ANNALS OF BUSINESS ADMINISTRATIVE SCIENCE 5 (2006) 19-40
Available at www.gbrc.jp
Online ISSN 1347-4456 Print ISSN 1347-4464

Competition and the Formation of Inter-firm Differentiation Following the Dominant Perception: A Case Study of the Online Securities Industry

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Abstract: In this paper, in order to answer the question: "In an industry where imitation by competitors is easy, how has differentiation between companies been created and maintained?" we provide a new framework, based on the Dynamic Capability-Based View of the Firm and Action System Theory. On the basis of this framework, we analyze the early stages of competition in the online securities industry in Japan. We found that when a Dominant Perception created in an industry is strengthened by the actions of companies, the strategy of a successful company may not be imitated for several years and consequently that an expansion in differentiation between companies may occur.

Keywords: online securities industry, internet business, innovation, dynamic capability-based view of the firm, action system theory

1. Introduction

Why does differentiation among companies arise and persist in an industry where imitation is easy? In the online securities industry,[1] business is basically conducted on the internet, each company's products and services are shown in real time and some major companies disclose their corporate performance. Therefore, the inducement to imitate a strategy that has succeeded in another company is relatively strong. In addition, as will be stated later, even though there are problems with the information system, it is not very difficult to follow the strategy

[1] Online security company in this paper means companies who provide security trading services such as stocks, debts and trust fund for individual customers via internet line. Also, online securities industry means a group of those companies.

of others. However, in the early stages of the Japanese online securities industry, Matsui Securities was visibly successful but others, despite knowing this, did not imitate their strategy for two years, which allowed Matsui Securities to build a dominant position. This paper aims to analyze the mechanism of this phenomenon, from a dynamic viewpoint, with a discussion of the *Dynamic Capability-based View of the Firm* and of the *Action System Theory*.

In researching strategic management theory, to answer the question why some companies that belong to the same industry have different competencies and keep performing differently, two major theories of defining the resources of competitive advantage occurred after the 1980s. The first is *Strategic Positioning*, which focuses on the external elements of a company and the other is a *Resource-based View of the Firm* (RBV), which focuses on a company's internal elements (e.g., Kato & Aoshima, 2000). Both explained the concept of differentiation among companies thoroughly and theoretically, however, there was little or nothing mentioned about the cause, process or mechanism of how such differentiation occurs. More specifically, the two views mentioned above have their limitations in that they are both statistical models. This has led to an increased interest in a *Dynamic Capability-Based View of the Firm*, which focuses on researching the dynamic process (e.g., Levinthal, 1995; Foss, 1997; Noda, 2001), however, research based on this approach is still developing and there is a lack of available reference material.

In this situation, Noda and Collis (2001) attempted to build a universal framework to analyze the dynamic process. In their research, they showed a thorough framework, focusing on the strength of three forces: 1. *Initial Conditions*, which generate the seeds of differentiation among companies; 2. *Divergence Forces*, which extend the differentiation; 3. *Convergence Forces*, which counter differentiation and; *Sustainability Conditions* that prevent convergence and sustain differentiation. The researchers also studied the correlation of these components, in an attempt to build a strategic theory about the evolution of differentiation between companies in the same industry.

One company's success always invites imitation by other companies and competitive differences among companies tend to decrease over time (Williams, 1994). Today especially, with severe competition on a global scale, even core resources or competencies that are difficult to imitate, are likely to diffuse to other companies (Teece, Pisano, & Shuen, 1997). Nevertheless, their explanations of the mechanism of creating and maintaining differentiation can be said to be incomplete because of too much reliance on *Coincidence* and on the aspect of *Initial Conditions*.

On the other hand, current research is increasingly being based on the *Action System Theory*, which considers the dynamic process at an early stage of an industry as being the intended action of a number of players and as a combined process of these (e.g., Numagami, 2000). Generally,

many technologies and services are offered at the beginning of a market's formation, then emergence of the dominant design consolidates them (Abernathy, 1978). The action system school of thought insists that it is also important to focus on *Unintended Results*, which are generated by the social and political interaction processes in the environment in which the company exists and not only on linear cause-and-result relationships, such as superior technology and service being the cause of market choice in this process. For example: "*A company's persistence in core technology and preceding research in the United States*" (Fukushima, 1999); "*Technology policy of the government*" (Shimamoto, 2001) and; "*Technology performance presented at academic society*" (Fujii, 2002) reported on those cases that are influenced largely by the innovation process and competition in the early stages of a market, after *Unintended Results* have occurred in consequence of the players' social interaction.

However, the major interest of that research was to clarify the logic behind what kind of interesting situation could occur in the innovation or competition process and to reinforce the probability of logic by using those cases, given that the environment surrounding a company (i.e., competition and technology) is not objective, but rather comprises actions by the players that influence each other. Therefore, the research question of this paper: "*how differentiation among companies can be formed and maintained in an environment where imitation is relatively easy*", has not yet been answered.

As we have seen, the dynamic capability-based view and the action system theory is deeply involved with the main theme of this paper, but we do not yet have a complete answer. This leads to the necessity of building a new viewpoint by adding to the discussions on the action system theory as to how differentiation among companies is formed and maintained in the early stages of an industry where imitation is relatively easy, based on the framework of Noda and Collis (2001) and by showing its adequacy in cases analyzed in this paper.

2. Dynamic framework of differentiation by competition among companies

Noda and Collis (2001) define the first forces that create differentiation as the *Initial Business Experiences* and the company's *Initial Conditions*. Each company has different *Initial Business Experiences* when they start business and then move their strategy in a different direction, which causes differentiation among competitors. That is, the *Initial Conditions*, being the premise of the *Initial Business Experience*, is the key to the origins of differentiation among companies. Examples of this are: internal elements, such as different priorities when acquiring resources; leadership at the top and their fortune, or; external elements such as the nature of the local market in which companies compete, and; the environment at the commencement of

business. Anyhow, these various elements, whether internal or external, work interactively and comprise the *Initial Conditions*, which affect the direction and priority of company's future.

The second element is *Divergence Forces*, which extend the initial differentiation among companies. The motivation to extend business, along with the direction set after the *Initial Business Experience*, comes from positive feedback, which means success at the beginning of business affects later resource allocation and as a result, the strategy position goes higher. For example, scale merit and resource allocation according to past performance (the batting average) to develop business preferentially, or a biased perception of top management, tend to see a business follow a positive success route. These elements extend the differentiation of business in each company (e.g., Noda & Bower, 1996).

The third element is *Convergence Forces*, which reduce the differentiation among companies and *Sustainability Conditions* which counter the *Convergence Forces*. One company's success leads other companies to imitate it and differentiation among companies will converge as time goes by (e.g., Williams, 1994). Therefore, it is important to prevent strategic imitation in order to sustain a competitive advantage. Some examples of *Sustainability Conditions* contained in past research is: patents to prevent imitation of resources and information adherence (Teece, Pisano, & Shuen, 1997), and; causal ambiguity, that is, the causes of superior company performance are not well understood (Lippman & Rumelt, 1982). However, looking at the real world, these elements are not sufficient to explain a mechanism that sustains a competitive advantage over a long period.

Discussions have arisen to compensate for these unexplained elements and current research calls this *Isomorphism Power*, based on the action system theory. Primarily, many strategic options compete with each other to obtain the limited resources in a company (Burgelman, 1991). Therefore, in order to invest resource in line with the strategy, it is essential that legitimacy for this one strategy and not others be approved internally (Hannan & Freeman, 1984; Kagono, 1988). Many criteria for legitimacy are conceivable, but in the early stages of the market, where there is extremely high uncertainty and vague evaluation criteria for technology and services, a company is not necessarily confident about its strategy. This makes it easier to secure legitimacy by insisting internally that reasonable procedures have been followed, for example, laws, upper organization, another company's strategy that looks to be performing well and the opinions of researchers or experts. This process is called isomorphism (DiMagio & Powell, 1983).

The process of isomorphism develops in an environment, called the *Ecologies of Learning* by Levitt and March (1988), in which one company imitates another's behavior. That means that when one strategy has been adopted by a leading company or group of companies, even though the strategy

turns out to be unreasonable afterwards, it is possible for it to become the dominant perception through the isomorphism process, just because the leading company has adopted it or because many companies do the same thing. Once this has happened, it becomes more and more difficult to secure legitimacy for strategic ideas that run against the dominant perception internally and an original strategy will be prevented (e.g., Fukushima, 1999).

Moreover, once a company follows a dominant perception-based strategy with the isomorphism process, then various internal elements prevent a change in strategy. There are two major methods of organizational learning. One is *Exploitation*, which focuses on conventional routine work and the other is *Exploration* which focuses on a new routine that shows possibility. Usually, *Exploitation* has priority because it performs better (March, 1991). On the other hand, when the external environment changes rapidly and significantly, like in the early stages of the market, a company should change learning away from *Exploitation* to *Exploration* to seek a new optimal routine. However, as people are used to the *Exploitation* way with its internal daily routine and their thoughts and behavior are fixed, they tend to take the familiar route and stick to conventional routines (Kagono, 1988; Levitt & March, 1988; Nelson & Winter, 1982). Furthermore, when conventional routine is thought to be a competitive resource or is connected to the political power of managers, resistance to change will be even larger and make it more difficult to adjust to the new environment (Leonard-Barton, 1992).

The development of each company's strategy and of the differentiation among companies formed in consequence of this is determined by the strength of these three forces. That is, a balance in the strength of these three elements may occur, causing a situation whereby each company pursues legitimacy of its strategy, formed by isomorphism to the external environment. So, many companies may adopt similar strategies and become resistant to internal change, competing endlessly with each other with an unreasonable axis, but neglecting to imitate the unique strategy of a successful company.

In the next section, the probability of the above viewpoints will be examined by looking at the online securities industry, where even in an environment where the evaluation and imitation of another's strategy was relatively easy, a number of companies held to the *Dominant Perception*, which was afterwards shown to be unreasonable and the company that was not imitated succeeded as a result.

3. Competition in the online securities industry at an early stage[2]

3.1. Online security industry and six companies

The history of the online securities industry in Japan dates back to April 1996, with the entry of Daiwa Securities to the arena. Within two years, major and

[2] The case in the third section is written based on description and data in published materials. Note that the writer interviewed 15 people working in or with the industry, including the presidents and chairpersons of surveyed companies. They admit this interpretation.

mid-sized companies entered the market, with up to 20 players competing. At the same time, the so-called "*Big Bang*" financial market deregulation in Japan began, which dramatically changed the competitive environment for online securities trading (Takai, 2004a, 2005). One of the first deregulation initiatives, introduced in December 1998, was the transition from a securities company licensing system to a registration system. This made it possible for many companies, including overseas companies and those from different industries, to enter the market more easily (Takai, 2004c). The second change was the deregulation of commission fees, which occurred in October 1999. Security companies were able to set their commission fee at any rate, which had previously been set at a single rate by law. This change created new competition rules in the securities industry, once seen as being differentiated only in scale.

At this institutional turning point of the securities industry, internet diffusion began and the number of companies in the securities industry grew to 51 over a six month period, up from 34 in September 1999. This includes about a quarter of the domestic security companies that entered the online security business during the peak period. In the beginning, online securities companies only handled a limited number of products. However, they soon began to provide products at the same level as face-to-face retail sales (i.e., at actual shop counters) and the quality of services also improved. As a result of such upgrading, the number of exchange transactions conducted online kept increasing despite a depressed stock market. Within a few years, the online securities market has grown as large as the face-to-face retail sales market (Takai 2001). With this rapid growth, companies merged or exited the market and the number of companies was reduced to 55 in September 2003, down from 67 in March 2001.[3]

Below, we consider the competition history in the early stages, from October 1999 to June 2003, focusing on six of the leading online securities companies[4]: Matsui Securities, E*trade Security, DLJ direct SFG Security (DLJ), Monex Security, Nikko Beans Security and Kabu.com Security.[5]

[3] See *Intanetto torihiki ni kansuru tyousa kekka ni tsuite (2004.9)* [from the survey of internet dealing], Japan Securities Dealers Association (2004, November 5).

[4] These six companies hold a share of more than 80% of individual dealing amount in online securities, and hold more than 60% of the shares of the amount handled over the counter (2004.4-6; *Statistical data of TSE, Quarterly settlements of companies* and *Annual report of Matsui Securities*). Therefore, it is enough to pick up those six in terms of the influences on the industry. Also, it is common to deal with those six companies when writing about major companies in the industry.

[5] Kabu.com Security was established by the merger of Nihon Online Security and E-wing Security in April 2004. Since the surveyed period in this paper covered more than half of the operation as Kabu.com, I used Kabu.com in this paper, not the former two companies. Note that Nihon Online Security entered when competition began, but the start of business was delayed from November 1999 to February 2000 due to a system failure (*Nikkei Sangyo Shimbun*, 1999, November 7). However, accounts began to be offered from October 1999, so it can be treated as they took some part in the competition triggered by commission deregulation just like competitors (*Nihon Kinyu Shimbun*, 1999, September 22). Also, DLJ Direct SFG Security changed their company name to Rakuten Security in July 2004, but there is no problem in describing it as DFJ Direct SFG Security because the analysis period of this paper ended in June 2003. Nikko Beans and Monex merged to establish a common holding company by share transfer (Nikko Beans Press Release, Monex Press Release, 2004, July 15).

3.2. Initial business experiences and initial conditions

Initial conditions

Matsui Securities was the only company out of the six who entered the market before 1999, when competition started, but its entry was in May, making it the 13th[6] company to enter the market, not far ahead of the others. However, the company's quest for a new business model started in 1992 when it announced the complete abolition of face-to-face sales activities. By 1996, Matsui had transformed itself into a specialized call-center securities company. President Matsui had experience of market competition after deregulation occurred in the shipping industry where he had worked before and he believed that the cost of sales people would not be accepted by customers once the market had become deregulated. His belief drove the decision to spend four years eliminating the sales team completely and overcoming strong internal resistance.[7] Later, at the time of the company's market entry in 1998, he added a new line, the internet, to the single channel call-center and after six months he abolished call-centers, to become a specialized online security company.[8] Thus, Matsui Securities prepared itself to enter the market by positioning its online security business as security broking without sales people and by utilizing the data and know-how from its call-centers.[9] This was a completely different approach from all other companies that entered the securities market before deregulation, who used the internet to complement their counter sales channel.[10]

Five companies, other than Matsui, entered the market after deregulation. These were major US discount brokers or companies financed by domestic financial institutions, which basically had no experience of management in the domestic securities industry.[11] That meant that they hardly had the know-how, data, potential customer base, fixed costs or resources to succeed when they started their businesses.

Initial business experience

Each company engaged in fierce competition when deregulation occurred in October 1999. Companies other than Matsui Securities set their fee system as a commission fee commensurate at the time of the contract price, with little originality such as different commission fees for certain contract price bands or

[6] See Osaki (1999, p. 173).

[7] This is detailed in "Havado Daigaku Bijinesu Sukuru Pota kyoju no senryakuron sabu noto" [Harvard University Business School Professor Porter's strategic sub-note vol.3] (*Shukan Toyo Keizai* 202004a) show only sources.02, July 27) (In Japanese). Notes from contents of Takai (2004a) show only sources.

[8] Above *Shukan Toyo Keizai* (2002, July 27).

[9] See "NIKKEI BP real interview" (2002, May 31). (In Japanese)

[10] From the service menu just before the deregulation of commissions. Written based on products and services of all the companies in the online securities industry.

[11] E-trade was established by making Osawa Security a 100% subsidiary incorporated in E*trade in the US (second largest share-deal in America in 1988, just before entering Japan) and E-trade financed by Soft Bank (Osaki, 1999; E-trade corporate history from homepage). Osawa Security had suffered deficits for the previous seven years until then and had a small customer base. E-trade incorporated just for the purpose of acquiring the license (*Nikkei Sangyo Shimbun*, 1998, October 5). Before long, Mr. Izuchi from Soft Bank came in as a new President (*Nikkei Sangyo Shimbun*, 1998, October 5). Therefore, E-trade inherited almost nothing from Osawa Security such as strategy and customer base.

setting different commissions according to the asset balance. These companies set their management target at increasing the number of accounts held.[12] Companies that disclosed the number of accounts held, such as DLJ, Monex and E*trade, held more accounts than Matsui Securities who had entered the deregulated market six months before them and this was considered a great success at that time.[13]

Matsui Securities, on the other hand, adopted a different strategy from the others who were competing on the number of accounts, based on its own customer data[14] on the market size of the online securities industry and its future. In fact, President Matsui at that time said: "*They say a million or two million accounts, but its nonsense… It will be 200 to 300 thousand, I guess.*"[15] Competitors had set targets at several hundred thousand accounts for each company. Based on this, Matsui Securities set customer targets at experienced investors and index turnover rates.[16] Here, turnover rate is the index that shows a transaction rate per customer. So, while other companies were focusing on increasing their number of accounts, only Matsui focused on experienced investors and on maximizing their transactions.[17]

In detail, Matsui Securities offered a unique fixed commission fee system (a fixed fee for multiple transactions), that is, the commission remained fixed (3,000 yen) for up to three transactions per day, as long as the total amount did not exceed a set range (three million yen). Compared with others who charged commission on the number of transactions, Matsui's system cost more[18] for only one transaction, however, it became less costly as a customer repeated transactions, so this system was suitable for professionals. In addition, Matsui offered services that took advantage of the real-time processing capability of online businesses, that carry a high risk and requires specific knowledge, such as margin trading and option trading.[19]

As can be seen, Matsui Securities made a good start with its trading services such as a unique commission system worldwide and margin and option trading for experienced investors.[20] That is,

[12] Each company's management index is as follows. E-trade: "We will acquire 100,000 accounts in a year." (President Kitao) (*Nikkei Sangyo Shimbun*, 1999, October, 4). Nikko Beans: "BEP is 300,000 accounts. We will attract new investors like the young." (*Nikkei Kinyu Shimbun*, 1999, September 27). DLJ: "We will certainly acquire more than 100,000 accounts by the end of this year." (President Kunishige) (*Nikkei Ryutsu Shimbun*, 2000, February, 12). Monex: "We aim at 200,000 accounts within this year." (President Matsumoto) (*Nikkei Ryutsu Shimbun*, 2000, February, 12). e-wing/Nihon Online: "(By the end of March 2000) acquire more than 100,000 accounts" "(Same) secure 50~60,000 accounts" (Yano Research Institute, 2002).

[13] In April 2000, the numbers of accounts were: Matsui 30,226, DLJ 51,491, Monex 56,594. E-trade announced 79,247 in March 2000, one month ahead of the others (from press released information).

[14] See "NIKKEI BP real interview" (2002, May 31). (In Japanese)

[15] Comments of President of Matsui Securities, Mr. Matsui (Above "Special Seminar at Financial Information Technology 2000," 2000, September 22).

[16] See Matsui and Matsumoto (2001), p. 52.

[17] See *Nikkei Sangyo Shimbun* (2001, January 10).

[18] Commission fee for contract price of ¥500,000 is: E-trade ¥800, DLJ ¥1,900, Monex ¥1,000, Nikko Beans ¥2,400, Kabu.com ¥1,000, whereas Matsui charged ¥3,000 even for 1 transaction.

[19] See Yano Research Institute (2000), p. 149.

[20] Daily average transaction amount increased dramatically in September 1999, just before commission deregulation, ¥1,930 million whereas in October just after the regulation, ¥4,890 million and in March 2000, six months after, ¥11,300 million (press release, Matsui Securities).

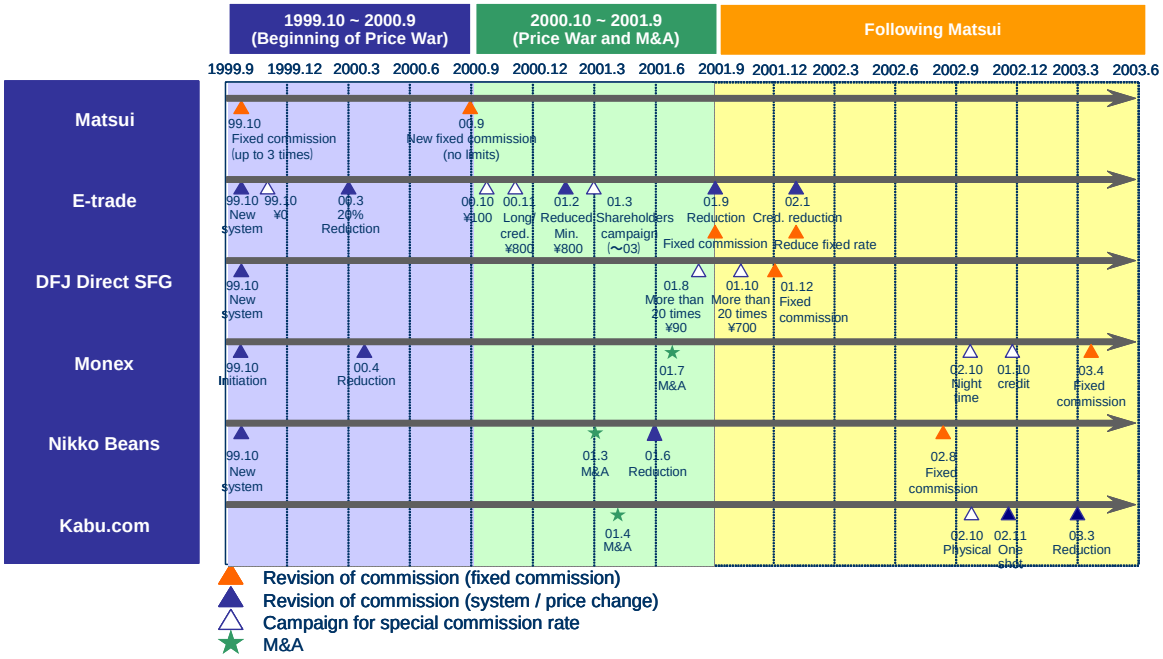
Matsui Securities succeeded in attracting middle-aged investors who use margin trading frequently with services that took their investors' behavior and mentality into consideration.[21]

3.3. Divergence forces

Competition of companies excepting Matsui Securities: Competition to increase the number of accounts

When commission fees were deregulated in October 1999, the proposed fee systems of the leading companies that specialized in online securities trading, except for Matsui Securities, were already below the profit line.[22] Although there was a common understanding at the time that 3,000 yen was the profitable line, the companies, other than Matsui Securities, proposed fees that were below this line (e.g., E*Trade=2,500 yen, DLJ=1,900 yen, Monex=1,000 yen). In fact, many of these companies admitted that upon deregulation they had set the fee below the profit line, as is shown in their comments: "*We are prepared to suffer a loss for three years*" (Nikko Beans) and "*The fee will not cover fixed costs*" (DLJ). Despite the fact that companies were already incurring losses, a fierce price war soon erupted. The first company to

Figure 1. Strategy and merger of six companies regarding commission fee



Note: strategy regarding commission fee is limited to physical shares here.
Sources: IR materials, press release of each company and four series of news papers from Nikkei.

[21] See *Nikkei Sangyo Shimbun* (2001, January 10).

[22] See *Nihon Keizai Shimbun* (1999, September, 27), *Nikkei Kinyu Shimbun* (1999, September 27), *Nikkei Kinyu Shinbun* (1999, August 10).

decrease its commission fee was E*trade Securities,[23] which was also the company that was first to trigger "*price destruction*" in the United States. Initially in October 1999, E*trade Securities began a free commission fee campaign for a limited period, without changing its revised price scheme that had just been set up. Following this, in March 2000, when E*trade Securities lowered its commission fee by 20%, this was soon followed by Monex, which lowered its commission fee for relatively high range transactions of more than two million yen.

A movement towards expanding scale began, in which various attempts took place to increase the number of accounts held through mergers and acquisitions. In April 2001, Kabu.com announced that it was to be incorporated through a merger,[24] followed by an announcement of acquisitions by Nikko Beans and Monex, respectively.[25]

These events triggered extreme discounting competitions after the latter half of the 2000 financial year, while the number of online security accounts increased by more than expected. As stated, companies other than Matsui, competed intensely by focusing on increasing their number of accounts by discounting commission fees and by acquisition (Figure 1).

[23] See Osaki (1999), p. 16.
[24] See *Nikkei Kinyu Shimbun* (2000, December 6).
[25] See *Press release*, Nikko Beans (2000, December 26), *Press release*, Monex (2000, December 27).

Matsui's strategy: Fixed commission and margin trading

Matsui Securities, on the other hand, maintained commission rates that were more costly if the customer made only one transaction. Moreover, recognizing that many customers had moved and that the turnover rate was high after actual competition had begun, Matsui had information that this strategy was correct.[26] Then, in October 2001, they changed their fixed commission fee system by removing the limitation on the number of daily transactions, from a maximum of three per day to no limit on the number of transactions for a commission of 3,000 yen, as long as the total trading remained under three million yen.[27]

They continued to enhance their services and products and developed an information system within the company[28] for purposes of realizing a strategy that focuses on turnover rates by targeting experienced investors, such as a combination of a fixed commission system and margin trading.[29]

Differentiation expansion

Two years after the securities market competition had begun, in September 2001, when Matsui Securities was still seen as a niche or day traders' company, Monex ranked first with 178,000 clients, followed by E*trade's with 168,000, DLJ's 111,000,

[26] See Matsui and Matsumoto (2001), p. 61.
[27] See *Press release*, Matsui Securities (2000, July 28, and 2000, July 18).
[28] See *Nikkei Sangyo Shimbun* (2000, January 21).
[29] See *Press release*, Matsui Securities (2000, April 14, 2000, May 1, 2000, June 15, 2000, July 7, 2001, February 14).

Nikko Beans' 78,000, and Kabu.com's 76,000. Taking second billing to the latecomers, Matsui Securities' client base stood at only 63,000. Nevertheless, when comparing the number of transactions per account per day or the amount of sales of transactions per day, there was a radical difference between Matsui Securities and the others, ranging from a three-fold to ten-fold difference.[30] The ratio of operating profit to operating revenue[31] in the fiscal year ending March 2002 was 19%, 17%, 1% for Matsui Securities, E*trade and DLJ, respectively. On the other hand, for Kabu.com, Nikko Beans, Monex, it was -9%, -22%, and -44%, respectively, showing that these companies were still suffering large losses, even after three years from their market entry. In addition, E*trade suffered losses[32] in the stock brokerage business. This means, in reality, that only Matsui Securities was really showing a profit.

As discussed, Matsui went in a totally different direction against the other companies. While the other companies suffered from low performance because of continuous price competition in an attempt to increase the number of accounts, only Matsui made favorable profits with its core strategy of a fixed commission fee system and margin trading.

[30] Numbers of contracts per account were, assuming Matsui as 100: DLJ 27, Monex 13, Nikko Beans 15, Kabu.com 10. Under the same assumption, transaction amounts were: E-trade 23, DLJ 38, Nikko Beans 9, Kabu.com 8 (Takai, 2004a).

[31] See annual IR materials from FY 2002.3.

[32] See *Nikkei Kinyu Shimbun* (2003, April 24).

3.4. Convergence forces and sustainability conditions

Dominant perception as a sustainability condition

Interestingly enough, most companies did not imitate Matsui's strategy for over two years, even though there was such a clear difference in performance. The reason for this phenomenon is possibly the *Dominant Perception* formed in the industry at that time.

In the Japanese securities industry before deregulation, the only successful business model was to have as many "good" customers as possible. Securities companies sought to keep their good customers as long as possible, by providing valuable investment information and advise, tailored to the needs of each customer under a relatively high and uniform commission fee structure, which was not viewed as particularly onerous by the affluent, middle-aged consumer groups, with their surplus assets, to which most of the securities companies' customers belonged.[33]

However, amid the public discourse of the *Big Bang* financial reforms in Japan, which gained momentum from around 1997, the government decided that securities commissions would be deregulated, among other anticipated deregulatory moves in the Japanese securities industries. At the time, there were strong expectations that the assets of general customers, who had previously not been targeted by the securities industry, would flash into

[33] See Saga (2001).

the stock market upon commissions deregulation. Moreover, at the time, Japan was in the midst of the so-called IT bubble economy, with the Nikkei stock index enjoying a rising trend.[34]

In the United States commissions had already been deregulated in 1975, 20 years ahead of Japan. This triggered a new type of security company called a *Discount Broker* that discounted commission fees and offered no or little investing information or consulting. This new type of companies afforded general citizens, not only the affluent, an opportunity to invest their asset. Despite this, in the U.S., the number of accounts for online security trading increased rapidly after around 1996 because of internet diffusion. The Japanese security industry watched this trend with interest.

By comparison of actual data, in September 1999, just before deregulation in Japan, there were only 130,000 online securities accounts[35] in Japan whereas the figure in the U.S. was 13 million.[36] Thus the Japanese market was much smaller than that of the U.S., even taking into consideration population size, individual asset compositions, and total assets.[37] Based on two significant upcoming changes that changed the U.S. market dramatically, namely the convenience provided by online services and commission deregulation, securities companies held high expectations for explosive growth of the Japanese market based on the precedent set by the United States.

Companies that specialized in online securities trading quickly became the leading players of the online securities market. Despite their entry into the market being later than the larger securities companies, they were capable of implementing aggressive strategies because they did not have the constraint of existing customers. Their objective was to attract new customers from the younger generations who had no securities transactions experience or from the large pool of businesspeople who were too busy to visit retail outlets.[38] Each company tried to be the first to attract such customers in bulk and a very competitive environment ensued.

In summary, the target customers in the Japanese securities industry had been limited to affluent, middle-aged and elder customers for a long time. However, as expectation of an increase in the customer base rose, hopes for the viability of the online channel also rose. As such, driven by the anticipated explosive market growth, as happened in the United States and with a push from the IT bubble economy,[39] the dominant perception was formed that customer numbers would increase significantly. Companies other than Matsui went into competition

[34] It increased continuously from ¥13,406 in September 1998 to ¥ 20,337 in March 2000, then decreased to ¥7,831 in April 2003 (Bank of Japan home page).

[35] See *Nikkei Kinyu Shimbun* (1999, October 21).

[36] Number of accounts in 1999 from Saga (2000).

[37] The amount of stocks held by individuals was ¥100 trillion (6.4% of individuals' total assets) in Japan, whereas it was ¥ 860 trillion in the United States (24.2% of individual's total assets) (explanatory materials, August 2001).

[38] See *Nihon Keizai Shimbun* (1999, November 2).

[39] From interview with Mr. Amamiya, operating officer and general operation manager, Kabu.com Security (2004, March 25).

under this perception.

The mass media paid much attention to Matsui Securities' unique strategies and so the other competitors must have had a good indication of what Matsui Securities was doing. But Matsui Securities' commission fees remained relatively higher than the minimum commission fees of its competitors who were engaging in price decreases after the deregulation in October 1999. Therefore the majority of the industry thought that Matsui Securities' performance was not enough to constitute a threat. Also, other companies held to the dominant perception, therefore even though they paid attention to Matsui's strategy, they kept evaluating it as targeting the limited and obsessed segments of the market: in other words day traders who traded stocks on a daily basis.[40] Ultimately, they perceived, Matsui Securities would not be able to attract the general public.[41] Other companies continued competing to discount commissions with the objective of increasing their number of accounts.

Imitation of Matsui and consequences of the time lag: Convergence forces

After two years of such competition, from around the latter half of 2001, competitors started to imitate Matsui Securities' strategy. As mentioned, Matsui Securities maintained its unique strategy which was completely different from the others, while other companies engaged in price competition based on the dominant perception. The result was that it steadily increased its number of accounts to a scale much larger than that of a niche company and maintained the top profit level in the industry, saying: "*Several hundred customers a month switch from Nomura and Daiwa*" (Matsui & Matsumoto, 2001). Moreover, by this time, Matsui Securities' revenue was significantly higher than the others and in addition, as mentioned above, the industry became aware of the fact that in reality it was normal for one customer to hold four to five accounts and the actual customers who trade in the company's account are limited.[42] Therefore, companies with the target of explosively increasing general customers and charging a low commission fee per transaction changed their strategy to increase their turnover by margin trading and a fixed commission fee system, as Matsui Securities was doing. Figure 2 shows these transitions of strategy, from competition to attain a high number of accounts, to the improvement of the rate of turnover.

After the strategy shift, those companies that had engaged in a fierce price competition found that their increase in the number of accounts stopped, but they experienced a favorable turnaround in business by following Matsui Securities' strategy.[43] In fact,

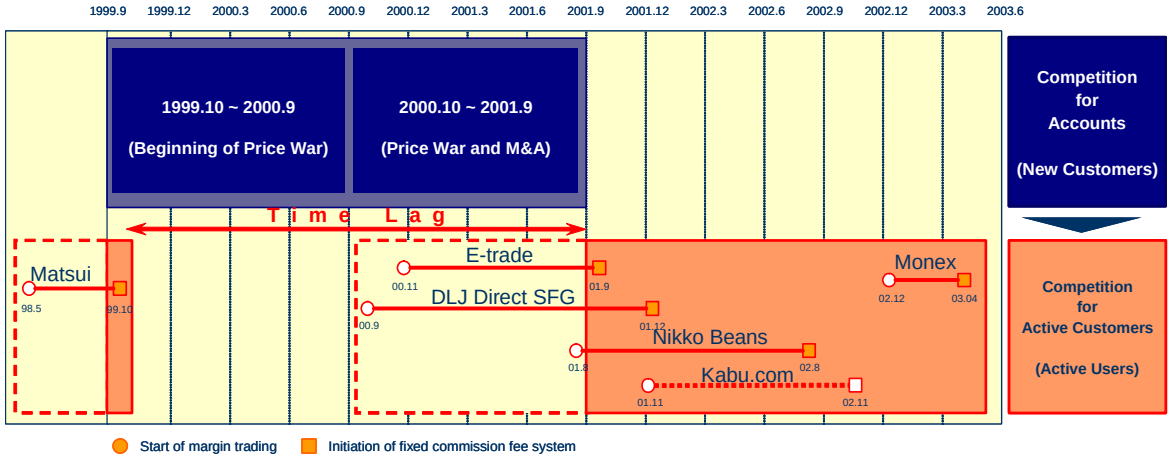
[40] From interview with President Kitao, E*trade, see *Nikkei Sangyo Shimbun* (2001, August 9).

[41] Comments from Mr. Suda, first President of Nikko Beans and operating officer, in charge of retail promotion at that time (*Nikkei Sangyo Shimbun*, 2001, August 10).

[42] See *Nikkei MJ* (2000, September 25).

[43] Following Matsui, initiation of combination of "margin trading" and "fixed commission fee", instead of number of accounts, decreased in absolute number and rate of increase, but profitability improved (Takai, 2004a, Figures 11 and 12). Only Monex, who were late to follow, showed a dramatic fall in profit.

Figure 2. Table of strategic follow



Note: Kabu.com introduced "one-shot transaction", which allows spending multiple days in fixed commission fee range. This is expressed as dotted line.
Source: IR materials of each company.

E*trade, which had been the most pro-active price-cutting leader, admitted that they had improved their performance with the transition from the conventional strategy to a strategy of fixed commission fees and margin trading with small bonds, which Matsui has invented. [44] Monex Security took another year to start imitating Matsui, conceded that they had been left behind in recovering performance figures. President Matsumoto puts the delay down to: "*A lack of insight.*"[45]

Today, various companies including E*trade, DLJ, and Monex, have succeeded in attracting Matsui Securities customers [46] by imitating its strategy and as a result have succeeded in reducing the revenue difference.[47] Regarding this, President Matsui was quoted as saying; "*Having been imitated by others who have differentiated themselves from us by their lower commission fees, some of our customers have shifted to these other companies.*"[48]

However, today Matsui Securities still remains the leading company in the industry (Takai, 2004b).

[44] See *Nikkei Kinyu Shimbun* (2003, April 24).
[45] See *Nikkei Kinyu Shimbun* (2003, April 24).
[46] Analyzing the difference of "inbound and outbound of stocks," which shows the account transfer among companies in FY 2003.3, companies followed Matsui's strategy and acquired from Matsui more than they transferred to Matsui. However, the only company that did not follow Matsui's strategy, Monex, lost more accounts to Matsui than were transferred from Matsui (*Nihon ni okeru onlain shoken torihiki no genjo* [The reality of online security trading in Japan], 2004 December, Kinzai Institute. (in Japanese)).
[47] Comparing the change in numbers of contracts and transaction amount per account (September 2001 to March 2003), Matsui decreased to about 70% in contracts and 60% in transaction amount. On the contrary, companies that decreased were Monex, which was late to follow, and the number of contracts of Nikko Beans, except for closed information such as number of contracts of E-trade and transaction amount of Monex. Monex showed an enormous increase in transaction amount (Takai, 2004a).
[48] See Matsui (2003), pp. 130-131.

3.5. Consideration for causes of forming and maintaining differentiation among companies: Reconfirmation of the framework

As mentioned earlier, it is basically quite easy to imitate the strategies of competitors in the online securities industry. Despite this, Matsui Securities succeeded in establishing a predominant position in the initial stages of this industry for two years and this phenomenon really interests us. The next question should be: Why Matsui Securities' strategy was not imitated for so long?

Matsui Securities was under an *Initial Condition* that it had derived from being a specialized call-center security company, before the online security market had become properly established. It learned that it was important to attract active customers who trade securities often in order to improve its turnover rate and that there are many customers who favor a system[49] that allows its customer (experienced investors) to engage in as many transactions as they liked – however small the transaction amount may be.[50] Therefore Matsui Securities succeeded in attracting affluent, middle-aged customers by adopting a strategy to develop and offer their own services, such as the combination of a fixed commission fee system and margin trading. These *Initial Business Experiences* generated the momentum for a thorough implementation of a strategy that was targeted at experienced investors and that improved their turnover rate in Matsui Securities. In fact, Matsui Securities developed an original information system by removing their upper limit for the number of transactions per day.

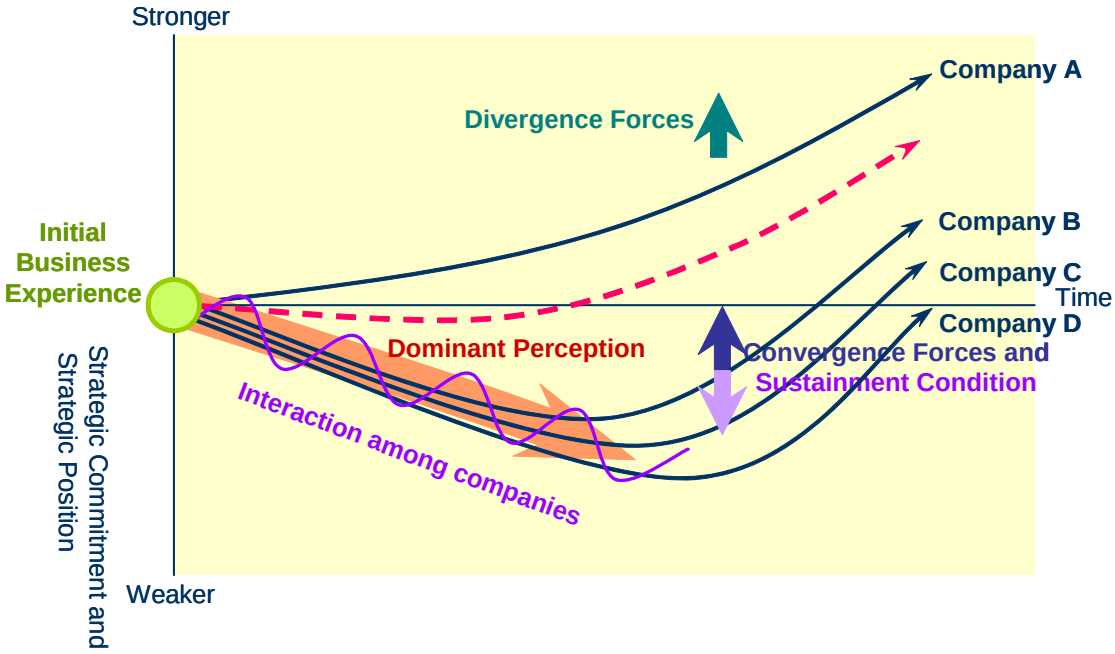
Companies other than Matsui Securities, on the other hand, experienced different *Initial Business Experiences*, namely that their number of accounts was increased by lowering commission fees and by company acquisition. The difference in their *Initial Business Experiences* formed another momentum: to focus more on increasing the number of accounts, which eventually expanded their differentiation from Matsui as *Divergence Forces*.

However, this is not considered an absolute factor in maintaining persistent differentiation between companies. Additionally, the original information system developed by Matsui to offer its differentiated services and products played some role in preventing imitation, however, if competitors wanted to, they could have overcome this in just a few months.[51]

Strategic imitation works as a *Convergence Force* but the *Sustainability Condition* prevented it. The fact is that companies, other than Matsui Securities, held to the *Dominant Perception*. In other words, the other companies continued to follow a dominant perception, believing that customer numbers would increase dramatically as was cases in the United States in an IT bubble economy and kept following the strategy of winning the price

[49] See *Yomiuri Shimbun* (2004, March 15).
[50] Above, "NIKKEI BP real interview" (2002, May 31) (In Japanese).
[51] From interview with Mr. Namba, Chief Information Officer in Monex Security (2004, June 21).

Figure 3. Mechanism of formation and maintaining differentiation among companies



competition and taking in customers first, to reap profits afterwards. This strategy seemed to be successful at first because the number of accounts did increase. Moreover, competitors saw that Matsui Securities was following a different strategy but misunderstood that Matsui Securities is a company for niche customers only, that did not enjoy the support of the most profitable customer group. Because of this misunderstanding, even if they were left behind by Matsui Securities in terms of profit, which was not a major issue at that time, they didn't take it as a failure but rather a temporary phenomenon. Therefore, there was no necessity to imitate the strategy.

Of course, the effectiveness of the strategy that Matsui Securities took during the early stages of the online securities industry, namely the improvement of turnover rate by acquiring active users, should have been clear to all the other companies from the published material and President Matsui's remarks. Nevertheless, the other companies continued to follow the dominant perception, which indicated that customers would increase dramatically and so these companies engaged in fierce competition, repeatedly cutting commissions whenever others did.

As stated before, it took no less than two years from the real rise of the market for the reality that Matsui Securities grabs active users who are the core customers of this stage of the online securities market, to replace the perception of Matsui Securities being a niche player that only attracts day traders. This replacement was a kind of '*Copernican Revolution*' in the industry's view of the market. However, by the time the change occurred, the gap

between Matsui Securities and the others was considerable. Companies other than Matsui Securities held to the dominant perception, they did not follow Matsui Securities' strategy, even though they knew the effectiveness of the strategy and its intention quite well. As a result, Matsui Securities kept growing in a situation that appeared to be similar to the so-called "*gap created by concentration of several companies*" (Shimamoto, 2001) (Figure 3).

4. Discussion

This paper has tried to build a new framework of the issue why differentiation is formed and maintained in an industry where imitation is relatively easy, based on a *Dynamic Capability-based View of the Firm* and the *Action System Theory*.

Noda and Collis (2001) used conceptual images, based on a *Dynamic Capacity-based Approach*, to show how differentiation among companies is created, with an axis of *Strategic Position and Commitment* and *Time*. In detail: when *Seeds of Differentiation among Companies; Initial Conditions* is operational, *Divergence Forces* work to expand differentiation, however, as time passes *Conversion Power* begins to reduce it by imitation, whereas *Sustainability Conditions* act to preserve differentiation. This is the process that maintains differentiation among companies.

However, their logic depends too much on coincidence and *Initial Conditions*, it is therefore not enough to explain how differentiation among companies is created and maintained in a situation where imitation is easy. On this point, this paper provides a framework, based on Noda and Collis (2001), with discussion of the *Action System* theory and with the concept of *Dominant Perception* as a strong *Sustainability Condition* and successfully conceptualizes the dynamic process of how differentiation among companies is created, as seen in Figure 3.

In Figure 3, the mechanism to create and maintain differentiation among companies originates in the *Seeds of Differentiation among Companies; Initial Conditions* and in *Divergence Forces* to expand it. In an industry where imitation is easy, if nothing happens, the differentiation would be reduced rapidly as per the dotted line in Figure 3. However, once a *Dominant Perception* has been formed, most companies compete under it and accelerate competition in the wrong direction by interaction among companies. Therefore, differentiation among companies can be maintained for a much longer period than is normally the case.

In this paper, we clarify the fact that the strategy of a successful company in the early stages of an industry may not be imitated for years, even in the situation where competitors know the strategy and its performance. So the validity of the strategy has been proved, because the *Dominant Perception*, to which many companies adhered, was strengthened. This has enormous significance in the field of management strategy in providing the mechanism and the reasons why strategic imitation does not

happen at once, even in an environment where information is so freely available, as it is today.

So, what is important: to exit ex-post unreasonable competition, as in the online securities industry, or not to get involved in the first place? Firstly, the answer is that the top executive himself/herself tries to interpret information intentionally, not merely process it automatically as part of routine work (e.g., Kuwada & Tao, 1998). The original purpose of a work routine is to eliminate redundant information and data for efficient management, however, as a routine becomes entrenched information and data, which seem to be unrelated to the operation, are eliminated to a greater extent (Levitt & March, 1988). However, if top executives can obtain rich information that has not been eliminated in a work processing routine and can interpret it correctly, it is possible that high level learning to modify the context and premises of existing behavior will be promoted (Kuwada, 1991).

It has been suggested that the best way to interpret information as a rich experience is to take raw data in directly, which has not yet been processed in an existing information processing procedure, by repeating a small experiment (e.g., Itami & Kagono, 2003). Thus, a company that accumulates information itself is thought to have a chance of exiting from irrational competition because it can judge the information from a market in alternative ways and proactively (Itami, 2004).

As stated above, in order for a top executive to interpret information as a rich experience, it is important to learn from other companies with a different approach to competition (Numagami, Asaba, Shintaku, & Amikura, 1992). When one company succeeds with very unique strategic behavior, like Matsui did in the online securities industry, learning and watching the company carefully, gives the opportunity to expose one's own inertia, to be noticed and to examine the rules and premises of learning (Shintaku & Amikura, 1998). Using the unique strategy of another company as a reference to watch oneself comparatively, such as considering why that company behaved as it did, is necessary to get out of wrong homogeneous competition.

In this paper, we tried to analyze the mechanism of the formation and maintenance of differentiation between companies from a dynamic point of view. Yet there are still some issues to be solved in order to add sophistication to this framework, such as identifying the detailed action undertaken by the internal business process of each company. More discussion is also necessary to clarify what the conditions are that form a *Dominant Perception*. We would like to build a more universal framework in future research.

Acknowledgements

The author would like to thank Junjiro Shintaku, Takahiro Fujimoto, Nobuo Takahashi, Tatsuyuki Negoro, Yoko Takeda, Daniel Heller, and Yoshinori Konno for helpful comments and suggestions on earlier drafts of this paper.

This research is financially supported by Grant-in-Aid for Scientific Research from Japan Society for the Promotion of Science (JSPS) and Research Grants from The Japan Securities Scholarship Foundation.

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〔Received September 29, 2006; accepted December 27, 2006〕

ABAS: ANNALS OF BUSINESS ADMINISTRATIVE SCIENCE

Vol. 5 December 2006

ABAS: ANNALS OF BUSINESS ADMINISTRATIVE SCIENCE is published annually in December by Global Business Research Center, Hongo, Bunkyo-ku, Tokyo, JAPAN. http://www.gbrc.jp