

# Competition among Companies Following the Dominant Perception and the Formation of Inter-Firm Differentiation

Yokohama National University Ayako Takai

---

**【Abstract】** In this paper, in order to answer the question: “*In an industry where the imitation by other competitors is easy, how has a differentiation between companies been created and maintained?*” we provide a new framework, based on a *Dynamic Capability-Based View of the Firm* and the *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 the industry is strengthened by the action between companies, the strategy of a successful company is not imitated for several years, and consequently, an expansion in differentiation between companies may occur.

## 1. Introduction

Why does differentiation among companies arise and persist in an industry where imitation is easy? In the online securities industry<sup>(1)</sup>, business is largely 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, despite problems with the information system, it is not very difficult to follow the strategy 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*.

Two major theories of defining the resources of competitive advantage occurred after the 1980s, which attempted to answer the question why some companies that belong to the same industry have different competencies and keep performing differently. 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 and Aoshima, 2000). Both theories 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 static 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.

Noda and Collis (2001) attempted to build a universal framework to analyze the dynamic process. In their research, they developed 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 and 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, Fukushima (1999), Shimamoto (2001), and Fujii (2002) reported on cases 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 clarifying the logic behind which interesting situation could occur in the innovation or competition process, and to reinforce the probability of logic 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 action system theory is deeply involved with the main theme of this paper, but we do not yet have a complete answer. This requires 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 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 business environment during start-up. These various elements, whether internal or external, work interactively and comprise the *Initial Conditions*, which affect the direction and priorities for the company's future.

The second element is *Divergence Forces*, which extend the initial differentiation among companies. The motivation to extend a business, along with the direction set after the *Initial Business Experience*, comes from positive feedback. Therefore, success at the beginning of a business affects later resource allocation, and as a result, the strategy position becomes entrenched. For example, using scale merit and allocating resource according to past performance for preferential business development, or a biased perception of top management, tend to see a business follow a positive success route. These elements extend the differentiation of business between companies (e.g., Noda and 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 decrease over time (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 are patents to prevent imitation of resources and information adherence (Teece, Pisano and Shuen, 1986) and causal ambiguity, that is, the causes of superior company performance are not well understood (Lippman and 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 and 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 and 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 increasingly 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 due to the isomorphism process, 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, as 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; Nelson and Winter, 1982; Levitt and March, 1988). Furthermore, when a conventional routine is thought to be a competitive resource or is connected to the political power of managers, resistance to change will be greater and make it more difficult to adjust to the new environment (Leonard-Barton, 1992).

The development of each company's strategy, and 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 the legitimacy of its strategy, formed by isomorphism to the external environment. Therefore, many companies may adopt similar strategies and become resistant to internal change, competing endlessly with each other using a suboptimal approach, whilst neglecting to imitate the unique strategy of a successful company.

In the next section, the probability of these viewpoints will be examined by looking at the online securities industry. This industry shows that 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 Security Industry at an Early Stage<sup>(2)</sup>

#### 3-1. The 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. Within two years, major and 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 security 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 securities companies that entered the online securities 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 had 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<sup>(3)</sup>.

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

### **3-2. Initial Business Experiences and Initial Conditions**

#### **3-2-1. Initial Conditions**

Matsui Security was the only company out of the six who entered the market before 1999 when competition started. Its entry was in May, making it the 13th<sup>(6)</sup> 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; 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, overcoming strong internal resistance<sup>(7)</sup>. 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<sup>(8)</sup>. Thus, Matsui Security prepared itself to enter the market by positioning its online business as security broking without sales people, and by utilizing the data and expertise from its call-centers<sup>(9)</sup>. 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<sup>(10)</sup>.

Five companies other than Matsui entered the market after deregulation. These were major US discount brokers or companies financed by domestic financial institutions, with no experience of management in the domestic security industry<sup>(11)</sup>. That meant that they had minimal expertise, data, potential customer base, fixed costs, or resources to succeed when they started their businesses.

#### **3-2-2. Initial Business Experience**

Each company engaged in fierce competition when deregulation occurred in October 1999. Companies other than Matsui Security set their fee system as a commission fee commensurate at the time of the contract price, with little originality such as different fees for certain contract price bands, or setting different commissions according to the asset balance. These companies set their management targets to increase the number of accounts held<sup>(12)</sup>. 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<sup>(13)</sup>.

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<sup>(14)</sup> on the market size of the online security industry and its future. In fact, President Matsui at that time said: *"They say a million or two million accounts, but it's nonsense... It will be 200 to 300 thousand, I guess."*<sup>(15)</sup> Competitors had set targets of several hundred thousand accounts for each company. Based on this, Matsui Securities set customer targets to increase experienced investors and index turnover rates<sup>(16)</sup>. Here, turnover rate is the index that shows a transaction rate per customer. Therefore, while other companies were focusing on increasing their number of accounts, only Matsui focused on experienced investors and on maximizing their transactions<sup>(17)</sup>.

In detail, Matsui Securities offered a unique fixed commission fee system (a fixed fee for multiple transactions), at 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 per

transactions, Matsui's system cost more<sup>(18)</sup> 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, which carry a high risk and require specific knowledge, such as margin trading and option trading<sup>(19)</sup>.

As can be seen, Matsui Securities made a good start with its trading services by providing unique commission system worldwide and margin and option trading for experienced investors<sup>(20)</sup>. Matsui Securities therefore succeeded in attracting middle-aged investors who use margin trading frequently, with services that took their investors' behavior and mentality into consideration<sup>(21)</sup>.

### **3-3. Divergence Forces**

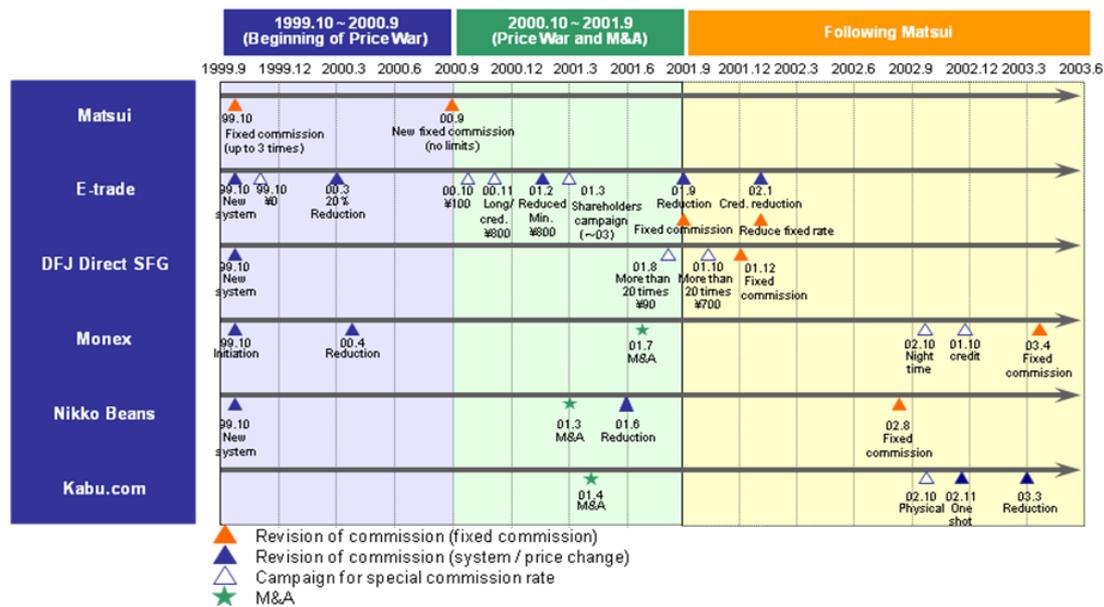
#### **3-3-1. Competition of Companies excepting Matsui Securities: Competition to Increase the Number of Accounts**

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<sup>(22)</sup>. 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 profitable 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 decrease its commission fee was E\*trade Securities<sup>(23)</sup>, 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, with various attempts 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<sup>(24)</sup>, followed by an announcement of acquisitions by Nikko Beans and Monex, respectively<sup>(25)</sup>.

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. Companies other than Matsui were therefore competing intensely, by focusing on increasing their number of accounts by discounting commission fees and by acquisition (Figure 1).

Figure 1



### 3-3-2. Matsui's Strategy: Fixed commission and margin trading

Matsui Security maintained commission rates that were more costly, but for 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<sup>(26)</sup>. 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, as long as the total trading remained under 3 million yen<sup>(27)</sup>.

They continued to enhance their services and products and developed an information system within the company<sup>(28)</sup> to realize their strategy of focusing on turnover rates by targeting experienced investors, using as a combination of a fixed commission system and margin trading<sup>(29)</sup>.

### 3-3-3. Differentiation Expansion

In September 2001, two years after competition in the securities market began, 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, Nikko Beans' 78,000, and Kabu.com's 76,000 whereas Matsui Securities' client base stood at only 63,000. 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<sup>(30)</sup>. The ratio of operating profit to operating revenue<sup>(31)</sup> in the fiscal year ending March 2002 was 19%, 17%, and 1% for Matsui Securities, E\*trade, and DLJ, respectively. On the other hand, for Kabu.com, Nikko Beans, and Monex, it was -9%, -22%, and -44%, respectively, showing that these companies were still suffering large losses three years after their market entry. In addition, E\*trade suffered losses<sup>(32)</sup> in the stock brokerage business. This means, in reality, that only Matsui Securities was showing a profit.

As discussed, Matsui went in a very different direction to the other companies. While the other companies suffered from low performance due to continuous price competition, only Matsui made favorable profits with its core strategy.

### 3-4. Convergence Forces and Sustainability Conditions

#### 3-4-1. 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 advice tailored to the needs of each customer, under a relatively high and uniform commission fee structure. This 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<sup>(33)</sup>.

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 the stock market upon commission 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<sup>(34)</sup>.

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 US, the number of accounts for online security trading still increased rapidly after around 1996, because of increased access to the Internet. The Japanese security industry watched this trend with interest.

Comparing data, in September 1999, just before deregulation in Japan, there were only 130,000 online securities accounts<sup>(35)</sup> in Japan whereas the figure in the U.S. was 13 million<sup>(36)</sup>. Thus, the Japanese market was much smaller than that of the U.S., even taking into consideration differences in population, individual asset compositions, and total assets<sup>(37)</sup>. Based on two significant upcoming changes that had previously altered the US market dramatically, namely the convenience provided by online services and commission deregulation, securities companies held high expectations for the explosive growth of the Japanese market.

Companies that specialized in online securities trading quickly became the leading players in the market. Despite their entry 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<sup>(38)</sup>. 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 older 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. The dominant perception, driven by the anticipated explosive market growth as occurred in the United States and with a push from the IT bubble economy<sup>(39)</sup>, was that customer numbers would increase significantly. Companies other than Matsui went into competition 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. However, 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. It must be assumed, therefore, that the majority of the industry saw no threat from Matsui Securities' performance. 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<sup>(40)</sup>. Ultimately, they perceived, Matsui Securities would not be able to attract the general public<sup>(41)</sup>.

### **3-4-2. Imitation of Matsui and Consequences of the Time Lag: Convergence Forces**

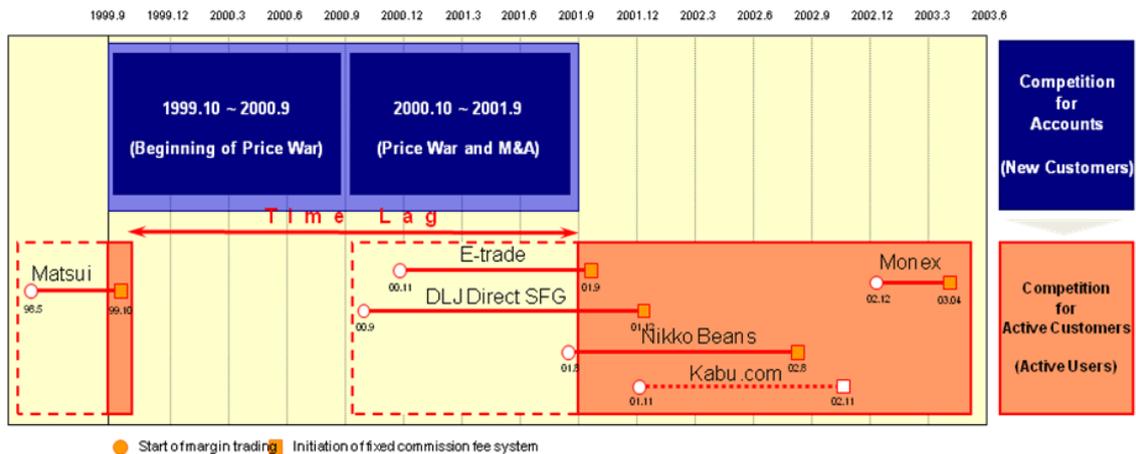
After two years of such competition, from late 2001, competitors started to imitate Matsui Securities' strategy. As mentioned, Matsui Securities maintained its unique strategy, while other companies engaged in price competition based on the dominant perception. The result was that it steadily increased 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 its competitors, and in addition, the industry realized that 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<sup>(42)</sup>. Therefore, companies with the target of driving customer growth 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 Security was doing. Figure 2 shows these strategy transitions, 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<sup>(43)</sup>. In fact, 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<sup>(44)</sup>. Monex security took another year to start imitating Matsui, and conceded that they had been left behind in recovering performance figures. President Matsumoto puts the delay down to "*A lack of insight*"<sup>(45)</sup>.

Today, various companies including E\*trade, DLJ, and Monex, have succeeded in attracting Matsui Securities customers<sup>(46)</sup> by imitating its strategy and as a result have succeeded in reducing the revenue difference<sup>(47)</sup>. 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*"<sup>(48)</sup>.

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

Figure 2



### 3-5. Consideration for Causes of Forming and Maintaining Differentiation among Companies: Reconfirmation of the Framework

As mentioned earlier, it is 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. 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 (usually experienced investors) who favor a system<sup>(49)</sup> that allows them to engage in as many transactions as they like—however small the transaction amount may be<sup>(50)</sup>. 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 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 acted as a *Divergence Force* eventually increasing their differentiation from Matsui.

However, this is not considered an absolute factor in maintaining persistent differentiation between companies. The original information system developed by Matsui to offer its differentiated services and products also played some role in preventing imitation. However, if competitors wanted to, they could have overcome this in just a few months<sup>(51)</sup>.

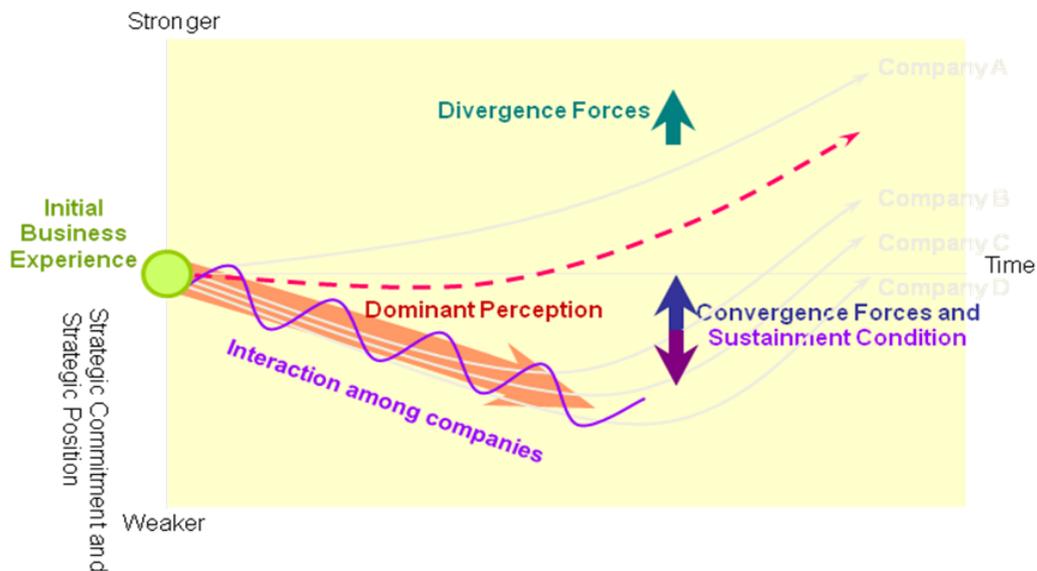
Strategic imitation works as a *Convergence Force* but the *Sustainability Condition* prevented it. The fact is that companies, other than Matsui Securities, held to the *Dominant Perception*. In other words, the other companies continued to follow a dominant perception, believing that customer numbers would increase dramatically as was case in the United States in an IT bubble economy and kept following the strategy of winning the price competition and taking customers in first, to reap profits afterwards. This strategy seemed to be successful at first because the number of accounts did

increase. Moreover, although competitors saw that Matsui Securities was following a different strategy they misunderstood the significance of it being a company for niche customers only, that did not enjoy the support of the most profitable customer group. Because of this misunderstanding, being left behind by Matsui Securities in terms of profit, which was not a major issue at that time anyway, was not seen 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 security industry, 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.

As stated before, it took no less than two years from the real rise of the market for the reality that Matsui Securities was attracting active users who are the core customers of this stage of the online securities market, to replace the perception of it 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. Other companies held to the dominant perception, they did not follow Matsui Securities, even though they knew the effectiveness of their 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).

Figure 3



#### 4. Discussion

This paper has tried to build a new framework for 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*. The *Seeds of Differentiation among Companies* can be shown through three stages: *Initial Conditions* set the initial differences, *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 process 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. This paper therefore 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*. It 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.

What then is the strategy for a company in this situation: to exit ex-post unreasonable competition, as in the online security industry, or not to get involved in the first place? Firstly, the answer is that the top executive tries to interpret information intentionally, not merely process it automatically as part of routine work (e.g., Kuwada and 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 largely eliminated (Levitt and March, 1988). However, if top executives can obtain valuable 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 procedure, by repeating a small experiment (e.g., Itami and 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 and Amikura, 1992). When one company succeeds with unique strategic behavior, as Matsui did in the online security industry, learning and watching the company carefully gives the opportunity to expose one's own inertia, to notice and to examine the rules and premises of learning (Shintaku and 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 unhelpful 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 universal framework in future research.

### [Acknowledgments]

The author would like to thank Junjiro Shintaku, Takayuki 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.

- (1) "Online Security Company" in this paper means companies who provide security-trading services such as stocks, debts, and trust funds for individual customers online. "Online Security Industry" means a group of those companies.
- (2) The case in the third paragraph 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.
- (3) See 'internet torihiki ni kansuru tyousa kekka ni tsuite (2004.9)' (from the survey of Internet Dealing), Japan Securities Dealers Association (2004.11.5).
- (4) These six companies hold a share of more than 80% of the 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 Security".) Therefore, it is enough to pick up those six in terms of the influences on the industry. 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 Nov. 1999 to Feb. 2000 due to a system failure (Nikkei Sangyo Shimbun, 1999.11.7). However, accounts began to be offered from Oct. 1999, so it can be treated as they took some part in the competition triggered by commission deregulation just like competitors (Nihon Kinyu Shimbun, 1999.9.22). 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, 2004.7.15)
- (6) See "Internet shoken torihiki no shinjitsu" (the Truth of Security Trading by Internet) (Osaki, 1999, p.173) (in Japanese).
- (7) This is detailed in "Harvard University Business School Pota kyoju no senryakuron sabu note" (Harvard University Business School Prof. Porter's strategic sub-note vol.3) (Shukan Toyo Keizai 2002.7.27) (in Japanese). Notes from contents of Takai, A. (2004a) show only sources.
- (8) Above "Shukan Toyo Keizai" (2002.7.27).
- (9) See "NIKKEI BP Real Interview" (2002.5.31) (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 security 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 HP). Osawa Security had suffered deficits for the previous 7 years until then and had a small customer base. E-trade incorporated just to acquiring the license (Nikkei Sangyo Shimbun, 1998.10.5). Before long, Mr. Izuchi from Soft Bank came in as a new President (Nikkei Sangyo Shimbun, 1998.10.5). Therefore, E-trade inherited almost nothing from Osawa Security such as strategy and customer base.
- (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, 1999.10.4), Nikko Beans: “BEP is 300,000 accounts. We will attract new investors like the young.” (Nikkei Kinyu Shimbun, 1999.9.27), DLJ: “We will certainly acquire more than 100,000 accounts by the end of this year. (President Kunishige)” (Nikkei Ryutsu Shimbun, 2000.2.12), Monex: “We aim at 200,000 accounts within this year. (President Matsumoto)” (Nikkei Ryutsu Shimbun, 2000.2.12), 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, 2001).
- (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 their press release).
- (14) See “NIKKEI BP Real Interview” (2002.5.31) (in Japanese).
- (15) Comments of President of Matsui Security, Mr. Matsui (Above “Special Seminar at Financial Information Technology 2000”, 2000.9.22).
- (16) See Matsui and Matsumoto (2001), p.52.
- (17) See Nikkei Sangyo Shimbun (2001.1.10).
- (18) The commission fees for a contract price of ¥500,000 were: E-trade ¥800, DLJ ¥1,900, Monex ¥1,000, Nikko Beans ¥2,400, Kabu.com ¥1,000, whereas Matsui charged ¥3,000 even for one 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 from Matsui Security).
- (21) See Nikkei Sangyo Shimbun (2001.1.10).
- (22) See Nihon Keizai Shimbun (1999.9.27), Nikkei Kinyu Shimbun (1999.9.27), Nikkei Kinyu Shimbun (1999.8.10).
- (23) See Osaki (1999), p.16.
- (24) See Nikkei Kinyu Shimbun (2000.12.6).
- (25) See “Press Release from Nikko Beans” (2000.12.26), “Press Release from Monex” (2000.12.27).
- (26) See Matsui and Matsumoto (2001), p.61.
- (27) See “Press Release from Matsui Security” (2000.7.28), “Press Release from Matsui Security” (2000.7.18).
- (28) See Nikkei Sangyo Shimbun (2000.1.21).
- (29) See “Press Release from Matsui Security” (2000.4.14., 2000.5.1., 2000.6.15., 2000.7.7., 2001.2.14).
- (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 (2003.4.24).
- (33) See Saga (2001).
- (34) It increased continuously from ¥13,406 in September 1998 to ¥20,337 in March 2000, and then decreased to ¥7,831 in April 2003 (Bank of Japan HP).
- (35) See Nihon Kinyu Shimbun (1999.10.21).
- (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 States (same 24.2%) (Explanatory materials, Aug. 2001).
- (38) See Nihon Keizai Shimbun (1999.11.2).
- (39) From interview with Mr. Amamiya, Operating officer and general operation manager, Kabu.com security (2004.3.25).
- (40) From interview with President Kitao, E\*trade, see Nikkei Sanyo Shimbun (2001.8. 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, 2001.8.10).
- (42) See Nikkei MJ (2000.9.25).
- (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, 2003a, Fig. 11 / 12). Only Monex, who were late to follow, showed a dramatic fall in profit.
- (44) See Nikkei Kinyu Shimbun (2003.4.24).
- (45) See Nikkei Kinyu Shimbun (2003.4.24).
- (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 online syoken torihiki no genjo" (The Reality of Online Security Trading in Japan), 2004.12, Kinzai Institute) (in Japanese).

- (47) Comparing the change in numbers of contracts and transaction amount per account (2001.9-2003.3), 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.
- (49) See Yomiuri Shimbun (2004.3.15).
- (50) Above, NIKKEI BP Real Interview (2002.5.31) (in Japanese).
- (51) From interview with Mr. Namba, Chief Information Officer in Monex Security (2004.6.21).

## [References]

- Abernathy, W. J. (1978). *The productivity dilemma: Roadblock to innovation in the automotive industry*. Baltimore, MD: John Hopkins University Press.
- Burgelman, R. A. (1991). "Intraorganizational ecology of strategy making and organizational adaptation: Theory and field research", *Organization Science*, Vol. 2, pp.239-262.
- DiMaggio, P. J. and W. E. Powell (1983). "The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields," *American Sociological Review*, Vol. 48(2): pp.147-160.
- Foss, N. J. (1997). "Resources and strategy: Problems, open issues, and way ahead." In Foss, N. J. (Ed.), *Resources, firms, and strategies: A reader in the resource-based perspective* (pp.345-365). New York: Oxford University Press.
- Fujii, D. (2002). "Coincidence and Innovation-through the case analysis of development of Blue LED", *Organizational Science*, Vol. 35(4), pp.68-80.
- Fukushima, E. (1999). "Trap of Designing "Standard" Product at Early Stage of the Market", *Business Review*, Vol. 46(4), pp.69-87.
- Hannan, M. T. and J. Freeman (1984). "Structural inertia and organizational change", *American Sociological Review*, Vol. 49, pp.149-164.
- Itami, H. and T. Kagono (2004). *Seminor Keieigaku Numon* (An introduction to management), Nihon Keizai shimbun-sha (In Japanese).
- (2004). Nihon kigyō no noryoku kochiku [Capability building of Japanese companies]. Paper presented at the regular symposium of the Academic Association for Organizational Science, Tokyo, Japan (in Japanese).
- Kagōno, T. (1988). *Soshiki Ninshikiron* (Organization Epistemology), Chikura Shobo (in Japanese).
- Kato, T. and Y. Aoshima (2000). "Innovation of Business Administration: Competitive Strategy (1)" *Hitotsubashi Business Review*, Vol. 48 (1), pp.103-114.
- Kuwada, K. and Tao, M. (1998). *Soshiki-ron* (Theory of Organization), Yuhikaku (in Japanese).
- (1991). "Strategic Learning and Long Term Adjustment of Organization", *Organizational Science*, Vol. 25(1), pp.22-35.
- Leonard-Barton, D. (1992). "Core capabilities and core rigidities: A paradox in managing new product development", *Strategic Management Journal*, Vol. 13(5), pp.111-125.
- Levinthal, D. A. (1995). "Strategic management and the exploration of diversity", In C. A. Montgomery (Eds.), *Resource-based and evolutionary theories of the firm* (pp.19-42). Boston: Kluwer Academic.
- Levitt, B. and J. G. March (1988). "Organizational learning", *Annual Review of Sociology*, Vol. 14, pp.319-340.
- Lippman, S. A. and R. P. Rumelt (1982). "Uncertain imitability: An analysis of interfirm differences in efficiency under competition", *Bell Journal of Economics*, Vol. 13(2), pp.418-438.
- March, J. G. (1991). "Exploration and exploitation in organizational learning", *Organizational Science*, Vol. 2, pp.71-87.
- Matsui, M. (2001). Oyannasaiyo demo tsumannaiyo (Do it, but it's boring). Nikkei Radio, Tokyo (in Japanese).
- and O. Matsumoto (2001). Kabushiki toshi kaikaku sengen (Declaration of securities trading reforming). Tokuma syoten, Tokyo (in Japanese).
- (2003). Minnaga nishi mukya ore ha higashi (When everyone looks to the West, I only looks to the East). Jitsugyo no Nihon, Tokyo (in Japanese).
- Nelson, R. R. and S. G. Winter (1982). *An evolutionary theory of economic change*. Cambridge, MA: Belknap Press

- of Harvard University Press.
- Noda, T. and J. L. Bower (1996). "Strategy making as iterated processes of resource allocation," *Strategic Management Journal*, Vol. 17, Special Issue, pp.159-192.
- (2001). "Senryaku no Dynamic rironkouchiku wo mezashite – Sangyounai kigyokansou no shinka wo meguru ichi kousatsu" (For Building Dynamic Theory for Strategy: Discussion about development of differentiation among companies in an industry), Shintaku, J. and Asaba, S., *Kyososenryaku no Dynamism* (the Dynamism of Competitive Strategy) the third chapter, Nihon Keizai Shimbunsha (in Japanese).
- and D. J. Collis (2001). "The evolution of intra-industry firm heterogeneity: Insights from a process study", *Academy of Management Journal*, Vol. 44(4), pp.897-925.
- Numagami, T., Asaba, S., Shintaku, J. and Amikura, H (1992). Taiwa toshiteno Kyoso: Dentaku sangyo niokeru kyoso kodo no saikaisyaku (Competition as Interlocution: Reinterpretation for competitive Behavior in Calculator Industry), *Organizational Science*, Vol. 26(2), pp.64-79 (in Japanese).
- (2000) Koi no Keieigaku (Business Administration of Action), Hakuto Shobo (in Japanese).
- Osaki, S. (1999). *Internet syoken torihiki no shinzitsu* (Truth about online securities trading). Japan Short-wave broadcasting, Tokyo (in Japanese).
- Saga, T. (2000). 'Online syoken torihiki wo meguru saikin no doko (Trend of online securities trading of late)', *Report of Association of Tokyo Stock Exchange Regular Members*, Aug. 2000, pp.1-12 (in Japanese).
- (2001). 'Syoken gaisya no keiei senryaku to kongo no kadai (Business strategy and future issue of online securities industry)', *Report of Association of Tokyo Stock Exchange Regular Members*, Aug. 2001, pp.1-10 (in Japanese).
- Shimamoto, M. (2001). 'Shigen no syutyu ni yoru kangeki – fine-ceramic sangyo no kouei system kizyutu (The niche created by concentration of resources: The action system approach to the Fine Ceramics Industry)', *Organizational Science*, Vol. 34(4), pp.53-66 (in Japanese).
- Shintaku, J. and Amikura, H. (1998). 'Senryaku schema no sougo sayo: Sharp no jigyo tenaki to senryaku sakutei no sansyoten' (Interaction of Strategic Scheme: Business Development and Reference Point for Strategy in Sharp), *The Journal of Economics*, Vol. 64(2), pp.2-24.
- Takai, A. (2001). 'Business model tokkyo senryaku (Strategy of Business model patent)', Sanwa Research Institute Corp. Management strategy newsletter, Vol. 4, pp.1-3 (in Japanese).
- (2004a). 'Online syoken gyokai ni miru reimei-ki no kigyokan kyosyo (Competition of online securities industry in early stage)' Akamon management review, Vol. 3, No. 7 (<http://www.gbrj.jp>) (in Japanese).
- (2004b). "The early stage competition in the Japanese online securities industry: Research based on case studies of leading companies", *Annals of Business Administrative Science*, Vol. 3(4), pp.53-72.
- (2004c). "Success factors and their formation processes in early stage competition in the Japanese online securities industry", *MMRC Discussion Paper Series*, MMRC-F-12.
- (2005). "Online shoken gyokai ni okeru pafomansu ni ataeru youin bunseki" (Analysis of Factors which Influence on Performance in Online Security Industry), *the JASMIN Journal*, Vol. 13(3), March 2005.
- Teece, D. J., G. Pisano and A. Shuen (1997). "Dynamic capabilities and strategic management", *Strategic Management Journal*, Vol. 18(7), pp.509-533.
- Williams J. R. (1994). "Strategy and the search for rents: The evolution of diversity among firms", In R. P. Rumelt, D. E. Schendel and D. J. Teece (Eds.), *Fundamental issues in strategy* (pp.229-246). Boston, MA: Harvard Business School Press.
- Yano Research Institute (2000). Online E\*trade service shizyo no jittai to senryaku (Reality and Strategy of online trading service market). Yano Research Institute (in Japanese).