Recent Development on the Crisis Theory in the Uno School

Kei Ehara (Saitama University)

(kei.ehara@gmail.com)

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Introduction

Kozo Uno (1897–1977) is one of the most influential Marxian economists in Japan and his works are indispensable in order to understand the formation and development of Marxian crisis theory by Japanese academics. Uno studied Marx's *Capital* intensively and his profound and critical reading led him to establish an utterly original theoretical framework on the basis of Marx's analysis. His influence on Japanese Marxians was so decisive as to bring about the rise of what is called the Uno school after the Second World War in Japan. Since Uno's arguments differ greatly from what Marx insisted in many respects, there occurred fierce debates between Uno's followers and their opponents. Crisis theory is one of the most important subjects among those discussions. The most representative work in Uno's theoretical studies is *Principles of Political Economy*, which has an English translation (Uno[1977]), but it includes little investigation on crisis presumably because what he did in Uno[1977] was the reorganisation of the overall system offered in three volumes of *Capital*, which lacked a clear and consistent view on crisis. In order to understand Uno's own view on crisis theory, we need to look into another book titled *Theory of Crisis* (Uno[1953]). Here in this article, we overview several essential features in Uno's crisis theory mainly developed in Uno[1953] and trace major progress achieved by the Uno school.

What distinguished Uno's crisis theory most apparently from other Japanese Marxians has been its emphasis on the increase in wages as the fundamental cause of crisis. Indeed, most Marxians at that time in Japan regarded overproduction of commodities rooted in the basic contradiction of capitalism between “the social character of production and the private character of appropriation” (Lenin[1963]p.167) as a cause of crisis, often making use of “reproduction schema” as a tool for theoretical formulation. This academic environment was an adversity for Uno as he

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1 Uno's purely theoretical literature first appeared as the two volumes of *Principles of Political Economy* in 1950 and 1952 respectively (Uno[1950,52]). It was just the next year, in 1953, that he published *Theory of Crisis*. This is the first and last book on crisis theory written by Uno, although he continued to write a number of articles on this topic until his final years of life. Meanwhile, he rewrote his book on the theory of political economy in 1964. This 1964 version is much shorter and more compact than the previous one and was translated into English by Thomas Sekine (Uno[1977]).

Itoh[1980] should be referred to as the most noteworthy work introducing the crisis theory in the Uno school. During nearly 40 years since its publication, further developments were achieved on various topics related to crisis theory, including Itoh's own contributions after the publication of Itoh[1980].
insisted that the buying and selling of labour–power should be recognised as the basic contradiction of capitalism and that the rise in wages in labour market must lead to the fall in profits gained by industrial capitals and precede the crisis accompanying the resultant overproduction of commodities. Insofar as we observe this difference between the mainstream Marxian crisis theory and Uno's, the discussion in the latter can be characterised as the Japanese version of overaccumulation theory or profit squeeze theory. However, the characteristics of Uno's crisis theory should not be reduced to this aspect. In order to capture the originality in Uno's approach in its entirety, we must take into consideration his achievements with respect to other fields of study in political economy and consider their relations to the crisis theory.

First of all, Uno criticised Marx's credit theory and reorganised it logically in accordance with the endogenous development from the activity of industrial capital. In Part 5, *Capital* Vol.III, Marx assumed two kinds of capitalists to explain the system of credit transactions: one is a “money capitalist” and the other a “functioning capitalist”. While the former lends a certain amount of money to others and obtains interest exclusively, the latter borrows money from the former to invest in some industrial projects, the profit from which the interest is paid. Uno was opposed to this dichotomised understanding of the credit system, arguing that neither of the two categories of capitalist could be sufficiently conceptualised. That is, he insisted that Marx's example of lending £100 of money “does not give a clue as to why the ‘money capitalist’ must lend the £100 to the ‘functioning capitalist’ instead of using it as capital himself. ...In the pure theory of capitalism the concept of a ‘functioning capitalist’ who does not possess a capital of his own is surely unreasonable, even if the concept is proposed to pair off with that of a ‘money capitalist’” (Uno[1977]pp.120,121). Instead, Uno's credit theory is established on the basis of idle money capitals generated in the course of the circuit of industrial capital. As industrial capital continues its production and circulation, it is necessary to lay some part of capital in money form as cash reserves for continuous operations of fixed means of production. Since the sale of commodities and the following cash inflow are utterly uncertain, individual capitalists cannot accurately forecast the proper amount of reserves to have ready in cash. Consequently, some industrial capitalists have too much reserves for the time being while others run out of cash temporarily. The idle money of the former, in Uno's argument, is fundamental to the credit system developed under the capitalist mode of production. This configuration of the credit system, which is organically related to the activity of industrial capital, enabled Uno to discuss the combined dynamics of industrial accumulation and credit trading. It is

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2 The difference between these two methods in credit theory is explained more in detail in Itoh[1988]chs.4.3, 8.2 and Itoh and Lapavitsas[1999]ch.3.
important, therefore, to realise that Uno regarded the rise in wages just as the fundamental cause of crisis and further conceived the increase in the interest rate as the moment of the outbreak of crisis. Both of these two factors are required for the full–fledged crisis theory. Uno's theoretical uniqueness lies in this synthetic and comprehensive approach, covering both industrial investment and credit relationship.

Secondly, Uno's crisis theory was designed to support his analysis on the historical transformation of capitalism. Although how Marx thought about the history of capitalism should be open to discussion, most part of Capital Vol.I is devoted to the study on 19th century Britain and is not so clear about how capitalism has experienced long–term changes as a certain social system. The preface to the first edition states, “[w]hat I have to examine in this work is the capitalist mode of production, and the relations of production and forms of intercourse that correspond to it. Until now, their locus classicus has been England. ...The country that is more developed industrially only shows, to the less developed, the image of its own future” (Marx[1992]pp.90,91). This text indicates the converging tendency of capitalism toward the image of 19th century England and does not include the attention to historical metamorphosis that leads to the diversity in capitalism. It corresponds with the conclusion of “the general law of capitalist accumulation”, which is a straight line toward the end of capitalism when “[t]he knell of capitalist private property sounds” (Marx[1992]p.929). The main story in Capital Vol.I is concluded with the crisis that ends capitalism itself and the crisis theory concentrating on a purely economic event is buried within this context. In contrast, confronted with the development of capitalism in the 20th century, Uno realised the necessity to construct a method for analysing historically diversified stages of capitalism, with the theory of crisis established separately from the discussion on the crisis of capitalism itself.

So we should notice that what Uno tried to prove was not only the labour–power shortage as a result of capital accumulation, but also the periodicity of crisis in spite of the difficulty in proving it logically. This was because he considered decennial crises in 19th century Britain as the foundation for theoretical abstraction. The regularity of crisis phenomena at that time, he insisted, could be supposed to show their similarity to the pure theoretical image of crisis. Once the crisis theory is thus constructed, it becomes the standard model to analyse the historical development of capitalism. While crises preceding the model cases are considered to be a taint of immaturity of capitalist production, those in the later period indicate the deviations from the standard capitalism. That is, the 18th century Europe had not yet seen capitalism complete its subsumption of social reproduction so that the crisis revealed itself as a speculative bubble that was triggered by and subject to accidental incidents, not accompanying economic destruction in the production sphere. The examples are Tulip Mania in 1637 in the Netherlands, the Mississippi Company Bubble in 1720.
in France and the South Sea Bubble also in 1720 in Britain. On the other hand, crisis phenomena had tended to diminish in intensity since the end of the 19th century, morphing into moderate but chronic depressions instead. This is considered to characterise the monopolistic state of capitalism represented by the emergence of finance capital, which prevented fierce restructuring after the boom had gone. We can observe the Long Recession from 1873 to 1896 in Britain, and the crisis in 1907 that originated in the U.S., one of the countries which had been vigorously catching up with the U.K. Uno's crisis theory is thus incorporated with the investigation of the historical stages capitalism had experienced up to the outbreak of the First World War, which is called the stages theory in the Uno school. The three stages briefly mentioned above are named as follows: the first is the stage of mercantilism, the middle and standard the stage of liberalism, and the last the stage of imperialism. This historical scenario describing the development of capitalism cannot be neglected when we are to observe the importance of the crisis theory in Uno's framework.

It is therefore not enough to follow the discussion in the Uno school on the process toward labour–power shortage. Rather, development of crisis theory after Uno can be apprehended more correctly when we pay attention to other features in Uno's crisis theory, viz., the synoptic approach in theory and the connection between theory and history. Though we are going to introduce the debate on the process of accumulation at first, it will be mainly about the relation to market or price system, not about the dynamics of the industrial reserve army as such, on which Marx focused in Ch.25, *Capital* Vol.I. And also, the discussion on the credit system is

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3 Although the concept of “finance capital” was taken from Hilferding[1910], the work itself was generally subject to hostile criticism from Uno. Broadly speaking, Hilferding tried to introduce the concept of “finance capital” as a straightforward theoretical extension of Marx's credit theory. On the contrary, Uno considered it impossible to explain the development of “finance capital” without referring to the historical specificity of the stage of imperialism, which he thought should be distinguished from the period *Capital* stood on and blamed Hilferding for his unawareness of the qualitative change in the end of the 19th century.

4 The idea of Uno's stages theory can be grasped in yet another work named *Theory of Economic Policy* (Uno[1971]), where he discusses the historical transitions of economic policies accordingly as the underlying economic situations change, dividing the history of capitalism into the three stages as mentioned in the text.

5 This does not mean that there is no theoretical progress on the latter aspect of accumulation theory in the Uno school. See Hoshino[1995] on this topic. It should also be born in mind that the methodological reconstruction of the theory of the business cycle attempted in Obata[2009][2014],
indispensable in grasping the general picture of the crisis theory in the Uno school. Meanwhile, history after the First World War has urged the Uno school to deal with further problems. The latter part of this article will discuss relatively new points of argument, i.e., stagnation and the reorganisation of the stages theory concerning crisis.

1. Process of Accumulation
What is most difficult for every profit squeeze theory is to prove the causal relation between the rise in wages and the reduction in profit rates. Increasing wage rates will not damage profit if selling prices should rise at the moment. Uno himself was confronted with such a criticism but virtually rejected the importance of the study on price fluctuation, labeling it as illusionary. It is necessary, however, to explain why the changes in prices should be regarded as just an illusion. In other words, we must solve the problem of direct comparison between wages and prices in order to conclude profit squeeze as such. Moreover, an illusion does deserve theoretical investigation in itself.

Though price fluctuation might be a phenomenal issue caused by more essential factors, the market disturbance contributes to crisis formation and the outbreak of crisis, both of which require theoretical conceptualisation. If the wage rise is to be the fundamental cause of crisis, these questions on market dynamics observed within the process of accumulation must be discussed further.

Though there had been numerous studies by the Uno school on the issue of the relation between wages and prices, the recent discussions adopt a somewhat macroeconomic approach to give a general overview of the profit–squeeze type of crisis. Kurita[1992] sees the effect of growth in demand as wages increase while profit is reduced at the same time. The rise in wages has, according to Kurita, both positive and negative effects on the rate of profit temporarily. But eventually, it cuts the accumulation fund and hampers economic growth, which reveals the overproduction of commodities and finally decreases the general rate of profit. The fundamental cause of crisis, which corresponds to the overaccumulation of capital, thus accompanies overproduction. The point of Kurita's framework can be found in his emphasis on the positive effect on social demand of the rise in wages which does not immediately reduce profit, which is also admitted in Hoshino[2007]. Hoshino criticises the unclear definition of wages in Uno's crisis theory and explicitly distinguishes the nominal and the real. Additionally, he introduces the concept of “real wage cost” in order to avoid the difficulty in grasping the changes in real wages, which the

which will be mentioned later, is based on a deep analysis into the peculiarity of the labour market that is derived from the existence of the industrial reserve army in particular.
comparison between nominal wages and prices entails. “Real wage cost” is defined as $\omega / \alpha_2$: $\omega$ is the rate of real wage and $\alpha_2$ is the productivity in the department producing consumption goods, or department 2. Let $N$ be all employees and $N_2$ be the employees in department 2, and if the supply of and demand for consumption goods equilibrate, there holds

$$\alpha_2 N_2 = \omega N,$$

therefore

$$\frac{\omega}{\alpha_2} = \frac{N_2}{N} \quad (1)$$

So the fluctuation in “real wage cost”, left in equation (1), can be observed in the change in the proportion of the number of workers in department 2 to all workers. What occurs as the shortage of labour–power, Hoshino insists, is the rise in nominal wage, not that in real wage, and this leads to an increase in demand for consumption goods at first. Responding to this, department 2 expands and $N_2 / N$ rises as long as productivity remains the same, which means the increase in “real wage cost” cuts into the rate of profit.

Market dynamics during the process of accumulation has the other issues than only their relation to the rate of wages: market disturbances such as price fluctuations must be investigated in themselves. Those formulations described above can be connected to the dynamic theory of prices, embracing the situations called “uneven development” in a broad sense into Uno’s crisis theory. The issues on market dynamics, however, cannot be reduced to the theory of prices. Even if prices have a general tendency to move upward or downward, each commodity price fluctuates separately amid varying activities of individual capitals. Those diversified movements of price and of individual capitals are mutually affected and the interaction between them becomes crucial particularly when the fluctuations gain momentum, forming an imbalance among industries with speculations at the end of the boom. For example, Yamaguchi[1985] argues that the exhaustion of the industrial reserve army itself paralyses capital allocation among industries because, without the unemployed workforce, production can only be expanded through headhunting workers from other capitalists, consequently destabilising the market especially in the final phase of the boom. The analysis in Itoh[1988] is well–arranged on this topic. Itoh maintains, “[t]he social functions of the motion of capital in the expanding process of reproduction must, however, become much altered, reflecting the difficulty due to over–accumulated capital”, and points out three factors intensifying price fluctuations in the last phase of prosperity: “[a]s the pace of expansion of reproduction slows down with a fall in the profit rate, the process of adjustment of the anarchical imbalance between various spheres of production is retarded”; “[t]he cost–prices would be affected by a rise in wages in
different proportions according to the different compositions of capital in various spheres of production ... Thus, there must appear certain commodities whose prices rise tendentially as their wage costs increase more than average per unit of capital”; “with a rise in wages, the demand for some means of consumption or their raw materials would suddenly increase, whereas the supply of these cannot be so quickly expanded in the short run, as in the case of agricultural products” (Itoh [1988] pp. 308–309).

While these traditional arguments of Yamaguchi's and of Itoh's explain turbulent market circumstances originating solely from the specific dysfunction of the labour market, thus enlarging Uno's framework of the crisis theory to contain the issues of the market, I have recently challenged this single causal approach itself in Ehara [2013][2014], putting stress on the inner systemic disorder which the market inexorably involves under capitalism as an equally important factor along with the impact of the shortage of labour–power. There I indicate that capital accumulation with fixed capital investment must entail the stratification of conditions of production coupled with increasing employment and emphasise the former process as the other underlying cause of market disruption. Each individual industrial capital needs to pick out the most profitable condition of production among the coexisting various producing conditions when investing in a certain industry, but this task of selection becomes increasingly difficult as the stratification of conditions deepens and eventually upsets the balance of capital allocation through industrial investments, bringing about the inevitable turbulence in the capitalist market. Speculative commercial capitals immediately follow the turmoil originally springing from the abode of production, precipitating evil stockpiling across diversified branches and ensuing catastrophe.

2. Dynamics of the Credit System

As we noted above, the crisis theory in the Uno school cannot dispense with the dynamics of the credit system and is grounded on the reorganisation of the theory of credit indicated in Capital Vol.III. Since the credit relationship is based on the idle money capital kept by individual industrial capitalists in Uno's view, the profit squeeze caused by the rise in wages inevitably affects credit formation. Increasing production costs must disturb the circuits of industrial capital and make capitalists divert the cash reserves to fluid capital for continuing production. Assuming that the maximum scale of bank lending is loosely but basically limited to the amount of the surplus monetary fund generated from smooth and sound reproduction, this reduction in idle money capital undermines banking and forces banks to tighten finance. To put it more simply, the decreasing supply of monetary funds from industrial capitals at the end of the boom must raise the rate of interest and stifle credit trading, finally bringing about the outbreak of crisis. Although Uno's
original text is more complicated and abundant in suggestions for further analysis into credit transactions in the business cycle, its basic methodology can be summarised as the cash based approach briefly described above.

This way of understanding the credit system is not completely wrong, but is oversimplified. Banks are not just intermediating cash between capitals, but are creating a purchasing power by way of giving credit. It is by no means an easy task to discuss the supply and demand relationship concerning the monetary fund market because of the relative flexibility in bank lending. The cash based approach does not pay sufficient attention to this role of credit creation that is essential to the banking industry. Uno's theory of credit had to be drastically reconstructed so that it could examine the actual mechanism of the banking system in capitalism. Yamaguchi[1984][1985] are the most representative and leading achievements in this field. What Yamaguchi emphasises in these works is the regular reflux of cash by repayment as a foundation for credit trading. It is true that a creditor who gives commercial credit must hold an adequate amount of reserves in order that he or she can do without immediate cash inflow, but the quantity of credit itself is not restricted to creditor's cash reserves. How much credit a creditor can give depends on how much a debtor can repay. This principle holds good for banking credit. Banks can issue their notes or create deposits for debtors as long as the borrowers are expected to sell some sort of assets within a certain period of time in the future and will be able to meet their liabilities. Credit money, which takes the form of banknotes or deposit currency etc., is created in these transactions and the credit creation in banking is grounded on the reflux of money from debtors to creditors, not on the cash reserves banks pile up, regardless of whether or not the credit money is convertible into commodity money such as gold coins. Yamaguchi's theory of credit can be understood as a sophisticated version of Uno's theory of credit in that it corrects the imperfection of the cash based approach and adopts a credit creating approach instead, clarifying the fundamental relationship underneath the assets and liabilities accumulated in the banking system.

While the credit creating approach shed light on the issue of credit money, making a breakthrough in the Marxian theory of money and credit which tended to be concerned exclusively on gold coins, it gave rise to another problem: if banks are able to extend credit and to provide the means of circulation to industrial circuit of capital insofar as the reflux of money is certain, how does this elasticity in credit creation reach its limit and put an end to the prosperity? We cannot rely on the simple supply–and–demand relation any longer because the “supply” of credit can be increased, as it were, even if the cash reserves decline as wages are increased. It is necessary to investigate the complexity of the dynamics of the credit system in itself. Yamaguchi himself challenged this conundrum, focusing on the uneven development in social reproduction caused by
The shortage of the industrial reserve army as essential momentum (Yamaguchi[1983][1984][1985]). The unevenness of the expansion of production accompanies market disruption as we have observed in the previous section, and it leads to partial delay in repayment among various debtors. Banks respond to this situation by raising interest rates selectively at first. But these sporadic rises in the rates of interest do not prevent debtors from excessive borrowing because they need purchasing power in order to keep production ongoing and maintain the piled stock of commodities. This means the simple comparison between the interest rate and profit rate makes little sense in explaining the sudden contraction of social production. Instead, what Yamaguchi underlines is the effect of cutting credit itself by which banks react to further deterioration in the prospect of the reflux of money in credit trading, which forces industrial capitals to cease production and at the same time undermines bank lending, inevitably ending up with credit collapse. In Obata[2009] and [2014], it is asserted that the formulation of the rate of profit in banking industry is indispensable to analyse the dynamics of the credit system. The rate of profit of banking capital, \( r_b \), is formulated as follows when the liabilities of banks with interest are omitted:

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r_b = \frac{L \times i - (z + d)}{K}
\]

Banks obtain the interest from assets, the quantity of which is denoted by \( L \), with spending \( z \) amount of costs to conduct credit research or debt collection. \( i \) is the interest rate for banks’ assets, so \( L \times i \) shows the gross profit of banking. When the assets become nonperforming, they also have to be subtracted from the gross profit, indicated as \( d \). And banks invest \( K \) amount of equity capital to operate all of these businesses.

As long as the general rate of profit of industrial capitals is stable, \( r_b \) is balanced with it and gains stability as a result. Once the industrial rate of profit gets fluctuated at the end of the boom, however, this regulation is violated. Obata[2009] describes the disturbance in credit system in two separate ways. On the one hand, banks can expand their balance sheets by giving credit to speculation. This results in rising \( r_b \) through increasing \( L \) without a rise in the interest rate. Credit collapses when the speculative bubble bursts and banks go bankrupt, with a considerable part of the assets turning out to be nonperforming. The other possibility is that banks try to secure the level of their profit rates by restricting credit. Faced with uncertain economic circumstances, banks may raise \( K \) and spend more \( z \) for credit research. In order to maintain \( r_b \) under these conditions, \( i \) must soar up, damaging industrial and commercial capitals along with credit restriction itself, after which follows an industrial or commercial crisis. Obata thus classifies how the credit system works in accordance with the structure of the rate of profit of banking capital.

These works are inclined to regard the withdrawal of monetary reserves in banks,
typically described as a drain of gold in traditional Marxian writings, as a result of credit concerns based on the disruption in social reproduction. Meanwhile, the opposite argument also has influence in the crisis theory in the Uno school, which attaches relative importance to a drain of reserves as a trigger for credit uneasiness, from both theoretical and empirical points of view. Those who support this view certainly agree with the credit creating approach in that the reflux of money is fundamental to the circulation of credit money. But they argue that it is necessary to deal with how the change in the amount of reserves destabilizes the banking industry in more detail so that the crisis theory can trace actual phenomena. For example, Hoshino[2007] insists that the rise in wages would force capitalists to withdraw deposits from banks to pay to their employees, thus internalizing this trigger into the original apparatus of Uno crisis theory. Because capitalists must pay wages in cash, this arena of cash transactions becomes a weak spot in the credit system according to Hoshino. Yoshimura[1999] and [2005] discuss the mechanism of foreign exchange working together with the internal financing and aim at constructing a sort of open model to elucidate the outbreak of crisis. Actually, the importance of the reserve money in the banking system was first stressed in Makoto Itoh's earlier work (Itoh[1973]). Although Itoh's analysis at that time was mainly grounded on historical experiences in 19th century Britain, recent literature is more theoretically arranged.

Before leaving this section on the dynamics of the credit system, we must take a look at another type of discussion about the role of finance in crisis theory. Traditionally, Uno's crisis theory has underlined the causal combination of the two factors of crisis, one in production and the other in the credit system. Most of the studies we have seen above are generally in line with this causality. This theoretical frame of investigation is, however, liable to undervalue relatively independent financial development which does not keep pace with industrial development because it conceives the state of finance exclusively as the upshot of reproduction. It naturally falls short of the purpose of analysing the dynamics in modern capitalism from the 1980s onward, which have seen neoliberalism sweeping and financial bubbles recurring all over the world. Bearing this contemporary situation in mind, some theorists in the Uno school advocate embracing what post-Keynesians like Hyman Minsky call “financial instability” in Uno's framework. Yokokawa[1989] is a pioneer of this radical challenge. Yokokawa tries to integrate Minsky's “financial instability hypothesis” with Uno's crisis theory by introducing the role and effect of independent banking activity, thereby evolving Uno's traditional style of the crisis theory into “Marxian monetary theory of crisis”. The uniqueness of his argument lies in his emphasis on “the plethora of money capital” as a cause of credit easing by banks at the end of the prosperity period. As the rise in wages squeezes profit, industrial expansion is dampened and “the plethora of money capital” emerges. This surplus fund which is not invested in production urges banks to give credit to riskier trading mainly
undertaken by commercial capitals, forming monetary boom and burst in Yokokawa’s view. While Yokokawa[1989] aims at integration in its own way, Itoh and Lapavitsas[1999] seems to be a rather typological argument in handling “financial instability” within its theoretical configuration. Itoh and Lapavitsas define financial turmoil arising separately from the state of reproduction as “monetary crisis of type 2” whilst “type 1” is considered to be the traditional sort of credit crisis discussed within Uno’s framework, which comes after industrial deadlock. According to them, this distinction in monetary crisis can be found in the text of Ch.3, Capital Vol.I. Besides, they maintain that Minsky's notion of financial instability “has much in common with the Marxist theory of crisis, particularly because it attempts to identify inherent weaknesses of the capitalist economy” (Itoh and Lapavitsas[1999]p.153), thus associating “monetary crisis of type 2” with Minsky's financial instability hypothesis. On the other hand, they refuse simple and arbitrary application of these two types of crisis to empirical study and state “Minsky's financial instability hypothesis appears most relevant for the period of accumulation difficulties that commenced in the 1970s. The specific changes in the historical conditions of capitalist accumulation in the post–Second–World–War period must be examined first in order fully to appreciate the significance of the relationship between long–term expectations and capitalist financial instability” (ibid.), emphasising the priority of historical analysis of the underlying capitalist accumulation process.

3. Stagnation

We have examined so far the theoretical efforts made exclusively on the factors of crisis as such. Meanwhile, some other points which are not directly related to the occurrence of crisis itself are getting attention and are being discussed in the theory of the business cycle, as various spectacles of the dynamics of capitalism other than crisis phenomena begin to unfold. In the following two subsections, we are going to overview those relatively new points of argument.

As obviously shown in the table of contents of Uno[1953], Uno's crisis theory covers not only the crisis in itself, but the business cycle as a whole comprised of three phases, i.e. prosperity, crisis and stagnation6. In spite of its title, Theory of Crisis, it is about a theory of the business cycle

6 Uno[1953] has five chapters titled as follows:
Ch.1 Prosperity
Ch.2 Crisis
Ch.3 Stagnation
Ch.4 Period of Business Cycle
Ch.5 The Necessity of Crisis in Capitalism
at the same time; thus clarifying crisis within the business cycle should be investigated independently of the crisis of capitalism itself. It is true, however, that the argument on stagnation in Uno[1953] is very short and uncultivated in comparison with that on prosperity or on crisis and that the latter has attracted most of the theoretical interest in the Uno school. This trend has changed to some extent on account of the “Lost Decade” or “Lost Two Decades” from the 1990s in Japan, with a new trend towards analysing the state of stagnation, (which should be distinguished from a steep backlash observed as crisis), growing among Japanese Marxian economists. Their works are to investigate why the economy has continued to stagnate for such a long period. Uno[1953] takes an ambivalent attitude toward this issue on stagnation: a persisting general overproduction of commodities is emphasised while it is asserted that the relation between the capitalist class and the working class remains to be reformed, but how both of these conditions are interlinked is highly opaque. Here we are going to classify relatively recent literature into two types according to which of these two factors Uno pointed out is stressed.

Itoh[1973] is a pioneer regarding the former point, i.e. the overproduction of commodities as the fundamental reason for the systemic persistence of stagnation within the theory of the business cycle. It is maintained that even if the rate of wages falls down, existing fixed capitals hamper the reallocation of capital across industrial branches, hence there is a persistent disproportionality among branches of production. This situation entails a remaining surplus of production capacities in various industries introduced during the past boom. As summarised in Itoh[1980], the Uno school has strongly rejected disproportionality among industries as a cause of crisis, but it is adopted as a cause of stagnation in Itoh's crisis theory, thus embracing disproportionality theory within the profit squeeze type of crisis theory in its own way. This style of argument is further developed recently in Tanaka[1995] and Miyazawa[2003][2011]. There the inflexibility of industrial capital rooted in fixed capitals gets more significant and is supposed to delay recovery by impeding both the employment of newly invented technologies and the spread of investment demands, thereby prolonging stagnation with imbalance among industries.

In these works mentioned above, it can be briefly stated that the dynamics of the business cycle are explained in a double principle: the economy can prosper as long as there is plenty of industrial reserve army and stagnation continues owing to persistent disproportion with fixed capitals, which is the aftermath of crisis. On the other hand, those who focus on the class–relation between the capitalists and the workers adopt a single causal approach to the theoretical formulation of the business cycle. For example, Nakamura[2005] stresses the peculiarity of labour–power as a commodity. It is true that a worker, a possessor of labour–power, pursues his or her economic interest but a worker is not a complete *homo economicus* in that he or she lives in his or her own

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household, the system of which is operated very differently from the market mechanism, and maintains the labour–power there as a member of a family and/or of some other community. Market forces cannot solely decide the rate of wages because of this background of labour–power and there is a bottom line that the capitalists cannot breach when they try to reduce the wage rate. The lower limit of the rate of wages is, Nakamura[2005] presumes, the primary cause of continuous stagnation. Obata[2009] [2014] also emphasise the peculiarity of the labour market, the structure of which is characterised by the presence of the industrial reserve army as typically depicted as in Figure.1 in Sweezy[1949] p.91. Since the industrial reserve army is not necessarily an excess of supply of labour–power but can involve workers who are just in training for some occupation or are engaged in other kinds of work that are not the wage labour under the capitalists (household workers, civil servants, NPO workers etc.), those dismissed from capitalist wage labour do not always need to sell their labour–power at a sacrifice. Hence the increase in unemployment is not accompanied by an immediate decline in the rate of wages. Massive layoffs during a crisis does reduce incomes of the working class, but it is due to the decrease in total working hours under the capitalists. Obata argues that the increased level of the wage rate that caused the past crisis can only be diminished through the drastic reorganisation of substantial working systems, which lessens the power of the workers against the capitalists and makes the workers agree to a wage cut. The reorganisation takes time because the capitalists must not only introduce new technologies but deskill some part of working processes and reshuffle employees, hence the persistency of stagnation.

In fact, what is more important in Obata's works is the methodological critique on the traditional formulation of the theory of the business cycle in the Uno school. The structure of the theory of the business cycle in Uno[1953], which puts three phases of prosperity, crisis and stagnation in sequential order, has been regarded as a self–evident premise. Obata rejects it as not being an effective theoretical framework of analysis, criticising it for lapsing into a mere description of phenomena, particularly those observed in 19th century England. Instead, it is insisted that prosperity and stagnation should be conceptualised as two distinctive phases comprising the basic states of capitalist economy in the business cycle and that crisis should be distinguished from these two as a switching event from prosperity to stagnation. This is why the single causal approach is required in the theory of the business cycle in Obata's argument. If the persistence of stagnation is explained as a remaining effect of crisis such as disproportion among industries, the stagnation can never be as equally important as the state of prosperity, although the configuration of this type of explanation is consistent with the sequential order of the business cycle. In order to conceptualise the phase of stagnation as logically equivalent to that of prosperity, both phases must be grounded on the same theoretical arena, such as the diagnosis of the labour market carried out in Obata[2009] [2014].
4. Reorganisation of the Stages Theory

Stagnation, which Japan experienced for a lengthy period of time during the 1990s and 2000s, is by no means the only actual phenomenon that calls for theoretical investigation after Uno's literature. Indeed, there have occurred numerous kinds of events concerning the business cycle under capitalism until the present day that are eligible for analytical attention. However, Uno's original study is very limited, just covering the history of capitalism up to the outbreak of the First World War. This limitation, in a sense, has provided Uno's political economy with the persuasive framework of the three historical stages of capitalism. Uno's stages theory virtually ends in 1914 and the following rest of the period is labeled as a “transitional period toward socialism”. It was natural, therefore, that Uno's followers tried to reorganise the stages theory, particularly the last stage of imperialism, as it became increasingly difficult to stay satisfied with this opaque and somewhat optimistic definition of the period after the First World War. Although reconsidering the stage of imperialism has diverse aspects to be discussed including such topics as the establishment of the welfare state, the mechanism of the international monetary system, the changes in industrial structure etc., here we are going to focus on those immediately related to the theory of crisis. Since the crisis theory is one of the basic theoretical standards for historical analysis in the Uno school, the phenomenon of the business cycle should deserve close attention in the stages theory.

It goes without saying that “the Great Depression” beginning from 1929 was the most outstanding disaster that determined the course of capitalism after the Second World War. While the Soviet Union was reported to be enjoying a lively economy, the capitalist world was confronted with severe recession and huge unemployment and allowed Fascism to thrive, finally plunging into the devastating war. It was of utmost importance for capitalist nations after 1945 to establish a stable political and economic system worldwide that could prevent economic catastrophe and hostile clashes between nations. The Great Depression should therefore be a critical event for the development of the stages theory and if the theory of crisis is to be helpful in investigating historical stages of capitalism, it should at least give us a hint about scrutinising the cause and effect of the Great Depression. In fact, the introduction of Uno[1953] begins with a brief overview of the Great Depression and admits its serious extensiveness as an economic crisis happening under capitalist economy, but he rejects further analysis into this specific event, insisting that investigation into individual crisis phenomena does not lead to building a general theory of crisis and that it is necessary to find out the typical crisis phenomenon that can offer the foundation on which the principle of crisis would be constructed. As mentioned above, decennial crises in 19th century England were picked out as a typical image. Then the next task for Uno ought to have been an
examination on the Great Depression on the basis of the general theory of crisis, but he did not proceed to this work. This discontinuation may be because of the limitation of his framework of stages theory which practically excludes the period after the First World War.

So it has been an onerous mission especially for the Uno school to open up the stages theory to the intermediate period between the two World Wars and to subsume the Great Depression within its overall configuration of political economy. Takumi[1990] classifies this fatal problem in Uno's stages theory into three points: firstly, if the stage of imperialism is characterised by declining intensity of crisis and looming chronic depression, it would be impossible to discuss the Great Depression that involved a sharp economic downturn; secondly, the traditional description of the stage of imperialism overlooks the periodicity of crises that had occurred during the period; thirdly, the traditional argument overestimates the influence of monopoly before the First World War and paid little attention to the strengthened monopoly capitalism after the war, consequently ignoring the relationship between the rigidity in price fluctuations and the intensity of crisis which is crucial to analysis into the Great Depression. Takumi[1994] is the elaboration which attempted to overcome these difficulties by carrying out a tremendous amount of empirical research on the Great Depression, concluding the core of the most catastrophic crisis in the 20th century could be elucidated from the viewpoint of Uno's crisis theory, viz., the combination of the rise in wages and financial disruption. According to Takumi, the fundamental cause of the intensive decline in investment in the earliest stage of the Great Depression must be the increase in wages that damaged the profitability of U.S. industries, with the monopolistic price mechanism and the volatile international monetary system escalating the turmoil, the intensity of which cannot be compared with that of the cyclical crises in the 19th century. Briefly speaking, Takumi virtually applies Uno's crisis theory to the Great Depression to detect its fundamental cause and historical features, consequently contributing to embracing the intermediate period between the two wars within the research scope of the stage of imperialism.

Insofar as the issue of identifying the ultimate factor of the Great Depression is concerned, sticking to the profit squeeze might be too obstinate. Shibata[1996] is one of the convincing empirical criticisms of Takumi's works in this respect, asserting that the rise in wages was conspicuous only among non–oligopolistic industries but cannot clearly be observed among oligopolistic industries, which suffered the most severe contraction of production in the crisis. Instead, Shibata places more emphasis on the downward rigidity of prices of commodities produced by oligopoly capitals as the fundamental problem at that time, together with the instability in the U.S. financial system and the international monetary system. Nakamura[2007] appreciates Shibata[1996]
After the Second World War, the capitalist world entered its “golden age”. Japan experienced around 10% annual real GDP growth every year for almost 20 years and revived from the ruins of war. Ouchi[1970] is arguably the most influential study in Japan on this prosperous period of capitalism, which interprets the era on the basis of Uno's crisis theory and the stages theory. In his work, the period is characterised as “state monopoly capitalism”, the phrase of which is well-known for Vladimir Lenin's definition on the post–first–world–war capitalism that was supposed to be in transition toward socialism, but Ouchi criticises the ambiguity in Lenin's work and the following studies of others such as Y. Pevsner, a Russian Marxist who engaged in investigating post–war Japanese capitalism, and K. Zieschang, an East German Marxist who had a deep impact in Japan on the study of this very topic. As a result, Ouchi's definition of “state monopoly capitalism” is radically different from that in the literature outside of Japan. His criticism can be summarised in two points. First, “state monopoly capitalism” should be distinguished from a simple wartime economy, since wartime regulation waned shortly after the war had ended. Ouchi insists that World War I should not be taken as a beginning of “state monopoly capitalism” and that it starts with the Great Depression that urged capitalist nations to rebuild the economic system entirely, forming the semi–stage of capitalism as a part of the stage of imperialism. Second, state capital as the developed form of monopoly capital cannot feature in “state monopoly capitalism”, according to Ouchi, because state intervention in the overall economy is in itself common in the whole stage of imperialism. Ouchi tries to specify what state policy can be regarded as characteristic of this semi–stage and concentrates on the effect of financial policy enabled under the domestic currency system flexibly managed without the restriction of gold reserves. It is maintained that inflationary financial policy raises the level of prices and thereby mitigates the pressure of the rise in wages and in interest, hence offsetting the causes of crisis. This mechanism prevents the outbreak of harsh crisis and makes long–term brisk growth possible, Ouchi[1970] concludes. The stage of imperialism was thus prolonged to post–war capitalism with some alteration and the crisis theory played a crucial role in the logic of Ouchi's achievement.

The 1970s inflationary crisis, however, undermined the system in the “golden age” of and attempts to abstract from it what Nakamura calls “the crisis theory of the Great Depression model”, which is typologically distinguished from “the crisis theory of typical model” that corresponds to the original type of Uno's crisis theory, consequently proceeding to what can be put as a multi–causal development in crisis theory. This mutual influence between theory and empirical studies can be regarded as a notable example in which the reorganisation of the stages theory eventually aroused the consciousness of reformulating the crisis theory.
capitalism, or even Ouchi's frame of reference for the system, prompting the methodological discussion on the relationship between the crisis theory and the stages theory. Itoh[1990] insists that the rise in wages and in the prices of raw materials, especially oil prices, must be regarded as the fundamental cause of the inflationary crisis in the 1970s, broadly supporting the argument in Armstrong, Glyn and Harrison[1984] and other works that observe profit squeeze underneath the turmoil appearing as stagflation. Itoh furthermore maintains that this verifies the practical effectiveness of Uno's crisis theory. On the other hand, Ouchi's unique system of "state monopoly capitalism", which assures the function of financial policy in alleviating the profit squeeze, cannot appropriately explain why this mechanism ceased to work in the 1970s. In Itoh[1981], which is the Japanese work preceding Itoh[1990], it is argued that this problem in Ouchi[1970] derives from a methodological fallacy. That is, according to Itoh[1981], direct application of Uno's crisis theory to the actual situation of capitalist economy like Ouchi's theory of "state monopoly capital" is too naive a way to conduct empirical analysis. The principle of crisis cannot directly explain the general theoretical interrelation between the actual capitalist dynamics and economic policy, Itoh maintains, and must be intermediated by historical studies, which forms the stages theory. Instead of the role of inflationary policy, he attributes the stable growth in the "golden age" of capitalism to military spending and welfare policy that were required to compete against socialism. This way of boosting economic expansion necessarily reaches its limit with the overaccumulation of capital under capitalist economy. Itoh thus first analyses the historical reality of world capitalism at that time and uses the theory of crisis only under the specific situation clarified through the empirical investigation. His methodology restricts the application of the crisis theory, hence allowing the stages theory to develop further in itself to deal with much diversified topics on the historical study of capitalism.

In spite of this limitation on the role of the crisis theory, the historical analyses on capitalism up to the 1970s by the Uno school generally approve the positive effectiveness of the crisis theory. Uno's crisis theory is literally regarded as the fundamental theory to the investigation of historical development and is referred to as the standard model to sort out the historical specificity, thus contributing to the extension and enrichment of the understanding of the stage of imperialism. As the stages theory proceeded to deal with the capitalism after the 1980s, however, this close connection between the crisis theory and historical studies began to fade away. After the 1980s, we have experienced recurrent financial bubbles and bursts all over the world and some theoretical attempts were made to elucidate these relatively new phenomena as we have overviewed in the earlier section. Nevertheless, the theory of crisis and its reconstruction have not been correlated with the recent development of the stages theory. Itoh[1990] and [2001] define the change in capitalism after the 1980s as "spiral reversal", stating "[c]apitalism seems to be running the film of history
backwards by ‘melting down’ the sustained trend of a century, and returning to the older stage of liberalism or even to that of mercantilism in some important ways.” (Itoh[1990]p.14) Although the definitions of the three stages of capitalism are originally related to the crisis theory, the “spiral reversal” itself is the description of empirical facts which can be grasped without the principle of theoretical crisis. Ouchi[2005] insists that capitalism after the 1990s can be characterised by decaying business cycles, conceiving the theoretical concept of crisis just as a negative image of the actual phenomena. These works do not extend the stage of imperialism any longer and to some extent share the recognition of qualitative change in the existing capitalist world. Since the change described in them is solely based on actual experiences, the stages theory is expanded with little reference to theoretical apparatus. Here we could have expected an active discussion about the reorganisation of the theory of crisis along with that of the stages theory, the purpose of which would be the systematic understanding of the modern type of financial crisis with clear logical relationship to the original Uno type of crisis and the theoretical investigation of the transformation in the modern era of capitalism. On the contrary, the independent development of the stages theory seems to have negated the importance of the theory of crisis, hence stagnating movement toward theoretical reformulation. While the stages theory was, in a sense, compelled to expand as capitalism survived throughout the 20th century, the overall framework of Uno's crisis theory was retained as it was and theoretical studies on the topic gradually lost momentum.

The recent financial crisis in 2007–8 came like a bolt out of the blue amidst the above academic situation and suddenly aroused the necessity for analysing crisis phenomena again. The studies on the modern crisis by the Uno school have diversified more than ever. Here we classify them roughly into three groups.

The first of them explains the recent crash from the viewpoint of the traditional style of Uno's crisis theory and tries to verify its effectiveness. Hoshino[2010] conducts an empirical analysis on the U.S. economy and points out the shortage of the labour force due to the increasing employment in the service sector from 2004 to 2007. This factor leads Hoshino to conclude “profit of US industries reached its peak in 2006 and began to decline since the next year because of a rising trend in unit labor cost… It is noteworthy that the declining trend of profit in US industries had began prior to the Lehman Shock in September 2008” (Hoshino[2010]abst.), thus observing the overaccumulation of capital against labour–power as the fundamental cause of crisis. Nitta[2013] pays more attention to emerging markets such as China, the rapid expansion of which were pushing up oil prices before the crisis. The rising gasoline prices dampened the demand for cars and damaged the rate of profit in car industries in the U.S., causing the overall economic downturn. This causality does not directly correspond with the profit squeeze type of crisis, but according to Nitta, it is the
“warped expression of the overaccumulation of capital” because gasoline is indispensable for driving a car and the rise in gasoline prices can be regarded as the rise in cost of the motorcar parts in a broad sense. While these two articles focus on the adaptivity of the framework of the overaccumulation of capital, Yamaguchi[2014] discusses the composition of the stages theory, relabeling the stage of imperialism with “the stage of finance capital” which continues until today. He divides this stage into four substages, 1. before WWI, 2. between WWI and WWII, 3. the period of the Cold War, 4. after the Cold War, and analyses the historical specificities in the fourth substage, taking the theoretical principle of the crisis as a standard model.

The feature in the second group of the contemporary crisis studies by the Uno school is the modification of the concept of the crisis theory. Itoh[2009] and [2013] are the leading works as to this approach, proposing the idea of “the financialization of labor–power” as the fundamental problem underlying “monetary crisis of type 2” mentioned above. It is supposed to be the deepened form of the contradiction of capitalism that has traditionally been defined as the buying and selling of labour–power in the Uno school, virtually indicating the expropriation from the working class through mortgage loans etc. “[M]ajor banks and other financial institutions began to expand consumer credit, and especially housing loans, to working people... In this sense, the commodity of labor–power has become increasingly financialized. This tendency can be called financialization of labor–power.”(Itoh[2013]p.12) This modification, however, does not mean two types of crisis theory can coexist within the theoretical principle of the crisis. Itoh[2014] makes this point clearer by way of criticising Harvey[2010], which appreciates a multi-causal approach, stating “[i]t is... not satisfactory just to specify the different models of crisis by comparing the 1973–75 and the subprime world crisis. The historical sequential context of these crises must be essential for understanding why real wages became so hard to rise even in the recovery phase since 2002 along with a prolonged depressive tone in the labour market, as well as why idle capital was so much mobilized speculatively into the US housing loan market by causing a sort of rather excessive consumer demand.” (Itoh[2014]abst.)

The third group of study takes the 2008 crisis as an opportunity to reform the stages theory comprehensively. Obata[2011] regards the feature in the current globalism as the rise of the newly emerging capitalism such as China and India, not as neoliberalism spreading from the U.S., and argues that globalism in that sense forms a new “plate” of capitalism arising from beneath the former “plate” of imperialism as emerging markets continued steady growth even after the financial crisis whilst the developed capitalist countries were faced with serious debt problems and stagnation. In Kawamura[2013a] and [2013b], it is maintained that “while its origin was in the United States, the global financial crisis cannot simply be attributed to the growth and collapse of financial bubbles
within that nation” (Kawamura[2013b]p.26), and that the 2007–8 crisis is a systemic crash of global capitalism since the mid–1970s, which shows two interlinked characteristic aspects: first, the development of the “global city” (Sassen[2001]) where headquarters of global companies control globally scattered business operations, and second, the “new empire circuit” of capital flows which globally finances the huge current account deficits of the U.S. with the U.S. dollar functioning as the international key currency. “The seriousness of the current situation becomes clear only when it is viewed in the context of this broader structural change in modern capitalism” (Kawamura[2013b]p.47), he concludes. Yokokawa[2013] rebuilds the stages theory, separating the development of capitalism after World War I as “bureaucratic capitalism” from “market capitalism”, which Uno's original stages theory covers. Overviewing his own theoretical apparatus called “institutional Marxian political economy” and the path of “bureaucratic capitalism”, Yokokawa classifies crises into three types, viz. cyclical, structural and systemic crisis, and accordingly discusses the subprime loan crisis and its meaning to capitalism as a whole.

Which of the three groups of argument will be dominant still remains to be seen. Neither of the first or the second group of studies sees the necessity of reconsidering the basic theory of crisis. The first insists on adapting the traditional formulation of Uno's crisis theory to the analysis on the recent crisis so there is no need to change it. Itoh modifies the basic concept of the crisis theory, but this modified theory does not substitute for the original; it is merely available to elucidate the current situation. Itoh is very consistent in this point, limiting the application of the crisis theory to the analysis on the real circumstances as carefully scrutinising the capricious activities of capitalism. Insofar as Itoh's methodology is taken, the basic set of the crisis theory is fixed and what changes is an ad hoc logic of crisis formation within the respective stages of capitalism. On the other hand, the third view should require complete reformulation of the theory of crisis. If the recent crisis is regarded as the contradiction of the whole system of global capitalism rather than as an incident within the developed countries themselves, it should be admitted that capitalism has already entered into an unexplored stage, in which a number of developing countries emerge as new capitalist nations in themselves. In order to capture this great historical transformation as such, the Uno school must carry out radical self–criticism the same way as Uno himself had critisised Marx.

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