case of every other commodity, by the labour-time necessary for the production, and consequently also the reproduction, of this special article. So far as it has value, it represents no more than a definite quantity of the average labour of society incorporated in it" (I: 170–71; 274). This explication is a little confusing and does not clarify the specificity of labor power as a commodity. What is common to both labor power and other goods as commodities is not the incorporation of labor time but the form of value they assume. The direct identification of value with the embodiment of labor in the classical manner seems to have led to this improper explication when applied to labor power.

    However, in the subsequent sentences, Marx explains correctly that the value of labor power is determined indirectly by "the value of the means of subsistence necessary for the maintenance of the labourer." His treatment of variable capital, in contrast with constant capital, also shows clearly that he is aware of the special character of the value of labor power.
15. "The sum of the means of subsistence necessary for the production of labour-power must include the means necessary for the labourer's substitutes, *i.e.*, his children, in order that this race of peculiar commodity-owners may perpetuate its appearance in the market" (I: 172 ; 275). Such means for the growth of children tend to increase with the extension of the ordinary education period required for the average, unskilled laborer by the development of capitalism.
16. As has been noted, when the major part of social production is organized by a communal or other precapitalist order, the exchange of commodities can be repeated even without enabling this repurchase of the elements of production. However, as the commodity economy encompasses the reproduction process more and more, even the small producer, say, at the fringe of capitalist economy, must be able to carry out this repurchase and must restore at least the labor time equivalent to $c + v$. Of course, this general rule does not exclude the actual possibility of monopoly capitalist exploitation of small

producers by squeezing the price relations, making it difficult to acquire even the substance of value equivalent to v, not to say s.

17. Marx raises this problem for instance as follows:

> Since the price of production may differ from the value of a commodity, it follows that the cost-price of a commodity containing this price of production of another commodity may also stand above or below that portion of its total value derived from the value of the means of production consumed by it. It is necessary . . . to bear in mind that there is always the possibility of an error if the cost-price of a commodity in any particular sphere is identified with the value of the means of production consumed by it. (III: 164–65; see also 160ff.; 206ff.)

18. Paul Sweezy, *The Theory of Capitalist Development* (New York and London: 1942), ch. 7; L. von Bortkiewicz, "Zur Berichtigung der grundlegenden theoretischen Konstruktion von Marx im dritten Band des *Kapitals*," *Jahrbücher fur Nationalökonomie and Statistik*, July 1907; English translation in Paul Sweezy, ed., *Karl Marx and the Close of His System, by E. von Böhm-Bawerk and Böhm-Bawerk's Criticism of Marx by R. Hilferding* (New York: 1966).
19. Sweezy, *The Theory of Capitalist Development*, p. 117.
20. T. Sakurai, *The Theory of Prices of Production* (Tokyo: 1968) treats these controversies in chapter 4.
21. J. Winternitz, "Values and Prices: A Solution of the So-called Transformation Problem," *The Economic Journal*, June 1948. Even though Winternitz uses a different notation, I continue to use that of Sweezy to express the same idea, for the sake of convenience. The same is true for the other discussants below.
22. R. L. Meek, "Some Notes on the Transformation Problem," *The Economic Journal*, March 1956; also in his *Economics and Ideology and Other Essays* (London: 1967).
23. F. Seton, "The Transformation Problem," *Review of Economic Studies*, June 1957.
24. A. Medio, "Profits and Surplus-Value: Appearance and Reality in Capitalist Production," in E. K. Hunt and J. G. Schwartz, eds., *A Critique of Economic Theory* (New York: 1972); David Laibman, "Values and Prices of Production: The Political Economy of the Transformation Problem," *Science & Society* 37, no. 4 (Winter 1973–1974); M. Desai, *Marxian Economic Theory* (London: 1974); A. Shaikh, "Marx's Theory of Value and the So-called Transformation Problem," 1974, mimeo; revised version in J. G. Schwartz, ed., *The Subtle Anatomy of Capitalism* (Santa Monica, Cal.: 1977); David Yaffe, "Value and Price in Marx's *Capital*," *Revolutionary Communist* 1 (January 1975).
25. The idea of utilizing Sraffa's theory of the standard commodity in his *Production of Commodities by Means of Commodities* (1960) in order to correct Marx's average commodity in the theory of prices of production was suggested in R. L. Meek's "Mr. Sraffa's Rehabilitation of Classical Economics," published first in June 1961 and also in *Economics and Ideology and Other Essays*.
26. Even though a formal distinction of dimensions between value and price is already pointed out by H. D. Dickinson in "A Comment on Meek's 'Notes on the Transformation Problem,' " *The Economic Journal*, December 1956, Desai's treatment is clearly more profound and systematic as a study of Marx's theory of value on the basis of the first point mentioned above.
27. Except for the notion of unit, Table 1 is the same as Table 4 on p. 121 of Sweezy's *The Theory of Capitalist Development*. Table 2 is derived by reducing the scale of each item of Sweezy's Table 4 by ½, supposing $z = ½$. Table 3 is newly made and added here.

3. Marx's Theory of Market Value

1. Cf. Paul Sweezy, ed., *Karl Marx and the Close of His System by E. von Böhm-Bawerk and Böhm-Bawerk's Criticism of Marx by R. Hilferding* (New York: 1966).
2. Ibid.
3. It is already known from the English edition of I. Rubin's *Essays on Marx's Theory of Value* (Detroit: 1972) that there was a controversy in this context between Marxist economists about the concept of socially necessary labor in the 1920s in Germany and the USSR. The two versions of the theory of socially necessary labor were summarized by Rubin as follows:

> An "economic" concept of necessary labor is that the value of a commodity depends not on the productivity of labor (which expresses that quantity of labor necessary for the production of a commodity under given average technical conditions) but also on the social needs or demand. Opponents of this conception ("technical" version) object that changes in demand which are not accompanied by changes in productivity of labor and in production technique bring about only temporary deviations of market prices from market values, but not long-run permanent changes in average prices, i.e., they do not bring about changes in value itself. (p. 185)

4. M. Yokoyama, *Foundations of Economics*, Part III: "Fundamental Problems in Marx's Theory of Value and Price" (Tokyo: 1955); R. Rozenberg, *Comment on Karl Marx's Capital* (Moscow: 1961).
5. Yokoyama, *Foundations of Economics*, pp. 147–49.
6. F. Yamamoto, *Studies on the Theory of Value* (Tokyo: 1962), ch. 4.
7. Yuichi Ōshima, *Theory of Prices and Capital* (Tokyo: 1974), ch. 7.
8. Roman Rosdolsky, in *The Making of Marx's Capital* (London: 1977), p. 92, for example, represents a position which is contrary to the orthodox technical average theory, and follows Marx's demand and supply theory of market value just as it stands. He asserts that market value is identical with market

price within the range of individual values between those of the best and the worst conditions of production in the same industry.

9. K. Uno, *Principles of Political Economy*, Vol. 2 (Tokyo: 1952), p. 90.
10. K. Uno, *Principles of Political Economy*, rev. ed. (Tokyo: 1964), p. 159.
11. Though the redefinition of market value in this way may seem close to Marshallian marginalism, in essence it is not. Unlike the marginalist, we do not take demand for a subjective, individualistic, and independent factor which determines the equilibrium price. The fluctuations of demand in our view are to be observed on the one hand, as a reflection of the anarchical motion of commodity production, and on the other, as the intermediary mechanism revealing the level of social value, which basically is determined from behind by the standard condition of production. In contrast, the neo-Ricardians one-sidedly emphasize the technical conditions of production as the determinant of prices, ignoring the role of market competition. The so-called indeterminancy of social value, when a commodity is produced under different technical methods with the same cost, which figures in the recent neo-Sraffan critique of Marx, seems at least partly to come from the neglect of such a dynamic rôle of market competition in revealing the regulative condition of production.

    Moreover, our theory of market value is not a mere formal theory of price like those of the marginalists or neo-Ricardians, but one which also reveals the relations of labor quantities as the substance of values. Thus, it aims at the elucidation of the historically specific form and mechanism of the (capitalist) commodity economy to cope with the differences in labor time necessary to produce the same sort of good which arise from differences in production conditions.

    The joint production problem recently underlined by Ian Steedman in *Marx After Sraffa* (London: 1977) can also be more properly analyzed in this view. For Steedman's anomalies of negative values and surplus values clearly come from his neo-Ricardian attempt to define values merely on the basis of technical conditions of production. Instead of calculating values of joint products by assuming different production processes for as many as the number of the commodities produced jointly, we can postulate that the dynamics of the market generally actually single out a representative technical condition for the joint production in each time period. The amounts of labor time embodied in each commodity produced jointly with others is certainly not determined directly by a single representative condition of production, *except* in the case where we can define ratios of division of total labor time jointly embodied in the joint products. In my opinion these ratios are to be found in the ratios of equilibrium prices among the joint products in the market, since the dynamics of the market again serve here as the capitalist mechanism by which technically indeterminate division of labor amounts among the joint products is dealt with in a historically specific way. Even under socialism without a market mechanism, the ratios of such division cannot be technically defined, but should be elastically determined cooperatively in a conscious operation. Needless to say, in our definition of the labor substance of commodities jointly produced via the market, there is no room for the anomalies of negative values. However, not only the substance of each commodity but also the total amount of substance of commodities jointly produced becomes determined partly by the combination of demand and supply conditions, inasmuch as this combination plays an essential role in determining the equilibrium prices of joint products. I believe that Marx's theory of forms and the substance of value and its development into the theory of market value are plastic enough to be applicable to the joint production problem in the direction suggested above.

12. T. Sakurai, *The Theory of Prices of Production* (Tokyo: 1968); Kōichirō Suzuki, *Principles of Economics* (Tokyo: 1962–1964).
13. As Robin Murray suggests in "Value and Theory of Rent: Part I," *Capital and Class* 3 (Autumn 1977), the surplus labor which is transferred from capitalists to landowners can be within the total surplus labor extracted in the agricultural sector, insofar as the organic composition of capital in agriculture is sufficiently lower than the social average. In our view, however, such a restrictive condition is not essential for the Marxist principle of differential rent.

4. The Formation of Marx's Theory of Crisis

1. References to *Capital* Vols. I and II are provided for both the International Publishers (1965, 1961) and Penguin or Vintage editions (1976, 1978). References to Vol. III are for the 1966 International edition only.
2. P. M. Sweezy calls this type of theory "Crises Associated with the Falling Tendency of the Rate of Profit" in *The Theory of Capitalist Development* (New York and London: 1942). As I discuss below, this theory should be developed rather independently of "the law of the tendency of the rate of profit to fall." Sweezy's designation seems to be misleading on this point. However, his treatment of this theory remains one of the rare such cases (in addition to Kōzō Uno's and his followers' studies in Japan) in the history of Marxian crisis theory. I would also like to suggest that the name Sweezy gives to the other type of theory—"Realization Crisis"—should be changed in order to sharpen the contrast with this theory.
3. Karl Marx, *Grundrisse* (1953; English edition published by Penguin, 1973). Hereafter references will include only the page numbers of both editions, the German one listed first.
4. T. R. Malthus, *Principles of Political Economy*, 2nd ed. (1836), p. 7.
5. Ibid., pp. 398–413.
6. Simonde de Sismondi, *Nouveaux Principes d'économie politique*, Vol. I (1819) pp. 319–20, 333.
7. Ibid., p. 338. See also E. von Bergmann, *Geschichte der Nationalökonomischen Krisentheorien* (1895), on details of crisis theories of Malthus and Sismondi.
8. A mistranslation of "*Verwertung*" into "realization" instead of into "value

increasing" or "valorization" in the English edition here makes impossible a proper understanding of the original meaning.

9. David Ricardo, *On the Principles of Political Economy and Taxation* (Cambridge: 1951), p. 93.
10. Ibid., p. 120.
11. In my view, Marx was aware from the beginning that the law of tendential fall of profit rate due to the rising composition of capital goes along with the production of relative surplus value. He started a little clumsily by presupposing a constant rate of surplus value, and has been criticized by many for having neglected the effect of the production of relative surplus value on the profit rate. It must be noticed, however, that Marx carefully takes account of the changing ratio "between the part of capital exchanged for living labour and the part existing in the form of constant capital" (see also *Capital*, III: 215–16). We must notice at the same time that he does not count "the production of relative surplus-value" as one of the "counteracting influences" (where only the production of absolute surplus value is treated as "increasing intensity of exploitation"), in chapter 14 of Volume III of *Capital*. This is because he already took account of that factor in the explication of 'the law as such" in chapter 13.

 As Marx says, a certain number of living laborers come to use more and more dead labor stocked in the form of means of production, i.e., constant capital (c), with a rise in the organic composition of capital. A certain number of living laborers under a given length and intensity of working days give yearly the same amount of the value created *(Wertprodukt)*, including both the surplus value (s) and the recreated variable capital (v). Therefore we can recognize theoretically that the ratio $(s + v)/c$ declines absolutely with a rising composition of capital, irrespective of the change or rise in the rate of surplus value, i.e., $s' = s/v$. The decline in the ratio $(s + v)/c$ goes on infinitely when the organic composition of capital continues to rise infinitely, in the long-term process of accumulation.

 The general rate of profit, $p' = s/(c + v)$, as formulated by Marx, is clearly always smaller than the ratio $(s + v)/c$. Hence, p' must have a tendency to fall even with a rising rate of surplus value, as the ratio $(s + v)/c$ drops infinitely in the long run. I agree with R. L. Meek's discussion on this point and his interpretation of Marx's explication of this law in *Economics and Ideology and Other Essays* (1967), pp. 131–35. Thus, my position is that Marx's law of the tendential fall of profit rate is quite provable, but that this law cannot be used directly in order to prove the logical inevitability and the cyclical nature of economic crises, as discussed above.

12. K. Marx, *Theorien über den Mehrwert*, in Marx-Engels *Werke*, Bd. 26, 2 (Berlin: 1967), published in English as *Theories of Surplus Value*, Part II, by Progress Publishers (Moscow: 1968). Hereafter references include only the page numbers of both editions, the German one listed first.
13. Adjustment of the pace of investment among various sectors according to the fluctuations of market prices not only shows, but also realizes, the concrete regulation of the law of value. The law of value fundamentally means the regulation of values of commodities by labor time socially necessary to produce them. However, this regulation of values by labor time cannot be maintained without adjustment of the labor allocation necessary to keep social reproduction across various branches of production. Competitive movement in the pace of investment according to the fluctuations of market prices and rates of profit, while causing incessant disequilibrium in labor allocation, forms, at the same time, the concrete mechanism of readjustment of labor allocation based on the law of value.

 Further, this concrete regulation of prices of commodity products by the law of value under capitalist economy presupposes the regulation of the social production relation between capital and wage labor based on the law of value of the labor power commodity. Therefore, we have to theoretically recognize and develop the law of value as the basic law of the whole motion of capitalist production.

14. Marx's original plan of his work, prepared at the end of the 1850s when he wrote the *Grundrisse*, was composed of six main parts: capital, landed property, wage labor, the state, foreign trade, world market. The first part of capital was further divided into four chapters: (a) capital in general, (b) competition, (c) credit, (d) joint-stock capital. The theoretical system of the *Grundrisse* was still clearly confined within the framework of "capital in general" in this plan.
15. In "The Marxian Theory of Crisis, Capital and the State," *Bulletin of the Conference of Socialist Economists* 1, no. 4 (Winter 1972), David Yaffe does not use this theory properly. Though I agree with his criticism of excess commodity theories of crisis, I am afraid that his positive explanation may obscure Marx's theoretical progress in the excess capital theory from the *Grundrisse* to *Capital*. Attempts by Yaffe and Cogoy to deduce the notion of cyclical crises directly from the law of the tendential fall of the profit rate seem to show only the abstract *need*, not the logical inevitability, of cyclical crises for capital accumulation. (See Mario Cogoy, "The Fall of the Rate of Profit and the Theory of Accumulation," *Bulletin of the Conference of Socialist Economists* 2, no. 7 [Winter 1973].) Yaffe fails (on p. 24) to relate the "absolute overaccumulation" of capital to the level of employment of the laboring population, which is here central to Marx's view.
16. Kōzō Uno has attempted to purify Marx's crisis theory in this direction in *Principles of Political Economy* (1950, 1952) and *Theory of Crisis* (1953). This attempt has been supported by the works of his followers, including my *Credit and Crisis* (1973), a part of which is summarized here.
17. Even though the form of joint-stock capital made it possible to gather profits and idle funds for new large-scale investments, the major industrial capitals did not take this form until after the end of the nineteenth century, when the typical phases of cyclical crises had already changed, leaving a deadweight of continuous excess capital in industries. The monopolistic joint-stock companies were formed in order to partially escape this difficulty of excess capital as a whole. However, the functions of joint-stock capital and its limitations cannot be taken into consideration here.
18. Particularly in the process of prosperity, where capitals can continue to increase their value using existing means of production, fundamental im-

provements in methods of production are difficult to realize, because of restrictions in detail as follows: (a) if these means are not yet fully depreciated, the cost of abandoning the remaining capital value comes to be a burden when they are to be renewed; (b) even after depreciation, "machinery is most valuable for capital when its value = 0" (*Grundrisse*, 652; 766) and therefore it is not readily scrapped so long as it is physically usable; and (c) profits tend to be added to capital as fast as possible, rather than to be stored long enough to build up new systems of equipment or new factories. In contrast, the process of depression, where existing equipment cannot fully function as capital to gain surplus value, these patterns are reversed, and capitals are forced to strive for the entire renewal of methods of production through the scrapping and rebuilding of fixed capitals, in order to overcome the difficulties of capital accumulation.

19. In the actual process of cyclical crises in the middle of the nineteenth century, rising prices of such agricultural products as cotton, wool, and so on were an obstacle to the accumulation of British industrial capital, together with rising wages at the end of prosperity. British industrial capital used to overaccumulate in relation not only to the laboring population but also to the inelastic supply of agricultural raw materials which were not produced inside its own production process. In the domain of principle, where all the factors of production except labor power should be supposed to be produced by capital, such a concrete difficulty to British industrial capital must be abstracted and viewed as an overaccumulation of capital only in relation to the laboring population.
20. The theory of interest, starting from the "moneyed capitalists," seems to come from the interest theory of the classical school, as developed by Adam Smith and David Ricardo, which regarded interest mainly as an economic base for the "moneyed class" and which almost lacked a theory of the credit system.
21. We must here take the structure of the British money market at the middle of the nineteenth century as our basis of theoretical abstraction, just as we take the typical cyclical crises of that period as the basis of abstraction for crisis theory in principle. The working of the capital market, including the function of joint-stock capital, still cannot be taken into account here (see also footnote 17). The function of the credit system is then confined to the short-term mobilization of circulating capitals, and has nothing to do directly with the long-term investment of fixed capitals.

    Even though I think that such a concept of the credit system is essential in clarifying Marx's crisis theory, I do not mean at all that the credit system is at the root of capitalistic crises. The excess capital theory of crisis shows clearly that the necessity of crisis comes from the fundamental difficulty for capital to treat human labor power as a commodity. The restriction on the development of productivity due to the existing fixed capital also forms an important intermediary factor. We must notice, however, that the excess accumulation of capital more and more occurs not in a regular, periodic fashion, but as a continuous difficulty, when capitalism reaches the imperialist stage, where the financial system is also changed corresponding to the basic change in capital accumulation. Hence, it is essential to form a notion of the credit system based on the empirical conditions in Marx's time, not only because this serves to clarify Marx's own theory of credit and crisis, but also because the working of the credit system in relation to cyclical crises cannot be made clear in principle on any other empirical basis.
22. Although I depend fundamentally on Kōzō Uno's crisis theory, I cannot agree on this point with his inclination to omit the role of commercial capital and speculation in the principle of crisis.

5. Marxist Theories of Crisis

1. M. Tugan-Baranovsky, *Les Crises Industrielles en Angleterre* (1913), p. 222.
2. Rudolf Hilferding, *Das Finanzkapital* (Berlin: 1910; rep. ed. 1955), p. 378; author's translation. English edition by Routledge & Kegan Paul in London and Monthly Review Press in New York, is in press.
3. Karl Kautsky, "Krisentheorien," *Neue Zeit* 20, no. 2 (1901–1902): 80.
4. Karl Kautsky, "Finanzkapital und Krisen," *Neue Zeit* 29, no. 2 (1911): 798.
5. Rosa Luxemburg, *The Accumulation of Capital* (London: 1951; New York: 1968), p. 143.
6. Makoto Itoh, "Book Review: *Marxian Economic Theory* by Meghnad Desai," *Bulletin of the Conference of Socialist Economists* 4, no. 10 (February 1975).
7. Nikolai Bukharin, *Imperialism and the Accumulation of Capital* (London: 1972), p. 210.
8. Ibid. p. 217.
9. Ibid. p. 234.
10. Ibid. p. 225. Although Lenin did not present his own interpretation of crisis theory, his criticisms of the Narodniks and Luxemburg, together with his treatment of the necessity of the imperialist export of capital, is generally regarded as dependent on an underconsumptionist theory of crisis. See Michael Bleany, *Underconsumption Theories* (London: 1976; New York: 1977) and Russel Jacoby, "The Politics of the Crisis Theory: Towards the Critique of Automatic Marxism," *Telos* 33 (Spring 1975), both of which deal not merely with Lenin's views but also with those of various theorists.
11. Paul Sweezy, *The Theory of Capitalist Development* (New York and London: 1942), ch. 10; Paul Baran and Paul Sweezy, *Monopoly Capital* (New York and London: 1966).
12. Meghnad Desai, *Marxian Economic Theory* (London: 1974).
13. Otto Bauer, "Die Akkumulation des Kapitals," *Neue Zeit* 31, no. 1 (1913): 866.
14. Ibid. p. 871.
15. Frank Beckenbach and Michael Krätke seem to neglect this point of view in Bauer, treating him merely as an underconsumptionist in "Zur Kritik der Überakkumulationstheorie," *Prokla* 8, no. 1 (1978).

16. Sweezy, *The Theory of Capitalist Development*, p. 149.
17. Kōzō Uno, *Principles of Political Economy*, 2 vols. (Tokyo: 1950, 1952; new condensed edition, 1964). (An English edition is now available from Harvester Press, 1980); *Theory of Crisis* (Tokyo: 1953).
18. Andrew Glynn and Bob Sutcliffe, *British Capitalism, Workers and the Profit Squeeze* (Harmondsworth: 1972); Bob Rowthorn, "Mandel's *Late Capitalism*," *New Left Review* 98 (July-August 1976); Radford Boddy and James Crotty, "Class Conflict and Macro-Policy: The Political Business Cycle," *Review of Radical Political Economics* 7, no. 1 (1975); J. Harrison, *Marxist Economics for Socialists* (London: 1978).
19. Erich Preiser, "Das Wesen der marxschen Krisentheorie," *Festschrift für Franz Oppenheimer–Wirtschaft und Gesellschaft* (Berlin: 1924), p. 252.
20. Ibid.
21. Henryk Grossmann, *Das Akkumulations–und Zusammenbruchsgesetz des kapitalistischen Systems (zugleich eine Krisentheorie)* (1929), pp. 121–22.
22. Ibid. p. 140.
23. Maurice Dobb, *Political Economy and Capitalism* (London: 1972), p. 108.
24. Ernest Mandel, *Marxist Economic Theory* (London: 1968); *Late Capitalism* (London: 1975), pp. 438–39; cf. Makoto Itoh, "Review of *Late Capitalism*," *Science and Society* 43, no. 1 (Spring 1979).
25. Paul Mattick, *Marx and Keynes* (Boston: 1969); David Yaffe, "The Marxian Theory of Crisis, Capital and the State," *Bulletin of the Conference of Socialist Economists*1, no. 4 (Winter 1972); Mario Cogoy, "The Fall of the Rate of Profit and the Theory of Accumulation," *Bulletin of the Conference of Socialist Economists* 2, no. 7 (Winter 1973); Paul Bullock and David Yaffe, "Inflation, the Crisis, and the Postwar Boom," *Revolutionary Communist* 3–4 (November 1975); Anwar Shaikh, "An Introduction to the History of Crisis Theories," in Union for Radical Political Economics (URPE), *U.S. Capitalism in Crisis* (New York: 1978).
26. "For the business fluctuation, the alternation of prosperity and depression is decisive, and the suddenness of this change is a secondary problem." (Hilferding, *Das Finanzkapital*, p. 385.)
27. Following my criticism David Yaffe abandoned his misusage of this definition of Marx's which cannot be deduced directly from the law of the tendency of the rate of profit to fall: see the Japanese version of "The Marxian Theory of Crisis, Capital and the State," in Itoh, Sakurai, and Yamaguchi, eds., *The New Development of Western Marxian Economics* (Tokyo: 1978). Russell Jacoby similarly misinterprets Grossmann, claiming that Grossmann deduced an "absolute decrease" of profit from that law, although he quotes Grossmann's statement that the "mass of profits relatively decreases" (cf. Jacoby, "The Politics of the Crisis Theory," p. 35). As I have commented, what absolutely decreases according to Grossmann is only the portion of capitalist consumption, not total profit, under the specific assumptions. Anwar Shaikh's favorable estimation of Grossmann and his type of crisis theory unfortunately relies on Jacoby's misinterpretation (cf. Shaikh, "An Introduction," p. 236.) As long as the rate of surplus value rises with the rising organic composition of capital, the absolute mass of surplus value or profit cannot decrease without the absolute decrease of employment. But the law of the tendency of the rate of profit to fall itself, due to the rising organic composition of capital, does not necessarily imply an absolute decrease in employment.

28. V. I. Lenin, "A Characterization of Economic Romanticism," *Collected Works*, Vol. 2 (Moscow: 1963), p. 167.
29. K. Zieschank, "Zu einigen theoretischen Problemen des staatsmonopolistichen Kapitalismus in Westdeustchland," *Jahrbuh des Institut für Wirtschafts–wissenschaften*, Vol. 1 (1957).
30. Mandel, *Late Capitalism*, p. 25.
31. Kōzō Uno, "A Basic Consideration on the Theory of the Reproduction Scheme," *Chūo-Kōron*, November 1932; see also Uno, *Studies in Capital*, (Tokyo: 1949), p. 134.
32. Hilferding, *Das Finanzkapital*; Bullock and Yaffe, "Inflation, the Crisis, and the Postwar Boom."
33. The section relies chiefly on Tadao Kawakami, *The World Market and Crisis* (Tokyo: 1971) and Kōichirō Suzuki, ed., *Studies in the History of Crisis* (Tokyo: 1974), as the empirical research for that period.
34. Makoto Itoh, "The Great Depression—Centering in Great Britain" in Kōichirō Suzuki, ed., *Studies in Imperialism* (Tokyo: 1964) provides the empirical basis of this section.
35. British shares in the exports of manufactured products worldwide were 37.1 percent in 1883 and 35.8 percent in 1890. This was either a little larger or about the same as the total shares of Germany, France, and the United States. See W. A. Lewis, "International Competition in Manufactures," *American Economic Review*, May 1957, p. 579.
36. The basic theoretical principle already embraced the possibility that difficulties in coping with excessive fixed capitals existing with disequilibrium and underconsumption phenomena would constitute a fundamental factor inhibiting capital accumulation during the depression phase. However, this difficulty was repeatedly overcome through the complete renewal of the fixed capital in the main industries in the typical industrial cycles. In this period, however, the difficulty of the depression phase was scaled up and became continuous.
37. In this section I rely mainly on Yoshirō Tamanoi, ed., *Studies in the Great Crisis* (Tokyo: 1964), to which I also contributed, and Masaru Yoshitomi, *The Great Crisis in the United States* (Tokyo: 1965).

6. The Inflational Crisis of World Capitalism

1. The reserves of gold and foreign currency held by six industrial countries (the United States, Great Britain, France, Italy, West Germany, and Japan) increased from $48,381 million to $87,514 million during the two years

since July 1971. A substantial part of such an increase was due to the speculative outflow of dollar funds from the United States in order to escape or rather to utilize the devaluation of the dollar.

2. David Yaffe, "The Marxian Theory of Crisis, Capital and the State," *Bulletin of the Conference of Socialist Economists* 1, no. 4 (Winter 1972); Paul Bullock and David Yaffe, "Inflation, the Crisis and the Post-War Boom," *Revolutionary Communist* 3-4 (November 1975).
3. See also Thomas Sekine, "Uno-Riron: A Japanese Contribution to Marxian Political Economy," *Journal of Economic Literature* 13, no. 3 (September 1975).
4. Paul Sweezy, *Modern Capitalism and Other Essays* (New York and London: 1972), p. 27.
5. Cf. A. MacEwan, "Changes in World Capitalism and the Current Crisis of the U.S. Economy," in *Union for Radical Political Economics* (URPE), *Radical Perspectives on the Economic Crisis of Monopoly Capitalism* (New York: 1975).
6. Cf. *Economic Report of the President* (Washington, D.C.: 1975), pp. 262, 286.
7. Sweezy, *Modern Capitalism*, pp. vii, viii.

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Value and Crisis

Essays on Marxian Economics in Japan

by Makoto Itoh

Marxian economic thought has a long and distinguished history in Japan dating back to World War I. During the 1920s the main focus was on two areas—the theory of capitalism expounded in the three volumes of Marx's *Capital*, and the particular characteristics of Japanese capitalism as it developed after the Meiji Restoration of 1868.

Rival schools of thought emerged and staged brilliant debates at a time when interest in Marxism in the United States was still almost nonexistent. Since World War II the economics faculties of major Japanese universities have taught both Marxist and neoclassical approaches, and many of the most important writings of U.S. and European Marxists have been translated and are widely used in Japan. There has not, however, been a comparable familiarity with the rich Japanese Marxist tradition in the West.

Professor Itoh's book makes an important beginning in rectifying this lopsided situation. It opens with a long and highly informative essay on the development of Marxian economics in Japan, and contains a number of the author's important and original contributions to this stream of thought.

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