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: revisiting a representative firm model**

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Heterogeneity of firms and Institutional theory of the firm: revisiting a representative firm model¹

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Abstract

*One main aim of this paper is to introduce and discuss an issue about the heterogeneity of firms in the theory of the firm. Because it seems that the heterogeneity of firms was not a principal subject in the theory of the firm. But, according to the development of the institutionalist approach that puts out different types of capitalism in the world, the diversity of firm models is becoming one important issue in the theory of the firm. On the one hand, most institutionalist approaches stress on the representative firm model in each type of capitalism or in one country. In order to discuss it, we will look at the French *régulation* theory that takes account of the increasing heterogeneous firm models both in the world and in one same institutional environment. Finally, from the theoretical problem about the heterogeneity of firms, we would like to refer the Japanese representative firm model and also Honda model as a different model of the firm in Japanese automobile industry.*

¹ An earlier version of this paper was prepared for the conference on <Japanese Capitalism Evolving with Asian Economic Integration> at Yokohama/Tokyo, Japan, August 30-31 2008. And this paper is the revision of my article Yokota[2009].

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Key words:

Heterogeneity of firms, Institutional theory, Régulation theory,
Productive models, Japanese representative firm model, Honda model

Introduction

In each era, we supposed a dominant and optimal firm model. For example, at the beginning of 20th century, derived from the scientific management system of F. Taylor, Ford(ism) model was one which permitted a mass production based on one unique standard model (T-Ford) and the simplification of tasks. But, as Ford model was losing some efficiencies and productivities in face of differentiation of consumer's demands and dissatisfaction of workers with very simplified tasks, Sloan model developed in General Motors(GM) replaced Ford model as a dominant one during the golden era of capitalism <Fordism> after the Second World War. And, after the crisis of the Fordism in 1970s, we pursued an alternative model of the firm to Sloan-Ford model; for example, Toyota model in Japan and Uddevala(Volvo) model in Sweden. In particular, Toyota model was appreciated under the name of <Lean Production> by IMVP researchers³. They emphasize that the lean production system would be adopted in all industry and in the world. That is, we thought that the lean production system, Toyota model, was a dominant and representative firm model in the era of After-Fordism.

However, the period of <Lost Decade> as the Japanese economic crisis started from the beginning of 1990s lead the turnover of reputation to the Japanese firms. Under institutional(-macroeconomic) change caused by economic and financial crisis, many Japanese firms enter in crisis and are trying to change their strategy and organizational structure, for example by imitating those adopted by American firms that had a good performance during the boom of <New Economy>. Even now in economic growth since 2002, Japanese firms are restructuring their own firm model adaptable and profitable in the evolving macroeconomic system. In this context, it is therefore important to examine if there is one dominant and representative

³ IMVP=International Motor Vehicle Programme. Womack, Jones and Roos[1991].

firm model to which they converge both in the world and in one country. In the other words, it must be matter to understand both the homogeneity and heterogeneity of firms.

However, the heterogeneity of firms is not a main theme in the economic theory of the firm. The neoclassical theory based on representative agent (consumer/producer) gives to firm the production function that specifies the level of output from one of inputs (Baudry[2003]). In this theory, an entrepreneur who is rational and aims to maximize the profit with all available information manage his firm. Between firms designed as production function, we could not find their organizational and strategic differences, because it is not matter for the neoclassical theory to analyze the process and activity of production operated in the firm, but to choice for a given output the inputs that permit a minimum cost. The firm is, therefore, a black box and a point in a market. Started from these problems of the neoclassical theory of the firm, the modern theory of the firm were developed in the 1970s. As we know, the modern theory of the firm originates from the article of R. Coase (1937) and is composed principally of three approaches: Transaction Cost Economics(TCE) (Williamson [1975][1985]); Property Rights Theory (Alchian and Demsetz [1972]); Principal-Agent Theory (Jensen and Meckling [1976]). What is important in the modern theory is that they emphasize a firm as organization and analyze the nature of the firm as follows: “What is the firm?” However, since the principal aim of the modern theory is to understand the nature of the firm to differentiate of market, they are based on a universal firm model in the world without taking account of the heterogeneity of firms. Even if TCE shows some different modes of governance structure and their historical evolution, it would be agreed that TCE pursues one firm model suited to a given era and to a given environment, and regarded as optimal solution to contractual relations between individuals in the firm.

One aim of this paper is, therefore, to introduce the heterogeneity of firms as a point of discussion in the theory of the firm. To do it, we will refer to the

institutionalist theory of the firm that addresses the link between firm's behavior or organization and the institutional or macroeconomic environment. But, this approach will be not enough to investigate the heterogeneity of firms, because it is based on the isomorphism between firms and institutional environment. To complement and extend such institutionalist theory in terms of the heterogeneity, we will focus on the theory of productive models by GERPISA, which is evolved with the French régulation theory. Finally, we would like to extend to the heterogeneity of Japanese firms in terms of Japanese representative firm model by examining Honda model in Japanese automobile industry.

The Institutional theory of the firm and the variety of capitalisms: the variety of national firm models

In the theory of the firm, it seems that the institutionalist approach is not yet recognized as a theory of the firm, because the aim of this approach is to show the variety of capitalisms against the hypothesis of convergence to one model of capitalism, for example the Anglo-Saxon or neo-liberalism model. To object to this convergence and then show the variety of capitalisms, the institutionalist approach emphasizes a role of firm as a central actor in an institutional environment or in a political economy. In this point, the institutionalist approach plays an important role to introduce a macroeconomic or an institutional environment in the analysis of the firm, while the modern theory of the firm is mainly focused on the link between individual and firm organization in the term of the methodological individualism. According to the institutionalist approach, the institutional environment reinforced by the institutional complementarity, which means the reciprocal relation between institutions, conditions the firm strategy and its organizational structure(See Figure 1). As a consequence, we could deduct that is observed in one institutional environment one particular firm model that is able to receive the maximum benefits offered by the external environment. The institutionalist approach permits to show the difference on corporate strategy and organizational structure across institutional

environments or across nations, in terms of the variety of capitalisms (Hall and Soskice [2001]). Thus, the variety of capitalisms leads the variety of firm models.

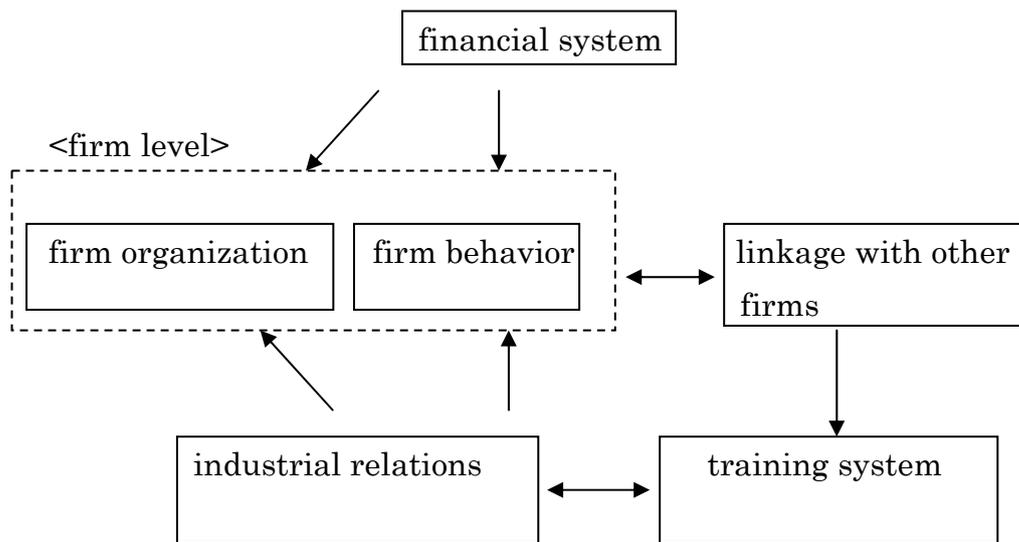


Figure1: A model of the institutionalist theory of the firm: Approach of VOC (Hall [1999])

Now, we will show two representative approaches, which combine the variety of capitalisms with the theory of the firm. Firstly, *Variety of Capitalisms: VOC* (Hall and Soskice[2001]) locates the firm at the center of the analysis of political economy by focusing on the relational problems that the firm faces in some institutional domains, and then shows two different types of capitalism: Liberal Market Economy (LME) in Anglo-Saxon countries and Coordinated Market Economy (CME) in Germany and Japan. In LME the firm depends on the market to resolve the relational problems with other actors, whereas in CME these problems are resolved through the strategic interactions outside of the market. On the one hand, LME shapes a firm model including hierarchical and fluid market-based employment system, transferable general skills of workers across firms, market-based finance, and contractual inter-firms relationship. On the other hand, CME is favorable to a firm model based on bank-based finance, profession system

“learning by doing” in the firm, a long-term employment relation and inter-firm relation, and so on. In contrast to a dichotomy of capitalisms in VOC, *Social System of Production: SSP* (Hollingsworth[1997]) shows more than two types of capitalism and then firm model. Emphasizing the role of the firm in a social system, SSP regards a firm as place of production underestimated by the neoclassical theory. According to SSP, the firm is embedded in a complex institutional environment or social system composed of some levels of society other than national level. And then, SSP shows different firm’s characteristics formed in each social system. The first one is Mass Standardized SSP developed in US and adopted historically by many American firms with the Ford system of production that produces highly standardized goods. In contrast to Mass standardized SSP, Flexible SSP is a social system of production that is capable responding to various demands of consumer due to the polyvalent machines and workers. Flexible SSP is subdivided into three kinds of SSP: Diversified Quality Mass Production (DQMS); Diversified Quality Production (DQP); Flexible and Specialization Production (FSP). DQMS is one observed and evolved in Japan, which is characterized by the long-term inter-firm relation like keiretsu, the bank-based financial system, the long-term and cooperative relation between employees and employers, the firm specific skills of workers, etc. DQP represents the social system of production like Germany, and includes a long-term relation between bank and firm, centralized bargaining system of employee-employer, theoretical and practical educational and professional system, etc. FSP characterizes small-medium size firms in the region of Italy, Denmark, and Sweden, which produce the specific goods by the craft production system, by cooperative inter-firm and employee-employer relations, by the long-term and cooperative relation with other actors, etc.

As mentioned above, we presented two typical and representative institutionalist approaches to the firm, whereas their principal purpose is to shed light on the variety of capitalisms. Concerning an external environment in which the firm operates, they recognize that there are

multiple levels, for example nation, region and international. But, in fact they mainly stand on the national level of the political economy taking account of the difficulty of transition of firm model from one country to another. And then, they put in each country a representative firm model, so called a <National representative firm model>, which is regarded as dominant and optimal firm model permitted to enjoy the benefits, the political power, the efficiency, etc. From this perspective, it is agreed that the institutionalist theory of the firm is based on the isomorphism between firm and institutional environment, which gives birth to the homogenization or convergence between firms in a same institutional environment (DiMaggio and Powell[1991]). Therefore, relatively to the number of national political-economic systems across nations, we could find the same number of heterogeneous national representative firm models on corporate strategy, organizational structure, production system and so on. Thus, the organizational and strategic heterogeneity at the firm level is led by the institutional or macroeconomic variety.

Surely, these institutionalist approaches to the firm don't agree to a universal representative firm model by taking account of the variety of national institutional environment. On the one hand, they maintain explicitly or implicitly a representative firm model in a national institutional environment, while they aim to criticise a representative firm model as universal model. In sum, for the <standard> institutionalist theory of the firm it is not matter to take account of the heterogeneity of firms in a same institutional environment, but to understand the variety of national firm models against universal firm model adopted by the neoclassical theory of the firm. However, we must have some questions as follows: "Does a national institutional environment shape only one representative firm model?"; "Are other firms which don't adopt the so-called representative firm model capable to being profitable in a national institutional environment?".

In the next section, in order to talk about these questions about the

heterogeneity of firms we will try to introduce a point of discussion about the heterogeneity of firm models in one country against the standard institutionalist approach which insist the variety of national representative firm model. Then, it is worth to refer to an approach to the firm developed with the regulation theory, that is the theory of productive models by GERPISA.

The heterogeneity of firms not only in the world, but also in one country: an analysis of the firm in the Régulation Theory

The main domain of the Régulation Theory (TR: Théorie de la Régulation) is the macroeconomic level, because its start point was to analyze the crisis of the capitalism in the 1970s. Therefore, the firm, which is microeconomic actor, is not a main domain in TR. However, in fact we have some studies of the firm by régulationists, for example Coriat[1991], Coriat et Weinstein[1995]. Recently, the theory of the firm is becoming little by little one of issues in TR by introducing the productive models of GERPISA. The purpose of this section is therefore to survey the productive models of GERPISA and then to try to show a methodological basis to the theory of the firm in TR, that is the heterogeneity of firms.

The productive models of GERPISA: the variety of productive models and profit strategies

The theory of productive models is elaborated in GERPISA, which is an international research group about automobile industry and which aims to re-examine the concept of one best way productive model, for example Lean production System by IMVP⁴. For this purpose, the theory of productive models focuses not only on <productive model> as organizational structure, but also on <the profit strategy>. And, it is also important for the theory of

⁴ GERPISA=Groupe d'Etude et de Recherche Permanent sur l'Industrie et les Salariés de l'Automobile). For the theory of productive models, see Boyer and Freyssenet[2000][2002].

productive models to take into consideration the linkage between firm level and political-economy environment which surrounds the firm, so called <the mode of growth and of distribution of national income> (the growth mode)(See Figure 2). Firstly, a profit strategy adopted by a firm must be pertinent to the growth mode, which conditions the product market and the labor market. The profit strategy is composed of one or some source(s) of profit among six (scale of economy, diversity of products, quality of product, permanent reduction in cost, innovation, flexibility). And then, six profit strategies are revealed in the automobile industry through 20th century: <volume>, <quality>, <volume and diversity>, <diversity and flexibility>, <permanent reductions in costs>, <innovation and flexibility>. Secondly, even if the profit strategy is coherent to the growth mode, the firm must have some means to realize its profit strategy. In other words, the firm must shape its productive model including product policy, employment relation, and productive organization. Moreover, what is important is that the productive model must be supported by the solid compromise of company governance(CG) between relational actors to the firm (manager, employee, supplier, stockholder, etc.).

As a consequence, the theory of productive models show six productive models observed through 20th century in the automobile industry, which are/were satisfied with these two conditions of profitability: diversity/flexibility strategy and Taylor model, diversity/flexibility strategy and Woollard model, volume strategy and Ford model, volume/diversity strategy and Sloan model, permanent reductions in costs strategy and Toyota model, innovation/flexibility strategy and Honda model.

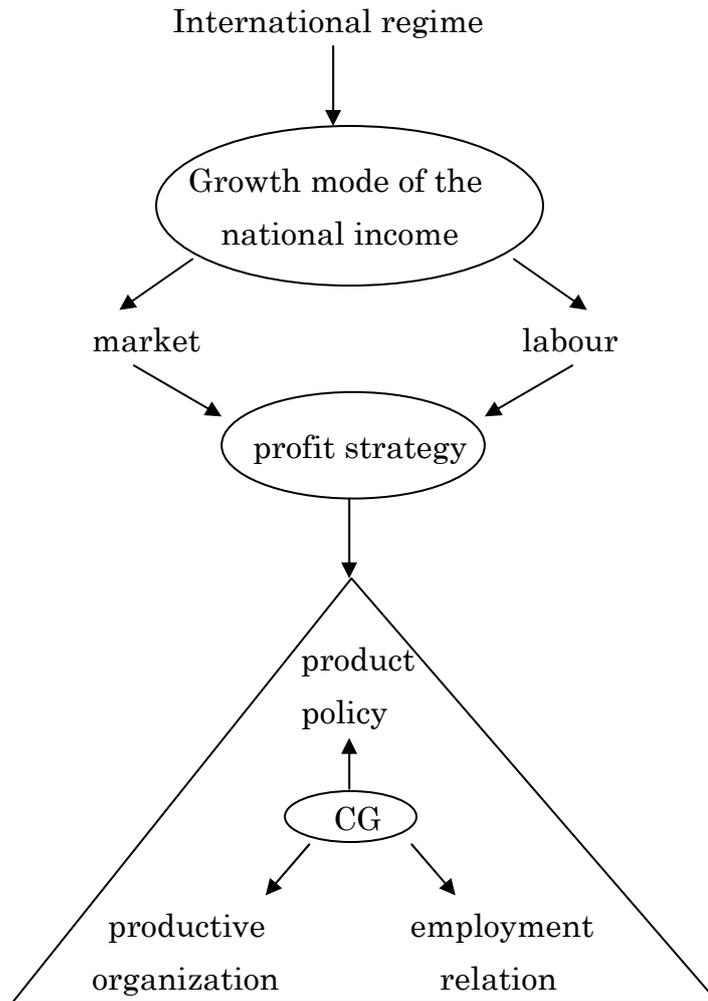


Figure2: The productive model and its environment (Boyer and Freyssenet[2002])

From the theory of productive models, now we have two implications towards the theory of the firm. Firstly, it is matter to understand that there are different firm models in the world, both historically and today, against the universal firm model. Secondly and more important, the theory of productive models talks about the heterogeneity of firms in one country. That is, even under the same growth mode, several profit strategies can be pertinent, and a profit strategy may permit more than one productive model (Freyssenet[2004]). For example, we observed taylor, ford and sloan models in US, and today in Japan Toyota has a different productive model from one of Honda. As a result, the theory of productive models gives to the analysis

of the firm a point of discussion on the heterogeneity of firms, in particular in one country.

An institutionalist approach to the firm in terms of the heterogeneity of firms: towards an analysis of the firm in the régulation theory

As mentioned above, the original purpose of TR was to analyze the crisis of capitalism in the 1970s, so called the crisis of Fordism. Its main domain of the analysis is, therefore, at macro-economic or meso-economic level taking consideration in the accumulation regime and the institutional forms of a nation state. However, while TR argued an analysis of capitalism in the era of Post-Fordism pursuing an alternative model of capitalism, we observe some analysis of firm by régulationists, for example Coriat[1991], Boyer et Durand[1993], Coriat and Weinstein[1995]. But, the analysis of the firm was not yet recognized as one principal domain in TR. Effectively, TR have just begun to study the theory of the firm as one domain of analysis. In such situation, in collaborating with the project of GERPISA and introducing the theory of productive models, some régulationists are trying to evolve the theory of the firm in TR (Shimizu[2005], Boyer[2004], Lung[2008], Yokota[2008]).

Now, if we can give MTR1 (MTR: Microéconomie de la Théorie de la Régulation) to the analysis of the firm evolved in TR before the introduction of productive models, according to Boyer[2004] MTR1 is as follows:

MTR1

=Institutional complementarity + Isomorphism organizations/institutions

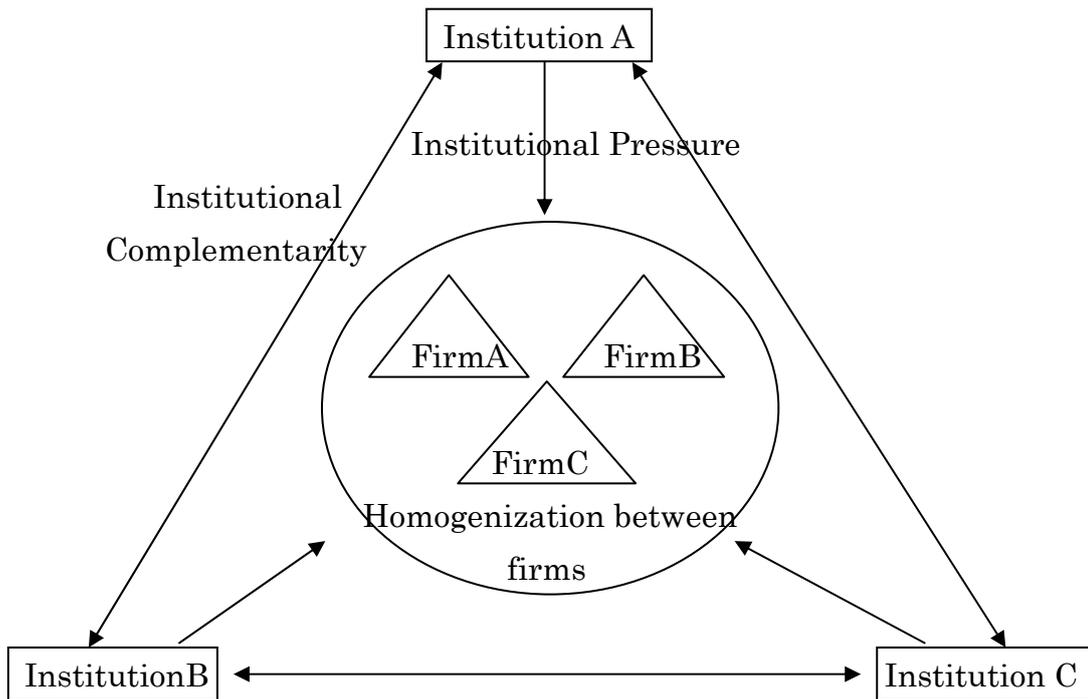


Figure 3: MTR1: Homogenization between firms based on the national representative firm model(Yokota[2009])

In sum, in the analysis of Post-Fordism, they pursued an alternative model of the firm to the Sloan(-Ford) model based on a mass production system and a more sophisticated scientific management system. For example, they showed and analyzed Toyotism-model derived from Toyota production system in Japanese capitalism and Uddevalism model at Volvo in Swedish one. In this case, to Sloan-Ford model considered as universal and optimal model during Fordism, TR proposes a candidate of the alternative model of the firm taking account of the variety of national trajectory of capitalism. In other words, MTR1 explicitly recognized the heterogeneity of firms in the world. On the one hand, as well as the standard institutionalist theory of the firm, the analysis of MTR1 stood on the homogenization between firms in one country, so called the isomorphism between firms and institutional environment.

In contrast to MTR1, the theory of the firm in TR introducing the theory of productive models, so called MTR2, can be expressed as follows:

MTR2= Institutional complementarity + heterogeneity of firms

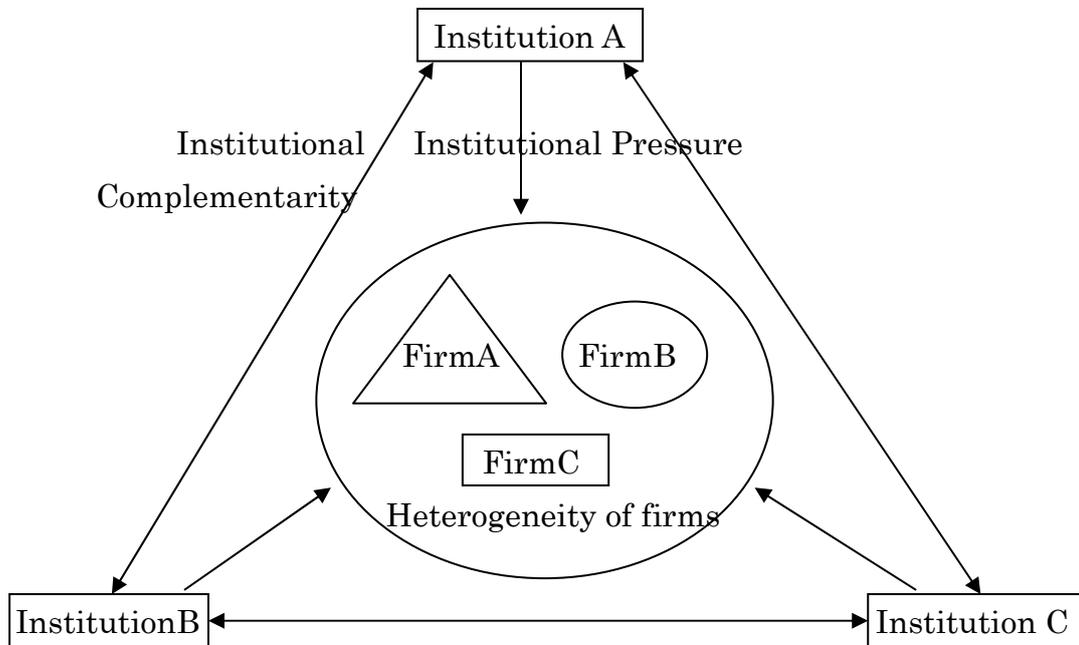


Figure 4: MTR2: The heterogeneity of firms in one institutional environment(Yokota[2009])

MTR1 keeps the national representative firm model on the basis of the isomorphism between organizations and institutions, whereas MTR2 is trying to analyze the heterogeneity of firms, in other words the variety of firm models, not only in the world but also in one institutional environment or in one country. By taking account of the theory of productive models that puts out the existence of several productive models even under one growth mode, the objective of MTR2 is therefore to introduce the heterogeneity of firms not only in the world but also in one institutional environment beyond the analysis of isomorphism. At the same time, MTR2 could show an original methodological point of view to the theory of the firm, which permits to complement and evolve the institutionalist theory of the firm.

Revisiting the Japanese representative firm model in terms of the heterogeneity of firms: Toyota model is “one best way”?

In many texts of the economy and the management, we can often find a conceptual word as follows: Japanese management system, Japanese production system, as if all Japanese firms adopt similar strategy and organizational structure. There may be no doubt that we have regarded the lean production system as dominant one in the Japanese automobile industry as well as in all industries, and that we have treated implicitly or explicitly the Toyota Production System(TPS), which is the origin of the Lean Production System, as the representative model of the Japanese firm. In this section, therefore, from the perspective of MTR2 based on the heterogeneity of firms we should examine the question on the representative Japanese firm model. In taking an example of Japanese automobile industry, we will especially give attention to Honda model that is confused with Toyota model.

The Japanese representative firm model: a brief survey

Under the good performance of Japanese economy until the bursting of the bubble economy at the beginning of the 1990s, Japanese firm model was appreciated as one to adopt for other firms in the world. In taking advantage of such economic situation in Japan, they pursued growth-oriented and long-termed strategy. In general, Japanese firm model is characterized by three elements: long-term(or lifetime) employment system, seniority-based wage system, and enterprise-based union. And then, we have some theories of economy and management that propose a Japanese representative firm model. It is the J-firm model by Comparative Institutional Analysis (Aoki and Okuno[1996], Aoki[2001]) that is a typical and representative theory and that gives us an image of Japanese representative firm model. In contrast to A-firm model in US characterized by a hierarchical coordination structure in which the information is decentralized between sectors or actors, J-firm model shapes a horizontal

one in which the information is shared within the firm. As a result, in Japanese institutional environment which is composed of Bank-based financial system, long-term inter-firm relation, long-term employment system, etc, Japanese firms tend to have similar organizational characteristics through the strategic complementarity between firms, for example long-term employer-employee contract, investment in firm-specific skills, wage system on promotion. Similarly, other theories show also some characteristics of Japanese firms by supposing explicitly or implicitly a Japanese representative firm model. Many researchers tend to focus on the relation between employee and firm and between employees (Itami[1987]), whereas Okumura [1984] analyzes aspect of cross shareholding between Japanese firms in terms of the relation between firm and stockholder as an important characteristic of Japanese firm. As for the skill training or skill formation system, we emphasized the role of OJT (On the Job Training) as typical and representative one in Japanese firms (Koike[1997]).

In spite of a difference of a point of view between these analyzes of Japanese firm, they suppose the hypothesis of a Japanese representative firm model. However, in the Lost Decade after the bursting of Japanese bubble economy at the beginning of 1990s, the Japanese firm/management system was losing more and more its effectiveness and reputation. Moreover, under the impact of “New Economy” in US, many Japanese firms tended to change their organizational structure and strategy, for example the payment and promotion for performance, by imitating so called the American firm system. Through such transition or evolution of organizational structure and strategy of Japanese firms in Lost Decade or Japanese economic crisis, it is therefore matter to (re-)examine the concept of Japanese representative firm model as dominant or optimal firm model.

Aoki and Jackson [2008], for example, argue the variety of firm models among Japanese firms by examining a relation between Corporate Governance (CG) and Organizational Architecture(OA), and then present diverse patterns of CG-OA linkage among Japanese firms: J-firm type,

Hybrid type I and II⁵. Certainly, Aoki and Jackson[2008] attempt to examine the increasing heterogeneous CG-OA linkage, but they include all industries from manufacture to IT and service, and also all scales of firm from large firms to small one. In this section we would like to concentrate on the heterogeneity of firms in the Japanese automobile industry.

Towards an understanding of the heterogeneity of Japanese firms: whither Honda, when Toyota model is regarded as representative Japanese firm model ?

Until recently, it is agreed that the Toyota model based on TPS was a representative firm model or production system for Japanese firms, in particular among Japanese automobile producers. Even today, this hypothesis is maybe valid. But, as Honda shows its competitiveness and higher performance coping with and adapting to the Lost Decade after the bursting of Japanese bubble economy at the beginning of 1990s, in addition to researchers in GERPISA some specialists and journalists on the automobile industry tend also to give attention to the originality of Honda model (Freyssenet[2001], Ikehara[2003], Yamada[2002]). From the beginning of 2000s, Honda is a principal competitor of Toyota in the place of Nissan, while Honda was fourth or fifth automobile producer in Japanese market until 1990s. However, it seems evident that Honda model is not recognized and is not analyzed sufficiently. Since the entry in automobile market in 1963, Honda model is often confused with Toyota model under the name of Japanese firm model or Lean Production System. But, comparing with Toyota and other Japanese automobile producers Honda has different history of the company, different evolution on growth strategy, product development and organizational structure, etc. In this last section, we will look for some heterogeneous characteristics in Honda towards an understanding of Honda model and of the heterogeneity of Japanese firms against the assumption of Japanese representative firm model.

⁵ About the heterogeneity of Japanese firms, see also Lechevalier[2007].

Started from a motorcycle company by Soichiro HONDA in 1948, Honda Motor Corporation is today divided in 5 business sections: motorcycle, automobile, power products, financial service, jet craft⁶. Especially, the automobile production was always his dream from long ago. However, in the 1960s there were already several automobile producers, for example Toyota, Nissan, and Mazda, in Japanese automobile market, and also MITI tried to control new entrants and limit automobile producers in three groups in face of the liberalization of capital to cope with the competition with American Big Three (GM, Ford, Chrysler) in Japanese market⁷. In spite of this context around automobile industry, in order to launch automobile business Honda presented two models(S500 and T360) in Tokyo Automotor Show in 1962. That aim is to make a fact that Honda is an automobile producer. One year later, in 1963 Honda launched T360/S500 and S600/T500 in 1964. Honda, latest entrant to Japanese automobile market, offered particular and compact-vehicle models that permit Honda to distinct from its competitors in the market dominated by foregoing automobile producers(Toyota in 1937, Nissan in 1933, Mazda in 1931/60⁸, etc), and also to make a new market segment. In the history of evolution in Honda as automobile producer, it is very important to mention to the exploitation of CVCC⁹ motor that satisfied American regulation Clean Air Act (Muskie Act), and the success of compact-vehicle CIVIC, which installs CVCC motor. Moreover, before other Japanese automobile producers, Honda constructed an automobile assembly factory at Ohio in US in 1982 as a measure against trade conflict in automobile industry between Japan and US. Through these historical evolutions and growth of the firm, today Honda becomes a generalist automobile producer that offers from compact-(Life, Fit, CIVIC) to

⁶ In 2008, motorcycle(13% of sales), power products(3.5%), automobile(79.1%), financial service(4.4%), jet aircraft

⁷ This bill confronted the opposition by financial and industrial circles and as a consequence was rejected.

⁸ Mazda began the production for three-wheeled motor vehicle in 1931 and four-wheeled motor vehicle R360-coupe in 1960.

⁹ Compound Vortex Controlled Combustion

public-/RV-vehicle(Stepwgn, Freed, Odyssey, CR-V, Accord), and as a consequence second producer after Toyota in the Japanese market by acting and responding rapidly in a given social-economic environment as well as in market. In March 2008, Honda has 26,583 employees, two assembly factories at Suzuka and Saitama in Japan¹⁰, 599,118 vehicles of sales in Japan, while Toyota has 69,478 employees, 1,849,816 vehicles of sales, 4 assembly factories at Aichi¹¹. In sum, we know that Honda is still a small-scale automobile producer over Toyota, while Honda has grown up to be a principal rival over Toyota in the New Era of Japanese automobile industry.

With the evolution of growth strategy, Honda develops its own production system with original machines and equipments and its organizational structure. Honda never imitated other foregoing automobile producers, neither Toyota nor American and European one, while at the beginning of automobile production Toyota learned from Ford-model to introduce mass production system. That is, Honda started from zero in order to enter the automobile market. In order to realize these strategies in the automobile market, Honda pursued an original and particular model of the firm, which enables to survive in the competition with other producers. But, it seems that Honda model begun to appear in the occasion of the change of management system in 1970, in the place of S. Honda who is founder and genius engineer, and of Takeo FUJISAWA who was vice-president as right arm of S. Honda. Until then, Honda was driven by S.Honda himself, his personality, imagination, creativity, vitality, etc., being supported by T. Fujisawa in the aspect of management. Through the transition of

¹⁰ In 2007 at Suzuka, 6,981 employees, 560,000 vehicles/year, two assembly lines, 9 models: Civic-hybrid/4D, Fit, Stream, Edix, Crossroad, S2000(TD line:10 vehicles/day), Airwave, Partner. At Saitama, 5,334 employees, 546,000vehicles/year(in 2006), two assembly lines, 9models (Elysion, Stepwgn, Odyssey, Freed, Accord-Sedan/Wagon, Legend, Inspire, CR-V).

¹¹ In sales, they don't include bus and track. Sales of Toyota are composed of Toyota and Daihatsu. See JAMA for Data of sales. Between 4 assembly factories, it is possible to move within 30min.

management system from Honda-Fujisawa to new generation, Honda restructured its firm model by introducing new systems towards flexible model of the firm under the project of <New Honda Plan>: for example collective management system¹², SED product development system¹³. Moreover, to understand the flexible model in Honda, we have to take account of the period of the Lost Decade after the bubble economy. At the beginning of 1990s, without exception, Japanese economic crisis made also an impact on Honda. While Honda got over this difficult period adapting rapidly to the crisis, it was necessary for Honda to restructure the model of the firm, including organizational system, profit strategy, production system, product strategy, employment system, etc., towards a firm model more flexible. In 2001, Honda proclaimed a new plan of restructuring its firm model focusing principally on the manufacturing section. Since then, Honda is always under restructuring its new firm model.

For example, in Honda we cannot see the distinction of educational background, sex, blue-colors/white-colors, nationality, etc. Accordingly, Honda adopts uniform or equal wage and promotion system to all employees, and in this system they are evaluated by professional license obtained in the firm. Moreover, we can observe the flexible mobility between posts or sections in the firm, even the transfer to Honda R&D and Honda Engineering(EG). In the level of production in factory Honda realizes the flexible assembly line that permits to produce eight different models at a maximal. In the consequence, in face of the change of demand in the market it is possible to transfer easily different models between assembly lines in the same factory and also across factories. As for the organizational

¹² The idea is that four top executive directors(Kiyoshi Kawashima, Kihachiro Kawashima, Nishida, Shirai) make a decision collectively, in the place of the management system of hand in hand by Honda-Fujisawa.

¹³ S=sales: Honda Motor Corporation, E=engineering: Honda Motor Corporation and Honda Engineering, D=developpement: Honda R&D. With this SED system, Honda organizes a project team composed of staffs of developments, productions and sales. Recently, Honda adds B(buy) to SED, namely SEDB system[Aono, 2007].

structure, while Production Engineering Department and Design Department are at the heart of Toyota(Whitney, Heller Higashi and Fukuzawa, [2007]), they are independent of Honda Motor Co., and then are taken charge by Honda R&D and EG, which are parts of Honda Group¹⁴. Honda Motor Co. manufactures vehicles and sells them, Honda R&D takes charge of the research and development of products(concept, design, exploitation and development of technology, etc). The principal roles of EG are the R&D of production technology, the design and construction of assembly line, etc.

Thus, we have just showed some characteristics of Honda model in order to begin to analyze and talk about its originality and particularity, because the aim of this section is to propose a start point towards a discussion about heterogeneous characteristics of Honda model against Toyota model in terms of the heterogeneity of firms in a same institutional environment. As mentioned above, started from motorcycle company and entered automobile market very lately, Honda have particular history and evolution as Japanese automobile producer, which could lead Honda to a different model of the firm to Toyota model and others.

Conclusion: towards the comparative analysis of firms beyond the (national) representative firm model

In this paper, a principal aim is to discuss the heterogeneity of firms taking account of the institutionalist theory of the firm. And in order to develop this methodological problem in the theory of the firm, we showed an approach of TR based on the productive models of GERPISA. But, the problem of heterogeneity of firms is not only a theoretical one in the theory of the firm, but also indeed a phenomenon observed in the real world. In

¹⁴ Honda R&D became independent of Honda Motor Co. in 1960. EG was created in 1970.

particular, we have given attention to the heterogeneity of firms in Japan by taking an example of Honda, which (re)organizes its firm model without converging to and imitating Toyota model. However, we cannot sufficiently show the heterogeneous characteristics between Toyota model and Honda model, because the aim of this paper is to show a point of discussion about <the Japanese representative firm model>. In order to develop the issue of the heterogeneity with an empirical analysis, it must, therefore, be matter to analyze Honda and its evolution comparing with other Japanese automobile producers.

Towards an understanding of Honda model we have several issues to examine. Firstly, how does Honda, which is also Motorcycle Company, evolve and develop its firm model (production system, employment system, development of product, organizational structure, inter-firm relation, etc) in a Japanese automobile market competing with other producers? Is there historically and even today an interaction between motorcycle and automobile concerning growth strategy, product development, etc.? Does Honda adopt JIT(Just in Time), Kanban system and so on? In other words, what is Honda production system? Secondly, how does Japanese institutional environment influence Honda model? It is matter to take account of a relation between evolutions or transitions both of macroeconomic level and of firm level. For example, while in the era of Lost Decade Toyota keeps a somewhat traditional Japanese firm model and in contrast Nissan is introducing an Anglo-Saxon system under the direction of C. Ghosn who comes from French automobile producer Renault, Honda is restructuring its production system and organizational structure towards more flexible and rapid system, without introducing neither Toyota model nor Anglo-Saxon model. It is essential that we must not confuse Honda model with Toyota model nor with other Japanese automobile producers under the name of Lean Production System or Japanese firm model.

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