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GUNNAR MYRDAL'S THEORY  
OF CUMULATIVE CAUSATION REVISITED

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# **Gunnar Myrdal's Theory of Cumulative Causation Revisited**

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## **Abstract**

The aim of this paper is revisiting and reevaluating Gunnar Myrdal, especially from the viewpoint of the theory of cumulative causation (CC theory). Regarding the history of CC theory, Myrdal is often situated between A. Young and N. Kaldor. However, this paper advocates that there are three currents of CC theory: 1) Young-Kaldor type CC theory, 2) Veblenian CC theory, 3) Wicksellian CC theory. Kaldor's CC theory is critically examined by Myrdal's CC theory. Myrdal's CC theory is the theory for "development" including institutional and political factors besides demand and supply. It is positioned between Young-Kaldor type CC theory and Veblenian CC theory, which means that it might be able to integrate those two currents with its unique theoretical character.

## . Introduction

It is often said that the mainstream economics has been developed on the basis of “equilibrium theory”. In such a theory, the market system is supposed to stabilize economic forces, which means even if the disequilibrium exists, it is recognized as being in a temporary state or should be disappeared by the “normal” operation of the market system. We might be able to call it “the theory of negative feedback”. The process of economic change is explained by “exogenous” factors in this theory.

Of course, there have been various theories against such a way of thinking. In these days, we can find many studies criticizing “equilibrium theory” especially in the evolutionary economics. The theory of cumulative causation (CC theory), which is analyzed by this paper, is also included in it. CC theory is well known as a typical logic of “positive feedback”. CC theory has a long history and has rather emphasized the circular and cumulative character in the process. In CC theory, the economic change is thought to be the endogenous phenomenon in the market system.

There have been few researches regarding the whole history of CC theory, except Toner (1999). Toner (1999) recognizes A. Young, Rosenstein-Rodan, A. O. Hirschman, K. G. Myrdal, and N. Kaldor as CC theorists and compares their theories mainly by the following three concepts: increasing returns, external economies, and complementarities (especially in consumption and production). Even though the author admires his study for being valuable, his way of arrangement regarding the history of CC theory is effective only for analyzing CC theory as “growth theory”, not for “development theory” in the wider sense<sup>1)</sup>.

The main theme of this paper is reevaluation of Gunnar Myrdal’s CC theory for being an apotheosis of CC theory as “development theory”<sup>2)</sup>. Although Toner (1999) draws the history of CC theory like one direct line from Young to Kaldor, I would rather show three origins and currents. Young-Kaldor’s CC theory might well be one of them. The originality and meaning of Myrdal’s CC theory will be shown in connection with

three origins and currents.

The paper is organized as follows. Section 2 describes three origins and currents of CC theory. Section 3 analyzes Myrdal's CC theory by comparing with Kaldor's CC theory. Finally, section 4 concludes that Myrdal's CC theory is uniquely positioned among three currents and such theoretical originality needs to be reevaluated.

## **. Origins and Currents of the Theory of Cumulative Causation**

### **1. Young- Kaldor: CC theory of “economies of scale”**

Young-Kaldor type CC theory is the first origin and current. It explains macro-economic growth from both demand and supply sides with the concept of “economies of scale” especially in the manufacturing sector.

Young's CC theory was first appeared in “Increasing Returns and Economic Progress” in 1928. This thesis was written to discuss the effect of increasing returns in the manufacturing sector to the macroeconomic dynamics. Young's CC theory there had been originated from the concept of Adam Smith and Alfred Marshall. The famous theory of “division of labour” advocated by Adam Smith described following three theses: (1) the division of labour has the effect of productivity improvement; (2) the division of labour is only for men who have the exchange propensity; (3) the degree of division of labour depends on the scale of the market. Then, Marshall developed the theory of “economies of scale” or “increasing returns” implied in Smith's theses. Marshall, in his historical background, insisted that increasing returns was compatible with the competitive state.

Although Young was strongly influenced by Marshall's theory on increasing returns, he developed his original theory of increasing returns on the macro-economic level by referring Smith's theses again. He advocated two formations of division of labour in his period: “roundabout method of production” and “division of labour among

industries". He insists that increasing returns are macro-economic phenomena and "qualitative as well as quantitative" (Young 1928, 528) changes which admit the emergence of new productions and industries.

According to Smith's theory of division of labour, the causality from the increase in demand for a goods (the expansion of the market) to the increase of supply of the goods (the development of division of labour) is clearly shown by the third thesis. However, Smith was quite vague about the possibility of the opposite causality. He doesn't make clear what determines the scale of the market itself. Contrary to this, Young insisted that the size of the market is determined by the volume of production, by utilizing Marshallian concept of "reciprocal demand".

Young connected Smith's third thesis to the concept of "reciprocal demand". This resulted in a new vision of economic growth based on CC theory. Young concluded that "Adam Smith's dictum amounts to the theorem that the division of labour depends in large part upon the division of labour" (ibid., 533). This statement is more than mere tautology. He says the economic growth process under the condition of increasing returns is "progressive and propagates itself in a cumulative way" (ibid., 533).

Kaldor, since the late 1960s, developed CC theory as a theory for macro-economic growth. His CC theory is strongly influenced by Young's CC theory. Of course, there are some important differences between the two. However, the basic theoretical character that the economic growth is explained by the macro-economic virtuous circle between the demand and supply on the basis of "economies of scale" especially in the manufacturing sector is the same.

## **2. Veblen: CC theory of the institutional school**

The second origin of CC theory is in Veblen's works. This "second" doesn't mean the order of historical period or the degree of importance. Indeed, Veblen's CC theory was earlier than the first one. This current focuses on the "institutional change" and

explains it by a mutual relation between an individual and the social structure. It has independent meaning apart from the first current<sup>3)</sup>.

Veblen, in his 1898 article “Why Is Economics Not an Evolutionary Science”, criticized economics for not being an evolutionary science, even though it had been the mainstream since Darwinism. He insisted the necessity of “theories of a comprehensive process by the notion of a cumulative causation” (Veblen 1898, 377-378).

Classical economics stands on the philosophy of natural law and utilitarianism. So, such economics regards the nature of human beings as a priori and the process of economic change as going toward a kind of “finality”. Veblen is against such a view and regards human beings as active existence, not passive one. According to Veblen, the nature of human beings changes with the change of socio-economic environment.

Veblen’s CC theory is the basic method explaining the mechanism of institutional change which is supporting the socio-economic evolution. This “evolution” doesn’t mean going toward something good but has a neutral meaning. In Veblen’s CC theory, the thought of an individual and the pattern of his behavior are changeable with the change of the social structure. In addition to it, the opposite causality is also supposed to be true. In other words, an individual and the social structure are supposed to relate each other in a circular and cumulative way. The institutions have a role of vehicle for such a mutual relation.

Veblen’s CC theory has affected the methodology of the institutional school. Originally, Veblen’s CC theory was quite different from Young-Kaldor’s in terms of their analytical focuses. While the former analyzed the institutional change, the latter didn’t consider it so deeply. However, these two currents aren’t exclusive each other. Indeed, we can find some analyses which try to integrate the theoretical characters of these two currents especially in the evolutionary economics in these days.

### **3. Wicksell: CC theory of monetary theories**

The third origin of CC theory is in Wicksell's monetary theory. Although it is unusual to refer to this current in the context of CC theory, it is necessary to mention this current here because Wicksell's CC theory has influenced many monetary theorists either directly or indirectly and Myrdal was one of them<sup>4)</sup>.

Wicksell, who was a neoclassical economist, thought that if the price of one commodity got higher, it would be explained by either the increasing demand or the decreasing supply for that commodity, so if prices of all commodity got higher, it would also be explained in the same way. However, there is Say's law in the neoclassical economics. The discrepancy between the demand and the supply is unfeasible in the world of Say's law.

Wicksell showed two concepts concerning the interest rate: "monetary interest rate" and "natural interest rate". While the former reflects the monetary side, the latter reflects the real side. Say's law is possible only when these two interest rates are the same. Wicksell insisted that it is very special for the monetary economy in the real world. He analyzed the price change mechanism in case that these two interest rates separated.

If the monetary interest rate gets lower than the natural interest rate, most firms must increase their investment. If so, the aggregate demand will be larger than the aggregate supply. Each firm must recognize such condition as a good chance to set the price of its commodity higher. However, many firms must think in the same way, and the prices will get higher without any expected result for each firm. Firms must expect that the price level will get higher for the future. It will result in the circular and cumulative mutual relationship between the increasing investment and the higher price level; "the cumulative inflation process". If the monetary interest rate is higher than the natural interest rate, the opposite will occur; "the cumulative deflation process". Whenever there is discrepancy between the two interest rates, such processes continue without any ends.

Wicksell influenced to the later development of monetary theories, especially to the theoretical establishment of Stockholm School. Myrdal was a member of Stockholm School in his early days. Even though he is well known as an institutional economist because of his later works, it should be carefully reexamined that he insists he took the first idea of his CC theory from Wicksellian monetary theory.

## . Myrdal and Kaldor

Kaldor's CC theory is often evaluated as the representative or the apotheosis in the history of CC theory. Indeed, Kaldor's CC theory left a lot of suggestion to the history of economic thought. However, it is not so easy to state that Kaldor's CC theory is the "only" apotheosis, since we have seen three origins and currents. I would like to analyze Myrdal's CC theory by comparing with Kaldor's CC theory.

### 1. Myrdal's CC theory

Myrdal's CC theory has been adopted for explaining various theoretical or practical problems. It has been typically examined by dividing into its three different aspects. The first way recognizes it as CC theory simply positioning between Young and Kaldor. The second recognizes it as a theory by a member of the institutional school and considers its institutional aspect in main. The third recognizes it as a theory by a member of the Stockholm school, focusing on the monetary theory in his early days<sup>5)</sup>.

They have seldom discussed how Myrdal's CC theory (theories), which have various theoretical contents, should be integrated or interpreted as a whole. Although Myrdal has been often introduced in the context of the history of CC theory and evaluated as a key person in its theoretical development, his position there has left quite ambiguous.

Myrdal experienced three academic stages in his life: a theoretical economist or a member of Stockholm school, a politician, and an "institutional economist" as he called

himself<sup>6</sup>). Though he said he had been affected by Wicksellian monetary theory and got the first idea of his CC theory, it was the last stage that he utilized and emphasized CC theory as his main theoretical tool in analyzing practical socio-economic problems.

Myrdal's CC theory in its final phase consists of four theses as follows.

1. The basic thesis: the thesis of "backwash effects"

Myrdal's CC theory has emphasized a divergent process. Such a process is well known as a typical logic of CC theory in general. Myrdal(1957) proposed a concept of "backwash effects" in order to explain the increasing economic inequality between developed countries and underdeveloped countries.

2. The opposite or exceptional thesis: the thesis of "spread effects"

Contrary to the first thesis, the second one is the logic of convergence. Although CC theory has its importance in emphasizing a divergent process and it is admitted that Myrdal didn't emphasize this thesis as much as the first one, this thesis should be a crucial thought because this characterizes his CC theory. Myrdal's CC theory doesn't deny the potential possibility of a convergent process.

3. The thesis relating to the scope of the analysis: the thesis of the importance of institutional factors

Myrdal insists that if so-called "non-economic" factors are excluded from the analysis, it will result in distorting the recognition of the facts. According to him, it is whether it is related to the problem, not whether it is an "economic factor", that decides whether the factor should be included in the analysis.

4. The thesis of political implications

Although Myrdal's CC theory admitted the potential possibility of convergence in the second thesis, he was too pessimistic to think such possibility would come true naturally. He rather believed in policies to turn over the economic forces composing the "vicious" circle. He showed the "equality" as his most important value premise

and insisted the policies based on the “equality” will induce higher economic growth.

Myrdal’s CC theory can be characterized in three points. The first is that his CC theory is not a simple logic of polarization process, because it includes not only “backwash effects” but also “spread effects”. The second is that his CC theory is supposed to consist of both “economic” and “non-economic” factors. The third is that his CC theory exists as the theoretical foundation of egalitarian policies.

## **2. Kaldor’s CC theory**

Kaldor’s CC theory consists of three or four Kaldor’s Laws which was presented in Kaldor (1966). According to Kaldor (1966), he discussed the effects of increasing returns in the manufacturing sector to the macro-economic dynamics.

Kaldor’s first law is that the growth rate of the manufacturing production positively relates to that of GDP. Kaldor insists that the former leads the latter. According to him, increasing returns are prevailing in the manufacturing sector and they are dynamic and macro-economic effects including “learning by doing” and technological innovations.

Kaldor’s second law is that increasing returns are prevailing especially in the manufacturing sector. It is called “Kaldor-Verdoorn’s Law”, which is originated in Verdoorn (1949). Kaldor showed it as a dynamic relationship between the production growth rate and the productivity growth rate. Furthermore, he insisted that the former induced the latter and only such causality should be understood as increasing returns.

Kaldor’s third law focuses on the employment. If the production growth rate in the manufacturing sector improves, the productivity growth rate will also improve according to Kaldor’s second law; however, it isn’t supposed to decrease the employment. Kaldor insisted the labour transfer from the non-manufacturing (agricultural) sector to the manufacturing sector. The important proposition of this

law is the existence of labour surplus in the non-manufacturing sector. By this law, the improvement of labour productivity in both sectors is supposed to occur.

Kaldor (1966) stated that the cause of the slow growth in UK was the constraint of labour surplus. However, Kaldor withdrew this statement and became an export-led growth advocator in 1970s. Instead of the constraint of the labour surplus, he came to emphasize that of export demand. Targetti (1992) called this “Kaldor-Thirlwall Law”.

Kaldor’s CC theory is summarized as follows.

The main message appears in the first law. The second and third law supports it. The production growth in the manufacturing sector will induce the productivity growth in its sector through the operation of increasing returns. Simultaneously, it will induce labour transfer from the non-manufacturing sector to the manufacturing sector. Then, the productivity as a whole improves, which means the advantage of the export competition if the country adapts the export-led strategy. The increasing export is connected to the increasing production in the manufacturing sector. This causality ends up with a circular and cumulative character.

Kaldor’s CC theory is deeply related to his historical background. There was a political problem concerning with EU affiliation. His CC theory was the theoretical foundation to disagree to the affiliation. He thought that the Great Britain which was at the slow growth or stagnation wouldn’t profit from the affiliation, rather it would be harmful. He showed CC theory not only as logic of high growth but also that of decline. In other words, it was the logic of “process of polarization”. He adopted CC theory to various international economic problems.

### **3. The theoretical characteristics of Myrdal’s CC theory: the critical examinations of Kaldor’s CC theory**

Kaldor (1970) introduced Myrdal’s CC theory as a totally different method from the

traditional growth theories and explained the inequality among regional developments by using it. However, in fact, he interpreted Myrdal's CC theory as follows: "this is nothing else but the existence of increasing returns to scale using that term in the broadest sense in processing activities" (Kaldor 1970, p.340). This statement means that he made the term approached Young's theory of increasing returns or macro-economic growth and utilized it in that way.

Myrdal's CC theory and Kaldor's CC theory have some similarities. For example, the historical periods of their CC theories were close, their analyses are mainly based upon international economy, and they made much of experimental data<sup>7)</sup>. However, their CC theories are different in some important points after all<sup>8)</sup>.

First, Myrdal's CC theory has a pair of concepts; "backwash effects" and "spread effects". He emphasizes a divergent process on the basis of them. On the other hand, Kaldor emphasizes a divergent process without the counterpart of "spread effects".

Undoubtedly, the intension of CC theory is in emphasizing the divergence. However, there is not always such a divergent process in the real world. Even if we can find an economic process like "virtual circle" or "vicious circle", it might not continue for the long run. There is every possibility that the trend will change in the long run.

Myrdal's special concept of "spread effects" should be reevaluated as one of the effective concepts to analyze such a possibility. Although he rather emphasizes the "backwash effects", the important thing is that he doesn't forget to show the forces against the divergent trend. His CC theory, by including both "backwash effects" and "spread effects", can explain a longer or a more changeable process.

Second, Kaldor's CC theory doesn't make much of so-called "institutional factors" compared with Myrdal's. Kaldor's CC theory provoked many controversies and influenced a lot of economists. In this sense, there is no doubt that Kaldor's CC theory has more meaning than Myrdal's. However, Kaldor's CC theory might have a historical or regional constraint in the sense that it focuses on industrial activities from the historical background of 1950s or 60s and it is drawn mainly from the viewpoint of

developed countries.

On the contrary, Myrdal's CC theory doesn't have any clear "model", since he emphasized the cultural differences among countries or regions and he didn't like to easily simplify the complicated factors concerning the problem. This academic attitude reflects his experience that he went and studied in various countries. His CC theory left ambiguity, however, it can be interpreted as the emergence of such academic attitude of his.

The third difference relates to the political implications from each CC theory. Although it is common that they both actively advocate policies based on CC theory, in order to advocate policies, Myrdal has his own methodology so-called "explicit value premises" which allows various value judgments and "optimal" policies depending on them. He exhibited the "equality" as his most important value premise and advocated various kinds of redistribution policies, e.g. housing policies and land reform policies. Furthermore, he showed an idealistic vision of the welfare world beyond the welfare state in order to persist the increasing gap between rich countries and poor countries.

Kaldor doesn't have such an explicit methodology, nor a vision. Thinking implicitly how a country can survive in the hard economic competition, he advocated the export-led growth strategy. Ultimately, their policies turned out to be quite different each other.

There must be a strong influence from the golden age of the welfare state in the 1960s behind Myrdal's political advocacy, so it is impossible to deny his CC theory having a historical constraint in this sense. However, his vision of the welfare world was surely an idea in advance of time and should be reevaluated in the modern globalized economy.

The reevaluation of Myrdal's CC theory doesn't mean that his CC theory is superior to Kaldor's. The only thing we can say here is that they are different in their theoretical character and Myrdal's CC theory can rather add some critical examinations to Kaldor's CC theory.

## . Concluding Remarks

Myrdal started his study in the current of Stockholm school. As he said, his CC theory was originated in Wicksellian monetary theory. However, he came to apply his CC theory to more practical problems after his study on the discrimination of black people in US.

Myrdal's CC theory is the theory for "development". By the word of "development", Myrdal means more than mere increasing production. His CC theory includes institutional and political factors besides the demand and supply. Myrdal's CC theory should be positioned between Young-Kaldor type CC theory and Institutional School type CC theory. Myrdal's CC theory might be able to integrate those two currents with its unique theoretical character.

Concerning institutional factors in the analysis, he insisted that both economic and non-economic factors should be included in the analysis due to substantial importance equally. This claim means a criticism to both Young-Kaldor type CC theory which doesn't make much of institutional factors in the analysis and Institutional School type CC theory which tends to explain the socio-economic change only from the institutional factors.

Again, Myrdal's CC theory allows the possibility and necessity of the social reform by introducing policies. It is different from Veblen's standpoint of insisting "the natural selection of institutions". On the other hand, though it is common for Myrdal and Kaldor to advocate strategic policies on the basis of each CC theory, Myrdal's CC theory has a special methodology of "explicit value premises" and admits various value judgments or various optimal policies, so it is still different from Kaldor's political proposals. Myrdal's methodology on policies is so unique that it might as well be called "the political implications in the evolutionary economics".

Myrdal's CC theory can be a kind of indicator of the direction for the further development of CC theory. We can find Setterfield (1997) and Hodgson (1989) trying to adapt the typical logic of CC theory, that is the "process of polarization" since Kaldor's CC theory, to the influence from technological and/or institutional environment. However, these trials aren't new. If we revisit Myrdal's CC theory, we can easily find such a direction of CC studies.

## Notes

- 1 ) However, Toner himself named his book *Main Currents in Cumulative Causation: The Dynamics of Growth and Development*.
- 2 ) Myrdal (1972) clearly distinguishes “growth” from “development”.
- 3 ) Inoue (2002) points out that there are two different currents in the development of CC theory. His view corresponds to the first and second currents in this paper.
- 4 ) See the concept of “Wicksell connection” in Hirai (2003).
- 5 ) As mentioned before, Toner (1999) puts Myrdal between Young and Kaldor. Gruchy (1972), Tsuru (1993), Takahashi (2002), and Uemura (1997) analyze Myrdal as an institutional economist. As analyses of Myrdal as a member of Stockholm school, see Lundberg (1985) and Sandelin (1991).
- 6 ) See Angresano (1997) onn Myrdal’s three academic stages.
- 7 ) See Toner (1999) p.150-154, 160, 163.
- 8 ) Maki (2002) also insists on some differences between Myrdal’s CC theory and Kaldor’s one.

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