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**Reconsidering Schumpeterian
Business Cycle Theory**
-From the Spiethoff-Schumpeter Perspective-

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Abstract: Schumpeter's *Business Cycles* has been evaluated as "a far-from-understood failure" (Shinohara 1999: 145) or "the limbo of 'out of print'" (*Introduction* by Fels in Schumpeter 1964: 10). Are those reasonable or acceptable evaluations? In this paper, to reply to those past evaluations, we reconsider Schumpeter's business cycle theory in direction for constructing the Spiethoff-Schumpeter perspective. In particular, we emphasize two points: The first point is to give more explicit explanation of the 'endogenous' business cycles. The endogenous feature of business cycles is the common for both Spiethoff and Schumpeter. However, we think the definition by Schumpeter is not necessarily distinct because of his quite extensive vision and a massive historical description. Therefore we make the definition more explicit in the light of Spiethoff's business cycle theory. As a result, we offer our concept of the Spiethoff-Schumpeter perspective. The second point is to consider the implication of the Spiethoff-Schumpeter perspective for modern evolutionary and institutional economics. We focus on institutions in this consideration. Schumpeter's three schemes of business cycles are divided broadly two types: one is on the Juglar cycle, the other is the Kondratieff cycle. We think the former is on a theoretical explanation on the endogenous business cycle. The latter is on a descriptive explanation on the institutional business cycle. In concluded remarks, we suggest the future research direction for modern evolutionary economics and institutional economics by applying the Spiethoff-Schumpeter perspective.

Keywords: Joseph A. Schumpeter; Arthur Spiethoff; business cycles; analytical framework

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1. Introduction

Schumpeter's *Business Cycles* has been evaluated as "a far-from-understood failure" (Shinohara 1999: 145) or "the limbo of 'out of print'" (*Introduction* by Fels in Schumpeter 1964: 10). Are those reasonable or acceptable evaluations? In this paper, to reply to those past evaluations, we reconsider Schumpeter's business cycle theory in direction for constructing the Spiethoff-Schumpeter perspective.

In particular, we emphasize two points: The first point is to give more explicit explanation of the 'endogenous' business cycles. The endogenous feature of business cycles is the common for both Spiethoff and Schumpeter. However, we think the definition by Schumpeter is not necessarily distinct because of his quite extensive vision and a massive historical description. Therefore we make the definition more explicit in the light of Spiethoff's business cycle theory. As a result, we offer our concept of the Spiethoff-Schumpeter perspective. The second point is to consider the implication of the Spiethoff-Schumpeter perspective for modern evolutionary and institutional economics. We focus on institutions in this consideration. Schumpeter's three schemes of business cycles are divided broadly two types: one is on the Juglar cycle, the other is the Kondratieff cycle. We think the former is on a theoretical explanation on the endogenous business cycle. The latter is on a descriptive explanation on the institutional business cycle.

To accomplish above two objections, this paper is constructed as follows. In section 2, we describe a brief biography on both Spiethoff and Schumpeter. In particular, we focus on their direct friendships at Bonn. In section 3, we examine previous research findings. There is an enormous amount of studies on Schumpeter's business cycle theory, on the other hand, we can hardly find any studies on Spiethoff. Thus, we focus on the latter, in particular. In section 4, we examine both business cycle theories respectively. In previous findings, Schumpeter's theory has been enough considered to some extent. However, Spiethoff's has not been necessarily studied enough because his German works has not been translated in English. Therefore, we put relatively emphasis on his theory. In section 5, we offer the Spiethoff-Schumpeter perspective. The method to construct this perspective is to abstract some common elements of both from our examination in previous section. In concluding section 6, we show a foresight of the Spiethoff-Schumpeter perspective towards modern evolutionary and institutional economics toward a next step of our research.

2. A brief Biography of both Spiethoff and Schumpeter¹

Arthur Spiethoff and Joseph A. Schumpeter had been in almost same era. Spiethoff was born in 1873 in Düsseldorf and died in 1957. Schumpeter was born in 1883 in Triesch and died in 1950. Hence, Schumpeter's life is all contained in Spiethoff's life. Spiethoff had trained and studied in environment of the German Historical School at University of Berlin under Gustav von Schmoller. Afterward, he had started his career as an assistant of Schmoller. In Schumpeter (1954), Spiethoff was placed one of the third generation in this School, together with Werner Sombart (1863-1941) and Max Weber (1864-1920). After he was a chief professor at University of Bonn in 1918, he had gained a reputation for his empirical studies of business cycles, and taught the principles of economics. On the other hand, Schumpeter studied at the University of Vienna where was a Mecca of the Austrian School. Therefore, in the background of Schumpeter's research, three main factors: neoclassical economics, the German Historical School and Marxism, were closely connected. He had an ambitious vision for establishing 'economic sociology' in the end.

In this section, we especially focus on their academic relationship at University of Bonn and their private friendship (See *Table 1.1*). In 1925, Spiethoff recommended Schumpeter as a candidate for a chief professor. At that time, Schumpeter had gone away from an academic circumstance. He had filled the Minister of Finance of the Karl Renner government in 1919 and a president of the private Biedermann Bank in 1921-24. After He failed as a president, in October 1925, Schumpeter could return to an academia thanks to good offices of Spiethoff and

¹ On Schumpeter's biography, quite a lot of works have already been published, in particular, McCraw (2007). Also refer to other works: Harris (Ed.) (1951), Schneider (1975), Swedberg (1991), Andersen (2007) and (2009), for example. Whereas few studies in English examined on Spiethoff's life. Kurz (2010) is one of a few studies.

Gustav Stolper. However, in 1926, his mother died in June at Vienna, what is worth, his wife and their newborn son also died in August. Then, Spiethoff made great support to Schumpeter. In 1932, Schumpeter had resigned his post at Bonn and decided to emigrate to America as a chief professor of Harvard University. At that time, Spiethoff had held a farewell party for Schumpeter. After he left Bonn, in 1933, Schumpeter edited the collected papers for Spiethoff to celebrate his sixtieth birthday and contributed himself a preface and an article. It is during the above period, which is shading in **Table 1.1**, that Spiethoff and Schumpeter directly had a friendship with each other.

Table 1.1: A Friendship between Schumpeter and Spiethoff

	Joseph A. Schumpeter (1883-1950)	Arthur Spiethoff (1873-1957)
1902		Vorbemerkungen zu einer Theorie der Überproduktion
1911	A professor at University of Graz	He was also one of the candidates.
1912	<i>Theorie der wirtschaftlichen Entwicklung</i> , 1 st German edition	
1916		He sent a letter to Schumpeter on warning against the customs agreement between Germany and Austria.
1918		A chief professor at University of Bonn
1919	The Finance Minister of the Karl Renner government (from this time, he went away from the academia)	
1921	A president of the private Biedermann Bank	He accepted Schumpeter to join the University of Bonn but Schumpeter declined.
1925	A chief professor at University of Bonn	He recommended Schumpeter as a candidate for a chief professor.
1926	He lost his mother, his wife and their son. <i>Theorie der wirtschaftlichen Entwicklung</i> , revised edition	Krisen He made an emotional support to Schumpeter.
1932	A chief professor at Harvard University	He held a farewell party for Schumpeter.
1933	He edited the collected papers to celebrate Spiethoff's sixtieth birthday.	
1939	<i>Business Cycles</i>	
1952		<i>Aufsätze zur ökonomischen Theorie</i>
1953		<i>Aufsätze zur Soziologie</i>
1954	<i>History of Economic Analysis</i>	<i>Dogmenhistorische und Biographische Aufsätze</i> (Above three books were edited by Spiethoff and his student Erich Schneider.)

Then, we come to mind that they had not only a friendship at academic and private lives, but also a mutual influence on their research on business cycles, although we cannot confirm only from **Table 1.1**. Spiethoff had already published an article entitled “*Vobemerkungen zu einer Theorie der Überproduktion*” in 1902, when Schumpeter was a student at the University of Vienna². Therefore, it is supposed Schumpeter would be known the Spiethoff's work and noticed its importance in ‘the third decade of sacred fertility,’ when he accomplished his early trilogy: *Das Wesen und der Hauptinhalt der theoretischen Nationalökonomie* (1908), *Theorie der wirtschaftlichen Entwicklung* (1912), and *Epochen der Dogmen- und Methodengeschichte* (1914). As the evidence, Schumpeter refers to Spiethoff sixteen times in Chapter 6 of *The Theory of Economic Development* (second edition) (1926). On the other hand, Spiethoff also exactly noticed the importance of Schumpeter's theory

² Schumpeter enrolled at the University of Vienna in October 1901.

of the economic development³ when he published his essential article entitled “*Krisen*.” In conclusion, both Spiethoff and Schumpeter were correlated with each other to accomplish each business cycle theory in terms of a search for essential elements of business cycles. This point is quite important to construct our Spiethoff-Schumpeter perspective.

3. Previous Research Findings

At first, we examine previous book reviews for Schumpeter’s *Business Cycles*. Schumpeter has completed this voluminous work after much effort. Nevertheless, it was almost ignored by then economists⁴. Although a number of critical reviews have been offered to his work⁵. Especially, the review by Simon Kuznets would be comprehensively much to the point. According to Kuznets (1941), the critical points are summarized as follows (270):

- (1) The book does not present a fully articulated and tested business-cycle theory.
- (2) It does not actually demonstrate the intimate connection between economic evolution and business cycles.
- (3) No proper link is established between the theoretical model and statistical procedure.
- (4) [The] Historical evidence is not used in a fashion that limits sufficiently the area of personal judgment.
- (5) The validity of three types of cycles is not established.

Kuznets made perceptive and substantial comments on the Schumpeter’s book. We suppose almost all readers agree Kuznets’ five comments. We still think, however, Schumpeter’s vision and his attempt to approach business cycles have many fascinating and unique contents, although his *Business Cycles* has many critical and substantial difficulties, The previous critical opinions were mainly on the part of statistical analysis. In terms of this statistical research, more sophisticated statistical analyses have been proposing by researchers, public agencies and private research institutes until now⁶. Here, we focus on Schumpeter’s theoretical part.

Secondly, on the theoretical part in *Business Cycles*, there has been the other evaluation: such as Lange (1941). Lange considered from the viewpoint of comparing Schumpeter with Marx in terms of their vision and scope. The similar way of evaluation can be seen in Tsuru (1993). According Tsuru, who was one of Schumpeter’s students at Harvard University, pointed some difficulties of Schumpeter’s work from comparison with Marxian economics as follows:

The recognition that the problem of business cycles is one of those problems which require the revelation of its connection to the specificity of capitalist society is the reputed strength of Schumpeter’s theory. If his theory is found to leave still much to be desired, the explanation may be that his approach is *from business cycles to capitalism* and that, due to the complexity of the intermediate links, the consummate synthesis is too much to hope for. In contrast to his theory, we shall now examine that of Karl Marx, whose approach may be said to be the opposite of Schumpeter’s, namely, *from capitalism to business cycles*. (Tsuru 1993: 48-49)

³ Shionoya (1997) show an evidence of this point by referring to a Spiethoff’s remark: “What is more amazing than that a man of 25 or 27 should write the history of that discipline! (Spiethoff 1949: 291).”

⁴ In terms of this reasons, we remember some points: such as the publication of Keynes’ *General Theory of Employment, Interest and Money* (1936) before three years or Schumpeter’s unfashionable historical description for practitioners.

⁵ As a recent critical examination, the controversy between Kingston (2006) and Andersen (2006) seems to be significant.

⁶ As one of the statistical analyses, in particular, based on Schumpeter’s business cycle, Solomou (1990) should be referred.

Tsuru recognized that: Schumpeter's analytical starting point was not necessarily on the case of the actual capitalist economy, but on the pure theory based on Walras' economics, on the other hand, Marx started from abstraction of the essence of capitalist economy and applied it to the phenomena of business cycles. Therefore, Marx's methodological prescription was the general conditions of cyclical phenomena, which were demonstrated as developing out of the general conditions of the capitalist mode of production. In other words, Marx's explanation of business cycles depended on the inclusion of institutional factors into the category of variables, on the other hand, the inclusion of institutions was not necessarily the essence for Schumpeter's explanation. In the end, Tsuru concluded on the comparison between Marx and Schumpeter as follows:

In conclusion, it must be stated that Schumpeter's edifice, though supported and embellished by countless references to concrete details of capitalist society, reduces itself logically to a theory which falls short of establishing a necessary connection between capitalism and business cycles, whereas the spadework which Marx carried out more than a century ago remains unchallenged and little improved. (p. 58)

As is known, Schumpeter's research was based on the Walras' statistics and the Marx's dynamics. For considering Schumpeter's business cycle theory, it is essential to examine correlation of his two theoretical bases. Especially the latter's 'endogenous' dynamics is now considered as "economic evolution." Thus, for the purpose of this paper, it should be more defined the concept of 'endogenous' through reconsidering the correlation of business cycle theories both Marx and Schumpeter.

Thirdly, in terms of previous studies on Spiethoff, it would be so much difficult to search and collect them, because his works was almost written in German. Although those have translated in English, in Japan, his *Krisen* was quickly translated in Japanese in 1936 and had been examined by especially Japanese Marxian economists since 1940s⁷, in particular. In 1940s, Hideo Aoyama, who was a non-Marxian economist, had tackled to examine Spiethoff's business cycle theory in earnest since early introduction by Yasuma Takada. In recent years, Mitsutoshi Ozawa has examined in detail on Spiethoff's methodology.

According to Aoyama (1940a) and (1940b), Spiethoff's business cycle theory is categorized as the non-monetary overproduction theory⁸. The theoretical bases of his theory are two theories: one is the 'disproportional theory' by Tugan-Baranovsky, on the other hand the 'saving theory' by Aftalion⁹. The former is the theory on the real side of the economy, on the other hand, the latter is on the monetary side. Aoyama recognized a signification of Spiethoff's theory in terms of a uniform explanation within both theories.

Aoyama pointed out, whereas, some critical points. The most essential question is "why is it impossible to solve the problem of overproduction by means of financial extension based on the overproduced productive goods?" (Aoyama 1941: 101-102) Aoyama describes that overproduction would be avoided by making efficient use of enterprise capital supplemented through financial extension during the upswing period. From Spiethoff's viewpoint, however, his answer would be negative. Because profitability and value of productive goods are declined by shortage of supplementary goods, those productive goods cannot become material bases for financial extension. Opposed to Spiethoff's negative answer, Aoyama suggests an alternative explanation. In short, it would be Schumpeter's theory on credit creation. This Aoyama's suggestion is quite important for us to construct the Spiethoff-Schumpeter perspective. Thus, we reexamine it in section 4.

Finally, in recent contributions on Schumpeterian business cycle, Heinz, D. Kurz examined the relation between Spiethoff and Schumpeter. The issues examined in Kurz (2010) are quite comprehensive: the Spiethoff's biography, the friendship of both, the comparison of their business cycle theories, and the comparison between their theories and others. If we venture to say our different focuses compared with Kurz (2010), this paper more focus on three points: (1) to examine the details of Spiethoff's theory, (2) to construct the Spiethoff-Schumpeter

⁷ Aoyama's papers in 1940s were collected in Aoyama (1958). Also see Ozawa (1984), which examined Spiethoff's business cycle theory from the viewpoint of Marxian economics and Marxian crisis theory.

⁸ There are various ways of classification of the business cycle theories: such as 'monetary or non-monetary,' 'endogenous or exogenous,' 'short-term cyclical or long-term trend.'

⁹ The examination from the same viewpoint can be seen also in chapter 10 of Rostow (1990), Chapter 10.

perspective, and (3) to examine the relation with modern evolutionary economics and institutional approach. In terms of the third point, it has already been advanced by several works: such as Witt (2002), Yagi (2004) and (2008), Shionoya (2008), and Andersen (2009) and (2011), in which the last two works by Andersen are emphasized an evolutionary feature of Schumpeter's vision and theory.

4. Spiethoff and Schumpeter on Business Cycle Theory

In this section, we examine Schumpeter's analytical framework of business cycle theory and consider Spiethoff's business cycle theory respectively. Schumpeter's theory has been already discussed considerably, therefore, we put emphasis relatively on Spiethoff's theory.

4.1 Schumpeter's Three-cycle Schema of the Business Cycle Theory: Reconfirmation

Above mentioned, although *Business Cycles* was an ambitious work subtitled "A Theoretical, Historical and Statistical Analysis of the Capitalist Process," it was almost totally ignored by economists at that time. What Schumpeter intended in his magnum opus was that the phenomenon of business cycles in the capitalist economy was a process of economic development itself.

Analyzing business cycles means neither more nor less than analyzing the economic process of the capitalist era. Most of us discover this truth which at once reveals the nature of the task and also its formidable dimensions. (Schumpeter 1939: v)

He had already established his theory of economic development in *Teorie der wirtschaftlichen Entwicklung* (1912). The key factors of his theory are next three points. The first factor is 'innovation' which is a cause of economic development. As is known, innovation covers five forms of new combination: the introduction of a new product, a new method of production, the opening of a new market, the acquisition of a new source of supply, and the reorganization of an existing industry. The second factor is 'entrepreneur' which is the subject of economic development or the agent of innovation. Schumpeter's entrepreneur is not a business manager himself. In contrast to a business manager who depends on existing goods and existing technological methods of production, the entrepreneur carries out new and creative projects. The third factor is 'bank credit' which is the means by which the entrepreneur accomplishes innovation. If the entrepreneur wants to undertake innovative activities, he must have control over productive resources. When an economy is in a static state with full development, the utilization of productive resources for new activities requires the forced withdrawal of the resources from existing uses. Faced with this situation, the entrepreneur acquires new credit from capitalists or banks and by means of the newly created purchasing power, pays higher prices than before for the needed resources. He is typically a debtor and repays what he owes out of entrepreneurial profits.

Schumpeter's theoretical method to analyze business cycles follows three steps. The first step is called the "first approximation," (See **Figure 4.1**) which is a pure theoretical model. In this scheme, two phases of business cycle are consisted: prosperity and recession. During the prosperity phase, an economy is distant from a certain equilibrium state caused by an entrepreneurial innovation. On the other hand, an economy returns to another equilibrium state through an adaptive process during a recession phase. The engine to change current conditions is creative destruction by the entrepreneur who is highly motivated and puts into practice the new combination by practicing his entrepreneurship. Therefore, the first phase is the innovative disequilibrating process, the second phase is the adaptive equilibrating process. It is important to recognize the first equilibrium state is not the same as the final equilibrium state. Different points are the productive condition, the level of production, the demand level of each heterogeneous firm, and so on. According to Schumpeter, in a static state, "everyone will cling as tightly as possible to habitual economic methods and only submit to the pressure of circumstances as it becomes necessary" (1934: 8-9). A static equilibrium state is expressed as the "circular flow" if the time element is taken into account. In the circular flow, the quantity and pattern of national products remain constant as the process of production follows the same route year after year. Schumpeter, in the first chapter of *The Theory of Economic*

Development, devised the concept of circular flow, in which an economic system repeats itself on the same scale year in and year out by introducing time into the concept of equilibrium. Even if changes occur in the circular flow of an economy resulting from changes in the data, they will occur continuously and in small steps within a fixed framework; therefore they can be treated by the method of economic statics. The elucidation of the process in which the phenomena of equilibrium destruction caused by an entrepreneurial activity is absorbed by the equilibrating mechanism and tendency of in an economic system and forms a business cycle. Schumpeter interpreted the market mechanism expounded by static theory as a response apparatus to innovations and then assumed the “neighborhoods of equilibrium” which is an actual counterpart of the equilibrium concept, at the midpoint of a business cycle scheme. Therefore, the first approximation is a pure theoretical model.

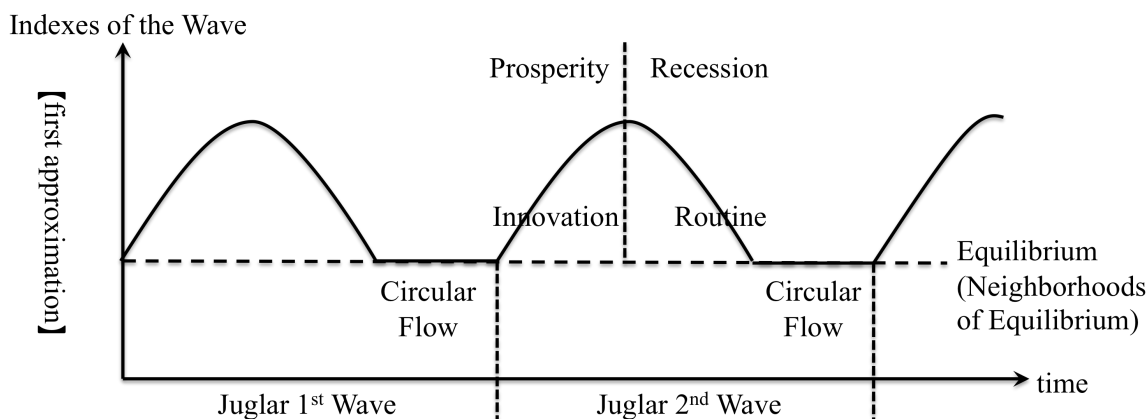


Figure 4.1: The first approximation (arranged from Andersen 2009: 219, Figure 8.5)

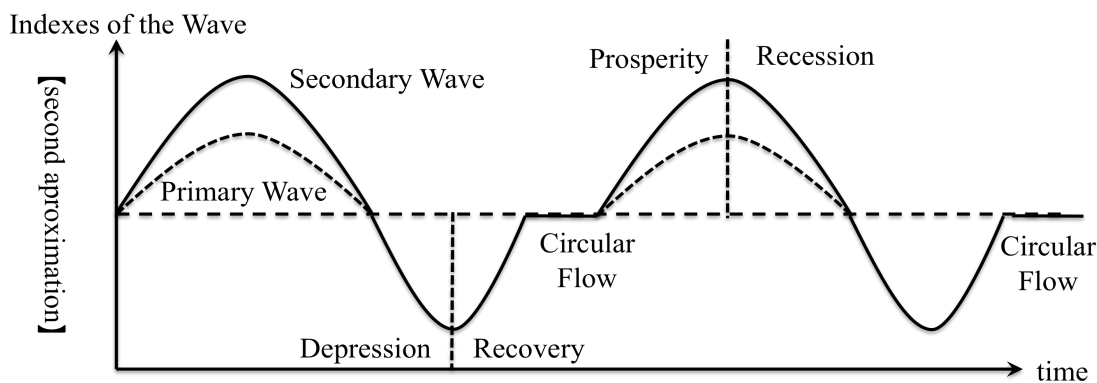


Figure 4.2: The second approximation (arranged from Andersen 2009: 231, Figure 8.7)

The second step is the “second approximation,” (See **Figure 4.2**) which is based on the first approximation and added several assumptions into that, in other words, Schumpeter denied five assumptions of the pure theoretical model (Andersen 2009: 233): (1) Each wave of evolution is unaffected by previous evolution. (2) Saving plays no significant role in the evolutionary process. (3) Credit creation is solely made for the finance of innovative projects. (4) Innovation does not create investment opportunities in established industries. (5) The response to innovation takes place under the condition of efficient competition and full employment. In this second approximation, Schumpeter distinguishes the wavelike fluctuation in economic activity in four phases: prosperity, recession, depression, and recovery. The essential factor in this scheme is agents’ psychological state. When one entrepreneur succeeds to realize a new combination, a crowd of others begins to imitate his activity and method. These micro agents’ innovative activities swarm during a prosperity phase, and a disquilibrating force becomes still more powerful and formulates a “secondary wave.” On the contrary, during the following recession phase,

the “abnormal liquidation process” is also heavily, thus, agents’ psychological instability is intensified. Because of the reinforced psychological instability, agents in an economy cannot well adapt to a new condition, The recession phase passes through away from a next equilibrium state (a next neighborhoods of equilibrium) through a vicious spiral in which pessimistic expectation acquires a causal role. As a result, an economic system enters a depression phase. Then, Schumpeter investigates about how to switch from the bottom of a depression phase to a following recovery phase. According to his proposition, some accompanied factors, which are lowered level of interest rate and resumption of slow innovative activities in the “depression undertakings,” which contains such as the food industry and the public works sector, would make a state improve.

The third step is the “third approximation,” which Schumpeter presented by means of the only analytically motivated drawings like **Figure 4.3**, which is described three simultaneous cycles in one scheme: one Kondratieff long wave (①), six Juglar cycles (②) and eighteen Kitchin cycles (③). Integrating three cycles in a same scheme, a long-term cycle is not only influenced by various factors within it, but also formed a discontinuous shape. Therefore, this third scheme would not be able to explain by a single common theory. It should be explained not only by the economic aspect which is the market mechanism, but also by the noneconomic aspects which contain such as history, institutions, culture and so on.

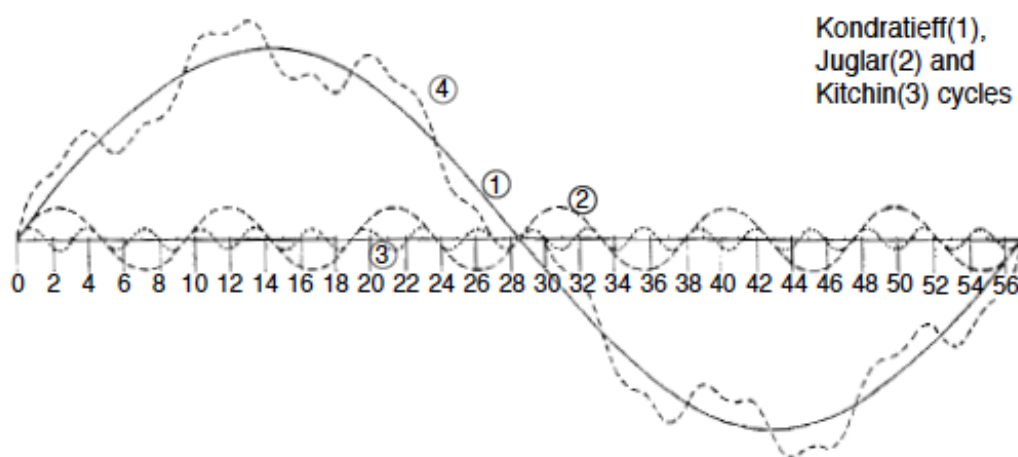


Figure 4.3: The third approximation (Schumpeter 1939: 213)

Here, we suggest that it is useful to divide three approximations into two groups: the first and the second approximations and the third one. The former two approximations are concerned with the “Juglar cycle,” on the other hand, the latter is concerned with “Kondratieff cycle.” Therefore, the theoretical understanding of business cycles does not make progress step by step, rather there is a deep rift between the formers and the latter. We should not, however, force to fill a rift, because two groups are different in terms of their theoretical bases. That is, the pure theoretical framework explains the formers, and Schumpeter’s “economic sociology” explains the latter. In the formers, the economic fluctuation is started by the investment to innovative activities. The volume of investment affects the degree of cyclical fluctuations. On the other hand, in the latter, business cycles are formulated in the long run not only by the investment, but also by stocks, technological conditions, and policies by firms and government. Each institution and the correlation of several institutions affect the whole economy in the long run. In this sense, the latter is related to Schumpeter’s economic sociology.

To understand Schumpeter’s explanation on the process of economic development, his early article entitled “On the Nature of Economic Crises” (1910) is quite useful. He summarized the features of the development process in nine theses (See **Table 4.1**). According to Andersen (2009), the signification of his article is in “the demonstration that an evolutionary theory of crises follows from his general model of economic evolution” (117). Moreover, Schumpeter himself showed the overall process of economic development, which had given a basis for his later works:

These ‘counter-movements’ not only restrict development, but end that development completely. A

number of values are destroyed, and this changes the basic conditions and assumptions contained in the plans of leading men of the economy. The economy must be rallied, before it can move forward again, and its value system must be reorganized. And the development that is implemented after this new, not simply a continuation of the old. (Boianovsky (Ed.). 2005: 17)

Table 4.1: The Nine Theses on the Process of Economic Development (Boianovski (Ed.). 2005: 50)

Theses	Keywords	Contents
1st	Process Types	The economic processes fall into two separate and, in practice, clearly distinguishable categories: static and dynamic.
2nd	Evolution	The dynamic category constitutes the purely economic development, that is, those changes to the appearance of the economy that develop out of the economy itself.
3rd	Disturbance	Economic development is essentially a disturbance of the static equilibrium of the economy.
4th	Equilibration	This disturbance causes a reaction in the static masses of the economy; namely, a movement towards a new equilibrium state.
5th	Reorganization	This process of convergence to a static state necessarily creates an end to each specific phase of the development and causes a reorganization of the value and price system of the economy and a general 'liquidation.'
6th	Cycles	These statements explain the phenomenon, which is popularly characterized as the change between prosperity and depression.
7th	Crises	During the process of convergence to a static state and, especially, during the time of its inception, collapses can easily develop, which we turn economic crises <i>par excellence</i> and which render the process 'abnormal.'
8th	Coincidences	The economy – and, indeed, this includes the static economy – is also exposed to coincidental disturbances, which, if they are sufficiently significant, can cause such crises.
9th	Unimportance	But these crises present no problem, they can indeed be effortlessly understood. They are not fundamentally related to a uniform phenomenon, carry no deeper common characteristics and do not result from a necessity inherent to the economy or any of its special forms of organization. The prevailing view, that crises thus occur if a large disturbance breaks out somewhere in the economy, is not only correct but also completely exhaustive.

In the other part, he also mentioned the relation between the empirical aspect and the theoretical framework on business cycles:

Although empirically it may be concluded that the larger trends of all these part-developments, which lie between the 'setbacks', all coincide with the large overall contour of the development, but theoretically we cannot consider merely the overall contour. Just as the entrepreneur cannot jump over the setback phase and rescue his plans into the next part-development stage, so the theory cannot do the same without completely losing touch with reality. (ibid.: 17-18)

According to **Table 4.1**, the first thesis is on the two 'process types' of the economic development. Schumpeter recognized that economic phenomena were classified into two distinct categories: static phenomena and dynamic phenomena. The second thesis is on the 'evolution' on the feature of capitalist development. Dynamic phenomena relate to purely economic development, the changes in an economy that originate from within the economy and are generated by the creation of new combinations by entrepreneurs with uncommon talents and energy. It should be a key thesis for our consideration at the next section. The third thesis is the 'disturbance' during the development process. Schumpeter understood economic development was essentially the disturbance of a static economic equilibrium. Therefore, this disturbance seems to be equal with an intentional activity by an entrepreneur. The fourth thesis is on the 'equilibrium.' The disturbance emerging within the capitalist economy evokes reactions that eventually lead economy to another new equilibrium. The fifth thesis is on the

'reorganization' of the capitalist economy. The process toward equilibrium terminates the development phenomena and brings about the liquidation and reconstruction of the value and price system of the economy. The sixth thesis is on the 'cycles.' As a result, there are alternating booms and depressions. The seventh thesis is on the 'crises.' In the process toward equilibrium an economic crisis can easily, though not necessarily, take place. The eighth thesis is on the 'coincidences.' Even a static economy is exposed to accidental disturbances leading to economic crises. The final ninth thesis is on the 'unimportance.' Disturbances are not uniform phenomena, nor they characterized by common features.

As mentioned above, for Schumpeter, the goal of dynamic theory was an autonomous theory that explains endogenously the dynamic mechanism of a capitalist economy in a similar way to which the static theory endogenously explains the working of a static economy. However, in this part, we could only reconfirm the innovation process caused by the correlation among entrepreneurs, imitators, and banks as the meaning of "endogenous." Then, we consider the Spiethoff's business cycle theory to make our understanding of "endogenous" more explicit.

4.2 Spiethoff's Analytical Framework on Business cycles

In this part, we examine three Spiethoff's works: "Preliminary Remarks to a Theory of Overproduction" (1902), "Business Cycles" (1925) and "The 'Historical' Character of Economic Theories" (1952). Through the examination of these works, we can grasp essence of his business cycle theory and bring about some implications. The specific issues are two points: (1) to understand the process of business cycle in the direction of his nonmonetary overinvestment theory, (2) to examine his specific concept of "economic style."

Firstly, Spiethoff's business cycle theory is classified into a nonmonetary overproduction theory in general. Before we examine the details of the process of business cycles, it is useful to understand his distinction of some concept of goods. The basic classification of goods is between "investment goods" and "indirect consumption goods." The former are productive facilities for fresh goods, which are either for means of production (mines, steelworks, machine factories, brick-ovens) or consumer goods (spinning and weaving mills, flourmills, bakeries) or residential buildings or public utilities (railways, water and light supplies). The latter are necessary to make those investment goods: such as iron, coal, bricks cement, timber. According to Spiethoff (1925), the meaning of this division that "the essential difference between the cyclical phase of upswing and downswing consists in changes in indirect consumption goods and in investment goods," (Spiethoff 1953: 93) in short, Spiethoff's concept of overproduction deals not with absolute overproduction but with one of a special kind (ibid.: 155).

A main trigger to bring the upswing phase is investment to indirect consumption goods. During the upswing phase, the volume of investment increases more and more. As a result, at the end of this phase, the overproduction of indirect consumption goods is revealed. In other words, this is the shortage of the "complementary goods," which is almost the labor. This shortage of the complementary goods equals to the lack of "disposable savings" from the monetary aspect. Regarding this point, a great volume of investment to the indirect consumption goods has been expended since the starting point of the upswing phase. Therefore, although Spiethoff's theory is categorized in nonmonetary theory, he explicitly mentions the monetary aspect and the roll of credit creation. His focus is only more on the real capital aspect than the monetary one.

Above mentioned in section 3, a detailed examination by Aoyama on Spiethoff's overproduction theory is much to the point. Although Aoyama does not mention the monetary aspect in Spiethoff's explanation, Spiethoff does not necessarily deny a situation of tight financial conditions at the turning point between upswing and downswing. Rather, he goes ahead his consideration to distinguishing what is in the background in the tight financial situation. That is to say, he introduces the monetary 'saving theory' to the real 'disproportional theory.' And then he made clear that there was the lack of disposable savings at a basis of tight financial conditions, and there was the disproportion between the real goods sectors in a background of the lack of disposable savings. Therefore, Spiethoff's business cycle theory is not simply categorized in nonmonetary overproduction theory, but it is more comprehensive theory. His theory has validity to some extent except for ambiguity of his explanation

on the financial aspect¹⁰.

Table 4.2: Spiethoff’s Schematic Model of Cyclical phases and Contents of Each Stage (arranged from Spiethoff 1953: 123)

Downswing or Depression	Recession or Slump	Decline in investment, iron consumption, iron production, rate of interest.
	1 st revival	Iron production, iron consumption, investment cease to decline and start a slow upward movement.
Upswing	2 nd revival	Greatly increased investment, particularly in ordinary shares. Iron consumption approaches the peak of the previous boom.
	Boom	Rising rates of interest; iron consumption surpasses the previous peak.
	Capital Scarcity	Capital is difficult to find: investment declines, rates of interest are high, share prices recede, residential building declines, iron consumption contracts.
Crisis		Collapse of credit, numerous suspensions of payment.

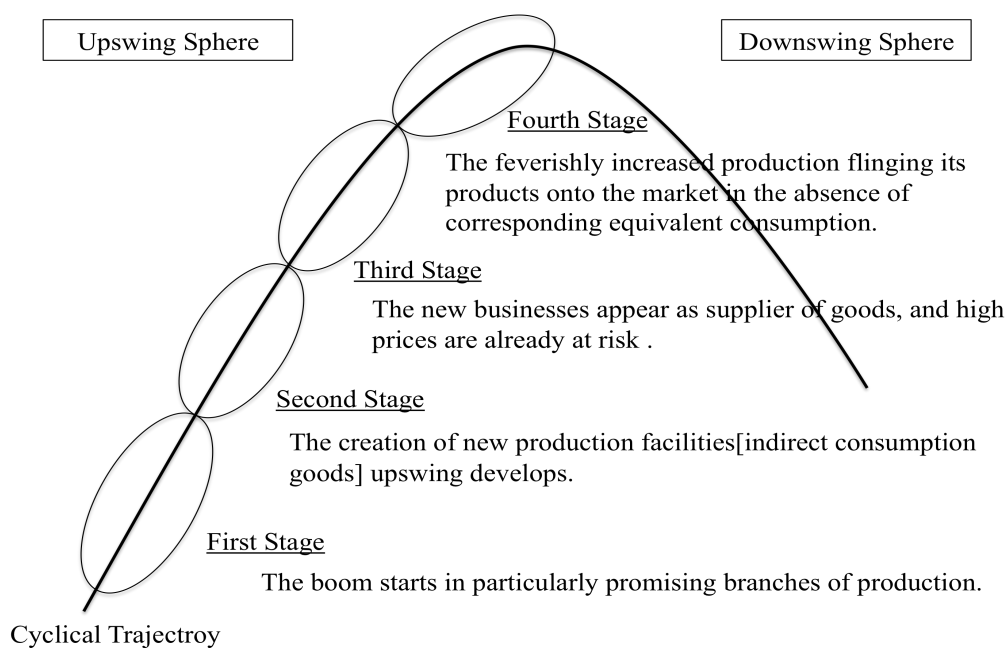


Figure 4.4: Four Stages of in Upswing Sphere of Spiethoff’s Scheme

Different from Schumpeter, Spiethoff is divided a whole process of one business cycle into three phases or six stages in detail (See **Table 4.2**). The upswing phase is divided more three stages or to be strict four stages. For our consideration, in terms of comparing Spiethoff’s scheme with above Schumpeter’s Scheme, we draw the former’s scheme as **Figure 4.4**. In the first stage, “particularly promising branches of production, from which capital expects a degree of profitability contrasting with the otherwise depressed rate of return, and from there a general upswing develops.” (Hagemann (Ed.) 2002: 53) This stage is formulated the conditions for the start of the boom. In the following second stage, “new production facilities [indirect consumption goods] are created.” (ibid.) These new indirect consumption goods absorb a considerable amount of investment without the products of the expanded reproduction process initially appearing as a counterweight. This second stage seems to draw the process toward the peak of the boom. In the third stage, “new businesses not only appear as demanders, but also as suppliers.” (ibid.) At this stage, interest rate is rising and high prices are already at risk. In the final fourth stage, feverishly increased production flinging its products onto the market in the absence of corresponding equivalent consumption.” (ibid., p. 54) As a whole, the engine of the upswing is an “innovative” investment to the idle

¹⁰ Furthermore, Spiethoff published an article on the financial policy: “Kreditpolitik,” *Die Kreditwirtschaft 2 Teil* (Kölner Vorträge, Bd. 2), Leipzig 1927. We can real this Japanese translation in Ozawa (2000).

capital, which is accumulated during the previous depression, and the practice of new combination as the same of Schumpeter. Aoyama suggested that: Spiethoff should be recognized a role of Schumpeterian entrepreneur and he mentioned the fundamental cause bringing the boom to a collapse was the “idleness” of industrial entrepreneurship. However, Spiethoff explicitly states about this at section II in his early article Spiethoff (1902):

At the beginning of the boom, large supplies of investment-seeking capital, accumulated during the depression, are available, which, though constantly replenished, are nonetheless gradually absorbed, so that from a particular moment onwards reproduction can no longer call on the accumulations of the depression to any great extent, but has to depend on newly formed capital. (Hagemann 2002: 55)

The second category of overproduction, which constitutes the content of the slump and depression, is in the first instance a rebound of the antecedent boom and overspeculation, both psychologically and economically. (ibid., p. 60)

Furthermore, in Spiethoff (1925), he starts “The Explanation of the Business Cycle (the title of section V) from the psychological aspect of an entrepreneur in the beginning point of the upswing.

The ultimate cause of the upward movement is of a psychological rather than of an economic nature. In former times, the acquisitive instinct was not the same as it is today, and it will again be different in future days. These differences, together with moral views regarding the values of life, form one of the causal chains for the historical origin of business cycles and their outward and inner extent. The further evolution of these factors will largely determine the future course of business cycles. (Spiethoff 1953: 181-182)

A downswing is primarily a reaction to an upswing, to overspeculation and to a crisis, a reaction which is psychological as well as economic. The ebullience of the spirit of enterprise is followed, as a psychological reaction, by its prostration; investment is regarded with widespread distrust. (ibid., p. 195)

From these citations, it would be apparent on the origin and introduction of the upswing that idle monetary disposable savings¹¹ and idle productive capital¹² accumulated during the depression phase are recirculated and employed again in the production process.

Secondary, we consider the Spiethoff’s specific concept of “economic style.” This concept was derived from the tradition of the German Historical School. The German Historical School was a common background for both Spiethoff and Schumpeter. It challenged classical economics from a transcendental viewpoint. In keeping with its political and ethical orientation, it advocated the historical approach, which has not been established as a paradigm in economics. Although Adam Smith emphasized an importance of historical observations, German Historical School has not taken one more step forward from the stage of accumulating historical specific facts as opposed to the theoretical development of classical economics. Considerably influenced by from Gustav von Schmoller, Spiethoff reached the own idea of economic style through Schmoller’s contributions elsewhere Max Weber, Werner Sombart and Edgar Salin.

In Japan, among few and far between researchers on Spiethoff’s economics, Mitsutoshi Ozawa has examined Spiethoff’s business cycle theory and his methodology since 1980s, in particular. According to Ozawa, compared

¹¹ Spiethoff mentioned four forms; (1) Idle manufacturing capital, (2) Bank deposits, (3) Advances to businessman to enable them to hold stocks due to overproduction, (4) Securities susceptible of being transferred abroad. (Spiethoff (1925/1953), p. 185)

¹² Spiethoff mentioned five forms; (1) unemployed labour, (2) productive capacity which is not used, (3) money held by individuals or by banks, (4) goods, whether means of production or consumer goods, when held by their makers or by dealers, (5) provisional capital export, in whatever form, with the intention of repatriation during the upswing. (ibid., p. 186)

with that a nonhistorical pure theory does not have the relevance to an actually existing reality, economic style is a “historical theory” obtained by the isolation of temporally and spatially specific facts. We can find the same interpretation in Spiethoff (1952)¹³:

Uniformities during certain periods or epochs –time-conditioned uniformities- can undergo a theoretical treatment; but, because of their character as time-conditioned uniformities, theory concerning them is not of universal applicability; it is “historical” theory. (Spiethoff 1952: 137)

Historical theory can deal not only whole patterns of economic life, that is, institutional setups, but also with individual institutions. (ibid.: 139)

Here, we notice that Spiethoff mentioned to an institution in relation to historical theory. It seems that considering economic style and establishing historical theory focus on the historically specific institutions! It may be signified that considering the long-term economic fluctuations as the same of Kondratieff long waves is equal to considering institutional changes.

5. The Construction of the Spiethoff-Schumpeter Perspective

Above two parts in previous section, we considered business cycle theories of both Schumpeter and Spiethoff respectively. Then, in this section, we abstract their common features through a comparison of the both. Above mentioned in section 3, we mentioned recent contributions modern evolutionary economics and institutional economics. Although we really agree with those studies, we suppose some issues to be solved for evolutionary reconstruction of Schumpeter’s theory. Therefore, the examination of these issues would constitute our Spiethoff-Schumpeter perspective.

On the whole, they share a recognition which, as an ignition point of economic development, innovation, are distinctive, partial, and unordered, so that economic development as a whole is no more than an aggregate of its parts, not a unified macro phenomenon. Schumpeter said, “cycles are not, like tonsils, separable things that might be treated by themselves, but are, like the beat of the heart, of the essence of the organism that displays them.” (Schumpeter 1939: v-vi) Spiethoff would hold this idea in common.

1) *the meaning of “endogenous”*: According to Schumpeter, the meaning of “endogenous” is explained that economic development in the capitalist system is perceived to depend on spontaneous changes in the endogenous factors of the system. However we suppose this conventional explanation has not been exactly well-defined until now. At first glance, Schumpeter’s business cycle theory seems to be a simple theory in which innovation is an essential factor to lead economic development. However, the range of real problems contained in the economy should be quite multiple. Therefore, Schumpeter was aware of that the theory of economic development should be followings: (1) It should be a multi-sectoral economic analysis. (2) It should be a cyclical theory of development. (3) It should be both a real material theory and a monetary one. These multiplicity and complexity are brought from three components of Schumpeter’s concept of economic development; innovation, entrepreneur and bank credit. Thus, these three elements’ interactions give birth to the endogenous features.

On the other hand, Spiethoff made a relatively explicit explanation on the meaning of “endogenous.”

Fresh influences must, however, have joined in, for so far only the free, highly capitalist market economy has pursued its course in short and relatively regular ups and downs. These new influences may be regarded as endogenous, since they originate in the economy itself and its own elements. The first element is economic man and his instincts. ... The second element is the nature of capitalist production. ... The third element is the free market system based on money. (Spiethoff 1953: 199-200)

¹³ See also Fritz Redlich paper (1970), who is a translator of Spiethoff (1952). Furthermore, Spiethoff himself claimed to be distinguished between mere “history” and “historical” theory.

Three elements referred in this citation would be concerned in order psychological, capitalistic, and economic element. Although this explanation would not be enough well-defined, it would not matter if we judge Spiethoff is relatively succeeded to define the concept of “endogenous”, opposed that Schumpeter did not establish satisfactorily a rigid theoretical formulation in response to his theoretical and methodological agenda.

2) *the role of the entrepreneurship*: According to Schumpeter, it goes without saying that the role of entrepreneur is critically essential factor. A strong motivation of an entrepreneur is necessary to practice the entrepreneurship. Above mentioned, Schumpeter emphasized this mental factor in the second approximation. Regarding such a psychological aspect, Spiethoff also emphasized as following:

Once special expectations have intensified the acquisitive instinct and spirit of enterprise in the more impressionable minds, the others are soon affected by the infectious influence of this state of mind and mass psychology does the rest. (Spiethoff 1953: 182)

To create a lodestar for capital investment, brave, enterprising men are needed, willing to risk a large part of their fortune, and often their very fate, in order to carry out an idea. (ibid.)

The boom sets in when the spirit of enterprise grows so strong that the demand for capital raises rates of interest. A chain of upswing phenomena develops, each of which calls forth the next. As with a rolling snowball, each turn expands the sphere: increased investment, increased consumption, rising prices and profits, together with the expansion of production and of capital formation and then again increased investment etc. (ibid., p. 188)

We think these citations are quite noticeable. The first citation and the third one correspond to Schumpeter’s swarms of innovative activities based on the crowd psychology. This process would be explained that the possibility of innovation does not spread evenly over time and because entrepreneurs are followed by many imitative firms so that innovations trend to cluster in a competitive market. The second one also corresponds to just Schumpeter’s entrepreneurship.

3) *Analytical schema divided into the Juglar cycle and the Kondratieff cycle*: Schumpeter’s analytical frameworks on business cycles have three types, while Spiethoff’s has one type. At a glance, both analytical frameworks are different. However, on one hand, Schumpeter’s schema would be able to divided broadly into two categories: one is corresponded to the Juglar cycle, another is corresponded to the Kondratieff cycle. On the other hand, Spiethoff’s analytical schema also two types: one is his business cycle theory, which corresponds to the Juglar cycle based on overinvestment to indirect consumption goods, and the other is his economic style, which corresponds to the long-term institutional framework. We understand this latter type is coordinated with the Kondratieff long wave. Consequently, we think that both Spiethoff and Schumpeter stand on the same analytical framework.

In terms of the above third point, it may be significant to compare both theories with Marx’s crisis theory, because both Schumpeter and Spiethoff was affected by Marx or Marxian economics. According to Marx, one of the possibilities of economic crises is concerning the realization of values of products. In other words, it is critical that the effective demand exist to realize values of products. If the interval of time between the two complementary phases of the process, C_1 -M- C_2 , becomes too long, if the cleavage between the sale and the purchase becomes too great, the essential unity of the process asserts itself convulsively by producing a crisis. The other possibility is that the cause of all real crises always remains the poverty and restricted consumption of the masses as compared to the tendency of capitalist production to develop the productive forces in such a way that only the absolute capacity of consumption of the entire society would be their limit. As Tsuru said, “Capitalist production is continually engaged in the attempt to overcome a barrier of harmony, but it is inherent

that it is overcome only by means which again place the same barrier in its way in a more formidable size.” (Tsuru 1993: 55) This means Marx’s historical materialism. Therefore, Marx started from an abstraction of the actual capitalism and applied it to the phenomenon of business cycles.

On the other hand, according to Schumpeter, in capitalist economy, it is innovation, not the class structure, which mediates bilateral interactions between economic and noneconomic spheres. That is to say, entrepreneurship, as one of the noneconomic mental elements, and capitalistic relationships of production, as economic spheres, are interrelated by innovative activity of an entrepreneur. Therefore, as Tsuru said, “Schumpeter’s approach was from business cycles to capitalism whereas Marx’s was the reverse, from capitalism to business cycles.” (ibid.) In general, it has mentioned that, for Schumpeter, Marx was essential one of his essential research backgrounds. However, indications by Tsuru explode the established statement.

Although Schumpeter and Marx adopted opposite approaches on the analysis of capitalistic business cycles, we regard in terms of the relationship between long-term economic growth and short-term economic fluctuations they would share a common understanding that it should be divided long-term trend of economic evolution with short-term economic fluctuations. If we describe it intuitively with a scheme as the same of Schumpeter’s business cycle scheme, it would be like **Figure 4.5**. On the viewpoint of Marx, although a short-term process of capital accumulation fluctuates with overaccumulation and underaccumulation, a long-term average trend generate an upswing trajectory of equilibrating capital accumulation. Whereas on the viewpoint of Schumpeter, his second approximation during the upswing phase of Kondratieff cycle is drawn as years of prosperity are more numerous than those of depression. The opposite would be also true in a downswing phase. A similar understanding can be found in Kondratieff’s early work (Solomou 1990: 5). Moreover, according to Solomou, “both Kondratieff (1979) and Spiethoff (1953) noted that prosperous years tended to predominate during long-wave upswings, whereas years of depression predominate during the downswings” (ibid.: 17).

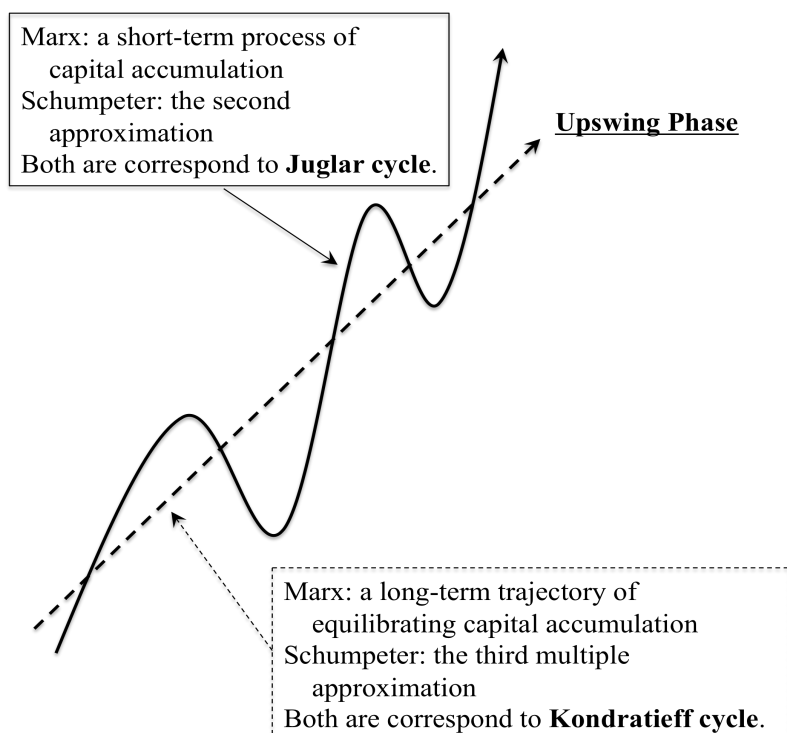


Figure 4.5: The Correlation between Juglar cycle and Kondratieff Cycle in

Though above examination, we suppose that the common analytical framework among Marx, Spiethoff and Schumpeter is not a symmetrical shape as Schumpeter’s approximation but a compound shape as **Figure 4.5**.

Whatever happens, we examined essential components of the Spiethoff-Schumpeter perspective as above mentioned in this section. Summarizing in brief, we could formulate our concept of the Spiethoff-Schumpeter perspective by three components: the first is an endogenous nature, the second is a psychological aspect of agents, and the third is a revised version of two analytical schemes.

6. Concluded Remarks

In this paper, we pointed out three characteristic elements of the Spiethoff-Schumpeter perspective through the examination of individual relationship between Spiethoff and Schumpeter and the comparison with between both theories. As concluded remarks, we have a view of possibilities of our Spiethoff-Schumpeter perspective toward the development with modern evolutionary economics and institutional economics.

Until now, so many contributions trying to development Schumpeter's works toward a new direction have been accumulated in modern evolutionary economics and institutional economics. In particular, Esben Sloth Andersen has emphasized that Schumpeter himself was inherently modern evolutionary economist and his business cycle theory could be interpreted the analysis of an evolutionary process of economic development¹⁴. The recent development in the direction of this research has been advancing in two directions, we suppose. One is the development of endogenous business cycle theories. These theories have various versions exist. For example in Aghion and Howitt (2009), they constructed the "Schumpeterian" model, but we should necessary to examine whether their macroeconomic theoretical model is composed of the real "Schumpeterian" features, which is the meaning of our Spiethoff-Schumpeter perspective. To the contrary, we should develop our research in direction for modern evolutionary economics since Nelson and Winter (1982). The other is the development of institutional long wave theories. We examined in this paper that Schumpeter's or Kondratieff's long wave theory should be interpreted as the cycle of institutions. Moreover, this cycle of institutions also determine Spiethoff's economic style. Recent contributions: such as Freeman et al. (1982), Freeman and Perez (1988), Perez (2002), Hirooka (2003), and so an, are studied institutional features of long waves. As Shionoya examined, the final goal of Schumpeter's research program was to establish "economic sociology." We can perceive a fragment of this goal from the 'lost' seventh chapter of the first German edition of *Theorie der wirtschaftlichen Entwicklung*, entitled "The Economy as a Whole," Schumpeter located the summary of preceding chapters in the wider context of social life and attempted to provide a comprehensive explanation of the development of a society as a whole¹⁵. He considered such areas as the economy, politics, social relations, the arts, science and morality. Assuming that social institutions condition the behavior, motives, and propensities of individuals, and that institutions change through the interactions among individuals in a historical process, it should be dealt with the institutional givens in theory and their changes in history. Schumpeter's final destination of economic sociology, in which a theoretical analysis of the development of institutions should be concerned, addresses a wider object of development on both economic and noneconomic domains. But it seems to be difficult to deal with the overall interactions between all the areas; rather, it summarizes the interactions between economic and noneconomic areas by focusing on the institutional factors that are closely associated with economic activities.

Finally, we suggest that above two future directions are corresponded to a subtitle of Schumpeter's *Business Cycles*. That is, the construction of Schumpeterian endogenous business cycle theory is the subject of "theoretical" and "statistical" research areas, and the examination of the institutional long wave theory is the subject of "historical" research area. Consequently, both research directions are contributed to the embodiment of the Spiethoff-Schumpeter perspective.

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¹⁴ See Andersen (2009) and (2011).

¹⁵ A new translation in English by U. Backhaus is Schumpeter (2002). Also see Part. 1 in Hanusch and Pyka (Eds.) (2007), Peukert (2002), and Yagi (2008).

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