THE INTEGRATION OF THE INTERNATIONAL PRODUCT LIFE CYCLE THEORY AND THE THEORY OF INTERNALIZATION: A MANAGERIAL PERSPECTIVE

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Introduction

A firm, whatever size or structure it may take, is an entity that creates goods and services and distributes these products to satisfy the consumers. The production and marketing activities constitute the fundamental aspects of business for its existance. On the other hand, reducing the cost, or more broadly, the cost management in the administrative and transactional activities is, though it is a very important aspect of business, regarded as a supplementary one for the entire management of the business enterprise.

It can be said, in other words, that the production and/or marketing functions in the management is the necessary condition for the existence and operation of the business enterprise while the cost management constitutes the sufficient condition for it. Michael Porter classifies the two aspects of corporate activities into (1) the main activities and (2) the supporting activities. (3) The main activities include the manufacturing, channeling, marketing, services and so on. The supporting activities are those such as the financing, information processing, handling the legal matters, planning, R&D, to list a few. The necessary and the sufficient conditions for the business enterprise defined above, and Porter's dichotomous classification of the business activities, i.e., the main and the supporting functions, are assumed to largely correspond with each other. The necessary and the sufficient conditions are also to be satisfied simultaneously. Satisfying either condition at one time without satisfying another may result in an unbalanced performance of the management which, in turn, may cause

the deterioration of the overall organizational effectiveness.

The multinational corporation (MNC) is no exception as an business entity to satisfy both the necessary and sufficient conditions. Both conditions for the MNC to satisfy for its qualification can be more detailed as follows:

The Necessary Condition— To satisfy as far and directly as possible the terminal consumers located in the multinational markets. In more detailed terms, the production and sales network ought to be established in the nearest locations of the consumers of various countries.

The Sufficient Condition— To reduce the cost all over the world. Basically, there are two possible ways to achieve this objective:

- (a) To minimize the cost at each of the operating units of the MNC. Theoretically, integrating the individual units with minimized cost enables the MNC to reduce the total cost to the lowest level.
- (b) To achieve the cost minimization through the transfer pricing strategy. Transfer pricing is the practice of transferring the profit generated in the high corporate income tax country to the low corporate income tax country by manipulating both the cost components and the price structure in both countries.

The International Product Life Cycle Theory and the Theory of Internalization as the Theories Explaining the Necessary and the Sufficient Conditions for the MNC

There have appeared many concepts, models, and theories attempting to explain the behavior and strategies of the MNCs. Some of them are listed below even though they may not represent the whole body of researches:

- (a) International Oligopolistic Approach (Hymer, Kindleberger)(2)
- (b) International Product Life Cycle Approach (Vernon, Wells)(3)
- (c) Internalization (Transaction Cost) Approach (Buckley, Casson, Rugman)⁽⁶⁾

- (d) Appropriability Approach (Magee)(5)
- (e) Eclectic Approach (Dunning)(6)
- (f) International Economic Approach (Comparative Profitability Approach) (Kojima)(7)

Among the above approaches, the last one, namely, Kojima's approach is different from others in that it deals with the MNCs and their behavior from the macroeconomic and/or the international economic standpoint. The remaining researches concentrate on the individual firm's behavior, adopting the managerial and/or the business economics approach. Among these managerial/business economic approaches, however, both the international product life cycle (IPLC) theory and the theory of internalization seem to grasp the characteristics of business activities by MNCs most directly. Other approaches such as the international oligopolistic approach and the appropriability approach deal with the MNCs' behavior rather indirectly and it is difficult to say that these approaches discuss the business itself.

Then, how do this IPLC and the internalization theory relate to our necessary and sufficient conditions for the MNCs? It goes as follows:

The IPLC is the theory explaining the MNC's production and marketing strategy deployed in the multinational markets.

The internalization theory is the one to explain the reason why and the process how the MNC minimize the cost all over the world.

It is therefore obvious that the IPLC is the theory explaining the MNC's behavior to satisfy the necessary condition and the internalization theory, to satisfy the sufficient condition. The two theories do not take opposing positions to each other. Rather, they only observe a firm as a business entity from different perspectives. It is even possible to say that they are supplementary in such means. The two theories are a set of wheels of a vehicle.

The Business Sequence in the IPLC

The IPLC has several stages in its sequence of business patterns for a product concerned to complete its life cycle in the multinational

markets:

- (1) Domestic production of a highly differentiated product starts in the technologically advanced country like the US. The product will not encounter any fierce competition with others due to its technological/ fundamental advantage.
- (2) Other domestic manufacturers will follow the strategy and introduce the similar kind of products in the market soon causing the loss of competitive advantage on the part of the product first introduced in this market. The product becomes standardized in its home market.
- (3) The manufacturer who initiated the production of this item finds some other outlets for the product in order to maintain the high profit margin. It is most likely the foreign market(s) which possesses the high demands for the product. The firm now starts exporting the product that has lost its competitive advantage at home to overseas market(s). The product can then regain its advantage in the overseas market(s).
- (4) The native manufacturers in the foreign country, however, soon after learning how to manufacture the product through the licensing agreement and/or purchasing the patent, may start their own production. This enables the foreign country to substitute the domestic production for the import of the item from the advanced country. The exporting firm in the advanced country has to lose again its competitive advantage over the foreign companies. The product at this stage is found to be standardized internationally.
- (5) Faced with this losing situation, the exporting firm of the advanced country has to protect its export market. It is likely that it establishes the production facilities within the foreign market(s) from where the product be shipped in order to satisfy the local demand.

The above illustration of the stages of IPLC can be summarized simply as follows: (1) Domestic Production of A differentiated Product

(2) Domestic Competition with Other Makers (3) Export to Foreign Markets (4) Import Substitution through Licensing/Patent (5) Foreign Direct Investment. For some kind of commodities faced with severe competition overseas, it may be very difficult to complete the

life cycle as described above. Rather, they may skip some of the stage(s) of their life cycle in order to cope with the competition with foreign-made products. In such cases, the sequence of business patterns, i.e., from (1) to (5) above, may not be followed. An alternative sequence of business patterns would be: (1) Domestic Production→ (2) Domestic Competition→ (5) Foreign Direct Investment, leaving (3) Export, and (4) Import Substitution (Licensing/Patenting) stages skipped. In all, the two types of IPLC are identified: (a) the IPLC with full stages, and (b) the IPLC with skipped stages.

The Business Sequence in the Internalization Theory

The internalization theory is the theory that intends to explain the reason for and the procedure of reducing the costs which accrue business units scattered when the MNC conducts businesses all over the world. Rugman classifies the costs into two types:

- (1) the regular cost needed in producing goods and services. The regular cost incurred for the domestic production is denoted by C. The regular cost for the production overseas is also denoted by C*.
- (2) the special cost which is supplementarily added to the regular cost in order to transport the goods and services to foreign market(s) from the original export country. Specifically, three kinds of special costs are identified:
 - Export Marketing Cost—A firm may choose to export as a method of transporting goods to foreign markets. In such a case, the export marketing cost becomes integral. This cost is denoted by M*.
 - Environmental, Cultural, and Political Cost— A firm is assumed to encounter various difficulties caused by the differences in environments, culture, and the politics in host countries. These difficulties are to cause additional cost to the MNC. This kind of cost is denoted by A*.
 - Advantage Dispersion Cost-A firm may lend and share its licenses with foreign firms. This may expose the licensing firm to the risk of losing its competitive advantage to the

licensee(s). The possible cost of dispersing the competitive edge is denoted by D*.

In consideration with these concepts of cost, the MNCs pursue a method of transporting goods and services to foreign markets. The methods are either (1) Export, (2) Foreign Direct Investment, or (3) Licensing. The composition of costs needed for each of the three transportation methods are as follows:

(1) Export	$C + M^*$
(2) Foreign Direct Investment	$C^* + A^*$
(3) Licensing	$C^* + D^*$

A firm, after calculating the total cost of each method, will compare this total cost with the expected total revenue derived from each method. In accordance with these results, the method with the maximum net profit will be selected. An important point, according to Rugman, is that the best method to be chosen for the cost minimizing purpose tends to vary over the period. It is possible to comprehend this variation from comparing the amount of additional cost such as M*, A*, D*.

Assume that $M^* < A^* < D^*$. Then, the export having the minimum cost $(C + M^*)$ will be the first choice, followed by the foreign direct investment $(C^* + A^*)$ as the second choice, and by the licensing $(C^* + D^*)$ as the last one. In short, the preferred sequence of business patterns, according to the internalization theory, is (1) Export \rightarrow (2) Foreign Direct Investment \rightarrow (3) Licensing, in that order.

When considering a theoretical perspective, however, it is even possible to establish another preferential sequence of business patterns as (1) Export \rightarrow (3) Licensing \rightarrow (2) Foreign Direct Investment.

Integrating the Business Sequences in both the Theories

In the previous section, the integrity of observing the MNCs from two sides, i.e., the production/marketing aspect and the cost management aspect, was discussed in order to apprehend the entire activity of the MNCs. The production/marketing approach is appropriately described by the IPLC and the cost management

approach is identified by the internalization theory. The first approach is for the necessary condition and the second one is for the sufficient condition for the MNCs to be identified. It should be noted again here that both conditions ought to be fulfilled simultaneously in order to achieve the well-balanced activity of the MNC in the world market. The simultaneous fulfillment of both conditions then implies that the business sequences specified by both theories ought to be also matched. This point is very important because even if, for example, the Foreign Direct Investment is chosen as the best business pattern from the IPLC's standpoint to fulfill the necessary condition, some other business pattern such as the Licensing might also be chosen as the best one from the Internalization Theory's view in order to satisfy the sufficient condition. In this case, the discrepancy of the best business pattern(s) for fulfilling the conditions is likely to result in some suboptimization of the MNC's organizational performance. Figure 1 illustrates the four possible cases of matching the necessary and the sufficient conditions.

		IPLC	
		A	В
INTERNALIZATION	X	A-X	В-Х
	Y	A-Y	В-Ү

Figure 1 Integrating the IPLC and The Internalization Theory

On the horizontal axis of Figure 1, two types of business sequence are arrayed along with the IPLC:

- (A) The Full Cycle Type
 - Domestic Production → (2) Export → (3) Import
 Substitution (Licensing) → (4) Foreign Direct Investment
- (B) The Cycle Skip Type
- (1) Domestic Production → (4) Foreign Direct Investment Along with the vertical axis, another set of business sequence based on the Internalization Theory is placed:
 - (X) $M^* < A^* < D^*$ Type
 - Domestic Production → (2) Export → (3) Foreign Direct
 Investment → (4) Licensing
 - (Y) $M^* < D^* < A^*$ Type
 - (1) Domestic Production → (2) Export → (3) Licensing →
 - (4) Foreign Direct Investment

Match-Mismatch of Business Patterns

The match-mismatch of the business patterns for both the necessary and the sufficient conditions is shown in Figure 2.

The capital M in Figure 2 indicates that the business patterns for the necessary condition and the sufficient condition match. The arrows drawn from the original M (the matched business patterns of the domestic production and export) to other Ms tell the sequential process of matched business patterns. The blank cells in Figure 2 indicate that the business patterns located in them do not match, therefore, the necessary condition and the sufficient conditions are not simultaneously satisfied.

In sum, the following sequences of business patterns are found to satisfy both the necessary and the sufficient conditions:

In the A-X combination.

- (1) Export → Foreign Direct Investment
- (2) Export → Licensing

In the A-Y combination,

(1) Export → Licensing → Foreign Direct Investment

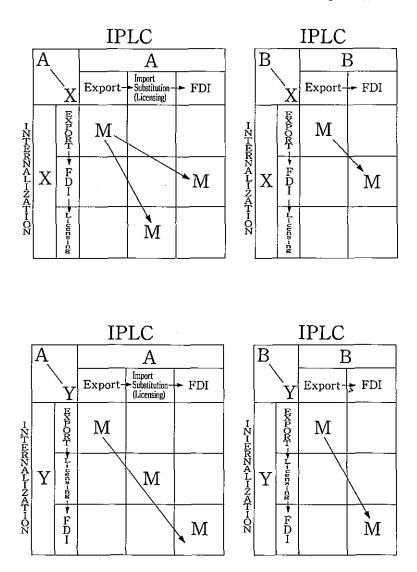


Figure 2 Details of the IPLCthe Internalization Theory Integration: The Match-Mismatch of Business Patterns

In the B-X combination.

- (1) Export → Foreign Direct Investment
- In the B-Y combination,
 - (1) Export → Foreign Direct Investment

From the above combinations, it becomes clear that there exist three sequences of business pattern that satisfy the necessary and sufficient conditions for the MNC. They are:

- a. Export → Foreign Direct Investment
- b. Export → Licensing
- c. Export → Licensing → Foreign Direct Investment

None of the above three business sequences are found to follow the sequence that the internalization theory itself originally suggested as the most plausible one, i.e., Export \rightarrow Foreign Direct Investment \rightarrow Licensing.

Conclusion

This study has revealed that the MNC has a possibility of taking several different sequences of business patterns in order to fulfill the necessary and sufficient conditions for its balanced operation in the world market. The choice of certain sequence of business pattern by the MNC, i.e., whether it is the Export, or Foreign Direct Investment, and/or the Licensing, is assumed to give a significant impact on the business and economic fundamentals of the host country. Its impact will be in various forms such as the loss/creation of job opportunities, the possibility of import substitution, the increase/decrease of tax revenue, the development of social overhead capital, and so forth to list a few. For the comprehensive analysis of the behavior of MNC and its theory building, it is necessary as the next step of research, to develop a framework which analyzes the mutual interaction between the behavior and strategy of the MNC (represented by such theories as the IPLC and the Internalization Theory) and the policy principles of the host country for its economic progress and welfare improvement.

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多国籍企業理論への経営学的接近: 国産生産ライフ・サイクルモデルと 内部化理論の統合の試み

〈要 約〉

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多国籍企業理論には、国民経済や国際経済の中での多国籍企業の行動を 分析する、いわゆるマクロ的接近と、企業としての多国籍企業行動を抽出 してきていて、分析するミクロ的接近がある。本論文は、この第2の研究 方法に沿っている。

いかなる企業といえども,その事業体の存続と成長のためには,その表の活動たる生産・販売と裏の活動たる組織の維持・管理がバランスよく統合されていなければならない。いわば,前者が企業存立の必要条件,後者が十分条件である。多国籍企業もこの例にもれない。多国籍企業の生産・販売を論じた(ということは必要条件を論じたということだが)理論としては国際生産物ライフ・サイクル論がある。組織の維持(そして,これは十分条件であり,組織活動コスト問題に帰着する)問題としては内部化理論がある。この2つの理論は,したがって,多国籍企業がうまく運営されるための車の両輪なのである。

ところで,多国籍企業の活動形態というのは,本国からの輸出や海外生産・販売,進出先からの逆輸入等実に多様である。そして,これらの活動 形態の間には,企業理論からして,一定の継起的移行プロセスが考えられる。

だが、多国籍企業の必要条件たる国際生産物ライフ・サイクル論が示す ところの継起的移行プロセスと十分条件たる内部化理論が示すところのそ れとが、完全に一致する場合と一致しない場合とがある。

一致する場合には,多国籍企業がその存立と成長の必要・十分条件を満 たすのであるから、その継起的移行プロセスは企業論理に適合している が、一致しない場合には、適合しない。つまり、多国籍企業の車の両輪が 同じ速度で回っていないことになる。

かくして、多国籍企業のミクロ理論というのは、一般になされているご とく国際生産物ライフ・サイクル論がよいか、内部化理論がよいかという 二者択一の問題ではない。この 2 つが統合され、しかも、 2 つの理論が示 す活動形態間の継起的移行が一致する場合にのみ, 多国籍企業の行動理論 として完成するのである。

本論文は,この2つの条件が一致するケースを吟味し,多国籍企業のミ クロ理論が複雑な業態選択の可能性を包含しているものであることを示す。