Major Business Combination Cases in Fiscal Year 2015
(Tentative Translation)

June 8, 2016
Japan Fair Trade Commission

For the purpose of ensuring the transparency of reviews undertaken by the Japan Fair Trade Commission (hereinafter referred to as "JFTC") on business combination cases, and for the purpose of improving the predictability of the JFTC's reviews on cases, the JFTC has published "Guidelines to Application of the Antimonopoly Act concerning Review of Business Combination (May 31, 2004, JFTC. Hereinafter referred to as the "Business Combination Guidelines")"in applying the Antimonopoly Act (hereinafter referred to as the "AMA") to the JFTC's reviews on business combinations. In addition, the JFTC has also published the results of the reviews of major business combination cases each fiscal year.

This year, the JFTC also publishes the results of reviews of major business combinations in fiscal year 2015 and provides the data associated with these reviews.

The JFTC sincerely hopes that companies planning business combinations will make use of the published outcomes of the JFTC's reviews of major business combination cases, as well as the Business Combination Guidelines.

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Major Business Combination Cases in Fiscal Year 2015

(Note 1) The order of the cases in this document complies with the order used in the Japan Standard Industry Classification, applied to business concerning products and services subject to reviews of business combinations.

(Note 2) Confidential information and competitor names, etc. associated with the companies concerned are not disclosed in the respective cases.

(Note 3) Market shares, HHI levels after business combinations, and number counts, i.e. the increment, etc. of the HHI after business combinations, are shown as “approximate figures estimated by the JFTC” based on the calculations according to the documents/materials submitted by the companies concerned (note that the term “HHI”

in this context refers to the Herfindahl-Hirschman Index; the same shall be applied hereafter). When it comes to market shares, in principle, these figures are shown at 5% intervals.

(Note 4) In each case, a horizontal business combination refers to a business combination between companies with a competitive relationship in the same particular field of trade, a vertical business combination refers to a business combination between companies at different transaction stages, such as a merger between a manufacturer and a distributor that sells its products, and a conglomerate business combination refers to a business combination that is neither a horizontal business combination nor a vertical business combination, including a merger between companies in different industries and acquisition of shares between companies in different geographic ranges in the same particular field of trade.

Case 1 Establishment, etc. of a joint sales company of containerboard, etc. by Nippon Paper Industries, Co., Ltd. and Tokushu Tokai Paper, Co., Ltd.

Part I The Parties

Nippon Paper Industries, Co., Ltd. (JCN 8011501009422) (hereinafter referred to as "Nippon Paper"; Nippon Paper and a group of companies which have already formed joint relationships with Nippon Paper are hereinafter collectively referred to as "Nippon Paper Group") is engaged in manufacture and distribution of paper, paperboard, and pulp.

Tokushu Tokai Paper, Co., Ltd. (JCN 3080001014336) (hereinafter referred to as "Tokushu Tokai Paper"; Tokushu Tokai Paper and a group of companies which have already formed joint relationships with Tokushu Tokai Paper are collectively referred to as "Tokushu Tokai Paper Group") is engaged in manufacture and distribution of paper, paperboard, and pulp.

Hereinafter, Nippon Paper and Tokushu Tokai Paper are collectively referred to as "the Parties."

Part II Outline of this case and applicable provisions

In this case, it is planned that 1) Nippon Paper will acquire shares of a subsidiary, to be newly established by Tokushu Tokai Paper (manufacturing writing and drawing paper, other special printing paper, other base stock for converting paper, unglazed shipping sacks kraft paper, unglazed grocery paper, liners, and core base paper; hereinafter referred to as "the manufacturer concerned"), and that 2) Nippon Paper and Tokushu Tokai Paper will newly establish, through joint incorporation-type split, a company (hereinafter referred to as "the sales company concerned") which will integrate the Parties' respective sales departments concerning unglazed shipping sacks kraft paper, unglazed grocery paper, liners, and core base paper. (Hereinafter, the acquisition of the shares and the joint incorporation-type split are collectively referred to as "the business combination concerned.")

In the business combination concerned, Nippon Paper submitted a notification of the plan for the acquisition of the shares concerning the above 1) in accordance with Article 10, Paragraph 2 of the AMA, and Nippon Paper and Tokushu Tokai Paper submitted a notification of the plan for the joint incorporation-type split concerning the above 2) in accordance with Article 15 (2), Paragraph 2 of the AMA.

The applicable provisions are Article 10 and Article 15 (2) of the AMA.

Part III Sequence of events and brief summary of the investigation

1. Sequence of events

Since September 2015, the Parties voluntarily submitted written opinions and materials to the JFTC stating that the business combination concerned would not substantially restrain competition, and the JFTC had meetings several times with the Parties in response to requests by the Parties. Subsequently, on September 18th, 2015, the JFTC accepted a written notification of the plan of the acquisition of the shares by Nippon Paper, and a written notification of the plan of the joint incorporation-type split by Nippon Paper and Tokushu Tokai Paper based on the regulations of the AMA, and commenced the preliminary investigation. The JFTC proceeded with the preliminary investigation based on the above-mentioned written notifications and other documents submitted by the Parties. As a result, on October 16th, 2015, the JFTC concluded to open the secondary investigation, because of necessity of further investigation, and on the same day, the JFTC requested the notifying companies to provide reports, etc., made the investigation public, and solicited public comments from third persons.

In the secondary investigation, the JFTC had meetings several times with the Parties in response to requests by the Parties, where the issues were explained and discussed. The JFTC also proceeded with the secondary investigation on the effect of the business combination concerned, based on the results of hearings and written surveys over users, distributive businesses, competitors, etc. as well as the reports submitted consecutively by the notifying companies.

Regarding the request for provision of reports etc. to the notifying companies, submission of all reports etc. was completed with the reports, etc. submitted on December 25th, 2015.

2. Brief summary of the investigation

In this case, the JFTC concluded that the business combination concerned would not substantially restrain competition in any particular field of trade.

Part IV Regarding joint relationships to be established by the business combination concerned

1. Establishment of the manufacturer concerned

Tokushu Tokai Paper spins off its Shimada Plant, which manufactures containerboard, kraft paper, etc., as a subsidiary (the manufacturer concerned), and Nippon Paper acquires more than 20% (in the range of 33.4% or more and less than 50%) of voting rights concerning shares of the manufacturer concerned. This makes the manufacturer concerned a consolidated subsidiary of Tokushu Tokai Paper, and at the same time, Nippon Paper's affiliated company accounted for by the equity-method. (The total number and other details of directors of the manufacturer concerned are not yet decided, but they are expected to be sent by the Parties based on the respective ratio of the voting rights owned.)

The manufacturer concerned will continue producing products which have been produced by the Shimada Plant of Tokushu Tokai Paper, namely, "1) writing and drawing paper[1]," "2) other special printing paper[2]," "3) other base stock for converting paper[3]," "4)unglazed shipping sacks kraft paper[4]," "5)unglazed grocery paper[5]," "6) liners[6]," and "7)core base paper[7]." (The manufacturer concerned will not produce products of Nippon Paper Group.)

2. Establishment of the sales company concerned

Nippon Paper and Tokushu Tokai Paper plan to integrate the respective sales departments of containerboard and kraft paper through joint incorporation-type split, thereby establishing the sales company concerned, which will be Nippon Paper's consolidated subsidiary, and at the same time, Tokushu Tokai Paper's affiliated company accounted for by the equity-method. (The total number and other details of directors of the sales company concerned is not yet decided, but they are expected to be sent by the Parties based on the respective ratio of the voting rights owned.)

The sales company concerned will be engaged in sales of some of Tokushu Tokai Paper's products produced by the manufacturer concerned, namely, "4) unglazed shipping sacks kraft paper ," "5) unglazed grocery paper," "6) liners," and "7) core base paper," as well as some of Nippon Paper Group's products produced by the Group's plants, namely, "4) unglazed shipping sacks kraft paper ," "5) unglazed grocery paper," "6) liners," and "7) core base paper."

On a different note, the Tokushu Tokai Paper Group will take charge of all of "1) writing and drawing paper," "2) other special printing paper," and "3) other base stock for converting paper" of Tokushu Tokai Paper produced by the manufacturer concerned, and will sell them together with "2) other special printing paper" and "3) other base stock for converting paper" produced by Mishima Plant of Tokushu Tokai Paper, and "2) other special printing paper" produced by Gifu Plant.

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1 Writing paper produced to the specifications of notebooks, letter paper, ledgers, etc., and drawing paper produced to the specifications of drafting and sketchbooks, etc.

2 Paper used for special purposes including checks, bills, bonds, greeting cards, maps, drafting paper, cover paper, etc.

3 Paper used to produce parchment paper, grease-proof paper, antirust paper, etc. by having it processed (applied or impregnated)

4 Paper used to produce large sacks for cement, fertilizers, rice and wheat, and other farm products

5 Paper used for adhesive tape, square bags, wrapping, and processing

6 Containerboard used for linerboard of corrugated board or partitions of corrugated boxes

7 Containerboard used for corrugating medium (fluting) of corrugated board

3. Joint relationships

Financed by Nippon Paper and Tokushu Tokai Paper, the manufacturer concerned would form joint relationships with them respectively, and so would the sales company concerned. Apart from this, Nippon Paper and Tokushu Tokai Paper would form indirect joint relationships with each other through the manufacturer concerned and the sales company concerned.

In the business combination concerned, Nippon Paper and Tokushu Tokai Paper would form indirect joint relationships with each other through the manufacturer concerned in products i.e., 1) writing and drawing paper, 2) other special printing paper, and 3) other base stock for converting paper. In this respect, the Parties argue that the manufacturer concerned will take information blocking measures and not disclose significant information for competition such as production cost concerning the above 1) to 3) to Nippon Paper.

In consideration of the above, the business combination concerned is deemed to have little impact on competition in 1) writing and drawing paper, 2) other special printing paper, and 3) other base stock for converting paper based on the premises that each of the Parties will independently continue sales of 1) writing and drawing paper, 2) other special printing paper, and 3) other base stock for converting paper, and that the manufacturer concerned will take the above measures.

Therefore, the following discussion is dedicated to 4) unglazed shipping sacks kraft paper, 5) unglazed grocery paper, 6) liners, and 7) core base paper.

Part V Outline of the paper manufacturing industry

1. Description of products

(1) Containerboard (liners and core base paper)

Among paperboard, both liners and core base paper are classified as containerboard. They are used to make corrugated board by sticking linerboard on one side or the both sides of corrugated core base paper. Corrugated board, then, makes corrugated boxes.

(2) Kraft paper (unglazed shipping sacks kraft paper and unglazed grocery paper)

Unglazed shipping sacks kraft paper and unglazed grocery paper are a kind of kraft paper made from pulp without going through a bleach process. According to the classified table for types of paper and paperboard published by Japan Paper Association (hereinafter, the organization referred to as "JPA," and the classified table as "JPA table"), kraft paper is classified as wrapping paper. The JPA table classifies unglazed shipping sacks kraft paper and unglazed grocery paper as unbleached wrapping paper, and unglazed grocery paper is further classified into a subset called other unglazed bag paper.

Unglazed shipping sacks kraft paper is mainly used as large kraft paper sacks for farm products such as rice and wheat, fertilizers, and cement whereas unglazed grocery paper's main usage includes square bags and adhesive tape.

2. Market scale

Domestic demand for paper and paperboard remained in the 30-million ton range after having reached a peak (31.96 million ton) in 2000, which was followed by a sharp decline to 27.91 million tons in 2009. Since then it has remained in the 27- and 28-million ton ranges.

In 2014, paper manufacturers' domestic sales figure of paper was around 1,790 billion yen while that of paperboard was around 699 billion yen. Among these total sales, types of products under examination here, namely unglazed shipping sacks kraft paper, unglazed grocery paper, liners, and core base paper account for around 33.9 billion yen, 15 billion yen, 297.9 billion yen, and 179 billion yen respectively.

3. Commercial distribution

Paper and paperboard produced by manufacturers are sold through agents and wholesalers.

4. Methods of price negotiation

If paper manufacturers plan to raise prices of paper or paperboard, they make announcement on their intention of raising prices, and the desired markup and shipment time. Then, agents negotiate with downstream enterprises (wholesalers and users) accordingly.

It is characteristic that major paper manufacturers announce a price rise in any type of product almost simultaneously and that their desired markup and timing of introduction are almost the same. (However, the desired increase of price tends not to take place as announced by the paper manufacturers. In fact, a price rise often takes effect with a smaller price increment a few months later than announced, as a result of the said negotiation.)

As described above, coordinated conduct can be observed among the paper manufacturers where they announce virtually the same price rise at the same time and then each manufacturer follows it up with negotiation with existing customers. (Simultaneous price revision)

Part VI Product-by-product consideration

1. Containerboard (liners and core base paper)

(1) Particular field of trade

A. Product range

a) Demand substitutability

Liners are used in the front and the back of corrugated board. They will often be printed with information on the content, thus needing to be smooth printable paperboard with higher esthetic quality than that of core base paper. On the other hand, unlike liners, core base paper does not require high quality in its surface because it is used as "flutes" between liners and almost invisible. Therefore, liners are not used as corrugated medium, and core base paper is not used in the surface either, effectively eliminating demand substitutability between liners and core base paper.

b) Supply substitutability

Among containerboard, liners are produced by using a multi-layer paper machine, which could be used to produce core base paper. On the other hand, core base paper is usually produced by single-layer paper machines, which often miss part of functions necessary for producing liners, making it almost impossible for such machines to produce liners unless a great deal of conversion is applied or other equipment is added. Accordingly, there is only limited supply substitutability exists between liners and core base paper.

c) Summary

Therefore, with regard to containerboard, the product range is defined separately as "liners" and "core base paper."

B. Geographic range

Major containerboard manufacturers have developed systems where they can meet demand for containerboard anywhere in the country, and according to competitors and users, products are usually sold at similar price throughout Japan even if customers are located far away from production bases. As well, major users, etc. are acquiring containerboard from paper manufacturers in all over the country.

Therefore, the geographic range is defined as “all regions of Japan”.

(2) Consideration of substantial restraint of competition

A. Competitive situation

a) Positions of the Parties

The following table shows the state of the domestic market of liners and core base paper in 2014. After the business combination concerned, the Parties will account for approximately 25% (the second largest) of the liner market, and around 10% (the fifth largest) of the core base paper market.

After the business combination concerned, the Herfindahl-Hirschman Index (HHI) of the whole core base paper market will be approximately 1,800, and the increment of HHI will be approximately 50, which will make the business combination concerned fall under the safe-harbor criteria for a horizontal business combination. On the other hand, the HHI of the whole liner market will be around 2,100, and the increment of HHI will be approximately 300, which will make the business combination concerned fall outside the safe-harbor criteria for a horizontal business combination.

Therefore, the following is dedicated to examination of liners.

Market share of core base paper in 2014

Rank	Company name	Market share
1	Company A	Approx. 25%
2	Company B	Approx. 25%
3	Company C	Approx. 15%
4	Company D	Approx. 15%
5	Nippon Paper	5-10%
6	Company E	0-5%
7	Company F	0-5%
8	Tokushu Tokai Paper	0-5%
	Others	0-5%
	Imports	0-5%
Total		100%

Market share of liners in 2014

Rank	Company name	Market share
1	Company G	Approx. 30%
2	Nippon Paper Group	Approx. 20%
3	Company H	Approx. 20%
4	Company I	Approx. 15%
5	Tokushu Tokai Paper	5-10%
6	Company J	0-5%
7	Company K	0-5%
	Others	0-5%
	Imports	0-5%
Total		100%

b) Existence of competitors

As mentioned above a), the liner market has prominent competitors including Company G (market share approximately 30%), Company H (20%), and Company I (15%) as well as smaller competitors such as Company J (5%).

c) Excess capacity of competitors

During the last five years, some competitors have newly installed a paper machine concerning containerboard thereby increasing capacity, while others have increased production by renewing their paper machines concerning containerboard. It is clear that, in the field of liners, new capital investment is being made.

Each paper machine has its own excess capacity. As well, paper manufacturers can increase production of certain types of paper by switching paper simultaneously produced by the same paper machine, according to the demand. Coupled with this, if a possibility is counted in of competitors raising production of liners by taking advantage of the excess capacity left in their paper machines used to produce liners, it is reasonable to conclude that there is a certain degree of excess capacity.

B. Imports

The proportion of imported products in the domestic liner market is less than 5% at the highest in recent years, and is still very little today.

As well, the hearings and written surveys over users and agents did not find opinions to the effect that import of liners would significantly increase, due to the issues of quality, delivery schedules, etc.

Therefore, import pressure on liners produced in Japan cannot be recognized.

C. Entry (regarding a switch from other types of products)

It is reasonable to assume that enterprises which own a multi-layer paper machine can make a new entry to the liner market.

However, although the scale of the liner market is unchanged or slightly on the rise, relatively more promising than other paper market, there seems to be no special reason to assume that a new entry will be made in the future, considering that a substantial amount of capital investment, etc. will be required to start producing liners, and that there has been actually no new entrant in the liner market for at least the last five years.

Therefore, entry pressure is deemed to be limited.

D. Competitive pressure from users

The hearings from users found that a sales competition is intense chiefly among users. And some users answered that they have a certain degree of bargaining power backed by their buying power. In fact, at the time of a simultaneous price revision described in the above Part V-4, some users with buying power were presented a smaller price increase than the announced markup at an individual negotiation, or even refused a price rise when the markup was small enough. As well, some relatively minor users claim that they would respond to a price increase by changing suppliers.

Therefore, it is reasonable to conclude that there is a certain degree of competitive pressure from users, especially from relatively large-scale users.

(3) Legal assessment based on the AMA

Although the domestic liner market will lose one competitor, it will still have three prominent competitors, including Company G with a market share of more than 20%. As well, a certain degree of competitive pressure from users, especially from relatively large-scale users, is deemed to exist. Accordingly, it would be reasonable to conclude that the Parties would not substantially restrain competition in the field of trade of liners unilaterally by conducting the acquisition of the shares in this case.

Coupled with what was mentioned above, if the fact that new capital investment is being made in the liner market is considered, although a simultaneous price revision described in the above Part V-4 is seen, it is not reasonable to claim that the business combination concerned would further make it easier to implement a seemingly ongoing trend of a simultaneous price revision. Therefore, it is reasonable to conclude that the business combination concerned would not substantially restrain competition in the liner market through the Parties coordinating with other companies.

2. Kraft paper (unglazed shipping sacks kraft paper and unglazed grocery paper)

(1) Particular field of trade

A. Unglazed shipping sacks kraft paper

a) Product range

a. Demand substitutability

Unglazed shipping sacks kraft paper is mainly used as material for large kraft paper sacks for farm products such as rice and wheat, fertilizers, and cement. Unglazed shipping sacks kraft paper is a type of product requiring greater strength among all the wrapping papers and cannot be replaced by other types of paper for the said usage. Therefore, demand substitutability does not exist between unglazed shipping sacks kraft paper and other types of paper.

b. Supply substitutability

It was found that some paper manufacturers were producing multiple types of wrapping paper (unbleached wrapping paper/ bleached wrapping paper) by one paper machine.

However, ribbed kraft paper and machine glazed kraft paper, both of which are categorized as unbleached wrapping paper, as well as machine glazed poster paper, machine glazed bleached kraft paper, and super calendared machine glazed kraft paper, all of which are categorized as bleached wrapping paper, cannot be produced without a Yankee machine[8]. Therefore, these types of paper do not have supply substitutability with other types of wrapping paper.

From the above consideration, except for ribbed kraft paper, machine glazed kraft paper, machine glazed poster paper, machine glazed bleached kraft paper, and super calendared machine glazed kraft paper, all the wrapping paper is deemed to have a certain degree of supply substitutability.

c. Summary

As mentioned in the above b, except for ribbed kraft paper, machine glazed kraft paper, machine glazed poster paper, machine glazed bleached kraft paper, and super calendared machine glazed kraft paper, all the wrapping paper is deemed to have a certain degree of supply substitutability. Nevertheless, among these different types of products with supply substitutability, suppliers are not the same and there is significant difference in their market share. Therefore, a certain degree of supply substitutability alone does not justify lumping all these different types of products together to define the product range. Hence, in this case, the product range is defined as “unglazed shipping sacks kraft paper” on the grounds that demand substitutability does not exist between unglazed shipping sacks kraft paper and other wrapping paper.

[8] A Yankee machine is a type of paper machine which has a Yankee dryer in its dryer section. A Yankee dryer is a cylinder with a mirror-finished surface, on which wet paper is stuck and dried to produce one-side glazed paper.

b) Geographic range

Major users, etc. are purchasing unglazed shipping sacks kraft paper from paper manufacturers all over Japan. There is no geographical restriction in terms of transportation or regional price difference. Therefore, the geographic range is defined as “all regions of Japan”.

B. Unglazed grocery paper

a) Product range

a. Demand substitutability

Unglazed grocery paper is used as material for wrapping including square bags. Like unglazed grocery paper, other unglazed bag and sack paper is also classified as other unglazed bag paper according to the JPA table. However, there is a difference between unglazed grocery paper and other unglazed bag and sack paper, which the former is unbleached whereas the latter is half bleached (somewhat white). The latter is also different in that it is used for envelopes so popularly that some users even said it is the overwhelmingly typical material for envelopes in general. Therefore, it is reasonable to conclude that there is only limited demand substitutability between these two types of products.

As well, the group of unbleached wrapping paper is largely divided into three sub-groups: unglazed shipping sacks kraft paper, other unglazed bag paper (unglazed grocery paper and other unglazed bag and sack paper), and other unbleached wrapping paper (ribbed kraft paper, machine glazed kraft paper, etc.). Neither side of other unglazed bag paper is smooth whereas ribbed kraft paper and machine glazed kraft paper, both of which are classified as other unbleached wrapping paper, have one side glazed and thus smoothed, presenting totally different appearance and printability. Therefore, it is also reasonable to conclude that there is only limited demand substitutability between other unglazed bag paper and other unbleached wrapping paper (ribbed kraft paper and machine glazed kraft paper).

b. Supply substitutability

It was found that some paper manufacturers were producing multiple types of wrapping paper (unbleached wrapping paper/ bleached wrapping paper) by one paper machine.

However, ribbed kraft paper and machine glazed kraft paper, both of which are categorized as unbleached wrapping paper, as well as machine glazed poster paper, machine glazed bleached kraft paper, and super calendared machine glazed kraft paper, all of which are categorized as bleached wrapping paper, are cannot be produced without a Yankee machine. Therefore, these types of paper do not have supply substitutability with other types of wrapping paper.

From the above consideration, except for ribbed kraft paper, machine glazed kraft paper, machine glazed poster paper, machine glazed bleached kraft paper, and super calendared machine glazed kraft paper, all the wrapping paper is deemed to have a certain degree of supply substitutability.

c. Summary

As mentioned in the above b, except for ribbed kraft paper, machine glazed kraft paper, machine glazed poster paper, machine glazed bleached kraft paper, and super calendared machine glazed kraft paper, all the wrapping paper is deemed to have a certain degree of supply substitutability. Nevertheless, among these different types of products with supply substitutability, suppliers are not the same and there is significant difference in their market share. Therefore, a certain degree of supply substitutability alone does not justify lumping all these different types of products together to define the product range. Hence, in this case, the product range is defined as "unglazed grocery paper" on the grounds that demand substitutability is limited between other unglazed bag paper (unglazed grocery paper and other unglazed bag and sack paper) and other unbleached wrapping paper as well as between unglazed grocery paper and other unglazed bag and sack paper, as mentioned in the above a.

On a different note, some of the usage of unglazed grocery paper is the same as that of other types of paper, which is examined later in the section "Competitive pressure from adjacent markets."

As well, except for ribbed kraft paper, machine glazed kraft paper, machine glazed poster paper, machine glazed bleached kraft paper, and super calendared machine glazed kraft paper, all the wrapping paper is deemed to have a certain degree of supply substitutability with unglazed grocery paper. Therefore, it is also examined later whether such wrapping paper can be recognized as entry pressure.

b) Geographic range

Major users, etc. are purchasing unglazed grocery paper from paper manufacturers all over Japan. There is no geographical restriction in terms of transportation or regional price difference. Therefore, the geographic range is defined as "all regions of Japan".

(2) Consideration of substantial restraint of competition

A. Unglazed shipping sacks kraft paper

a) Competitive situation

a. Positions of the Parties

The following table shows the state of the domestic market of unglazed shipping sacks kraft paper in 2014. After the business combination concerned, the Parties will account for approximately 25% (the second largest) of the unglazed shipping sacks kraft paper market. After the business combination concerned, the HHI of the whole market will be approximately 3,400, and the increment of HHI will be approximately 200, which will make the business combination concerned fall outside the safe-harbor criteria for a horizontal business combination.

Looking at the change in the market share of the Parties during the last five years, Tokushu Tokai Paper remains almost unchanged while Nippon Paper is on the decrease, effectively lowering the position of the Parties in recent years.

Market share of unglazed shipping sacks kraft paper in 2014

Rank	Company name		Market share
1	Group L		Approx. 50%
		Company a	Approx. 30%
		Company b	Approx. 20%
2	Tokushu Tokai Paper		Approx. 15%
3	Company M		Approx. 15%
4	Company N		Approx. 10%
5	Nippon Paper		5-10%
	Imports		0-5%
Total			100%

b. Existence of competitors

After the business combination concerned, there still will be multiple prominent competitors, including Company a, holding approximately 30%, the largest portion of the market, as well as Company b, Company M, and Company N, respectively accounting for 10% or more of the market.

On a different note, with regard to Group L, Company a holds more than 20% of Company b's voting rights (being the largest single entity in terms of the ratio of the voting rights), which has formed joint relationships between the two firms. However, they are maintaining relations where they conduct business activities independently, which is supported by the fact that the said ratio of the voting rights held by Company a on Company b is only slightly higher than 20%, and by the promise made by the two firms to the JFTC in the past investigation for the business combination that they would conduct independent business activities concerning production and distribution of unglazed shipping sacks kraft paper, and not share information related to the said production and distribution which is not known to the public but significant in terms of competition. Examination was made based on this understanding.

c. Excess capacity of competitors

Each paper machine has its own excess capacity. As well, paper manufacturers can increase production of certain types of paper by switching paper simultaneously produced by the same paper machine, according to the demand. Coupled with this, if a possibility is counted in of competitors raising production of unglazed shipping sacks kraft paper by taking advantage of the excess capacity left in their paper machines used to produce unglazed shipping sacks kraft paper, it is reasonable to conclude that there is a significant degree of excess capacity. As well, some competitors claim that they plan to strengthen their sales efforts to reduce their excess capacity.

b) Imports

The proportion of imported products in the domestic unglazed shipping sacks kraft paper market is less than 5% at the highest in recent years, and is still very little today.

As well, the hearings and written surveys over users and agents did not find opinions to the effect that import of unglazed shipping sacks kraft paper will increase, due to the issues of quality, delivery schedules, etc.

Therefore, import pressure on unglazed shipping sacks kraft paper produced in Japan cannot be recognized.

c) Entry (regarding a switch from other types of products)

Since there is supply substitutability among different types of wrapping paper (except for ribbed kraft paper, machine glazed kraft paper, machine glazed poster paper, machine glazed bleached kraft paper and super calendared machine glazed kraft paper), enterprises which are producing wrapping paper excluding unglazed shipping sacks kraft paper are deemed to be able to switch production from the said wrapping paper to unglazed shipping sacks kraft paper.

However, there seems to be no special reason to assume that a new entry will be made in the future, considering that there is little incentive to actively make such a switch in production because of expected lower demand for unglazed shipping sacks kraft paper in the future, and that there has been actually seldom new entrant for at least the last five years.

Therefore, entry pressure is deemed to be limited.

d) Competitive pressure from users

The hearings from distributive businesses found very few users claiming that they had bargaining power. As well, at the time of a simultaneous price revision described in the above Part V-4, price increase was implemented in almost all the cases although there were some differences in how much and when the price was increased.

Therefore, it is not reasonable to conclude that competitive pressure from users is fully working.

B. Unglazed grocery paper

a) Competitive situation

a. Positions of the Parties

The following table shows the state of the domestic market of unglazed grocery paper in 2014. After the business combination concerned, the Parties will account for approximately 35% (the largest) of the unglazed grocery paper market. After the business combination concerned, the HHI of the whole market will be around 2,900, and the increment of the HHI will be approximately 500, which will make the business combination concerned fall outside the safe-harbor criteria for a horizontal business combination.

Market share of unglazed grocery paper in 2014

Rank	Company name		Market share
1	Group L		Approx. 35%
		Company a	Approx. 20%
		Company b	Approx. 15%
2	Company O		Approx. 25%
3	Tokushu Tokai Paper		Approx. 25%
4	Nippon Paper		Approx. 10%
5	Company P		5-10%
	Imports		0-5%
Total			100%

b. Existence of competitors

The field of trade of unglazed grocery paper has prominent competitors such as Group L (holding approximately 35% of the market) and Company O (25%) as well as another competitor Company P (10%). With regard to Group L, there are joint relationships between Company a and Company b as mentioned in the above (2) A a) b. In order to provide careful examination to the business combination concerned, the examination here is made by handling Company a and Company b collectively as Group L, rather than judging the degree of their joint relationships for unglazed grocery paper, based on the grounds that there is no similar promise made on unglazed grocery paper to that on unglazed shipping sacks kraft paper, and that not much time has passed since joint relationships between Company a and Company b were formed.

On a different note, there are multiple competitors whose market share changed by around 10% during the last 10 years.

c. Excess capacity of competitors

Each paper machine has its own excess capacity. As well, paper manufacturers can increase production of certain types of paper by switching paper simultaneously produced by the same paper machine, according to the demand. Coupled with this, if a possibility is counted in of competitors raising production of unglazed grocery paper by taking advantage of the excess capacity left in their paper machines used to produce unglazed grocery paper, it is reasonable to conclude that there is a significant degree of excess capacity. As well, some competitors claim that they plan to strengthen their sales efforts to reduce their excess capacity.

b) Imports

The proportion of imported products in the domestic unglazed grocery paper market is less than 5% at the highest in recent years, and is still very little today.

As well, the hearings and written surveys over users and agents did not find opinions to the effect that import of unglazed grocery paper would increase, due to the issues of quality and handling of defective products.

Therefore, import pressure on unglazed grocery paper produced in Japan cannot be recognized.

c) Entry (regarding a switch from other types of products)

Since there is a certain degree of supply substitutability with general uncoated printing paper or different types of wrapping paper (except for ribbed kraft paper, machine glazed kraft paper, machine glazed poster paper, machine glazed bleached kraft paper and super calendared machine glazed kraft paper), enterprises which are producing uncoated printing paper or other wrapping paper are deemed to be able to switch production from the said paper to unglazed grocery paper.

However, there seems to be no special reason to assume that a new entry will be made in the future, considering that there is little incentive to actively make such a switch in production because of expected lower demand for unglazed grocery paper in the future, and that there has been actually seldom new entrant for at least the last five years.

Therefore, entry pressure is deemed to be limited.

d) Competitive pressure from adjacent markets

Unglazed grocery paper is mainly used to make square bags and adhesive tape. And, some paper bags and shopping bags are instead made of other unglazed bag and sack paper, unglazed bleached kraft paper, machine glazed poster paper or some other types of wrapping paper while certain types of adhesive tape are produced with polypropylene rather than being made of unglazed grocery paper. In short, there are substitutes for unglazed grocery paper for most of its usage.

Unglazed grocery paper is competing with such alternative products, making it reasonable to conclude that the unglazed grocery paper market is subject to a certain degree of competitive pressure from each of adjacent markets of multiple products, including unglazed bleached kraft paper etc.

e) Competitive pressure from users

The result of hearings from users suggests that price is a highly important factor when they choose suppliers. However, many of them did not negotiate a price in the first place, or simply accepted the proposed markup at the time of a simultaneous price revision described in the above Part V-4, due to their small volume of transaction.

Therefore, it is not reasonable to conclude that competitive pressure from users is fully working.

(3) Legal assessment based on the AMA

A. Unglazed shipping sacks kraft paper

Although the domestic unglazed shipping sacks kraft paper market will lose one competitor, it will still have Company a, accounting for more than 30%, the largest share of the market, as well as three other prominent competitors, each of which will hold more than 10%. Accordingly, it would be reasonable to conclude that the Parties would not substantially restrain competition in the field of trade of unglazed shipping sacks kraft paper unilaterally by the business combination concerned.

Coupled with what was mentioned above, if the fact that the market share of the Parties is on the decline is considered, although a simultaneous price revision described in the above Part V-4 is seen, it is not reasonable to claim that the business combination concerned would further make it easier to implement a seemingly ongoing trend of a simultaneous price revision. Therefore, it is reasonable to conclude that the business combination concerned would not substantially restrain competition in the unglazed shipping sacks kraft paper market through the Parties coordinating with other companies.

B. Unglazed grocery paper

Although the domestic unglazed grocery paper market will lose one competitor, it will still have two prominent competitors, Group L and Company O, each of which holds more than 20% of the market, as well as another competitor with some market share. As well, competitive pressure from adjacent markets is deemed to be working to a certain degree. Accordingly, it would be reasonable to conclude that the Parties would not substantially restrain competition in the field of trade of unglazed grocery paper unilaterally by the business combination concerned.

Coupled with what was mentioned above, considering that, in the unglazed grocery paper market, players' shares are less static, although the market size is on the decline, while a simultaneous price revision described in the above Part V-4 is seen, it is not reasonable to claim that the business combination concerned would further make it easier to implement a seemingly ongoing trend of a simultaneous price revision. Therefore, it is reasonable to conclude that the business combination concerned would not substantially restrain competition in the unglazed grocery paper market through the Parties coordinating with other companies.

Part VII Conclusion

The business combination concerned is not deemed to substantially restrain competition in any particular field of trade.

Case 2 Acquisition of Polypore International, Inc. shares by Asahi Kasei Corporation

Part I Outline of this case

This case deals with a plan where a US subsidiary of Asahi Kasei Corporation, a holding company (JCN 5120001059606) (hereinafter referred to as "Asahi Kasei"; Asahi Kasei and a group of enterprises which have formed joint relationships with Asahi Kasei are collectively referred to as "Asahi Kasei Group."), will acquire all share of Polypore International, Inc. (headquartered in the United States; hereinafter referred to as "Polypore"; Polypore and a group of enterprises which have formed joint relationships with Polypore are collectively referred to as "Polypore Group"; Polypore and Asahi Kasei are hereinafter collectively referred to as "the Parties," and Polypore Group and Asahi Kasei Group as "the company group"; The acquisition of the shares is hereinafter referred to as "the act concerned.")

The applicable provision is Article 10 of the AMA.

Part II Particular field of trade

1. Product description

The product in which the company group compete with each other is separators used as a material for lithium ion batteries (hereinafter referred to as "LIB").

Separators are parts in the form of film (usually polyolefin[1] flat-film), which are filled with microscopic pores to allow lithium ions to pass through, placed between positive and negative electrodes inside LIB. They allow passage of lithium ions only, thereby causing battery reaction while providing a function to isolate positive and negative electrodes.

Separators are largely divided into 1) wet separators (hereinafter referred to as "wet") and 2) dry separators (hereinafter referred to as "dry") depending on the basic manufacturing method.

While wet has high strength and can be made quite thin, it requires a long production process and an organic solvent to extract plasticizers, thereby making its production cost tend to be higher than dry's. On the other hand, dry has less strength and comes with a certain degree of thickness but compares favorably with wet in terms of production cost. Among the Parties, Asahi Kasei Group manufactures and distributes only wet whereas Polypore Group mainly handles dry.

As well, usage of LIB is largely divided into 1) general use, 2) automobile use, and 3) storage battery use, and different performance is required depending on the usage as follows.

[1] A highly polymerized compound made of hydrogen and carbon, which includes polyethylene and polypropylene

1) As general use LIB is used for mobile phones, laptop computers and other small products, its separators for general use LIB are required to be thin and tough. As a result, for this purpose, wet is used predominantly while dry is almost never used.
2) As automobile use LIB is used in electric cars, its separators do not need to be as thin as those for general use LIB. However, with their size and trading lots larger than separators for general use LIB, and their cost accounting for approximately 20% of the whole cost of electric cars, separators for automobile use LIB are facing significant demand for their cost cut. For this reason, automobile use LIB used to have low-priced dry exclusively. However, today wet is also being used for this purpose thanks to its productivity improvement, which has lowered production cost and sales price.
3) As storage battery use LIB is relatively large and used mainly as an emergency power source for businesses and houses. Therefore, its separators can be thick and are not required to provide as high performance as those for LIB for 1) general use and 2) automobile use.

2. Product range

Since separators have different user groups and different required performance according to the usage of LIB, it is reasonable to assume that demand substitutability does not exist among LIB separators with a different usage.

On a different note, separators for automobile use LIB include not only wet and dry but also nonwoven fabric[2]. Considering the difference in performance and cost between wet and dry, as mentioned in the above 1, and nonwoven fabric's characteristics of being less electrically resistant and more durable against heat, etc. than wet and dry, it may seem somewhat reasonable to define the product range separately among these three types of separators. However, while Asahi Kasei Group is only producing wet and Polypore Group is mainly producing dry as mentioned in the above 1, LIB manufacturers, as users, are choosing wet, dry, or nonwoven fabric, based on comprehensive consideration of prices and functions when developing a new LIB, making it reasonable to assume that there is a certain degree of demand substitutability. Based on this understanding, the product range is defined as "separators for general use LIB," "separators for automobile use LIB," and "separators for storage battery use LIB."

The following discusses separators for automobile use LIB, whose competition is deemed to be subject to a relatively large impact, since both of the Parties manufacture them.

3. Geographic range

Separators for automobile use LIB are light-weighted, high-value-added products and there is no restriction in terms of transportation, or special circumstances to consider. As well, LIB manufacturers, as users, are purchasing products from overseas suppliers as well, including the Parties. However, there are no grounds on which to reasonably assume that the users are doing so irrespective of whether suppliers are Japanese or foreign. Therefore, the geographic range is defined as "all regions of Japan".

[2] A fabric-like material made by laminating and spreading layers of fibers in a sheet form, and adequately sticking them together through interlacing, fusing, bonding, etc.

Part III Impact of the act concerned on competition

1. Positions of the Parties

Since both of the company group are influential in the market, although their market shares are unclear, examination here is made on the premise that the safe-harbor criteria for a horizontal business combination do not apply.

2. Conditions of competitors

Separators for automobile use LIB are selected by automobile use LIB manufacturers when they develop a new product at the time of full remodeling of existing car models. Upon such selection, automobile use LIB manufacturers first decide which type of separators to be used among wet, dry, and nonwoven fabric, and then competition among separator manufacturers of the chosen type sets in. For this reason, Asahi Kasei Group, which produces only wet, and Polypore Group, which mainly produces dry, rarely compete directly.

As well, although their market shares are unclear, there are Company A, producing dry as a prominent competitor, and Company B, producing nonwoven fabric as a competitor, and both companies are deemed to have sufficient excess capacity.

3. Imports

Separators for automobile use LIB have neither an institutional barrier concerning their import nor huge constraints in terms of transportation cost, etc., since they are light-weighted and high-value-added products. As well, while a number of separator manufacturers exist overseas, such as in South Korea, China, etc., there is no quality difference between imported products and domestically produced products. In fact, some Japanese automobile use LIB manufacturers have adopted products made by manufacturers overseas other than the Parties.

Therefore, it is reasonable to conclude that a certain degree of import pressure exists.

4. Entry

It is not reasonable to expect to see an enterprise which does not currently have facilities or know-how required to produce separators for LIB make new entry since it would involve a huge amount of capital investment and some five year period of accumulation of advanced production know-how and of quality management.

On the other hand, it is easy for enterprises which already have facilities or know-how required to produce separators for LIB, even LIB for other usage, to enter the market. Also, there is no patent issue concerning separators for automobile use LIB which would make it hard to make a new entry. As well, separators for automobile use LIB are expected to see higher demand in the future. Therefore, it is reasonable to expect some separator manufacturers for LIB for other usages to join in the market. This is backed by the fact that, during the last several years, some domestic separator manufacturers for general use LIB have disclosed that they will enter the market of separators for automobile use LIB, and have been preparing for production accordingly.

Therefore, it is reasonable to conclude that a certain degree of entry pressure exists.

5. Competitive pressure from adjacent markets

Aramid-resin-coated separators, adopted as separators for general use LIB, have a higher melting point and greater heat-resistance than wet or dry, and provide basic performance similar to that of wet, effectively meeting the requirements as separators for automobile use LIB. Therefore, they can possibly be adopted as an alternative for separators for automobile use LIB in the future. In fact, multiple manufacturers of Aramid-resin-coated separators have announced that they will supply aramid-resin-coated separators for automobile use LIB.

Therefore, it is reasonable to conclude that a significant degree of competitive pressure from adjacent markets exists.

6. Competitive pressure from users

Since automobile use LIB accounts for approximately 20% of total car production cost, auto manufacturers are strongly demanding a price cut by LIB manufacturers, which in turn are putting pressure on manufacturers of separators for LIB to lower prices all the time, even after separators have been adopted. Separator manufacturers are lowering prices according to such a demand.

Once a product has been adopted for a certain automobile use LIB, it will usually continue to be used until the next full remodeling of the car. If separator manufacturers do not satisfy a demand for a price cut, they may not receive an order at the time of the next full remodeling. As well, considering that there are a number of separator manufacturers as well as imported products, LIB manufacturers can easily switch separator suppliers at the time of full remodeling. Accordingly, it is reasonable to conclude that LIB manufacturers hold strong bargaining power.

Therefore, it is reasonable to conclude that a significant degree of competitive pressure from users exists.

7. Summary

As mentioned above, the company group have only limited competitive relations between them, and are deemed to have not much of an impact on competition while there are multiple competitors as well as a certain degree of import pressure and entry pressure, and a significant degree of competitive pressure from adjacent markets and users. Therefore, it is reasonable to conclude that the act concerned would not substantially restrain competition in the field of trade of separators for automobile use LIB with unilateral conduct by the Parties or coordinated conduct with competitors.

Part IV Conclusion

The JFTC concluded that the act concerned would not substantially restrain competition in any particular field of trade.

Case 3 Acquisition of Stock of Tokyo Kohtetsu Co., Ltd. shares by Osaka Steel Co., Ltd.

Part I The Parties

Osaka Steel Co., Ltd. (hereinafter, referred to as "Osaka Steel"; a group of companies which have already formed joint relationships with Nippon Steel & Sumitomo Metal Corporation [hereinafter "NSSM"], the parent company of Osaka Steel, is hereinafter referred to as "NSSM Group") is engaged in manufacture and distribution of general shaped steel, steel bars etc..

Tokyo Kohtetsu Co., Ltd. (hereinafter, referred to as "Tokyo Kohtetsu") is engaged in manufacture and distribution of general shaped steel.

Hereinafter, Osaka Steel and Tokyo Kohtetsu are collectively referred to as "the Parties" and NSSM Group and Tokyo Kohtetsu are collectively referred to as "the company group".

Part II Outline of this case and applicable provision

In this case, it is planned that Osaka Steel will acquire more than 50% of voting rights in stock of Tokyo Kohtetsu (hereinafter "share acquisition concerned").

The applicable provision is Article 10 of the AMA.

Part III Sequence of events and brief summary of the investigation

1. Sequence of events

Since July 2015, the Parties voluntarily submitted written opinions and materials to the JFTC stating that the share acquisition concerned would not substantially restrain competition, and the JFTC had meetings several times with the Parties in response to a requests by the Parties. Subsequently, on August 20th, 2015, the JFTC accepted a written notification of the plan of the share acquisition concerned based on the regulations of the AMA, and commenced the preliminary investigation. The JFTC proceeded with the preliminary investigation based on the abovementioned written notification and other documents submitted by the Parties. As a result, on September 18th, 2015, the JFTC concluded to open the secondary investigation, because of necessity of further investigation, and on the same day, the JFTC requested the notifying companies to provide reports, etc., made the investigation public, and solicited public comments from third persons.

In the secondary investigation, the JFTC had meetings several times with the Parties in response to request by the Parties, where the issues were explained and discussed. The JFTC also proceeded with the secondary investigation on the effect of the share acquisition concerned, , based on the results of hearings over enterprises that belong to the company group, competitors[1], wholesalers and users.

Regarding the request for provision of reports, etc., to the notifying companies, submission of all reports, etc. was completed with the reports, etc. submitted on November 10th, 2015.

2. Brief summary of the investigation

In this case, the JFTC concluded that the share acquisition concerned would not substantially restrain competition in any particular field of trade. Meanwhile, the JFTC

[1] "Competitors" do not include enterprises that belong to the company group.

regarded Kyoei Steel and Topy Industries, companies whose shares NSSM holds in small quantities[2], and Hokuetsu Metal, a company whose shares Topy Industries holds in small quantities[3] (these three companies are hereinafter collectively referred to as "Kyoei Steel, etc.") as certain competitive pressures on the Parties and the JFTC will continue to keep an eye on whether or not the company group (excluding Kyoei Steel, etc.; the same applies hereinafter in Part III-2) would acquire additional voting rights in stock of Kyoei Steel, etc. or expand the scope of concurrent positions of officers, resulting in a joint relationships between the company group and Kyoei Steel, etc. being strengthened and a competitive relationship between the company group and Kyoei Steel, etc. being made weaker and whether or not the company group would forge a business partnership with Kyoei Steel, etc. resulting in competition being substantially restrained in any particular field of trade relating to small and medium general shaped steel.

Details of review results with regards to small and medium general shaped steel are as described in Part IV and V.

Part IV Particular field of trade

1. Product range

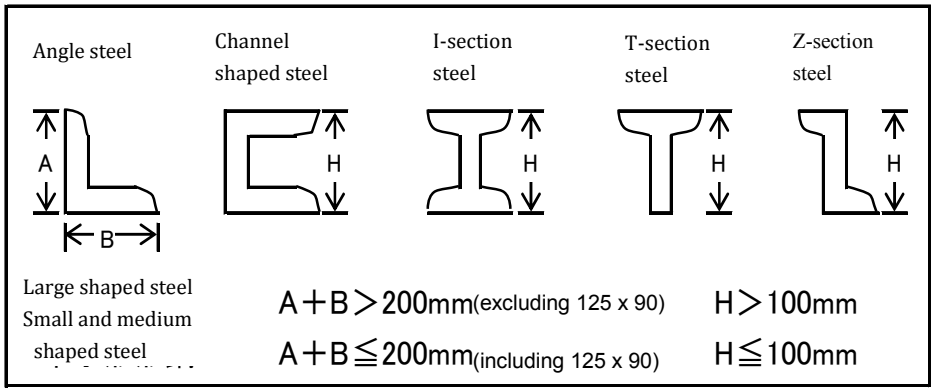
(1) Outline of shaped steel

Shaped steel is steel material produced by using a rolling mill or universal rolling mill (with a caliber roll [grooved roll] in which a groove is provided corresponding to the shape of finished products) to extend semi-finished products such as bloom and billet by applying pressure so that the products have a certain cross sectional shape.

Shaped steel is classified into steel sheet pile, H-section steel, angle steel, I-section steel, channel shaped steel according to the cross sectional shape of steel. In addition, shaped steel excluding steel sheet pile and H-section steel is called general shaped steel, which is classified into large shaped steel and small and medium shaped steel depending on the sum of two sides, height, etc. and according to the cross sectional shape of steel. For angle steel, there are lots of small and medium products. For I-section steel and channel shaped steel, there are lots of large products.

[2] As companies whose shares NSSM holds in small quantities, Kyoei Steel Ltd. (hereinafter "Kyoei Steel"; The ratio of voting rights owned by NSSM is 26.7%, with NSSM being the largest single shareholder) and Topy Industries, Ltd. (hereinafter "Topy Industries"; The ratio of voting rights owned by NSSM is 20.5%, with NSSM being the largest single shareholder) exist.

[3] As a company whose shares Topy Industries holds in small quantities, Hokuetsu Metal Ltd. (hereinafter "H okuetsu Metal"; The ratio of voting rights owned by Topy Industries is 36.0%, with Topy Industries being t he largest single shareholder) exists.



Taking a look at usage for each cross sectional shape of shaped steel, a steel sheet pile is a collective name of sheet-shaped piles for which fittings are provided to both sides of a cross section so that a continuous wall can be formed and these piles are used for earth retaining, water stopping and other applications. In addition, H-section steel is long structural steel materials produced by rolling so that the cross section of steel is H-shaped, and these materials are used as major structural members for construction, civil engineering and bridges. H-section steel is a representative product, with a majority of shaped steel products being H-section steel. Meanwhile, in the category of general shaped steel, there are types of angle steel, I-section steel, channel shaped steel, etc. and unlike H-section steel, general shaped steel is mainly used as auxiliary materials for construction and civil engineering and as structural members of ships.

With respect to transactions of general shaped steel, there are cases where an electric furnace manufacturer sells out its goods to a trading company or specified agent, etc. (hereinafter collectively "Trading Company, etc.") without designating a user and determining transaction conditions (such as prices) (this type of selling is called "Sales to Stores"), and there are also cases where an electric furnace manufacturer negotiates directly with a user on transaction conditions and sells goods directly or through a Trading Company, etc. (this type of selling is called "Sales to Specific Customers"). A majority of transactions are conducted in the form of Sales to Stores.

As described above, shaped steel includes H-section steel and steel sheet piles but the Parties do not compete with each other in terms of H-section steel and steel sheet piles. As such, in this case, the JFTC considered matters related to general shaped steel that does not include H-section steel and steel sheet piles.

(2) Demand substitutability

For general shaped steel, there are diverse products in terms of cross sectional shapes, dimensions, etc., which are used differently for each application. Therefore, individual general shaped steel products have no demand substitutability.

(3) Supply substitutability

General shaped steel products have a variety of dimensions, but the same production equipment can be used to produce products with different dimensions, for example by replacing caliber rolls (grooved rolls). Therefore, it can be considered that there is basically supply substitutability. Meanwhile, although there are cases where small and medium general shaped steel and large general

shaped steel are manufactured by using the same equipment, separate production lines are set up in many cases partially because production efficiency is different between the two categories of general shaped steel. As such, supply substitutability is limited between small and medium general shaped steel and large general shaped steel. Further, in fact, enterprises that mainly produce small and medium general shaped steel and enterprises that mainly produce large general shaped steel are different and there is also a difference in the distribution of their market shares. Therefore, supply substitutability is limited between small and medium ones and large ones.

On the other hand, with respect to the cross sectional shape of general shaped steel, the same production equipment can be used to manufacture products with different cross sectional shapes, for example by replacing caliber rolls (grooved rolls). Therefore, there is supply substitutability between products with different cross sectional shapes.

Based on the above discussion, the product range is defined as "small and medium general shaped steel" and "large general shaped steel".

2. Geographic range

Due to the fact that small and medium general shaped steel and large general shaped steel are produced in production sites across Japan and are distributed across the nation regardless of the production site, the geographic range is defined as "all regions of Japan".

Part V Consideration of substantial restraint of competition

As described in Part IV, in this case the product range is defined as "small and medium general shaped steel" and "large general shaped steel". Because safe-harbor criteria apply to large general shaped steel, small and medium general shaped steel is considered in the following.

1. Position of the company group

(1) Market share

With respect to small and medium general shaped steel, the acquisition concerned will make the company group collectively occupy approximately 60% of market share and rank at the first place, and the increment of HHI will be approximately 1,300, which will not be subject to safe-harbor criteria for horizontal business combination.

[Small and medium general shaped steel market shares in 2014]

Rank	Company name		Market share
1	NSSM Group		Approx. 45%
		Osaka Steel	Approx. 25%
		Kyoei Steel	Approx. 15%
		Topy Industries	0-5%
		Hokuetsu Metal	0-5%
2	Company A		Approx. 35%
3	Tokyo Kohtetsu		Approx. 15%

4	Company B	0-5%
5	Other	0-5%

(2) Conditions of competition among the Parties in the past

In this case, each of the Parties occupies more than 10% of market share across Japan, and it is considered that they compete with each other but there is some difference in the distribution of their market shares on a regional basis. According to the results of econometric analysis[4] conducted for this case, proximity between a production base and a region with demand affects cost competitiveness significantly, and a difference in the distribution of their market shares on a regional basis is considered to reflect a difference in their cost competitiveness. As such, it is conceivable that the actual extent of competition between the Parties varies depending on regions, and matters such as the intensity of competition based on a difference in the distribution of their market shares on a regional basis were considered.

With respect to Hokkaido and Tohoku (approx. 10% of shipments in Japan), from which production bases of both the Parties are far away, the distribution of their market shares is almost equal to that of their market shares across Japan (however, in Tohoku near which a production base of Tokyo Kohtetsu is situated, the market share of Osaka Steel and that of Tokyo Kohtetsu are in reverse order), and therefore the Parties are considered to compete with each other at the same level as for the entire nation. On the other hand, in other regions for which there are circumstances such as a production base of either of the Parties being far away from customers, the market share of the Parties is very small and the intensity of competition is not high and therefore the effect of competition being lost between the Parties on the market is considered to be not so large.

2. Conditions of competitors, etc.

(1) Conditions of competitors

As a strong competitor, Company A, which occupies approximately 35% of market share, exists, and there are also several other competitors, each of which has a certain level of excess capacity.

(2) Evaluation of a joint relationships within the company group (Kyoei Steel, etc.)

A. Overview

NSSM, the parent company of Osaka Steel, owns more than 20% of voting rights in Kyoei Steel and Topy Industries and is the largest single shareholder, and therefore it is conceivable that there is a joint relationships between NSSM and each of Kyoei Steel and Topy Industries (Part I-1(1)I(ii) of the Guidelines to application of the Antimonopoly Act concerning review of business combination [final revision: June 2011; hereinafter referred to as the "Guidelines".]).

In response to the above discussion, the Parties argued that the joint relationships between NSSM on one hand and Kyoei Steel and Topy Industries on the other cannot be regarded as a "relationship where parties completely unite

[4] Econometric analysis described in Note 5 below.

as one to conduct business activities" and does not go beyond a loose-knit combination, and therefore such relationship works to put a competitive pressure upon the Parties.

Therefore, the JFTC considered whether or not the company group excluding Kyoei Steel, etc. and Kyoei Steel, etc. will start to coordinate their activities partially because NSSM exerts an influence on competitive activities of Kyoei Steel, etc., the company group excluding Kyoei Steel, etc. conducts activities taking into account the interests of Kyoei Steel, etc., or non-public sensitive information is shared between NSSM and Kyoei Steel, etc. through their shareholding relationship.

B. Joint relationships

a) Kyoei Steel

The ratio of voting rights owned by NSSM is approximately more than 20% and with regards to officers who assume a concurrent position, there is only a part-time outside corporate auditor. In addition, the representative director and senior advisors of Kyoei Steel hold 14.65% of shares in total. In any other respect, there is no business partnership between the two companies and the amount of transactions between them is very small.

Further, although NSSM is considered to have significant interests in the results of business performance of both Osaka Steel and Kyoei Steel, with respect to small and medium general shaped steel, a strong competitor Company A, which occupies approximately 35% of market share, exists and is considered to work to warn against incentives for the coordinated conduct, taking into account conditions, etc. described in (3) below.

Furthermore, the JFTC has determined that NSSM cannot use its position as a holder of a small number of shares of Kyoei Steel to have access to Kyoei Steel's information that is sensitive from the viewpoint of competition.

b) Topy Industries

The ratio of voting rights owned by NSSM is slightly more than 20% and there is no officer who assumes a concurrent position. In addition, there is no business partnership concerning the general shaped steel business, and the two companies only conduct common transactions with each other.

Further, although NSSM is considered to have significant interests in the results of business performance of both Osaka Steel and Topy Industries, with respect to small and medium general shaped steel, a strong competitor Company A, which occupies approximately 35% of market share, exists and is considered to work to warn against incentives for the coordinated conduct, taking into account conditions, etc. described in (3) below.

Furthermore, the JFTC has determined that NSSM cannot use its position as a holder of a small number of shares of Topy Industries to have access to Topy Industries' information that is sensitive from the viewpoint of competition.

c) Results of hearing

According to the results of hearing of opinions from competitors, wholesalers and users, Kyoei Steel and Topy Industries are NSSM's equity-

method affiliates but put a certain competitive pressure on the Parties.

d) Summary

Based on the above, it cannot be considered that the joint relationships between NSSM on one hand and Kyoei Steel and Topy Industries on the other is strong, and the JFTC has decided to regard Kyoei Steel and Topy Industries as a certain competitive pressure on the Parties[5], and also has decided to regard Hokuetsu Metal, which is considered to have a joint relationships with Topy Industries, as a certain competitive pressure on the Parties.

C. Evaluation of competitive pressures

Kyoei Steel occupies approximately 15% of market share and each of Topy Industries and Hokuetsu Metal occupies 0-5% of market share and the three companies have a certain excess capacity.

(3) Conditions of competition in the past

To date, market shares of electric furnace manufactures fluctuate significantly and it cannot be considered that electric furnace manufacturers coordinate their activities, resulting in their market shares being fixed.

3. Import

Although there is no institutional barrier to importing, with product quality, delivery performance, etc. taken into account, there is little possibility that users may switch from domestic goods to imported goods.

Therefore, import pressure is considered to exert almost no influence.

4. Entry

Entry into the market by a blast furnace manufacturer and an electric furnace manufacturer that mainly handles large shaped steel cannot be expected, but steel bar manufactures may enter the market.

Therefore, import pressure is considered to exert a certain influence.

5. Competitive pressure from related markets

In regards to usage of some of small and medium general shaped steel (frames

[5] In this case, to analyze whether or not the intensity of competition between NSSM Group excluding Kyoei Steel and Kyoei Steel differs from the intensity of competition between NSSM Group excluding Kyoei Steel and enterprises excluding Kyoei Steel, an econometric analysis was conducted to determine how the merger (hereinafter the "2012 Merger") of the former Nippon Steel Corporation (hereinafter the "Former Nippon Steel") and the former Sumitomo Metal Industries, Ltd. (hereinafter the "Former Sumitomo Metal"), which resulted in Osaka Steel and Topy Industries that belonged to the Former Nippon Steel Group and Kyoei Steel that belonged to the Former Sumitomo Metal Group becoming members of the same group, affected the price cost margin (the price cost margin is a value defined by the formula [{(product price – marginal cost)/product price} x 100] and is hereinafter referred to as "PCM") for each product. The analysis revealed that a group of product types (medium channel shaped steel with the sum of two sides being 150 mm or more) for which the presence of NSSM Group has not been enhanced due to the 2012 Merger has seen a greater increase in PCM after the 2012 Merger than a group of product types (medium equilateral angle steel with the length of one side being 50 mm or more but 75 mm or less) for which such presence has been enhanced. This result shows that the intensity of competition between NSSM Group excluding Kyoei Steel and Kyoei Steel does not significantly differ from the intensity of competition between NSSM Group excluding Kyoei Steel and enterprises excluding Kyoei Steel, and the result is consistent with the review results described in Part V-2(2). The JFTC made judgments taking into account the results of economic analysis as well.

for solar panels, piping and air conditioning ducts, pallets used for exporting, structural members for radio communication base stations, etc.), light-weight shaped steel manufactured by cold roll forming (bending processing) thin steel plates is used as a substitute in some cases.

Therefore, pressure from related markets is considered to exert a certain influence depending on usage.

6. Competitive pressure from users

Since there is basically no difference in quality among goods of domestic manufacturers, Trading Companies, etc. and users can relatively easily switch manufactures and there is a tendency that Trading Companies, etc. and users focus on prices and lead times when selecting manufacturers.

Trading Companies, etc. and users that make purchases from multiple suppliers negotiate on prices, referencing on trends in supply and demand, trends in steel scrap prices and prices offered by other manufacturers, which puts a downward pressure on prices.

In addition, in the case of Sales to Stores, small- to mid-size specified agents making purchases from a single supplier exist, and such specified agents compete with other Trading Companies, etc. over prices. If such specified agents cannot purchase goods at competitive prices, their customers will be won by other Trading Companies, etc. Therefore, it is considered that electric furnace manufacturers have their prices under a downward pressure put by users through specified agents.

Further, demand for steel products is on a downward trend, and although demand can be expected to be generated from Tokyo Olympic and Paralympic Games, there is a possibility that a decline in demand may be further accelerated after the Games. Therefore, with respect to small and medium general shaped steel whose prices are likely to reflect fluctuations in trends of supply and demand, a systemic trend of supply volume exceeding demand volume is considered to further puts a downward pressure on prices.

As described above, competitive pressures from Trading Companies, etc. and users exert significant degree of competitive pressure.

7. Evaluation based on the AMA

As mentioned above, an effect of substantial loss of competition between the Parties is limited, and it is not considered that unilateral conduct would substantially restrain competition in any particular field of trade, taking into account the fact that the existence of multiple competitors including one strong competitor, certain competitive pressures put by Kyoei Steel, etc. on the Parties, a certain level of entry pressures and competitive pressures from a relevant market, and an significant degree of competitive pressures from users are conceivable.

In addition to the above, it is not considered that coordinated conduct would substantially restrain competition in any particular field of trade, taking into account the facts that an increase in the certainty of predictability of competitors' activities in line with a reduction in competition units is considered to be limited in consideration of the conditions of existing competition between the Parties, that competitors with an significant degree of excess capacity and Kyoei Steel, etc. have incentives for increasing sales by lowering prices, that the past fluctuations in market shares are significantly large, and that there is no reason to believe that electric furnace

manufacturers have already engaged in coordinated conduct.

Part VI Conclusion

Following the reasoning given above, the acquisition concerned is not considered to substantially restrain competition in any particular field of trade.

Case 4 Integration of Intel Corporation and Altera Corporation

Part I Outline of this case

This case concerns 1) a merger which took place between a subsidiary of Intel Corporation (headquartered in the United States; hereinafter, the group of combined companies to which the company belongs is referred to as "Intel Group"), which is engaged in manufacture, distribution, etc. of semiconductors, and Altera Corporation (headquartered in the United States; hereinafter, the group of combined companies to which the company belongs is referred to as "Altera Group"; hereinafter, "Intel Group" and "Altera Group" are collectively referred to as "the Parties") , which is engaged in manufacture, distribution, etc. of semiconductors, with Altera Corporation as the merging corporation; and 2) acquisition of all share s of the post-merger company made by Intel Corporation (hereinafter, the merger concerned and the acquisition of the shares concerned are collectively referred to as "the act concerned").

The applicable provisions are Article 10 and Article 15 of the AMA.

(Reference) Coordination with foreign competition authorities

As this case was investigated by the European Commission, etc., as well, the JFTC exchanged information with the European Commission when investigating this case.

Part II Particular field of trade

1. Description of products and services covered

(1) CPU

A CPU (Central Processing Unit) is an integrated circuit, which receives digital data as inputs and processes them according to the instruction stored in a memory, and functions as a brain of a computer.

CPUs are largely divided into two groups: "x86" manufactured by Intel Group and Company A, and "ARM" developed by Company B. x86 is used mainly in the heart of personal computers, and server-oriented devices. ARM, on the other hand, generally has a built-in ROM (Read Only Memory), and is used to control industrial machinery and household appliances.

According to the hearings from users, they consider the usage of x86 and ARM not the same despite the fact that they are technically substitutable with each other, because ARM is not really used for data centers or PCs which handle a lot of data whereas x86 is over-engineered and thus usually avoided for industrial machinery from the cost perspective.

The Parties list PCs and servers (including ones used in data centers) as main fields of x86 usage.

(2) FPGA

An FPGA (Field Programmable Gate Array) is a semiconductor which enables users to configure its circuits after manufacturing in order to get it to perform special functions. It comes with various benefits, such as helping faster development of a substrate by using FPGAs to realize most of circuits on it, or shortening time required for redevelopment when trouble has occurred.

FPGAs are used in all sorts of devices including various network equipment supporting base stations and the backbone of mobile phones, servers used in data centers, equipment at terrestrial digital broadcasting stations, measuring instruments, arcade video game machines, and plasma display panel TV sets.

The following table shows characteristics of ASIC[1] and ASSP[2], both of which are sometimes used for their functions similar to FPGA's partially, compared with FPGA.

(Comparison table among FPGA, ASIC, and ASSP)

	FPGA	ASIC	ASSP
Customization	By each customer	By each customer	By each usage (for multiple customers)
Sales unit price	High	Low	Low
Development cost at customers	Low	High	N/A
Development period at customers	Short	Long	N/A
Circuit change after purchase	Possible	Impossible	Impossible

(3) CPLD

A CPLD is similar to an FPGA in that it can let users configure circuits after manufacturing, but there are several functional differences between them. The following table shows specific differences, and users rarely use CPLDs and FPGAs for the same purpose.

As well, Intel Group is not producing CPLDs in its own manufacturing facilities.

(Differences between FPGA and CPLD)

	Volatility[3]	Rewrite circuits	Specs	Size	Cost	Usage
FPGA	Yes	Possible	External memory required	Large	High (Double or triple)	Can be configured for various processes.
CPLD	No	Impossible	Built-in	Small	Low	For connection with

[1] ASIC (Application Specific Integrated Circuit) is a logic IC customized to usage of specific customers. With IC's functions and performance optimized to usage of specific customers, customers can differentiate their products equipped with ASIC from other products which come with off-the-shelf ICs.

[2] ASSP (Application Specific Standard Product) is a logic IC sold to an unspecified large number of customers as a general-purpose product for specific usage.

[3] If volatility exists (Yes), settings of semiconductors will be erased when the device is turned off. On the other hand, if nonvolatility exists, settings of semiconductors will be kept even if the device is turned off.

			memory			other circuits in the same device

(4) Semiconductor contracted manufacturing service

Intel Group is providing a semiconductor contracted manufacturing service to small-scale semiconductor manufacturers. Fabless semiconductor enterprises[4] and system development companies which design by themselves design their own semiconductor products, and provide the design to outside manufacturers. Such outside manufacturers are called a "fab," or more generally "foundry." Semiconductor contracted manufacturers usually provide a wafer[5] fabrication service only. According to the Parties, competition among semiconductor contracted manufacturers takes place in wafer fabrication.

(5) Usage for data centers

A. Data centers

A data centers is large-scale facility housing associated systems including a variety of computer server systems and networking and storage systems, and used by large-scale server network operators including cloud service[6] providers (CSPs) and major financial institutions.

B. Servers

A server is a computer dedicated to manage PCs and printers through mutual operation with network-managing software. It is composed of hardware such as a CPU and a RAM (storage unit), an operation system, and application software.

According to the type of CPU equipped, servers are largely divided into x86 servers[7] equipped with an x86 CPU, and other servers equipped with other CPUs. Approximately 70% of domestic sales of servers are accounted for by x86 servers in terms of monetary amounts (almost 100% in volume terms).

C. Combination of CPU and FPGA for usage in servers for data centers

CPUs play a brain-like role in computers and execute instructions received from software programs. As a general-purpose device, they can perform a wide range of functions, and are designed to execute various computation processes. In servers used in data centers, CPUs ad FPGAs are currently used by being connected with each other via PCIe, or other interconnect technology to improve CPU's processing capacity. However, Intel Group is planning to integrate x86 and FPGA before long as a measure to further improve CPU's processing capacity. On a different note, CPLD is not

[4] Semiconductor manufacturers without their own manufacturing facilities

[5] Wafers are circuit substrates made of silicon in a sheet form, which will be semiconductor chips for customers after going through a manufacturing process including dicing.

[6] Cloud service refers to a service which, through a network, provides users with data and software, which used to be used in users' computers. By securing minimum environment (client devices such as PCs or mobile information terminals, web browsers run on them, and internet connection environment), users can access a variety of services with a device of their choice.

[7] The name "x86 server" is derived from the fact that it was developed by using an x86 CPU made by Intel Corporation. Today, however, servers equipped with an x86 CPU made by other companies are also called "x86 servers."

used to improve CPU's processing capacity because its performance is different from that of FPGA.

2. Product or service range

(1) CPU and FPGA

FPGAs are semiconductors which let users configure/ modify circuits after purchase according to the usage. Because users want this function in an FPGA, there is no demand substitutability with products such as ASIC or ASSP, which does not allow users to configure/ modify circuits. As well, there is no supply substitutability between FPGA and ASIC/ ASSP because methods and required know-how for circuit designing and production are different.

Upon producing electronic devices, etc., users choose semiconductors which provide functions required for specific usage. However, because CPUs and FPGAs are different in characteristics and functions, they do not have demand substitutability with each other.

As well, there is no supply substitutability between CPUs and FPGAs because methods and required know-how for circuit pattern designing and production are different.

With regard to CPUs, they are largely divided into x86 and ARM, as mentioned in the above 1 (1). The two groups do not share usage (x86 is mainly for servers, including those used in data centers, and PCs, whereas ARM is mainly used for smartphones/ tablet computers, telecommunications and industrial equipment). Therefore, there is no demand substitutability between them. As well, since patents for x86 CPUs are owned by Intel Group and Company A, other CPU manufacturers producing ARM cannot supply x86 CPUs. Therefore, there is no supply substitutability either.

As well, while FPGAs are used in servers for data centers, smartphones/ tablet computers, telecommunications and industrial equipment, because FPGAs for data center servers have requirements different from those for other usage, there is no demand substitutability between FPGAs for data centers and those for other usage.

In this case, as connection and integration between CPU and FPGA moves ahead as mentioned in the above 1 (5) C, the effect of market foreclosure stemming from this needs to be examined. Considering that such connection and integration is taking place in CPUs and FPGAs used in servers for data centers, and that most of such servers are x86 servers, the product range is defined as "CPUs for x86 servers for data centers" and "FPGAs for x86 servers for data centers" for users who need both CPUs and FPGAs.

On a different note, because semiconductor contracted manufacturing services for FPGAs are not always services for fabricating FPGAs for specific usage, the product range is defined as "FPGAs" with regard to examination of the effect of vertical business combination.

(2) CPLD

As mentioned in the above 1 (3), a CPLD is usually used for different purposes from an FPGA, there is only limited demand substitutability between CPLD and FPGA.

As well, because FPGA design is far more complicated than CPLD design, FPGA manufacturers can produce CPLDs whereas CPLD suppliers cannot readily switch production to FPGAs without expending significant development cost or taking significant development risk. Therefore, there is only limited supply substitutability, and the product range is defined as "CPLDs" in this case.

(3) Semiconductor contracted manufacturing services

Semiconductor contracted manufacturers produce a wide range of semiconductors for various customers, and are not specialized in production of individual semiconductors such as FPGA or CPLD. It is reasonable to assume semiconductor contracted manufacturers can easily offer contracted manufacturing services for other types of semiconductors, if design is undertaken by the Parties or other semiconductor manufacturers.

Therefore, the service range is defined as "semiconductor contracted manufacturing services" in this case.

3. Geographic range

(1) CPUs for x86 servers for data centers, FPGAs for x86 servers for data centers, and CPLDs

Since any of "CPUs for x86 servers for data centers," "FPGAs for x86 servers for data centers," and "CPLDs," defined in the above 2 (1) and (2) require little transportation cost, customs duty, etc., there is not much price difference between Japan and other countries. As a result, users are conducting business without segregating domestic and foreign suppliers, while suppliers are also conducting business regardless of countries of users. Therefore, the geographic range is defined as "worldwide."

(2) Semiconductor contracted manufacturing services

With regard to "semiconductor contracted manufacturing services," defined in the above 2 (3), major suppliers are offering such services around the world while the Parties and other major customers are also conducting business across the world. Coupled with this, semiconductors require little transportation cost, etc., as mentioned in the above (1), the geographic range is defined as "worldwide."

Part III Impact of the act concerned on competition

1. Vertical business combination

(1) Positions of the Parties

A. Upstream market

With its semiconductor contracted manufacturing service, Intel Group can possibly produce FPGAs or CPLDs. Therefore, the act concerned is qualified as a business combination with its semiconductor contracted manufacturing service as upstream market, and FPGAs and CPLDs as downstream market.

The HHI is approximately 3,900, at the highest, while market share of the Parties is less than 5%. Therefore, the safe-harbor criteria for a vertical business combination apply.

Market share of semiconductor contracted manufacturing services in 2014

Rank	Company name	Market share
1	Company C	Approx. 50%
2	Company D	Approx. 10%
3	Company E	Approx. 10%
4	Company F	Approx. 5%
-	Intel Group	0-5%
	Others	Approx. 25%
Total		100%

B. Downstream market (FPGAs)

Altera Group and Company G supply approximately 90% of FPGAs[8].

The HHI is approximately 4,300, at the highest, while market share of the Parties is approximately 40%. Therefore, the safe-harbor criteria for a vertical business combination do not apply.

Market share of FPGAs in 2014

Rank	Company name	Market share
1	Company G	Approx. 55%
2	Altera Group	Approx. 40%
3	Company H	0-5%
	Others	Approx. 5%
Total		100%

[8] Semiconductor contracted manufacturing service provided by Intel is for all types of FPGAs. Therefore, as discussed in the above 2 1), examination here is made based on the share in the market of all types of FPGAs. On another note, shares of the market held by companies are not largely different across different purposes or price ranges of FPGAs.

C. Downstream market (CPLDs)

Altera Group and Company H supply approximately 90% of CPLDs.

The HHI is approximately 4,400, while market share of the Parties is approximately 35%. Therefore, the safe-harbor criteria for a vertical business combination do not apply.

Market share of CPLDs in 2014

Rank	Company name	Market share
1	Company H	Approx. 55%
2	Altera Group	Approx. 35%
3	Company G	Approx. 10%
Total		100%

(2) Altera Group's refusal, etc. of purchasing FPGAs and CPLDs from enterprises other than Intel Group (hereinafter referred to as "customer foreclosure")

A. Capabilities of customer foreclosure

It is virtually impossible [1] for Altera Group not to outsource semiconductor manufacturing to enterprises other than Intel Group, considering that it is difficult for Intel Group to immediately start full-scale production for Altera Group because it has not been long since Intel Group launched its semiconductor contracted manufacturing service.

As well, even if Altera Group conducted customer foreclosure, enterprises offering semiconductor contracted manufacturing services in the upstream market could easily offer the services to companies other than Altera Group[2].

Considering what has been mentioned above, it is reasonable to conclude that the act concerned will not provide Altera Group with capabilities of customer foreclosure against competitors of Intel Group.

B. Incentive for customer foreclosure

It is difficult for Intel Group to immediately start full-scale production for Altera Group because Intel Group has just entered the market of semiconductor contracted manufacturing services. As well, it would incur an enormous amount of cost to immediately fabricate the same FPGAs as existing FPGAs currently produced by other semiconductor contracted manufacturers.

Therefore, it is reasonable to conclude that the act concerned will not provide Altera Group incentive for customer foreclosure against competitors of Intel Group.

C. Summary

From what has been mentioned above, it is reasonable to conclude that the act concerned will not lead to customer foreclosure by Altera Group against competitors of Intel Group, thereby causing no issues such as closure

[1] Currently, Altera Group is outsourcing manufacturing of most of its semiconductors to Company C.

[2] Business with Altera Group accounts for an extremely small proportion in sales of semiconductor contracted manufacturers. Producing multiple types of semiconductors other than FPGAs, semiconductor contracted manufacturers are deemed to be able to easily switch production to semiconductors other than FPGAs.

or exclusivity of the market.

2. Conglomerate business combination (product expansion)

(1) Positions of the Parties

Although accurate market share for CPUs for x86 servers for data centers is not available, the Parties and competitors claim that it is not much different from the state of the market for CPUs for x86 servers in the following. According to the market share below, the HHI is approximately 9,600, and the Parties hold more than 95% of the market. As well, accurate market share for FPGAs for x86 servers for data centers is not available either. For data center use, FPGAs are used to improve CPU's performance, and such usage has just begun. However, it is expected to grow in demand in the future, and therefore, examination here is made based on the premise that the safe-harbor criteria for a conglomerate business combination do not apply.

Market share of x86 CPUs for servers in 2014

Rank	Company name	Market share
1	Intel Group	95-100%
2	Company A	0-5%
Total		100%

(2) Conglomerate business combination (product expansion)

As mentioned in Part II 1 (5) C, CPUs and FPGAs for servers for data centers are connected and used as a combination, and are expected to be integrated in the future to further improve CPU processing capability. Therefore, examination is provided whether the act concerned will lead to the issues of closure or exclusivity of the market, thereby substantially restraining competition in any particular field of trade.

A. CPUs for x86 servers for data centers

There is a possibility that the issues of closure or exclusivity occur in the field of trade concerning CPUs for x86 servers for data centers, if the Parties, through the act concerned, manufacture and distribute FPGAs under the name of Altera Group which are compatible, or capable of providing the maximum performance only with x86 made by Intel Group.

a) Capabilities of market foreclosure

FPGAs are all produced by semiconductor contracted manufacturers, whose excess capacities are not disclosed. As well, according to the hearings from users, specifications are different across FPGA manufacturers, and, once installed in a device, it is hard to replace an FPGA with another made by a different manufacturer before the renewal of the device itself. On the other hand, when developing a new device, users can easily switch to an FPGA made by other companies, and in fact, sometimes users do change from one FPGA supplier to another when developing a new product. Under such circumstances, the FPGA market has a prominent competitor, such as Company G holding more than 50% of the market, as mentioned in the

above 1 (1) B, and sooner or later the market of FPGAs for x86 servers for data centers is expected to be similar to the market of all types of FPGAs, according to the Parties and competitors. Therefore, even if the Parties manufacture and distribute FPGAs under the name of Altera Group which are compatible, or capable of providing the maximum performance only with x86 made by Intel Group, users still can purchase FPGAs from companies other than Altera Group.

As well, in light of the October 2015 announcement made by Company G, holding more than 50% of the FPGA market, and Company I, engaged in CPU manufacture and distribution, that they would strategically cooperate in technology aimed at development of products realizing higher CPU performance based on interconnection between CPU and FPGA, CPU suppliers other than the Parties are expected to be able to continue supplying CPUs to be used in combination with an FPGA without cooperating with the Parties.

As mentioned above, FPGA users are able to purchase FPGAs from companies other than Altera Group, making it reasonable to conclude that the act concerned will not provide the Parties with capabilities of foreclosing the market of CPUs for x86 servers for data centers through manufacturing and distributing FPGAs under the name of Altera Group which are compatible, or capable of providing the maximum performance only with x86 made by Intel Group.

b) Incentive for market foreclosure

As mentioned in the above Part II 1 (5), complementary use of CPU and FPGA is chiefly found in data centers only. According to hearings from users, technology for integration of CPU and FPGA (next-generation technique) will not be realized anytime soon, if it will at all. As well, there are workable alternatives for an FPGA as a semiconductor to be used in combination with a CPU to improve CPU's processing capability in data centers, such as ASIC and GPU [3], for which semiconductor manufacturers are developing technologies. As FPGA has not become the de facto standard of a CPU complement, it is reasonable to conclude that there is no incentive for foreclosing the market of CPUs for x86 servers for data centers.

c) Summary

As mentioned above, it is not reasonable to conclude that the act concerned will lead to the issues of closure or exclusivity of the market of CPUs for x86 servers for data centers by the Parties manufacturing and distributing FPGAs under the name of Altera Group which are compatible, or capable of providing the maximum performance only with x86 made by Intel Group. Therefore, it is deemed that the Parties would not substantially restrain competition of the market of CPUs for x86 servers for data centers just by conducting the act concerned.

[3] CPU for graphics

B. FPGAs for x86 servers for data centers

There is a possibility that the issues of closure or exclusivity occur in the field of trade concerning FPGAs for x86 servers for data centers, if the Parties, through the act concerned, manufacture and distribute x86 under the name of Intel Group which are compatible, or capable of providing the maximum performance only with FPGA made by Altera Group.

a) Capabilities of market foreclosure

There are such interconnect technologies as PCIe and QPI among interfaces between CPUs and other semiconductors which can be used when improving CPU's performance by combining CPUs with other semiconductors. In particular, PCIe, which has an established standard and places essential patent holders under a licensing obligation on FRAND terms, is deemed to be a workable substitute for Intel's own interconnect technologies (QPI, etc.)

As well, because Intel Group is licensing its own interconnect technologies to FPGA manufacturers, these companies can continue supplying FPGAs for x86 servers for data centers to be connected and used with CPUs for x86 servers for data centers made by Intel Group.

In addition, in light of the October 2015 announcement made by Company G, holding more than 50% of the FPGA market, and Company I, engaged in CPU manufacture and distribution, that they would strategically cooperate in technology aimed at development of competing products realizing higher CPU performance based on interconnection between CPU and FPGA, FPGA suppliers other than the Parties are expected to be able to continue supplying FPGAs to be used in combination with a CPU without cooperating with the Parties.

As mentioned above, the Parties' competitors concerning FPGAs are able to supply FPGAs to be used in combination with a CPU for higher CPU performance. Even if the Parties manufacture and distribute CPUs only compatible with Altera Group's FPGAs, the Parties are deemed to be not able to eliminate their competitors concerning FPGAs to be used in combination with a CPU for higher CPU performance from the market. Therefore, the Parties are deemed to have no capabilities of foreclosing the market of FPGAs for x86 servers for data centers.

b) Incentive for market foreclosure

Apart from FPGA, ASIC and GPU are semiconductors expected to be viable as well for use in combination with a CPU to improve CPU's processing capability at data centers, and semiconductor manufacturers are developing technologies accordingly. Therefore, it cannot be said that FPGA is currently the de facto standard of semiconductors used in combination with a CPU at data centers.

As well, considering that users' cooperation (product tests) is indispensable, according to the Parties and users, when semiconductor manufacturers, including the Parties, develop a new product, if the Parties, nevertheless, act as mentioned above, and fail to secure cooperation from

users, it may have a serious impact on their development of the next-generation products.

Under such circumstances, the Parties are deemed to have no incentive to go ahead with act which may lead to foreclosure of the market of FPGAs for x86 servers for data centers.

c) Summary

As mentioned above, on the grounds that even if the Parties manufacture and distribute CPUs only compatible with Altera Group's FPGAs, the Parties' competitors concerning FPGA can continue supplying FPGAs to be used to improve CPU's processing capability because those suppliers can continue supplying the products to be used in combination with a CPU without cooperation of the Parties; that FPGA is currently not the de facto standard of semiconductors used in combination with a CPU at data centers; and that the Parties may be subject to a serious impact on their new technological development, it is difficult that the company group will eliminate competitors out of the market by manufacturing and distributing CPUs only compatible with Altera Group's FPGAs. Therefore, it cannot be said that there is a high probability that such act by the Parties will cause the issues of closure or exclusivity of the market of FPGAs for x86 servers for data centers. As a result, it is reasonable to conclude that the Parties would not substantially restrain competition in any particular field of trade in the market of FPGAs for x86 servers for data centers.

Part IV Conclusion

The JFTC concluded that the act concerned would not substantially restrain competition in any particular field of trade.

Case 5 Integration of NXP Semiconductors N.V. and Freescale Semiconductor, Ltd.

Part I Outline of this case

This case concerns 1) a merger which took place between a subsidiary of NXP Semiconductors N.V. (headquartered in the Netherlands; hereinafter, the group of combined companies to which the company belongs is referred to as "NXP Group"), which is engaged in development, manufacture, and distribution of semiconductors, and Freescale Semiconductor, Ltd. (headquartered in UK; hereinafter, the group of combined companies to which the company belongs is referred to as "FSL Group") , which is engaged in manufacture and distribution of semiconductors, with Freescale Semiconductor, Ltd. as the merging corporation; and 2) acquisition of all shares of the post-merger company made by NXP Semiconductors N.V. (hereinafter NXP Group and FSL Group are collectively referred to as "the Parties"; hereinafter the merger concerned and the acquisition of the shares concerned are collectively referred to as "the act concerned.")

The applicable provisions are Article 10 and Article 15 of the AMA.

(Reference) Coordination with foreign competition authorities

As this case was investigated by the US Federal Trade Commission, the European Commission, etc., as well, the JFTC exchanged information with the US Federal Trade Commission and the European Commission when investigating this case.

Part II Particular field of trade

1. Product range

The Parties are companies which are engaged in manufacture and distribution of semiconductors, and some specific products manufactured and distributed by the Parties are in horizontal relations. Among such products, examination was made on RF power transistors (Radio Frequency Power Transistors), for which both of the Parties hold a relatively high market share, and are deemed to have a relatively high impact on the competition. RF power transistors are special semiconductors which transmit radio waves to antennas in the high frequency band, and used in products installed in communication infrastructure for mobile devices (base stations, etc.), radars, satellites, etc.

2. Geographic range

Since RF power transistors defined in the above 1, are sold around the world, and require little transportation cost, customs duty, etc., there is not much price difference between Japan and other countries. As a result, users are conducting business without segregating domestic and foreign suppliers, while suppliers are also conducting business regardless of countries of users. Therefore, the geographic range is defined as "worldwide."

Part III Impact of the act concerned on competition

1. Positions of the Parties

As the HHI is approximately 4,300, while the market share of the Parties is more than 60%, the safe-harbor criteria for a horizontal business combination do not apply.

Market share of RF power transistors in 2014

Rank	Company name	Market share
1	FSL Group	Approx. 35%
2	NXP Group	Approx. 25%
3	Company A	Approx. 10%
4	Company B	Approx. 10%
	Others	Approx. 20%
Total		100%

2. Conditions of competitors

While there are competitors such as Company A and Company B, their market share is less than 10% respectively, way smaller than that of the Parties. Although competitors are deemed to have a certain degree of excess capacity, considering their small market shares, they do not present a sufficient constraint on the Parties.

3. Legal assessment based on the AMA

Through the act concerned, the Parties will hold more than 60% of the market of RF power transistors, creating a large gap with competitors.

However, the Parties were proposing business transfer to a third party from the onset of this case. Based on discussion with the JFTC, the Parties made the final proposal of business transfer mentioned in the following Part IV (hereinafter referred to as “the business transfer concerned”). Legal assessment based on the AMA was made on the basis of the proposal.

Part IV Proposal of the business transfer concerned by the Parties

The Parties proposed transfer of NXP Group's business concerning RF power transistors as follows.

1. Transfer of assets, etc.

The following shows business to be transferred, which includes all assets and employees concerning operation of RF power transistor business currently owned by NXP Group.

1) All contracts concerning purchase and supply, all contracts concerning research and development, and all records and related documents required for operation of the RF power transistor business.
2) All tangible assets required for operation of the RF power transistor business, and manufacture and distribution in the same business (This includes manufacturing facilities, etc. used to manufacture products in the same business.)
3) All intangible assets required for operation of the RF power transistor business, and manufacture and distribution in the same business (This includes license, etc. such as all patents and techniques used exclusively or preferentially by the same business, and other patents and techniques required for the RF power transistor business.)

2. Requirements on the business buyer

The Parties suggested to the JFTC that they would name an enterprise which would meet the following five requirements as a buyer of the RF power transistor business during the business transfer concerned.

1) The buyer has sufficient experience and capabilities.
2) The buyer has no capital ties with the Parties, and is independent from them.
3) The buyer has sufficient financial resources, expertise, and incentive to maintain and develop the business to be transferred.
4) The buyer will cause no concern in terms of competition in Japan through acquisition of the business to be transferred; thereby will not bring about a risk of slowing down the business transfer concerned.
5) Until the JFTC confirms the eligibility of the buyer proposed by the Parties, the Parties will hold integration.[1]

3. Maintenance of competitiveness and continuity of the business to be transferred

The economic growth potential of the business to be transferred will be protected or maintained while the potential risk of losing competing capabilities of the business to be transferred will be minimized.

[1] As a result of subsequent consideration on a candidate buyer proposed by the Parties, the JFTC concluded that the candidate buyer meets the requirements on, and is qualified as the business buyer in this case.

4. Maintenance of separation and independence of the business to be transferred

Separation and independence of the business to be transferred will be maintained by separating it from other continuing business of NXP Group.

5. Non-sharing of confidential information

Every possible measure will be taken to ensure that confidential information will not be shared between NXP Group and the enterprise buying the business to be transferred.

Part V Assessment of the business transfer concerned

The following table shows the impact of the business transfer concerned on the market share of RF power transistors.

	Before the act concerned		After the act concerned	
	FSL Group	NXP Group	Without the business transfer concerned	With the business transfer concerned
RF power transistors	Approx. 35%	Approx. 25%	Approx. 60%	Approx. 35%

As seen in the above table, if the business transfer concerned is implemented, the share of NXP Group, one of the Parties, in the RF power transistor market will be transferred out. Therefore, the act concerned will not add to the market share of the Parties, and as a result, overall market share of the RF power transistor will remain unchanged.

As well, the transfer to be made by NXP group will include, as mentioned in the above Part IV-1, the whole RF power transistor business which has so far been conducted by NXP Group, including employees relevant to the RF power transistor business, providing sufficient grounds to consider the business transfer concerned as full transfer.

In addition, while the Parties argue that they will transfer the RF power transistor business to a buyer which meets the requirements mentioned in the above Part IV-2, such a buyer is expected to make a major independent competitor in the RF power transistor market.

Furthermore, the Parties are offering to guarantee that competing capabilities as well as separation and independence of the business to be transferred will be maintained, as mentioned in the above Part IV-3 and 4.

Considering what has been mentioned, the JFTC concluded that the business transfer concerned proposed by the Parties is appropriate.

Part VI Conclusion

The JFTC concluded that the Parties would not substantially restrain competition in any particular field of trade with unilateral conduct by the Parties or coordinated conduct with competitors just by conducting the act concerned, on the premise that the business transfer concerned will be implemented as proposed by the Parties.

Case 6 Integration of Western Digital Corporation and SanDisk Corporation

Part I Outline of this case

This case deals with integration made by Western Digital Corporation (headquartered in the United States; hereinafter referred to as "Western Digital"; a group of combined companies which has Western Digital as the ultimate parent company is hereinafter referred to as "Western Digital Group"), which is engaged in manufacture and distribution of hard disc drives (HDDs), etc. and SanDisk Corporation (headquartered in the United States; hereinafter referred to as "SanDisk"; a group of combined companies which has SanDisk as the ultimate parent company is hereinafter referred to as "SanDisk Group"; Western Digital Group and SanDisk Group are hereinafter collectively referred to as "the Parties"), which is engaged in manufacture and distribution of memory cards, etc. (hereinafter the integration concerned is referred to as "the act concerned.")

The applicable provisions are Article 10 and Article 15 of the AMA.

(Reference) Coordination with foreign competition authorities

As this case was investigated by the US Federal Trade Commission as well, the JFTC exchanged information with the US Federal Trade Commission when investigating this case.

Part II Particular field of trade

1. Product range

(1) Product description

Among solid-state drives (hereinafter referred to as "SSDs"), which are devices to store electronic data, both of the Parties are manufacturing and distributing enterprise SSDs, which are for enterprise use. Depending on the interface[1] used, SSDs are divided into three types. Among SSDs, products which are manufactured and distributed by both of the Parties are those called SAS enterprise and PCIe enterprise.

A. SSD

SSDs are a device to store electronic data. Conventionally, hard disc drives (HDDs) have been widely used as devices to store data, for example, in personal computers for individuals and servers and storages for enterprises. SSDs, on the other hand, are characterized by having built-in ICs called NAND flash memory, which enables fast read and write speeds, although making the products more expensive[2] than HDDs, and being highly resistant to physical shock thanks to having no moving mechanical components as opposed to HDDs.[3] Due to such advantages of SSDs, data storages are switching from HDDs to SSDs.[4]

An SSD is composed of "NAND flash memory," providing data storage functions, a "controller," managing data reading/writing and erasing as well

[1] A part which is connected to another device

[2] In general, the price of HDD is US$0.04-0.18 per gigabyte, whereas SSD costs US$0.42-2.45 per gigabyte.

[3] On the other hand, HDDs have advantage over SSDs in terms of how much they can store. However, it is said that the difference among them is getting smaller due to the improvement of SSD's performance in recent years.

[4] In this respect, users of (enterprise) SSDs say that HDDs cannot replace (enterprise) SSDs because they are slower in reading and writing data than SSDs although they are a kind of storage media as SSDs are.

as repairing errors, and an "interface," the part to connect with another device or some system, across which data is exchanged. The most important component is NAND flash memory, which accounts for more than half of the total SSD cost. SSD's performance is measured mainly by the following four factors: endurance[5], read/write speeds[6], reliability[7], and capacity[8].

As there are differences in performance and price between HDDs and SSDs, as mentioned above, users consider these two types of devices as different products, and are using them for different purposes. (There is a certain degree of demand substitutability, but it is limited.) As well, HDDs and SSDs have totally different physical structures. Accordingly, manufacturing and other processes, and production facilities and lines are all different. (There is no supply substitutability.)

B. Enterprise SSD

Depending on the usage, SSDs can be divided into two groups: client SSDs, mainly for personal use, and enterprise SSDs for enterprise use.

The products which both of the Parties are manufacturing are enterprise SSDs, which are built into servers and storages mainly used in heavily-loaded environment such as data centers of enterprises.

Customers of the Parties (users of enterprise SSDs) are major manufacturers of servers and storages.[9] These customers purchase enterprise SSDs from the Parties, and install them into servers and storages, which are sold to private enterprises such as banks as well as government and municipal offices.

On the other hand, client SSDs are SSDs used in general consumer products such as personal computers and mobile electronic devices.

Enterprise SSD's performance is higher than client SSD's, offering faster read/write speeds and higher reliability.

Table 1: Comparison of client SSD and enterprise SSD

	Capacity	Average price (per gigabyte)	Worldwide sales
Client SSD	30GB - 2TB	US$0.42	Approx. US$6.88 billion
Enterprise SSD	100GB – 6.4TB	US$1.05	Approx. US$4.54 billion

As mentioned above, there are differences in performance and price as well as usage between client SSDs and enterprise SSDs. (There is no demand substitutability.)

On the other hand, according to the Parties, as client SSDs and enterprise SSDs share some common parts and are produced in similar assembly lines as

[5] Endurance indicates the total number of write operations which can be made by the time an SSD loses its reliability (by the time the probability of failure occurrence increases and the SSD runs through its natural life.)

[6] Read/write speeds indicate the speed at which data is read from an SSD and the speed at which data is written (stored) on an SSD.

[7] Reliability indicates the probability of the occurrence of system failure where data is lost.

[8] Capacity indicates how much data can be stored on a drive.

[9] According to the Parties, the top five users account for much of the total demand of SAS enterprise SSDs. Other users include large-scale cloud service providers (hereinafter referred to as "CSPs").

well, there is a certain degree of supply substitutability.

On a different note, sales in the enterprise SSD market is growing in both value terms and volume year after year, which is expected to continue moving forward in light of demand for a switch from HDDs.

C. Different interfaces of enterprise SSD

Depending on the interface used, enterprise SSDs can be divided into SATA enterprise SSDs, SAS enterprise SSDs, and PCIe enterprise SSDs.

Among the above three types, the products both of the Parties are manufacturing and distributing are SAS enterprise SSDs and PCIe enterprise SSDs.

Characteristics of each interface are as follows.

a) SATA

SATA is the oldest kind among the three types of interfaces, and enterprise SSDs with SATA are usually cheaper than enterprise SSDs which come with either one of the other types of interfaces while they have slower data access speeds (speeds at which data are exchanged) as well as lower reliability (more likely to fail).[10] Therefore, in general, enterprise SSDs equipped with a SATA interface are used in servers, etc. for cost-sensitive users. On a different note, large part of client SSDs for general consumers uses a SATA interface.

b) SAS

SAS came after SATA mentioned above, and enterprise SSDs equipped with SAS allow faster data exchange and offer higher reliability than SATA-based enterprise SSDs. Therefore, SAS enterprise SSDs are installed in high-end servers, etc. for enterprises which need high reliability in data management, etc.

c) PCIe

PCIe was originally developed as a multipurpose interface to connect a variety of hardware with systems, etc., not as an interface to be exclusively used for storage devices such as HDDs and SSDs.[11]

One of characteristics of PCIe interfaces is that the number of lanes (transmission lines) can be altered depending on the host device. In general, the more the number of lanes is, the faster data can be exchanged, and the higher the cost will be.

PCIe interfaces make fast data storing (writing) and reading possible, and it is said that enterprise SSDs equipped with a PCIe interface, in general, offer the same or higher reliability than enterprises SSDs with a SAS

[10] According to users, they usually do not use SATA enterprise SSDs for servers, etc. to be delivered to customers (banks, etc.) who need very high reliability in data management. However, it does not mean that SATA enterprise SSDs have no demand. Users meet request of customers who want economical servers, etc. by installing SATA enterprise SSDs in products.

[11] According to the Parties, after NVMe (Non-Volatile Memory Express), an open and standardized communication interface/protocol for PCIe interfaces, and was developed for SSDs, released in 2011, production and distribution of PCIe enterprise SSDs compatible with the NVMe protocol was set off by many of enterprise SSD manufacturers in recent years.

interface.

According to explanation by the Parties and the result of hearings from users, characteristics of enterprise SSDs with different interfaces can be summarized as follows.

Table 2: Characteristics of enterprise SSD by the built-in interface

	Rough estimate of communication speed	Average price difference among enterprise SSDs by the built-in interface (by setting the price of SATA enterprise SSD as 1)	Reliability	Usage
SATA	6Gbps[4]	1	Low	For low end use
SAS	12Gbps	1.8	High	For middle and high end use
PCIe	40Gbps	3	High	For high end use

d) The following table shows worldwide sales of enterprise SSDs by the built-in interface

Table 3: Worldwide sales of enterprise SSDs by the built-in interface (2014)

	In units		In value terms	
	Units (Million)	%	Sales (US$)	%
SATA enterprise SSD	6.2	79.6	2.2 billion	50.4
SAS enterprise SSD	1.3	16.7	1.3 billion	29.7
PCIe enterprise SSD	0.29	3.7	870 million	19.9

Currently, SATA enterprise SSDs dominate in terms of both volume and value. However, demand for SAS enterprise SSDs and PCIe enterprise SSDs are expected to grow significantly because SAS enterprise SSDs and PCIe enterprise SSDs are expected to replace SATA enterprise SSDs in the future.[5]

e) The following table shows change in the average price of enterprise SSDs by the built-in interface.

Table 4: Change in the average price per GB by the built-in interface

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
SAS enterprise SSD	8.00	4.84	30.3	1.80	1.24	0.84	0.54	0.45	0.39	0.31
PCIe	7.44	4.86	4.23	2.92	1.92	1.35	0.89	0.58	0.49	0.38

[4] Gbps is a unit of data transfer speed, expressing how many gigabits (billion bits) of data can be transferred per second. 1Gbps indicates that one gigabit (one billion bits) of data can be transferred every second.

[5] Users say that demand for PCIe enterprise SSDs is expected to grow sharply due to development of NVMe for SSDs.

enterprise SSD										
SATA enterprise SSD	3.35	1.67	1.14	0.81	0.66	0.50	0.36	0.28	0.24	0.21

As seen in the Table 4, prices of SSDs with different interfaces are converging and the difference is expected to get even smaller in the future. However, currently, the price difference is still large between SATA enterprise SSDs, the cheapest, and SAS enterprise SSDs or PCIe enterprise SSDs.

f) Regarding Demand substitutability

According to users of enterprise SSDs, 1) SATA enterprise SSDs are low-priced but have low reliability; 2) SAS enterprise SSDs and PCIe enterprise SSDs are more reliable but more expensive than SATA enterprise SSDs; and 3) being even more reliable than SAS enterprise SSDs, PCIe enterprise SSDs are grabbing the market share from SAS enterprise SSDs, and often used in high-end servers, etc.

Users of enterprise SSDs are purchasing enterprise SSDs from enterprise SSD manufacturers, installing them in servers and storages, and selling those devices to private enterprises (banks, etc.) and government and municipal offices. Users say that types of interfaces matter when choosing enterprise SSDs, because performance[6] of enterprise SSDs is largely dependent on what type of interface is used.[7]

According to users of enterprise SSDs, when they produce servers, etc. they consult enterprise SSD manufacturers as well, trying to adopt enterprise SSDs which will enable them to make servers and storages providing performance required by customers and at the same time will meet cost requirements. For example, they use SAS- or PCIe-based enterprise SSDs for servers and storages of customers who are looking for performance and reliability, while they use SATA-based enterprise SSDs for servers and storages of cost-sensitive customers.[8]

g) Regarding production lines for different interfaces (regarding supply substitutability)

According to the Parties, in general, components of enterprise SSDs are the same irrespective of the type of interface. Enterprise SSDs of any interface can be produced by using the same manufacturing facilities, and it

[6] According to users, customers have slightly different needs over enterprise SSDs. Among performance evaluation criteria for enterprise SSDs mentioned previously, large-scale CSPs are more likely to look for high capacity and low price, whereas customers who provide heavily-loaded servers tend to value high read/write speeds and reliability.

[7] However, the types of interfaces alone do not decide performance of enterprise SSDs. It is influenced by the built-in controller and NAND.

[8] According to users, when they actually choose enterprise SSDs, they conduct a test by installing sample products provided by enterprise SSD manufacturers in their own servers or storages in order to see if the products are compatible with other devices and systems and produce required performance. (Enterprise SSD manufacturers create a roadmap concerning development and manufacture of their own products, and propose new products to users, namely, server and storage manufacturers, accordingly.) Users say that such a trial is indispensable for developing products such as servers and storages.

is easy, and takes not much effort or cost to change a production line for enterprise SSDs equipped with a certain type of interface to a production line for enterprise SSDs equipped with another type of interface.

This is because, the Parties argue, most of the production process for enterprise SSDs is automated by robots, thereby only requiring feeding appropriate instructions to the machines according to the type of interface mounted on enterprise SSDs, and providing appropriate materials.

h) Summary

1) Demand substitutability

As mentioned in the above a) to f), because interfaces hugely affect performance of enterprise SSDs, and their performance, prices, and reliability differ depending on the type of the mounted interface, users consider types of interfaces important when they choose enterprise SSDs. In fact, when they consider performance of enterprise SSDs, they attach importance to types of interfaces. On the other hand, depending on the specifications and price users want, enterprise SSDs with different interfaces may cover the same usage. Therefore, it cannot be said that there is absolutely no demand substitutability.

Considering such circumstances, it is reasonable to conclude that some sort of demand substitutability does exist across different interfaces but it is only very little today.

2) Supply substitutability

As mentioned in the above g), the Parties argue that it is easy to switch production of enterprise SSDs with a certain type of interface to those with another type of interface on the same production line, and that there is a certain degree of supply substitutability across enterprise SSDs with different interfaces.

D. NAND

NAND flash memory[9] is an integrated circuit (IC) widely used in products such as tablet computers, mobile phones, USB drives, SD cards as well as SSDs, and has a data storage function. Depending on the products, NAND differs in factors[10] such as cost, endurance, performance, quality, etc., and is divided into 2D NAND and 3D NAND[11] in terms of structure.

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[9] Flash memory is a nonvolatile memory to store data. Flash memory includes two types: NAND flash memory and NOR flash memory. NAND memory is the most suitable for SSDs and other large capacity storage devices whereas NOR memory is right for storing and executing codes, and generally used in small capacity. Because of these differences between NAND memory and NOR memory, SSDs exclusively use NAND memory which excels in endurance, price, and speeds at which data can be written and erased, etc. Hereinafter NAND flash memory is referred to as NAND.

[10] The most basic circuit structure to store data in NAND is called a cell. Those which can store a single bit of information is called single-level cells (SLC), two bits of information multi-level cells (MLC), and three bits of information triple-level cells (TLC). Although NAND is different in this respect, users are using these different types of NAND alternatively, according to the Parties.

[11] Since its commercial launch around 1998, NAND has been scaled down, making it smaller in size, greater in capacity per unit volume, and lower in cost. However, as limits of scalability (limits of Moore's Law) approach, 3D NAND has recently been created, which has transistors stacked vertically in multiple layers. Compared with 2D NAND, 3D NAND is considered to be better in performance, reliability, and endurance due to its structural

According to the Parties, NAND used in consumer products is small in size and consumes a small amount of electricity, in general. On the other hand, NAND used in enterprise SSDs, which are used in enterprises, tends to be more reliable and provide higher storage capacity. However, there is no clear distinction between these products.

As in the following table, showing worldwide sales of NAND, sales are growing in both value terms and volumes year after year.

Table 5: Worldwide sales of NAND in value terms and volumes (including self-consumption)

	2012	2013	2014
In value terms (US$ million)	24,322	29,745	31,271
In volumes (million GB)	31,769	44,922	64,684

a) Suppliers and buyers (customers) of NAND of the Parties

Almost all of NAND which Wester Digital purchases is used for the purpose of its enterprise SSD production.

SanDisk uses almost all of NAND it produces (in a joint factory with a NAND manufacturer) in SSDs and USB drives it manufactures by itself (self-consumption), and the joint factory with Company A accounts for almost all of NAND supply required for such SSD and USB drive production.

b) Relations between SanDisk and Company A concerning NAND production

SanDisk and Company A have formed a joint investment company (hereinafter referred to as "the JV concerned") with Company A holding 50.1% of shares and SanDisk 49.9%

SanDisk and Company A are selling (or self-consuming) NAND they purchase independently.[12]

The Parties argue that relations between SanDisk and Company A concerning NAND production, menitoned above, will continue after the act concerned.

As mentioned above, considering that Company A and SanDisk do not jointly sell products, and that products produced and sold are different and have different production cost between the two companies, there is no special circumstances which make it reasonable to assume that the two companies will make joint sales after the act concerned.

Therefore, examination of the impact of a vertical business combination on competition, provided in Part III below, will be made on the premise that Company A will continue its sales independently from SanDisk.

(2) Consideration of the product range

As mentioned in the above 1), there is no demand substitutability between client SSDs and enterprise SSDs, and there is only little demand substitutability

difference.

12 SanDisk relies on the JV concerned for NAND supply, and almost all of NAND it purchases is self-consumed, and goes into products sold by itself (SSDs, USB drives, memory cards, etc.) whereas Company A sells part of NAND it purchases to external parties, and self-consumes the rest.

among enterprise SSDs equipped with different interfaces. On the other hand, the Parties argue that there is supply substitutability. However, based on the fact that manufacturers and their market shares are quite different between client SSDs and enterprise SSDs, as well as among enterprise SSDs with different interfaces, the product range in the market to be considered as a particular field of trade is defined, among enterprise SSDs, as "SAS enterprise SSDs" and "PCIe enterprises SSDs," which both of the Parties are manufacturing and distributing.

With regard to a vertical business combination, the product range in the market to be considered as a particular field of trade is defined as "NAND" for the upstream market, and "enterprise SSDs" as a whole for the downstream market, since NAND is not installed in enterprise SSDs equipped with a specific type of interface.

2. Geographic range

"SAS enterprise SSDs," "PCIe enterprise SSDs," and "NAND," defined in the above 1 (2), are sold across the world. As well, because any of these products is light-weighted and incurs little transportation cost, there is little price difference between Japan and other countries. Furthermore, users purchase from suppliers irrespective of whether the suppliers are in Japan or overseas, while suppliers are also doing business no matter which countries users are located in. Therefore, the geographic range is defined as "worldwide."

Part III Impact of the act concerned on competition

1. Market share

With regard to products defined in the above Part II, market shares and the state of safe harbor rule application are as follows based on the data submitted by the Parties.

<Horizontal relations>

(1) SAS enterprise SSD

Through the act concerned, the share of the Parties would be approximately 75% (the largest), and the HHI would be approximately 5,700, the increment of the HHI would be approximately 2,600. Therefore, the safe-harbor criteria for a horizontal business combination do not apply.

Market share of SAS enterprise SSD in 2014

Rank	Company name	Market share
1	Western Digital	Approx. 45%
2	SanDisk	Approx. 30%
3	Company A	Approx. 10%
4	Company B	Approx. 10%
5	Company C	0-5%
6	Company D	0-5%
Total		100%

(2) PCIe enterprise SSD

Through the act concerned, the share of the Parties would be approximately 40% (the largest), and the HHI would be approximately 2,300, the increment of the HHI would be approximately 70. Therefore, the safe-harbor criteria for a horizontal business combination apply.

Market share of PCIe enterprise SSD in 2014

Rank	Company name	Market share
1	SanDisk	Approx. 35%
2	Company D	Approx. 20%
3	Company E	Approx. 20%
4	Company F	Approx. 5%
5	Company C	0-5%
6	Company B	0-5%
7	Company A	0-5%
8	Western Digital	0-5%
	Others	Approx. 10%
Total		100%

<Vertical relations>

(3) Upstream market: NAND

The share of SanDisk in the NAND market is approximately 20% (the third largest), with the HHI 2,000 at a maximum. Therefore, the safe-harbor criteria for a vertical business combination apply.

Market share of NAND (including self-consumption) in 2014

Rank	Company name	Market share
1	Company B	Approx. 30%
2	Company A	Approx. 25%
3	SanDisk	Approx. 20%
4	Company C	Approx. 15%
5	Company G	Approx. 10%
6	Company F	0-5%
	Others	0-5%
Total		100%

(4) Downstream market: enterprise SSD

Through the act concerned, the share of the Parties in the enterprise SSD market would be approximately 30% (the largest), and the HHI 2,000 at a maximum. Therefore, the safe-harbor criteria for a vertical business combination do not apply.

Market share of enterprise SSD in 2014

Rank	Company name	Market share
1	Company F	Approx. 25%
2	SanDisk	Approx. 15%
3	Company B	Approx. 10%
4	Western Digital	Approx. 10%
5	Company C	Approx. 5%
6	Company D	0-5%
7	Company A	0-5%
8	Company E	0-5%
	Others	Approx. 15%
Total		100%

2. Consideration of evaluation factors

(1) Horizontal business combination (SAS enterprise SSD)

A. Positions of the company group and the state of competitors

As prominent competitors, there are Company A (holding approximately 10% of the market; the third largest) and Company B (holding approximately 10% of the market; the fourth largest). Other competitors include Company C (holding 0-5%; the fifth largest), Company D (holding 0-5%; the sixth largest), etc.

Company A has been increasing its market share for the past few years. In light of its advantage of producing NAND by itself (holding approximately 25% of the NAND market; the second largest), Company A is expected to significantly increase its share in the SAS enterprise SSD market. Accordingly, it is considered that shares of manufacturers in the SAS enterprise SSD market can change easily.

As well, there are enterprises, other than Company A, producing NAND by themselves, such as Company B (holding approximately 30% of the NAND market; the largest) and Company C (holding approximately 15% of the NAND market; the fourth largest). These competitors can purchase NAND at a lower cost when they produce SAS enterprise SSDs. As well, on the ground that they can produce SAS enterprise SSDs with higher performance by improving the performance of NAND they are making, they have sufficient competing capabilities against the Parties even when the Parties can produce NAND by themselves after the integration concerned.

NAND is used not only in enterprise SSDs. Rather, only 10% of the total NAND demand is accounted for by enterprise SSDs, according to the Parties. Based on this, if the Parties raise the price of SAS enterprise SSDs after the integration concerned, it creates incentives for Company B and Company C, both of which are self-producing NAND, to produce cheaper SAS enterprise

SSDs by diverting NAND produced for devices other than enterprise SSDs to production of SAS enterprise SSDs. Such circumstances could discourage the Parties to increase the price of SAS enterprise SSDs[13].

B. Competitive pressure from users

Users of SAS enterprise SSDs are major manufacturers of servers, storages, etc. and large-scale CSPs, and the top five of them account for a large part of demand for SAS enterprise SSDs.

These users, when purchasing SAS enterprise SSDs, first request manufacturers producing SAS enterprise SSDs which meet the specifications and provide performance they require, to provide estimates. Based on the estimate (price) and technical proposal, they choose multiple candidate suppliers (First stage). Then, users usually assign supply volume by quarter based on the price suggested by manufacturers qualified as suppliers (Second stage). After granting supplier qualification to multiple manufacturers through estimates in the first stage, users can switch which manufacturers actually supply among the pool of the suppliers at least as often as every quarter without incurring any additional cost.

In this respect, User H says while they are purchasing SAS enterprise SSDs from two companies, that is, Company A and Western Digital, they usually take advantage of quarterly price negotiation with the two suppliers, and adjust the proportion of assignment between the two. And User H argues that it is easy to change supplying manufacturers and their allotments.

As well, because the price trend of NAND, which accounts for most of the cost of enterprise SSDs, is publicly available[14], users can obtain some information on the price (cost) of enterprise SSDs.[15]

In addition, because most of users of enterprise SSDs are purchasing HDDs as well, if the Parties increase the price of SAS enterprise SSDs, users purchasing HDDs from the Parties (Western Digital) can take countermeasures by not purchasing HDDs from the Parties. Such circumstances could discourage the Parties to increase the price of SAS enterprise SSDs.

Moreover, some users of enterprise SSDs can produce enterprise SSDs by themselves, who can also counter the Parties if they increase the price of enterprise SSDs after the act concerned, by increasing the in-house production of enterprise SSDs and cutting supply from other companies.

Therefore, it is reasonable to conclude that competitive pressure from users is fully working.

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13 According to the Parties, enterprise SSDs are produced mostly by contract manufacturers. Although accurate excess capacity of such contract manufacturers is unknown, there are a lot of such manufacturers, and they usually produce a wide range of electronic devices. Accordingly, if demand for enterprise SSDs grows, they can flexibly meet such demand. Therefore, it can be inferred that they have a certain degree of excess capacity.

14 According to the Parties, the latest NAND price report and customer information are provided based on the market information and the information sources obtained by a research company.

15 This is corroborated by statement of users.

C. Entry pressure

While patents concerning SAS enterprise SSDs are owned by the Parties and competitors, no fact can be found which makes it reasonable to assume that the act concerned will make the patents owned by the Parties a barrier to entry.

As well, recent years saw new entrants to the market of SAS enterprise SSDs, such as Company B (entered in 2012) and Company D (entered in 2014). They have market shares of approximately 10% and 0-5% respectively in value terms in 2014. As multiple enterprises have entered the market in recent years, as seen in these cases, there is a certain degree of entry pressure.

D. Competitive pressure from adjacent markets

In general, PCIe enterprise SSDs provide faster communication speeds and are more suitable for high-performance products and more expensive than SAS enterprise SSDs. On the other hand, demand for PCIe enterprise SSDs is expected to grow sharply thanks to the development of NVMe[16] created for SSDs, thereby lessening the current difference in usage and functions between the types of SSDs.

Therefore, a price increase of the SAS enterprise SSDs will lead to the smaller difference with PCIe enterprise SSDs, which provide similar functions, and for which the Parties have only small market shares, effectively pushing the shift towards PCIe enterprise SSDs. Accordingly, PCIe enterprise SSDs can be recognized as major competitive pressure from an adjacent market even though their current market is smaller than that of SAS enterprise SSDs.

E. Trend in technological innovation

According to the Parties, the product cycle for enterprise SSDs is approximately 15 months, relatively short (the cycle for product obsolescence is short)[17]. Coupled with this, as demand for enterprise SSDs is expected to grow year after year, the Parties argue that manufacturers are always competing for higher performance and lower price through introducing new technology (for example, NVMe for PCIe interfaces and 3D NAND) to new products.

As well, users say that they consider technology and new proposals suggested by enterprise SSD manufacturers when they choose products. In other words, users choose suppliers by having them compete in performance of enterprise SSDs in a trial using sample products. Traditionally users have been asking enterprise SSD manufacturers for high performance.

Therefore, the market of SAS enterprise SSDs is deemed to be a market where lively competition for performance and quality is taking place and technological innovation is frequently occurring.

16 Refer to the footnote 11.

17 In this respect, User H says that manufacturers of enterprise SSDs mark products for EOL (End Of Life: termination of production) one year after their launch, and switch to next-generation products.

F. Summary

1) Substantial restraint of competition by unilateral conduct

After the integration concerned, the Parties will have approximately 75% of the market of SAS enterprise SSDs

However, it is unlikely that circumstances will arise where the Parties have a certain degree of freedom to influence price unilaterally, considering that there are prominent competitors such as Company A and Company B; that users of SAS enterprise SSDs are all quite major enterprises and can exercise highly strong pressure on the Parties for lower price through changing suppliers, as seen in cases where they keep multiple suppliers and change them through regularly asking for estimates when purchasing the products; that there could be major competitive pressure from an adjacent market of PCIe enterprise SSDs, which are expected to significantly grow in demand; and that multiple enterprises have entered the market of SAS enterprise SSDs in recent years.

Therefore, the integration concerned would not be deemed to substantially restrain competition in the market of SAS enterprise SSDs with unilateral conduct by the Parties.

2) Substantial restraint of competition by coordinated conduct

In the market of SAS enterprise SSDs, it is hard for a manufacturer to predict moves of other companies on the grounds that, as mentioned in the above 1), users purchase from multiple suppliers and can exercise highly strong pressure on the Parties for lower price through changing suppliers; that multiple enterprises have entered the market of SAS enterprise SSDs in recent years; and that technological innovations take place so frequently that market shares of manufacturers can change easily. Such circumstances are deemed to effectively discourage enterprises from taking coordinated conduct. Therefore, it is deemed unlikely that SAS enterprise SSD manufacturers take coordinated conduct with each other.

Accordingly, it is unlikely that circumstances will arise where the Parties have a certain degree of freedom to influence price though coordinated conduct with competitors. Therefore, the integration concerned would not be deemed to substantially restrain competition in the market of SAS enterprise SSDs through the Parties taking coordinated conduct with competitors.

(2) Vertical business combination (NAND)

A. Consideration concerning SanDisk's refusal of supply, etc. of NAND to competitors other than the Parties (hereinafter referred to as "input foreclosure")

With regard to input foreclosure, as the safe-harbor criteria for a vertical business combination apply in the supply market of NAND (upstream market), detailed examination will not be provided.

On a different note, SanDisk self-consumes almost all of NAND it produces in a joint factory with Company A to produce SSDs and USB drives, which alone provides sufficient grounds that input foreclosure will not be an issue.

B. Consideration concerning the Parties' refusal of purchasing, etc. of NAND from competitors other than SanDisk (hereinafter referred to as "customer foreclosure")

According to the Parties, Western Digital is currently purchasing NAND only for the purpose of producing enterprise SSDs. Moreover, NAND is used in a wide range of devices (including client SSDs, tablet computers, mobile phones, and USB drives, etc.) other than for enterprise SSDs. As well, the Parties argue that their consumption (purchase volume) of NAND accounts for approximately 20% in total (Wester Digital 0-5%, SanDisk approximately 15%) of the supply volume (the total supply volume including self-consumption) of NAND by all the NAND suppliers. If the Parties (Western Digital), after the integration concerned, purchase NAND only from SanDisk, although competitors of SanDisk may lose business with Western Digital, it does not mean that they will be immediately eliminated from the market considering the current market share in question.

Therefore, it is not reasonable to conclude that the integration concerned will lead to the issues of closure or exclusivity of the market.

Part IV Conclusion

The JFTC concluded that the act concerned would not substantially restrain competition in any particular field of trade.

Case 7 Integration of Denali Holding Inc. and EMC Corporation

Part I Outline of this case

This case concerns a merger which took place between a specific purpose company that is a subsidiary of a holding company called Denali Holding Inc. (headquartered in the United States; hereinafter referred to as "Denali"; hereinafter the group of combined companies to which the company belongs is referred to as "Denali Group"; Dell Inc. (hereinafter referred to as "Dell"), mainly engaged in manufacture and distribution of computers, etc., is a subsidiary of Denali), and EMC Corporation (headquartered in the United States; hereinafter referred to as "EMC"; hereinafter the group of combined companies to which the company belongs is referred to as "EMC Group"; hereinafter Denali Group and EMC Group are collectively referred to as "the Parties"), which is mainly engaged in manufacture and distribution of software, etc., with EMC as the merging corporation; and acquisition of all shares of the post-merger company made by Denali (hereinafter the merger concerned and the acquisition of the shares concerned are collectively referred to as "the act concerned.").

The applicable provisions are Article 10 and Article 15 of the AMA.

(Reference) Coordination with foreign competition authorities

As this case was investigated by the US Federal Trade Commission, the European Commission, etc., as well, the JFTC exchanged information with the US Federal Trade Commission and the European Commission when investigating this case.

Part II Particular field of trade

1. Product description

Competing products between the Parties include 1) external enterprise disk storage systems (hereinafter referred to as "EEDSS"), 2) backup software, 3) identity and access management solutions (hereinafter referred to as "IAM solutions"). As well, in some cases, 4) x86 servers manufactured and distributed by Dell and 5) virtualization software manufactured and distributed by VMware, Inc. (hereinafter referred to as "VMware"), an EMC Group company, are sold to the same users.

The following examination covers neither back up software nor IAM solutions, to both of which the safe-harbor criteria for a horizontal business combination apply, but the remaining three groups of products.

(1) Description of competing products between the Parties (EEDSS)

EEDSS is a unit equipped with multiple disc drives (HDDs, SSDs, etc.), a controller, and a power supply fan module. It is a system connected to a server and provides greater capacity, efficiency, and redundancy (safety of information).

EEDSS is differentiated according to its characteristics including performance, capacity, expandability, data availability, etc. and has different prices according to its specifications. The Parties say that it is divided into three groups according to its price range: 1) Entry-level (the average sale price less

than US$25,000), 2) Mid-range (the average sales price from US$25,000 to US$249,999), and 3) High-end (the average sales price US$ 250,000 or more).

(2) Description of products sold to common users

A. Servers

A server is a computer dedicated to manage PCs and printers through mutual operation with network-managing software. It is composed of hardware such as a CPU and a RAM (storage unit), an operation system, and application software.

According to the type of CPU used, servers are largely divided into x86 servers[1], and other servers. Approximately 70% of domestic sales of servers is accounted for by x86 servers in terms of monetary amounts (almost 100% in volume terms). The following table shows the outline of these servers.

	x86 servers	Other servers
Characteristics	Relatively low-priced servers using x86 CPUs made by Company A or compatible CPUs made by Company B	High-end servers equipped with CPUs other than x86 CPUs, realizing advanced information processing
Usage	(Past) For low-performance systems (Currently) Expanded usage similar to that of high-end servers by connecting multiple units	For complicated and wide-ranging information processing systems requiring no system halt or malfunction 24 hours 365 days
Users	In addition to general enterprises, users who exclusively used high-end servers in the past are starting to adopt x86 servers by connecting multiple units.	Telecom-related companies, financial institutions, governmental organization, etc.

B. Virtualization software

Virtualization refers to the act of faking computer resources such as 1) servers, 2) storage systems, and 3) network equipment that are different from actual physical structure, and its execution requires virtualization software. By running virtualization software, users use a variety of virtualization techniques, for example, creating a virtual machine environment in a computer or server, making a single server act like multiple servers, and making multiple hard disks work like a single large hard disk. Among all types of servers, virtualization software is not used on servers required to provide extremely high performance due to issues of security, etc. In fact, virtualization software is almost exclusively used on x86 servers.

While virtualization software is evaluated by a variety of criteria such as

1 The name "x86 server" is derived from the fact that it was developed by using an x86 CPU made by Company A.

user-friendliness, management capabilities, reliability, performance, etc., software developers make sure that software is designed to have "broad utility" and is compatible with all types of x86 servers so that any user could use it no matter what kind of x86 server they use. In fact, virtualization software available from manufacturers today has broad utility and can run on any x86 server.

2. Product range

(1) EEDSS

As mentioned above, EEDSS can be divided into 1) Entry-level, 2) Mid-range, and 3) High-end. Among them, users choose the right type according to what functions they consider important among workload processing capabilities, performance of expandability, reliability, data processing efficiency, data restorability, data sharing characteristics, data security, and energy efficiency.[2] As well, depending on the enterprise, distinctions among the three types of 1) to 3) are different, for example, some EEDSS products classified into 1) by Dell being considered to belong to the group 2) by EMC, thereby making it difficult to clearly differentiate the three groups.

In addition, the three types of 1) Entry-level, 2) Mid-range, and 3) High-end, all have common functions and there is no such EEDSS that has a special function which can only be realized by a specific manufacturer. As production lines can change from one type to another easily, it is reasonable to conclude that there is supply substitutability among the three groups of products.

Therefore, the product range is defined as "EEDSS" in this case.

(2) x86 servers

As mentioned in the above 1 (2) A, some usage is shared by x86 servers and other servers and it cannot be denied that there is some substitutability between these two groups of servers. However, examination regarding servers should be made on servers purchased by virtualization software users as mentioned in the flowing Part III-2 2), and virtualization software is used almost exclusively on x86 servers. Therefore, sufficient examination can be done by looking into x86 servers only.

According to user types, x86 servers are largely divided into two categories: the on-premises type and the cloud type. As for the former, enterprises purchase a x86 server, set it up and manage it in their buildings whereas in the case of the latter, cloud enterprises (cloud service providers (hereinafter referred to as "CSPs")) purchase servers and use them for providing cloud space to customers.

However, the product range is defined as "x86 servers" in this case because there is demand substitutability and supply substitutability between the on-premises type and the cloud type for the following reasons.

A. Users who purchase x86 servers use them for operation of either case of the on-premises type and the cloud type.

[2] According to users and competitors, distinctions among the three types of 1) to 3) are not clear because any specific function can be found in any of them and every enterprise defines the three groups its own way.

B. x86 servers are no different between the on-premises type and the cloud type and produced by the same production lines.

(3) Virtualization software

As mentioned above, what can be virtualized includes 1) servers, 2) storage systems, and 3) network equipment, and there is specific virtualization software for each of them. For example, server virtualization software is necessary for a server to be virtualized, and other types of virtualization software do not work for this purpose. Therefore, there is no demand substitutability.

As well, with regard to virtualization software for any of 1) servers, 2) storage systems, and 3) network equipment, development takes a substantial amount of period, a substantial number of personnel, substantial investment and product tests, making a switch from production of one type of software to another type difficult. Therefore, there is no supply substitutability among products for these different types of devices. As well, since it is for servers that the Parties produce influential virtualization software, sufficient examination can be done by looking into virtualization software for servers alone.

Therefore, examination is made by defining the product range as "virtualization software for servers" in this case.

3. Geographic range

(1) EEDSS and virtualization software for servers

EEDSS and virtualization software for servers defined in the above 2 incur very little transportation cost and customs duty, and there is little price difference between Japan and other countries. Accordingly, users purchase from suppliers irrespective of whether the suppliers are in Japan or overseas, while suppliers are also doing business no matter which countries users are located in. Therefore, the geographic range is defined as "worldwide."

(2) x86 servers

When server suppliers sell products in Japan, they localize the servers by mounting a Japanese language keyboard, software, and operation system, and replacing some parts, including AC adapters, with those meeting Japanese specifications, while users in Japan are also purchasing almost exclusively servers of Japanese localized versions from domestic suppliers.

However, on the grounds that localization cost is not unique to Japan[3] because servers' basic specifications are the same and each country localizes them, according to the Parties and competitors; and that the Parties have a larger share in the world market than in the Japanese market, the geographic range in this case is defined as "worldwide" in order to provide more careful examination.

3 According to competitors, users in Japan are different from those overseas in that they tend to use x86 servers for a long period of time, and that they consider services as well as products important when they choose products.

Part III Impact of the act concerned on competition

1. Horizontal business combination

(1) Positions of the Parties

Through the act concerned, the share of the Parties would be approimately 35% (the largest), and the increment of the HHI would be approximately 400. Therefore, the safe-harbor criteria for a horizontal business combination do not apply.

Market share of EEDSS in 2014

Rank	Company name	Market share
1	EMC Group	Approx. 30%
2	Company C	Approx. 15%
3	Company D	Approx. 10%
4	Company E	Approx. 10%
5	Company F	Approx. 10%
6	Denali Group	Approx. 5%
	Others	Approx. 20%
Total		100%

(2) Conditions of competitors

There are multiple prominent competitors with more than 10% of the market respectively. Looking at the domestic market, Company F holds 20% of the market and there are other prominent competitors with more than 10% of the market respectively.

As well, according to the Parties and competitors, EEDSS is a product produced after receiving orders from users, some requiring a relatively long time until completion. However, they argue that there will be no shortage in excess capacity of manufacturers unless semiconductors run short due to a natural disaster, etc. Therefore, it is reasonable to assume that competitors have a certain degree of excess capacity.

(3) New entry

While patents concerning EEDSS are owned by the Parties and competitors, no fact can be found which makes it reasonable to assume that the act concerned will make the patents owned by the Parties a barrier to entry. As well, because many enterprises have entered the market at least during the last five years, it is reasonable to conclude that entry pressure is working.

(4) Competitive pressure from adjacent markets

In general, when expanding storage capacity, users can do so without expanding their own data centers by borrowing storage space from CSPs if they choose not to purchase more of EEDSS.

CSPs are taking advantage of their own infrastructures and providing customers storage services on cloud.

On a different note, the Parties and competitors argue that CSPs are providing approximately 90% of their cloud storage services by applying

software defined storage (hereinafter referred to as "SDS")[4] to x86 servers' built-in storage so that cloud service could be offered, thereby not necessarily requiring EEDSS.

Coupled with the fact that there have been actual cases of a shift from EEDSS to cloud services provided by CSPs, the following circumstances make it reasonable to conclude that cloud services work as significant competitive pressure from an adjacent market.

1) According to the report by a private research company submitted by the Parties, the storage industry is currently seeing a shift from the on-premises type to the cloud type and that the cloud market is expected to grow from 2014 to 2018 more than five times the rate of existing IT technology.
2) According to the "Results of FY2014 Communications Usage Trend Survey" released in July 2015 by Ministry of Internal Affairs and Communications, the number of enterprises using cloud services is increasing year by year[5] and "file management/ data storage" is the most popular cloud service among users with 46.3% of them using it (2014), making it reasonable to conclude that cloud services have gained a certain degree of domestic popularity for storage use. The Results also claim that the larger the capital the company has, the more likely it uses cloud services, based on which more enterprises are expected to use cloud services in the future.

(5) Substantial restraint of competition by coordinated conduct

Circumstances such as relatively easy new entry, as mentioned in the above 3), and the advent of cloud services provided by CSPs are deemed to effectively discourage enterprises from taking coordinated conduct. Accordingly, it is unlikely that EEDSS manufacturers take coordinated conduct with each other. Therefore, it is unlikely that circumstances will arise where the Parties have a certain degree of freedom to influence price though coordinated conduct with competitors, and the business combination concerned is not deemed to substantially restrain competition in any particular field of trade by the Parties taking coordinated conduct with competitors.

(6) Summary

From the above, the act concerned is not deemed to substantially restrain competition in any particular field of trade with unilateral conduct by the Parties or coordinated conduct with competitors.

4 SDS refers to software that commoditizes built-in storages of multiple servers as if they were one common storage, and enables automated and efficient allocation according to the application's requirements.

5 Cloud service users accounted for 14.1% in 2010, 21.6% in 2011, 28.2% in 2012, 33.1% in 2013, and 38.7% in 2014.

2. Conglomerate business combination (product expansion)

(1) Applicability of the safe-harbor criteria

As the following tables shows, the HHI is approximately 3,200 at a maximum and the share of the Parties is approximately 45% (the largest) in the market of virtualization software for servers whereas, for x86 servers, the HHI is approximately 1,700 at a maximum and the Parties hold approximately 20% of the market. Therefore, the safe-harbor criteria for a conglomerate business combination do not apply.

Market share of virtualization software for servers in 2014

Rank	Company name	Market share
1	EMC Group (VMware)	Approx. 45%
2	Company G	Approx. 30%
3	Company H	Approx. 5%
4	Company I	0-5%
5	Company J	0-5%
	Others	Approx. 15%
Total		100%

Market share of x86 servers in 2014

Rank	Company name	Market share
1	Company E	Approx. 30%
2	Denali Group	Approx. 20%
3	Company K	Approx. 10%
4	Company L	Approx. 10%
5	Company D	Approx. 10%
6	Company N	Approx. 5%
	Others	Approx. 15%
Total		100%

(2) Consideration of the effect of market foreclosure (x86 servers)

There is a possibility that the issues of closure or exclusivity of the market occur in the field of trade concerning x86 servers, if the Parties, through the act concerned, manufacture and distribute virtualization software under the name of VMware which is compatible, or capable of providing the maximum performance only with x86 servers made by Dell.

A. Capabilities of market foreclosure

With regard to virtualization software for servers, there are following circumstances: 1) as mentioned in the above Part II-1 2) B, it is designed to provide broad utility and run on any x86 server; 2) users can easily replace virtualization software which was produced by one manufacturer and installed in a server with another supplier's software[6]; 3) none of the virtualization software manufacturers lacks excess capacity since the

6 While there is no technical barrier hindering a switch, some comepetitors are offering a replacement tool for free, which makes it even easier to replace VMware's virtualization software.

software is sold through licensing.

Under such circumstances, there are prominent competitors[7] in the market of virtualization software as mentioned in the above (1), including Company G holding approximately 30% of the market (the second largest), and if the Parties manufacture and distribute virtualization software under the name of VMware which is compatible, or capable of providing the maximum performance only with x86 servers made by Dell, users can easily purchase virtualization software for servers from suppliers other than VMware.

In addition, the share of Company G in the market of virtualization software has been growing recent years and CSPs tend to use free virtualization software for servers. In such circumstances, even if the Parties make the said move, x86 server suppliers other than the Parties are deemed to be able to easily find x86 server users.

As mentioned above, users of virtualization software for servers can purchase software from suppliers other than VMware. Therefore, the Parties are deemed to have no capabilities of foreclosing the x86 server market by selling virtualization software under the name of VMware which is compatible only with x86 servers made by Parties.

B. Incentive for market foreclosure

Coupled with the conditions mentioned in the above A, it is important to obtain support from users of a variety of x86 servers when developing virtualization software for servers. Therefore, switching from broad utility to closed specifications against x86 servers other than those made by Dell is deemed to work against the Parties rather than for them.[8]

In addition, according to the Parties and competitors, virtualization software for servers is generally higher in profitability than x86 servers, which creates no incentive for the Parties to manufacture and distribute virtualization software under the name of VMware which is compatible, or capable of providing the maximum performance only with x86 servers made by Dell.

Therefore, the Parties are deemed to have no incentive to switch to closed specifications as described above.

C. Summary

As mentioned above, on the grounds that there is very little probability that the issues of closure or exclusivity on the x86 market arise by the Parties adopting closed specifications of virtualization software against x86 servers produced by others, the Parties are not deemed to substantially restrain competition in any particular field of trade in the x86 server market.

7 Company I has approximately 40% (the largest) share of the domestic market.

8 This is corroborated by statement of competing enterprises as well.

Part IV Conclusion

The JFTC concluded that the act concerned would not substantially restrain competition in any particular field of trade.

Case 8 Acquisition of Ikyu Corporation shares by Yahoo Japan Corporation

Part I Outline of this case

This case deals with a plan where Yahoo Japan Corporation (JCN 4010401039979) (hereinafter referred to as "Yahoo"), which is mainly engaged in internet advertising business, will acquire all shares of Ikyu Corporation (JCN 9010401053430) (hereinafter referred to as "Ikyu"; Yahoo and Ikyu are hereinafter collectively referred to as "the Parties") (hereinafter, the acquisition of the shares is referred to as "the act concerned.").

The applicable provision is Article 10 of the AMA.

Part II Particular field of trade

1. Service range

(1) Online travel reservation service

An online travel reservation service refers to a service where an online travel agency (hereinafter referred to as "OTA") sets up a travel reservation website on the internet and provides the following 1) and 2), thereby connecting hotel businesses, inn businesses, air transport services, etc. (hereinafter referred to as "hotel businesses, etc. ") and users.

1) Services which are provided to hotel businesses, etc. and enable them to attract users to accommodation, transportation, and other travel services, and take and manage reservation (hereinafter referred to as "travel mediation services")
2) Services which are provided to users (general consumers) and enable them to obtain information on accommodation, transportation, and other travel services, and make reservation.

Revenues of online travel reservation service businesses are fees paid by hotel businesses, etc. (generally a certain proportion of values of closed travel service contracts)

On the other hand, each OTA is awarding users who made reservation through its travel reservation website with points worth a certain proportion of values of the closed contracts.

Entrusted by hotel businesses, etc. to publish information concerning traveling (information on accommodation facilities, means of transportation, etc.), the Parties are providing services mentioned in the above 1) and 2) to each group of users by publishing such information on their travel reservation websites.

While brick-and-mortar travel agencies could be considered providing similar services to online travel reservation services, the latter is different from the former for both customers including users (travelers) and hotel businesses in the necessity of internet environment. Therefore, there is no demand substitutability.

As well, supply substitutability is deemed to be limited because online travel reservation service businesses need to establish a system for reservation websites and develop a maintenance and management system for it while brick-

and-mortar travel agencies need to develop branch facilities and relevant personnel system.

In addition, because both of the Parties are conducting online travel reservation services, the service range is defined as "online travel reservation service" which is composed of multi sides according to the types of users; one is for users (travelers), the other for hotel businesses, etc.

(2) Online restaurant reservation service

An online restaurant reservation service refers to a service where an online restaurant reservation service enterprise (hereinafter referred to as "restaurant reservation enterprise") sets up a restaurant reservation website on the internet and provides the following 1) and 2), thereby connecting restaurants and users.

1) Services which are provided to restaurants and enable them to attract users to them and take and manage reservation (hereinafter referred to as "reservation mediation services")
2) Services which are provided to users and enable them to obtain information on seat availability, search menus, and make reservation for seats and food and drink menus of restaurants.

Revenues of online restaurant reservation service businesses are fees paid by restaurants (generally either or a combination of monthly fixed charges and variable charges on closed contracts).

On the other hand, some restaurant reservation enterprises are awarding users who made reservation through their restaurant reservation websites with points.

Entrusted by restaurants to publish their information, the Parties are providing services mentioned in the above 1) and 2) to each group of users by publishing such information on their restaurant information websites.

Because there is no service which substitutes for online restaurant reservation services, the service range is defined as "online restaurant reservation service" which is composed of multi sides according to the types of users; one is for customers, the other for restaurants.

(3) Metasearch service

A metasearch service is a service which cross-searches multiple websites, presents information published on multiple websites of OTAs and/or restaurant reservation enterprises in a way users could easily view and compare multiple itineraries and details of restaurant services including prices, and enables users to choose one of the websites of OTAs or restaurant reservation enterprises and to make reservation, etc. through it, thereby providing the following 1) and 2) and connecting OTAs and restaurant reservation enterprises with users.

Yahoo is providing a metasearch service for OTAs and restaurant reservation enterprises (hereinafter collectively referred to as "OTAs, etc.").

1) Services which are provided to OTAs, etc. and enable them to attract users by ensuring that their information is published in a way that it can be compared with other OTAs' in response to searches by users.
2) Services which are provided to users (travelers and restaurant customers) and enable them to compare information provided by multiple OTAs, etc. at a glance, and make reservation with one of the OTAs, etc. of their choice.

In the metasearch service business, some metasearch service suppliers, such as Yahoo, offer services for more than one industry while others serve only one specific industry; therefore metasearch service suppliers are different from industry to industry for which the services are to be offered. In this case, among Ikyu's businesses, only the online travel reservation service and the online restaurant reservation service are using metasearch services, based on which the service range is defined as "travel reservation metasearch service" and "restaurant reservation metasearch service."

Each of these two metasearch services is composed of multi sides according to the types of users; one is for OTAs, etc., the other for users (travelers and restaurant customers).

(4) Multi-sided market[1]

With regard to the above (1) and (2), consideration was made based on the characteristics of a multi-sided market, considering that 1) there are multi-sided customers, namely, users, and hotel businesses, etc. or restaurants (hereinafter these businesses are collectively referred to as "service providers"); 2) OTAs, etc. have functions of mediating transactions between the multi-sided customers (providing travelling services or food and drink to users of service providers); and 3) there are indirect network effects, namely, the increase of the number of the users on one side grows quality of the service for the other (the more the users there are, the more likely the service is to be used, and then, the more attractive the service is for service providers; and the more choices the service offers, the more attractive the service is for users).

With regard to the above (3) as well, consideration was made based on the characteristics of a multi-sided market, considering that the service (3), which mediates between users and such services as the above (1) and (2) which provide a mediating function, has characteristics similar to the above 1), 2), and 3).

2. Geographic range

As users of services defined in the above 1 (1) to (3) can access such services no matter where they are in Japan as long as they have internet connection, the geographic range is defined as "all regions of Japan."

1 Although there is a variety of understanding as definition of multi-sided market, here, it is defined as a market which meets three requirements: 1) there are two or more different user groups; 2) there is a platform providing a place which mediates transactions between different user groups; and 3) there are indirect network effects.

3. Types of business combination

(1) Horizontal business combination

As both of the Parties are conducting business mentioned in the above 1 (1) and (2), the act concerned falls under the category of a horizontal business combination.

(2) Vertical business combination

While Yahoo is providing a metasearch service, Ikyu is conducting online travel reservation service business and online restaurant reservation service business as a metasearch service user.

Therefore, consideration is made by considering the relationship of Yahoo's metasearch service business with the online travel reservation service business and online restaurant reservation service business provided by the Parties as a quasi- vertical business combination with the metasearch service business as an upstream market, and each of online reservation service businesses as a downstream market, and using criteria for a vertical business combination accordingly.

Part III Impact of the act concerned on competition

1. Horizontal business combination (online travel reservation service business)

It is considered that OTAs are competing with each other for hotel businesses, etc. through the number of users and the volume of business made on their own websites; that revenues of OTAs from hotel businesses, etc. are a certain proportion of sales of hotel businesses, etc. made on the websites of the OTAs; and that OTAs are competing with each other for users by the number of hotel businesses, etc. which OTAs do business with, and by awarding users with points worth a certain proportion of sales made on their own websites.

Accordingly, it is reasonable to consider the market share in terms of transaction volume as indexes to suggest positons of enterprises in competition in the two different services for service providers and users. Through the act concerned, the Parties together will hold approximately 5% of the market of online travel reservation service business while the increment of the HHI will be approximately 6. Based on this, the safe-harbor criteria for a horizontal business combination apply.

Market share of online travel reservation service business

Rank	Company name	Market share
1	Company A	Approx. 25%
1	Company B	Approx. 25%
3	Company C	Approx. 10%
4	Ikyu	0－5%
－	Yahoo	0－5%
	Others	Approx. 40%
Total		100%

2. Horizontal business combination (online restaurant reservation service business)

It is considered that restaurant reservation enterprises are competing with each other for restaurants almost exclusively through the number of customers they send to the restaurants; and that they are competing with each other for users by the number and quality of restaurants which are registered with them.

Accordingly, it is reasonable to consider the market share in terms of the number of referred customers as indexes to suggest positons of enterprises in competition in the two different services for restaurants and users. Through the act concerned, the Parties together will hold approximately 10% of the market of online restaurant reservation service business while the increment of the HHI will be approximately 15. Based on this, the safe-harbor criteria for a horizontal business combination apply.

Market share of online restaurant reservation service business

Rank	Company name	Market share
1	Company B	Approx. 65%
2	Company D	Approx. 15%
3	Ikyu	Approx. 10%
4	Company E	Approx. 5%
5	Company F	0－5%
－	Yahoo	0－5%
	Others	0－5%
Total		100%

3. Vertical business combination

In this case, there is a quasi-vertical business combination as follows.

	Upstream market		Downstream market	
	Product range	Geographic range	Product range	Geographic range
A	Travel reservation metasearch service business	All regions of Japan	Online travel reservation service business	All regions of Japan
B	Restaurant reservation metasearch service business	All regions of Japan	Online restaurant reservation service business	All regions of Japan

(1) Upstream market A and B

As Yahoo's market shares in both A and B are unknown, the safe-harbor criteria for a vertical business combination do not apply.

(2) Downstream market A and B

As the Parties together will hold, after the act concerned, 10% or less of the downstream market in both A and B, the safe-harbor criteria for a vertical business combination apply.

(3) Consideration of evaluation factors

As evaluation factors for vertical business combinations in A and B are generally the same, consideration is made collectively in the following.

In this case, there is a possibility that the issues of closure or exclusivity of the downstream markets A and B may arise by Yahoo refusing to supply its metasearch service (hereinafter referred to as "input foreclosure") to competitors (OTAs, etc.) other than Ikyu. However, it is considered that the issues of closure or exclusivity of the markets will not arise since Yahoo is deemed to have neither capabilities nor incentive for input foreclosure as mentioned in the following.

First, there are multiple competitors offering a metasearch service other than Yahoo. As well, there is no special legal regulation concerning new entry, and no need to make large capital investment when launching a metasearch service. In fact, there have been some new entries made by overseas enterprises, etc. during the past several years. Based on these facts, OTAs, etc. are deemed to be able to use metasearch services provided by enterprises other than Yahoo easily. Therefore, Yahoo is deemed to have no capabilities of conducting input foreclosure.

In addition, Yahoo is deemed to have no incentive to conduct input foreclosure on the grounds that 1) a marginal cost for providing a metasearch service is extremely small, making it easy to add OTAs, etc., and the more the OTAs, etc. are included in the metasearch service, the more attractive the metasearch service is for users; and 2) input foreclosure would take away sales opportunities from Yahoo, thereby inflicting a huge loss on the company because Ikyu is currently accounting for only a small proportion of sales of Yahoo's metasearch service business.

(4) Summary

Based on the above mention, the act concerned is not deemed to lead to the issues of closure or exclusivity of the markets.

4. Other considerations

Through the act concerned, Ikyu's online travel reservation service business and online restaurant reservation service business will be able to take advantage of information concerning consumers' purchasing behavior gained through Yahoo's business activities including internet advertising, based on which the Parties could improve business capabilities. However, while Yahoo could have made use of such information for its own online travel reservation service business and online restaurant reservation service business, there have been multiple competitors which have a larger market share than Yahoo for each service. As well, such enterprises other than Yahoo are deemed to be able to obtain information concerning consumers' purchasing behavior through various means. Therefore, the Parties are not deemed to substantially restrain competition in the online travel reservation service business or the online restaurant reservation service business just by conducting the act concerned.

Part IV Conclusion

The JFTC concluded that the act concerned would not substantially restrain competition in any particular field of trade.

Case 9 M&A of Operations between FamilyMart Co., Ltd. and UNY Group Holdings Co., Ltd.

Part I Outline of this case

This case deals with a plan concerning 1) a merger between FamilyMart Co., Ltd. (JCN 2013301010706) (hereinafter referred to as "FamilyMart") and UNY Group Holdings Co., Ltd. (JCN 5180001086231) (hereinafter referred to as "UNY GHD") where the former will be the merging corporation and the latter the absorbed company (hereinafter, the post-merger FamilyMart will be referred to as "the integrated company)", and 2) transfer of the convenience store business of the integrated company to Circle K Sunkus Co., Ltd., (JCN 9180001085915) (hereinafter referred to as "CKS"), a wholly owned subsidiary of UNY GHD, through an absorption-type split which will be implemented upon consummation of the said merger and will have the integrated company as a splitting company and CKS as a successor company (hereinafter, the said merger and absorption-type split are collectively referred to as "the act concerned.")

The applicable provisions are Article 15 and Article 15 (2) of the AMA.

In the following, the general term "FamilyMart Group" includes a group of business combination which has FamilyMart as the ultimate parent company, FamilyMart's domestic area franchisers, and member stores of the franchise chain concerning convenience stores run by FamilyMart whereas the general term "UNY GHD Group" includes a group of business combination which has UNY GHD as the ultimate parent company, CKS's domestic area franchisers, and member stores of the franchise chain concerning convenience stores run by CKS inclusively. As well, FamilyMart Group and UNY GHD Group are collectively referred to as "the company group."

Part II Particular field of trade

1. Service range

FamilyMart Group owns a chain of convenience stores under the names of "FamilyMart," "Cocostore," and "Everyone" through franchising, as well as allows area franchisers to own chain stores in some parts of Japan and other countries, and to operate convenience store business in their own regions. Like FamilyMart, UNY GHD Group owns a chain of convenience stores under the names of "Circle K" and "Sunkus" through franchising, as well as allows area franchisers to own chain stores in some parts of Japan, and to operate convenience store business in their own regions.

Under control, instructions and support of franchisers regarding management, franchise member stores conduct convenience store business. The franchise agreement technically says that member stores reserve the right to decide product lineups, prices, etc. However, in reality, convenience stores are mostly run by selling products recommended by the head office, at prices suggested by the head office, as not only the company group but also franchisers in general argue for uniformity among member stores to earn the trust of consumers, thereby requiring member stores to comply with rules established by the franchise agreement, etc. Accordingly, competition through sales price and product lineup among member stores of the same convenience store chain

(hereinafter referred to as “CVS chain”) is limited. Instead, in the convenience store business, CVS chains are deemed to be competing through their own member stores.

Products sold by convenience stores are basically available at other types of retail businesses including supermarkets. However, differences exist in convenience, product lineups, and a price range between convenience stores and other types of retail stores, and general consumers are deemed to be using the two groups of stores for different purposes. Therefore, demand substitutability between convenience stores and other types of retail businesses is deemed to be limited.

Based on the above, the service range is defined as “convenience store business.”

On a different note, “mini Piago,” a store chain run by UNY GHD Group, is classified into the category of “mini supermarket.” However, these stores share many characteristics with convenience stores such as having small floor space, operating for long hours, and focusing on food and beverages. Therefore, consideration concerning the act concerned treats “mini Piago” as a convenience store.

2. Geographic range

Commercial zones for convenience stores cannot be uniformly defined, but should reflect the location, nearby facilities, population, and the traffic of adjacent roads of each store. However, a commercial zone for a convenience store is usually considered approximately 500 meters, and CKS also sets its standard commercial zone as within a 500-meter radius of a store when opening a new store. Based on these, the geographic range in this case is defined as “within a 500-meter radius of convenience stores of the company group.”

Part III Impact of the act concerned on competition

1. Horizontal business combination

(1) Areas under consideration

There are 2,222[1] areas across the country, which have convenience stores of both FamilyMart Group and UNY GHD Group within the geographic range defined in the above Part II-2. Each of these areas will see the number of CVS chains in competing relations (hereinafter referred to as "the number of competing CVS chains") decrease by one through the act concerned. Among them, in areas where the number of competing CVS chains will decrease from two to one (395 areas), and from three to two (546 areas), there will be a relatively large impact on competition through price of products, etc.

However, among the areas where the number of competing CVS chains will decrease from three to two, those which have a greater number of convenience stores run by enterprises other than the company group (hereinafter referred to as "competing convenience stores") than the number of convenience stores of the company group (78 areas) are expected to continue lively competition. Therefore, consideration in the following is made to see whether the Parties, through the act concerned, will substantially restrain competition in any particular field of trade in the other 863 areas (after removing the 78 areas.)

(2) Economic analysis concerning incentives for a price increase

A. Conducting a questionnaire survey

The JFTC conducted an in-store questionnaire survey on general consumers in cooperation with the Parties in order to grasp consumer demand for convenience stores.

Upon selecting stores where the survey was conducted, the JFTC divided the 863 areas defined in the above (1) into the following four groups based on the number of competing CVS chains and whether neighboring areas have competing convenience stores after the act concerned, and then chose multiple stores from each group for the survey.

1) Group of areas which will see, after the concerned act, the number of competing CVS chains within a 500-meter radius of a base store (hereinafter referred to as "the number of chains within 500 meters") decrease from three to two, and at the same time, will have a competing convenience store within the range of from 500 meters to one kilometer of the base store (hereinafter referred to as "within a one kilometer range")
2) Group of areas which will see, after the concerned act, the number of chains within 500 meters decrease from three to two, and at the same time, will have no competing convenience store within a one kilometer range
3) Group of areas which will see, after the concerned act, the number of chains within 500 meters decrease from two to one, and at the same time, will have a competing convenience store within a one kilometer range

1. The number of areas included in this case is as of the date of the examination.

4) Group of areas which will see, after the concerned act, the number of chains within 500 meters decrease from two to one, and at the same time, will have no competing convenience store within a one kilometer range

The survey was conducted to see such as how frequently store visitors used the store, and how their purchasing behavior would change or would not change in the event of a price increase of a certain degree in the store (whether they would continue to purchase from the store, and if they changed stores to purchase from, which store they would purchase from).

B. Inference of GUPPI

To see whether the convenience stores of the company group will have incentive to increase prices after the act concerned, an index called GUPPI (Gross Upward Pricing Pressure Index) was obtained for each store, defined in the above A, where the survey was conducted.

If stores of one of the company group (Company α) increase prices by a very small amount, some customers switch to stores of the other of the company group (Company β), thereby adding to profits of the stores of Company β.

This additional profit is obtained by the following formula (A).

$$\left(\text{Additional profit of stores of Company } \beta\right) = (\text{diversion ratio}) \times (\text{marginal profit of stores of Company } \beta) \ldots (A)$$

The "diversion ratio" here means the ratio of the increase in sales volume at stores of Company β to the decrease in sales volume at stores of Company α in the event of a small price increase at stores of Company α. The "marginal profit of stores of Company β" indicates an increment of profit obtained when stores of Company β sold an additional unit of products.

The "additional profit of stores of Company β" will be additional profit of the company group after the business combination.[2] Therefore, this additional profit can be considered as the strength of price increasing pressure of Company α after the business combination.

GUPPI can be obtained by dividing the "additional profit of stores of Company β" by the price at stores of Company α, as expressed in the formula (B) below.

$$\text{GUPPI} = \frac{(\text{diversion ratio}) \times (\text{marginal profit of stores of Company } \beta)}{\text{price at stores of Company } \alpha} \ldots (B)$$

By assuming that prices are the same between stores of Company α and Company β, the formula for GUPPI can be modified into the following (C).

2 If stores of Company α set price in the way it brings the largest profit to them, the profit of stores of Company α will change very little after a very small price increase.

GUPPI = (diversion ratio)

× (marginal profit ratio of stores of Company β) … (C)

In this case, the JFTC concluded that it would infer GUPPI by the formula (C) based on the assumption that prices are the same between stores of Company α and Company β. For inference of the diversion ratio and the marginal profit ratio, the JFTC used the results of the in-store questionnaire discussed in the above A and financial data submitted by the company group, respectively.

While the results of GUPPI inference for most stores were less than 3%, one store from the Group 4) defined in the above A showed approximately 4.8%, a relatively high value. Therefore, the JFTC undertook more detailed consideration on the Group 4) (68 areas)[3].

On a different note, detailed consideration was not given to the remaining 794 areas of the Group 1), 2), and 3), where stores showed low GUPPI. However, the JFTC concluded that, through the act concerned, the Parties would not substantially restrain competition in any particular filed of trade in these areas because a certain degree of competitive pressure is deemed to be working from competing convenience stores which exist in the geographic range defined in the above Part II-2, or within a one kilometer range in addition to the fact that these areas showed small GUPPI values.

3 Total 69 areas belong to the Group 4) defined in the above A. However, in one of them, stores of one of the Parties' Groups were already closed, thereby reducing the number of areas subject to detailed examination to 68.

(3) Economic analysis concerning competitive pressure from other types of business

The results of the in-store questionnaire survey mentioned in the above (2) A show that the proportion of customers, who answered that they would switch to a supermarket, can bear comparison with the proportion of those who answered that they would switch to a major competing convenience stores in the event of a price increase by the stores of the Parties, indicating that supermarkets could discourage the Parties from increasing prices to a certain degree. Based on this finding, the JFTC conducted econometric analysis over five Prefectures including Ishikawa, Gifu, Aichi, Mie, and Ehime where relatively have a lot of areas which convenience stores of the company group compete with each other, in order to obtain quantitative information on the degree of competition among convenience stores and other types of business including supermarkets.

Based on an econometric model that explains the average number of customers for each store of the company group per day by differences in competing environment (the number of convenience stores, "chain supermarkets"[4], etc. around the store), store attributes (floor space, availability of parking lots, availability of various products and services, etc.), and commercial zone attributes (store location, population around the store, etc.), the JFTC inferred parameters (coefficients of each explanatory variables) through regression analysis.

According to an analysis of a model with the number of chain supermarkets around a store of the company group as an explanatory variable, as the number of chain supermarkets within a 1,500-meter radius of a store of the company group increases, the average number of store customers decreases significantly. As well, in an analysis of another model conducted by setting a dummy variable for every number of chain supermarkets found around a store of the company group, if the store of the company group has three or more chain supermarkets within its 1,500-meter radius, the store has a markedly fewer number of customers.

Accordingly, the Parties are not deemed to substantially restrain competition, just by conducting the act concerned, in 22 areas among the 68 areas defined in the above (2) B, because in these areas, the Parties' stores are subject to competitive pressure arising from three or more chain supermarkets within their 1,500-meter radius. Therefore, these 22 areas were excluded from consideration, leaving the remaining 46 areas subject to more detailed consideration. (Hereinafter these 46 areas are referred to as merely "the 46 areas.")

4 "Chain supermarkets," here, refer to stores classified into "chain supermarkets" in the "Japan supermarket directory 2015" (issued by The Shogyokai Publishing, Co., Ltd. on November 20, 2014) used in the economic analysis (except for stores of UNY GHD Group). (This directory defines a chain supermarket as a supermarket which runs five or more stores.)

(4) Consideration of substantial restraint of competition concerning the 46 areas

A. The conditions of the past competition among stores of the company group

Among the 46 areas, four areas have stores of one of the company group located in a service area of an expressway, the premises of a pachinko parlor, etc., locations which make competition with stores of the other of the company group less severe. Based on this, it can be inferred that competition has been rather inactive among stores of the company group in these areas.

Therefore, the impact of the act concerned on competition in these four areas is deemed to be limited.

B. Competitive pressure from adjacent markets

a) Competitive pressure from geographically adjacent markets

The commercial zone of a convenience store does not necessarily make a circle with the store at its core, due to the width of roads, population density, distance from facilities (stations, educational institutions, work locations, accommodation facilities, public facilities, etc.). As well, an effective distance from the store is not always 500 meters as defined in the above Part II-2. In particular, convenience stores which a relatively large proportion of customers drive to visit tend to have a wider commercial zone because customers move a longer distance.

In this respect, the 42 areas, except for the four areas mentioned in the above A, are deemed to have a certain proportion of customers visited by car in light of the availability of parking lots and the status of nearby streets. Therefore, it is considered that these areas (42 areas) have a wide commercial zone.

In the 42 areas, there is no convenience store of other CVS chains within a one kilometer radius of a store of the company group. However, among them, 30 areas have a convenience store of other CVS chains in a relatively close range, or within a short drive of a store of the company group, based on which such convenience stores are deemed to be working a certain degree of competitive pressure.

b) Competitive pressure from other types of business

It is considered that supermarkets compare unfavorably with convenience stores in terms of convenience because they have a longer distance from their parking lots to the stores and larger floor space, and require customers to walk farther and for a longer time while locating products, checking them out, and leaving stores.

On the other hand, supermarkets can bear comparison with convenience stores in terms of the abundance of product lineups (convenience of product lineups) from the perspective of general consumers. As well, supermarkets have their own appeal which convenience stores do not offer, including lower-priced products. Therefore, convenience stores are deemed to be subject to a certain degree of competitive pressure from supermarkets in areas where a supermarket is found in the neighborhood of a convenience store. In fact, the in-store questionnaire survey mentioned in the above (2) A found that a diversion

ratio to supermarkets was high, while competitive pressure from chain supermarkets was recognizable according to the result of the economic analysis mentioned in the above (3).

In this respect, in 31 areas of the 42 areas mentioned in the above a), convenience stores of the company group have, in their neighborhood, a supermarket deemed to have a competitive constraint in terms of business scale and hours of operation, thereby being subject to a certain degree of competitive pressure from these supermarkets.

c) Summary

As mentioned in the above a) and b), in 39 areas of the 46 areas, a certain degree of competitive pressure is deemed to be working from other types of business (supermarkets), or stores of competing CVS chains in geographically neighboring markets.

C. Economic analysis, etc. based on an additional in-store questionnaire survey

With regard to remaining three areas (referred to as Area A, Area B, and Area C), after removing the four areas mentioned in the above A and the 39 areas mentioned in the above B c) out of the 46 areas, it was unclear whether there would be competitive pressure on stores of the company group after the act concerned, because geographically neighboring areas of these three areas had neither convenience store nor supermarket which was deemed to have a competitive restraining influence although stores of the company group were deemed to have had lively competition with each other.

For this reason, another in-store survey similar to one mentioned in the above (2) A, was conducted on these three areas and GUPPI was inferred through the same method mentioned in the above (2) B as well. The results turned out to be in the range of 2.3% to 3.2%, based on which it was concluded that the company group were unlikely to have incentive to raise prices after the act concerned.

The following gives possible reasons for arriving at such economic analysis results.

a) Area A

Stores of the company group are positioned in each side of a national road. They are located around eight kilometers south of a JR East station and there is no train running by. Rice paddies spread around the stores and only a small number of houses are strung along the national road. There are only convenience stores scattered around and no supermarket is found in the neighborhood. As a result, customers of stores of the company group are mainly composed of drive-by customers on the national road.

As main customers are those who drive by on the national road, commercial zones of stores of the company group are deemed to be wide and so is the customers' traveling range for shopping.

As the stores of the company group have multiple stores of competing CVS chains in a five-minute drive distance (around 4 kilometers as the crow flies), they are deemed to be subject to a certain degree of competitive

pressure from these stores.

b) Area B

Stores of the company group are positioned in each side of a national road. This national road has a huge amount of traffic. There are few buildings or houses around the stores of the company group, and no commercial facilities. As a result, customers of the stores of the company group are mainly composed of drive-by customers on the national road.

As main customers are those who drive by on the national road, commercial zones of stores of the company group are deemed to be wide and so is the customers' traveling range for shopping.

As the stores of the company group have a store of a competing CVS chain and a supermarket in a five-minute drive distance (around 3 kilometers as the crow flies), they are deemed to be subject to a certain degree of competitive pressure from these stores.

c) Area C

As stores of the company group see a newly developed residential area on their south side, as well as an industrial complex with large-scale factories and research laboratories on their east side, their customers are deemed to include workers commuting to the industrial complex as well as residents from the new residential area.

As the new housing development is two kilometers far from the nearest station and trains run on average only twice an hour, the main means of transportation for residents is driving. As well, many of commuters to the industrial complex are deemed to drive there. Therefore, customers of the stores of the company group are deemed to use stores located within a certain range, including supermarkets in the downtown on a daily basis.

Coupled with this, based on a high diversion ratio to a supermarket obtained through the above-mentioned in-store survey, the stores of the company group are deemed to be subject to a certain degree of competitive pressure from a particular supermarket located approximately three kilometers away as the crow flies.

(5) Summary

The act concerned would not substantially restrain competition in any particular field of trade with unilateral conduct or coordinated conduct.

2. Other considerations

UNY GHD Group is operating chain stores in each of Tokai, Kanto, Hokuriku, and Kinki regions. Its store brands include "Apita," classified into general merchandise stores, carrying a variety of products including food, daily necessities, clothing, etc., and "Piago," a type of food-oriented supermarkets, as well as mall-type shopping centers. While UNY GHD Group is conducting these general retail businesses as well as convenience store operation, the act concerned may increase the following possibilities:

1) Possibilities that the issues of closure or exclusivity in the general retail business market arise from the loss of sales opportunities of competitors the market by the company group taking advantage of competitiveness in convenience store business and increasing their competitiveness in the general retail business market
2) Possibilities that the issues of closure or exclusivity in the convenience store business market arise from the loss of sales opportunities of competitors in the market by the company group taking advantage of competitiveness in general retail business and increasing their competitiveness in the convenience store business market

Competition in convenience store business and general retail business is considered to be taking place on a store level but the increase in overall business capabilities of the company group from the integration in this case is likely to be realized not on an individual store basis but uniformly across the nation.

As well, looking at the state of nationwide competition, etc. in the convenience store business and general retail business, there are multiple prominent competitors, including those which have a larger share than the company group in either of the convenience store business and retail business, as seen in the following table. Therefore, the company group are not deemed to substantially restrain competition in the market of general retail business (convenience store business) through taking advantage of their competitiveness in the convenience store business (general retail business) and increasing their competitiveness in the general retail business (convenience store business).

Convenience store business (nationwide)

Rank	Company name	Market share
1	Company A	Approx. 35%
2	Company B	Approx. 20%
3	FamilyMart Group	Approx. 20%
4	UNY GHD Group	Approx. 10%
	Others	Approx. 15%
Total		100%

General retail business (nationwide)

Rank	Company name	Market share
1	Company C	Approx. 15%
2	Company D	Approx. 10%
—	UNY GHD Group	0—5%
	Others	Approx. 70%
Total		100%

Part IV Conclusion

The JFTC concluded that the act concerned would not substantially restrain competition in any particular field of trade.

Case 10 Joint share transfer by The Higo Bank, Ltd. and The Kagoshima Bank, Ltd.

Part I Outline of this case

This case deals with a plan where The Higo Bank, Ltd. (JCN 2330001001532) (hereinafter referred to as "Higo Bank," and Higo Bank and its subsidiaries collectively referred to as "Higo Bank Group") and The Kagoshima Bank, Ltd. (JCN 7340001000826) (hereinafter referred to as "Kagoshima Bank," and Kagoshima Bank and its subsidiaries collectively referred to as "Kagoshima Bank Group"; Higo Bank Group and Kagoshima Bank Group are hereinafter collectively referred to as "the Parties"), both of which are engaged in banking, will integrate their businesses through conducting joint share transfer (hereinafter referred to as "the act concerned").

The applicable provision is Article 15 (3) of the AMA.

Part II Particular field of trade

1. Service range

Main services of banking business are deposit service, loan service, and currency exchange service, all of which are provided by both the Parties. Among the three services, deposit and loan services, a major part of the services provided by the Parties, are examined here in this case.

Deposit service receives money from depositors, and manages and stores it, whereas loan service lends money to enterprises and individuals.

In this case, the product range is defined as "deposit service" and "loan service."[1] While deposit service and loan service are also provided by financial institutions other than banks such as shinkin banks and credit cooperatives, these financial institutions are subject to tighter restrictions on their business activities. Based on this, in this case, deposit services and loan services conducted by city banks and regional banks are to be examined and financial institutions other than banks are reviewed as competitive pressure from adjacent markets as needed.

2. Geographic range

Main business area for the Parties for both deposit services and loan services is Kumamoto Prefecture and Kagoshima Prefecture. According to the Parties, a large part of users who trade with them is residents and corporations in the municipalities where a branch of the Parties is located, and at the same time, the Parties are conducting business activities firmly linked with communities. Therefore, in this case, geographic range is defined by every "municipality".

1 The Parties are engaged in currency exchange service, investment trust sales, general leasing/ installment sales, etc. as well. However these services are provided incidental to deposit service and loan service, and their impact on competition can be assessed through examining how deposit service and loan service will affect competition.

Part III Impact of the act concerned on competition

1. Applicability of the safe-harbor criteria to each particular field of trade

(1) Horizontal business combination

Among municipalities where the Parties are competing with each other, the HHI will increase by fewer than 150 in Fukuoka City, Kumamoto City, and Miyazaki City for each of particular fields of trade defined in the above Part II, namely, deposit service and loan service, and in City B of Kagoshima Prefecture for deposit service only. Accordingly, the safe-harbor criteria for a horizontal business combination will apply.

On the other hand, as mentioned later, City A of Kumamoto Prefecture and City B of Kagoshima Prefecture will see the HHI concerning loan service approximately 4,700 and 3,700 respectively, up by more than 150 points, making them fall outside the safe-harbor criteria for a horizontal business combination. Therefore, examination is provided for these cities in the following 2.

On a different note, horizontal relations between the Parties cannot be recognized in municipalities along the prefectural border between Kumamoto Prefecture and Kagoshima Prefecture, the main business Prefectures for the Parties, based on whether or not the Parties have a branch in such municipalities. However, as it was learned that a branch of Kagoshima Bank located in City C of Kagoshima Prefecture was conducting sales activities on a corporation located in the neighboring City A of Kumamoto Prefecture, the Parties are considered to have horizontal relations in City A of Kumamoto Prefecture for loan service.

(2) Conglomerate business combination (territory expansion)

The Parties' market share is 10% or less in each of particular fields of trade defined in the above Part II, namely, deposit service and loan service, in two cities, among 74 areas where only one of the Parties has a branch and is conducting sales activities. Accordingly, the safe-harbor criteria for a conglomerate business combination apply to these two cities.

On the other hand, in 69 municipalities among the 74 areas, the Parties' market share exceed 25% in both deposit service and loan service, and in another city, the HHI concerning loan service is approximately 2,800 and the market share is more than 10%. Therefore, the safe-harbor criteria for a conglomerate business combination do not apply to these municipalities, and examination will be made in the following 2. (With regard to deposit service in this city, the Parties' market share is less than 10%. Therefore, the safe-harbor criteria for a conglomerate business combination apply.) With regard to the remaining two cities, the Parties' market share is unknown. Therefore, the Parties are considered to fall outside the safe-harbor criteria for a conglomerate business combination in examination detailed in the following 2. (The 72 municipalities subject to consideration of evaluation factors in the following 2 are hereinafter referred to as "the 72 municipalities.")

2. Consideration of evaluation factors

In the following, both a horizontal business combination and a conglomerate business combination are collectively examined. Among areas where the Parties have horizontal relations and are competing with each other, City A of Kumamoto Prefecture and City B of Kagoshima Prefecture are examined since the safe-harbor criteria for a horizontal business combination do not apply, which is because one of the Parties, the local one, has a somewhat large market share. However, the market share of the other bank, the one which is not local, is small and the increment of the HHI is not large either. Therefore, the Parties do have horizontal relations but the resulting impact of the act concerned on competition is deemed to be minor. Instead, analysis of the nature and competition concerning the integration in this case should focus on its conglomerate business combination (territory expansion).

(1) The state of competitors

A. City A of Kumamoto Prefecture (horizontal business combination)

In City A of Kumamoto Prefecture, Company A and Company B, both of which are a second regional bank with a certain amount of market share as seen in the following table, have branches and are conducting sales activities actively. As well, the integration will cause only a little change to the overall market share.

Market share of bank loan service and the number of branches in City A of Kumamoto Prefecture

Loan service		Name of financial institution	No. of branches
Rank	Market share		
1	Approx. 65%	Higo Bank	2
2	Approx. 20%	Company A	1
3	Approx. 15%	Company B	1
4	0－5%	Kagoshima Bank	－
Total	100%	－	4

B. City B of Kagoshima Prefecture (horizontal business combination)

In City B of Kagoshima Prefecture, second regional banks such as Company B, holding a certain amount of market share, regional banks such as company C, and city banks such as Company E, as seen in the following table, have branches and are conducting sales activities actively. As well, the integration will cause only a little change to the overall market share.

Market share of bank loan service and the number of branches in City B of Kagoshima Prefecture

Bank loan		Name of financial institution	No. of branches
Rank	Market share		
1	Approx. 55%	Kagoshima Bank	46
2	Approx. 15%	Company B	26
3	Approx. 5%	Company C	1
4	Approx. 5%	Company D	2
5	Approx. 5%	Company E	1
6	0－5%	Company F	1
7	0－5%	Company G	1
8	0－5%	Higo Bank	1
Others	0－5%	－	－
Total	100%	－	82 or more

C. The 72 municipalities (conglomerate business combination territory expansion)

In 50 of the 72 municipalities, second regional banks such as Company A, Company B, etc. have branches and are conducting sales activities.

D. Summary

As mentioned above, in City A of Kumamoto Prefecture, City B of Kagoshima Prefecture, and 50 municipalities, multiple banks other than the Parties have been competing while in both City A of Kumamoto Prefecture and City B of Kagoshima Prefecture in particular where the Parties will make a horizontal business combination, the overall market share will be affected only by a small amount and there are prominent competitors as well. Accordingly, competitive pressure from other banks is deemed to be working to a certain degree even after the act concerned.

(2) Entry

If a bank wishes to open a branch, it can do so just by notifying the Financial Service Agency. As there is no special geographical restriction on a branch opening, banks can open branches at will. Recent years saw some actual examples of new entries which were made by competitors in municipalities of Kumamoto Prefecture and Kagoshima Prefecture where they did not have branches but expected to see a rise in population.

Therefore, in areas under above-mentioned circumstances, a certain degree of entry pressure from banks other than the Parties is deemed to be working.

(3) Competitive pressure from adjacent markets

A. Competitive pressure from financial institutions other than banks

In almost all of the 72 municipalities and City A of Kumamoto Prefecture and City B of Kagoshima Prefecture, financial institutions such as shinkin banks and credit cooperatives are providing deposit service and loan service at their own outlets. However, since these financial institutions are subject to tighter restrictions on their business operation area than banks, competitive pressure from financial institutions other than banks is deemed to be limited.

B. Competitive pressure from geographically neighboring markets

Among areas which the safe-harbor criteria for a conglomerate business combination do not apply to, there are some areas where prominent financial institutions other than the Parties do not operate. (As for areas relevant to a horizontal business combination, multiple banks other than the Parties are actively competing as mentioned in the above 1.) However, according to the Parties, some users in such areas are willing to use branches set up in neighboring municipalities because the branches are conveniently located, or close to where users work or study. Accordingly, such branches are doing business with users from neighboring municipalities and conducting sales activities beyond their home cities.

Therefore, in areas under such circumstances, a certain degree of competitive pressure from geographically adjacent markets is deemed to be working.

(4) Conglomerate business combination (territory expansion)

With regard to conglomerate business combination (territory expansion), no competitive pressure between the Parties as a potential competitor is deemed to exist on the grounds that there was no new opening of a Higo Bank branch in Kagoshima Prefecture or a Kagoshima Bank branch in Kumamoto Prefecture during the past 10 years, or no concrete plans to that effect .

(5) Summary

Based on the above circumstances, it is unlikely that circumstances will arise where the Parties have a certain degree of freedom to influence conditions of loan interest rates, etc. through unilateral conduct or coordinated conduct in City A of Kumamoto Prefecture, City B of Kagoshima Prefecture, or the 72 municipalities by conducting the act concerned.

Part IV Conclusion

The JFTC concluded that the act concerned would not substantially restrain competition in any particular field of trade.

Case 11 Acquisition of Message Co., Ltd. shares by Sompo Japan Nipponkoa Holdings, Inc.

Part I Outline of this case

This case deals with a plan where Sompo Japan Nipponkoa Holdings, Inc. (JCN 9011101055980) (hereinafter referred to as "Sompo Japan Nipponkoa HD"; a group of business combination which has Sompo Japan Nipponkoa HD as the ultimate parent company is hereinafter referred to as "Sompo Japan Nipponkoa Group"), which has subsidiaries including Sompo Care Next Inc. (case JCN 7010801015197), which is engaged in nursing care business, will acquire shares, thereby a majority of voting rights of Message Co., Ltd. (JCN 1260001015656), which is engaged in nursing care business as well (hereinafter referred to as "Message"; Message and its subsidiaries are hereinafter collectively referred to as "Message Group"; "Sompo Japan Nipponkoa Group" and "Message Group" are hereinafter collectively referred to as "the Parties.").

The applicable provision is Article 10 of the AMA.

Part II Particular field of trade

1. Service range

(1) Outline of nursing care business where the Parties are competing with each other

A. Private residential home business

This business accommodates elderly persons and provides everyday life support including meals, etc. and other services including functional training.

Sompo Japan Nipponkoa Group is providing this business in eight Prefectures mainly in Kanto, Tokai, and Kansai regions while Message Group's service is offered widely across the nation from Hokkaido to Kyushu.

B. Business of providing residences with health and welfare services for the elderly

This business rents an apartment with barrier-free structure to the elderly, and provides services such as their safety confirmation and living consultation.

Sompo Japan Nipponkoa Group is providing this business in Kanagawa Prefecture while Message Group's service is offered widely across the nation from Hokkaido to Kyushu.

C. Home-visit care business

This business delivers caregivers to homes of the elderly, and provides life support services such as meals and other physical care as well as cleaning.

Sompo Japan Nipponkoa Group is providing this business in Kanagawa Prefecture and Osaka Prefecture while Message Group's service is offered widely across the nation from Hokkaido to Kyushu.

D. Day care business

This business provides the elderly who visit nursing care facilities for a day with services such as meals, bathing, and rehabilitation in the facilities.

Sompo Japan Nipponkoa Group is providing this business in Saitama Prefecture, Tokyo Metropolis, Kanagawa Prefecture, and Osaka Prefecture while Message Group's service is offered in eastern Japan and Osaka Prefecture.

E. Home care support business

This business sends care managers to the elderly's home, and provides services such as developing an appropriate care plan based on the request of the elderly and his/her family.

Sompo Japan Nipponkoa Group is providing this business in Kanagawa Prefecture and Osaka Prefecture while Message Group's service is offered widely across the nation from Hokkaido to Kyushu.

(2) Definition of the service range

With regard to the nursing care business mentioned in the above (1) A to E, users tend to choose the services they want based on the level of care they require (nursing care level), service content (care for meals, bathing, etc., rehabilitation, safety confirmation, etc.), and how service is provided (by being accommodated in facilities, visiting facilities, or being visited).

Therefore, the service range in this case is defined as "Private residential home business," "Business of providing residences with health and welfare services for the elderly," "Home-visit care business," "Day care business," and "Home care support business." (Hereinafter these businesses are collectively referred to as "the five businesses concerned.")

2. Geographic range

(1) Home-visit care business, day care business, and home care support business

Home-visit care business, day care business, and home care support business all require staff such as caregivers to visit homes of users (in home-visit care business and home care support business) or users to visit service facilities (in day care business). For this reason, the tendency is that enterprises set up a base within an easy driving distance of users (roughly in the same municipality) while users also choose a service provider they can drive to (roughly from their municipalities).

Therefore, the geographic range in this case is defined as "municipalities" where enterprises run service facilities.

(2) Private residential home business and business of providing residences with health and welfare services for the elderly

Private residential home business and business of providing residences with health and welfare services for the elderly provide services by accommodating users in facilities owned by service providers for a long term. For this reason, users do not have to travel to facilities often, and tend to consider not only facilities closest to their homes but also those within a certain

distance (roughly in the same Prefecture) when choosing a service provider.

Therefore, the geographic range in this case is defined as "Prefectures" where these facilities are located.

Part III Impact of the act concerned on competition

1. Horizontal business combination

For any of the five businesses concerned, the HHI of the Parties will increase by fewer than 150 in any of the geographic range defined in the above Part II 2, based on which the safe-harbor criteria for a horizontal business combination apply.

2. Conglomerate business combination (territory expansion)

(1) Applicability of the safe-harbor criteria

Among the five businesses concerned, for private residential home business, business of providing residences with health and welfare services for the elderly and day care business in each geographic range defined in the above Part II-2, the Parties' market share is less than 10%, or it is less than 25% and the HHI less than 2,500, resulting in the Parties falling inside the safe-harbor criteria for a conglomerate business combination.

For home-visit care business and home care support business as well, the Parties will fall under the safe-harbor criteria for a conglomerate business combination in almost every geographic range defined in the above Part II-2. And for those geographic areas which are not fall under the safe-harbor criteria, the following (2) examines the evaluation factors.

(2) Consideration of evaluation factors

As Sompo Japan Nipponkoa Group conducts home-visit care business and home care support business in only three areas in the whole country respectively, and its market share in any of these areas is only approximately 0-5%, it is not reasonable to expect that the act concerned will increase the Parties' technical capabilities, creditworthiness, and brand popularity, thereby improving the Parties' overall business capabilities on competition in home-visit care business and home care support business. Even if the Parties' overall business capabilities do increase, there are prominent competitors in each area which the said safe-harbor criteria do not apply to and they will not be expected to be restrained from taking competitive behavior in any manner by the Parties conducting the act concerned.

In addition, as there is no fact that either one of the Parties, apart from the act concerned, considered a plan to enter the other's market, there is no loss of potential competitors, either.

Part IV Conclusion

The JFTC concluded that the act concerned would not substantially restrain competition in any particular field of trade.

Appendix 1

Regulations on Business Combinations

1. Regulations on business combinations

The AMA prohibits acquisition or possession of the shares of a company, the merger of companies, the split of a company, joint-share transfer or the acquisition of business where it creates a business combination that is likely to substantially restrain competition in any particular fields of trade. In response thereto, the Japan Fair Trade Commission (hereinafter referred to as "the JFTC") has been conducting reviews of business combinations pursuant to the provisions of the AMA.

2. Notification system regarding business combination plans pursuant to the AMA (for a flowchart on reviews of business combinations, see paragraph 2, Appendix 2)

When a business combination is implemented between companies that satisfy certain requirements, the AMA requires such companies to make a notification on their business combination plan in advance to the JFTC (for a summary of the conditions requiring notification, see paragraph 1, Appendix 2).

The JFTC conducts a review of whether or not the business combination regarding which prior notification has been made needs a detailed review within 30 days after receiving the notification. When the case in question does not raise any issues in light of the provisions of the AMA, the JFTC concludes its review within the prescribed period. If the JFTC judges that the case requires further review, it requests that the companies submit reports, etc. and determines whether or not the business combination in question may raise any issues, in light of the provisions of the AMA, within 90 days after receiving all the reports, etc.

In a case where the JFTC judges that the business combination raises an issue in light of the provisions of the AMA, the JFTC notifies the person(s) to be designated as the addressee of the order of the possible contents, etc. of the cease and desist order, and then the JFTC provides the person(s)/addressee(s) with an opportunity to deliver opinions and provide evidence, and finally the JFTC issues a cease and desist order against the person(s)/addressee(s). Moreover, the person(s)/addressee(s) is capable of requesting a hearing by the JFTC and a judgment by a court if the person(s)/addressee(s) is dissatisfied with the cease and desist order issued.

Appendix 2

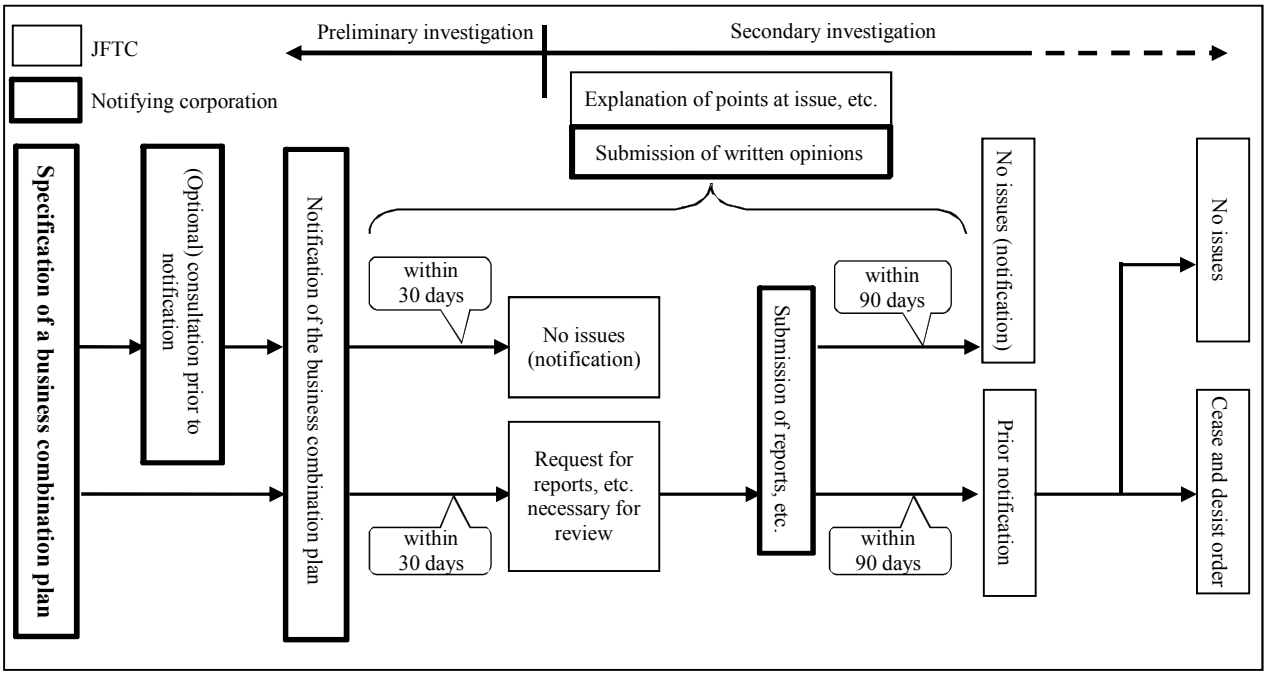
1. Summary of conditions requiring notification for business combinations

Type of business combination (the provisions of the AMA applied to the case)		Summary of conditions requiring notification for business combinations
Acquisition of shares (Article 10)		(1) A company with domestic total turnover (Note 1) exceeding 20 billion Japanese yen (2) acquires shares of a company whose domestic turnover, together with those of its subsidiaries, exceed 5 billion Japanese yen and (3) whose proportions of voting rights held(Note 2) accounts for more than 20% or 50%.
Merger (Article 15), Joint share transfer (Article 15-3)		(1) A company with domestic total turnover exceeding 20 billion Japanese yen and (2) a company with domestic total sales exceeding 5 billion Japanese yen (3) merge (or conduct a joint share transfer).
Split (Article 15-2)	Joint incorporation-type company split	(1) A company with domestic total turnover exceeding 20 billion Japanese yen and (2) a company with domestic total turnover exceeding 5 billion Japanese yen (3) establish a company by joint incorporation-type company split, to which all the businesses are transferred, etc.
	Absorption-type company split	(1) A company with domestic total turnover exceeding 20 billion Japanese yen and (2) a company with domestic total turnover exceeding 5 billion Japanese yen (3) acquire all the businesses, etc.
Acquisition of business, etc. (Article 16)		(1) A company with domestic total turnover exceeding 20 billion Japanese yen (2) acquires all the businesses transferred from a company with domestic turnover exceeding 3 billion Japanese yen; or (1) A company with domestic total turnover exceeding 20 billion Japanese yen (2) acquires any substantial part of a business with domestic turnover exceeding 3 billion Japanese yen (or all or any substantial part of the fixed assets used for business).

(Note 1) Domestic total turnover mean the aggregate domestic turnover of companies, etc. belonging to a business combination group (a group consisting of "the ultimate parent company" of the notifying company and its subsidiaries).

(Note 2) Proportion of voting rights held means the proportion of voting rights held by the group of combined companies to which the notifying company belongs.

2. Flowchart for review of business combinations



3. Safe Harbor Criteria

(1) Safe-harbor criteria for horizontal business combinations

In cases where the relevant corporate group after the business combination meets any of the conditions (a) through (c) below, the horizontal business combination is not normally considered to substantially restrain competition in the particular field of trade.

(a) The HHI[*3] after the business combination is no more than 1,500;

(b) The HHI after the business combination is more than 1,500 but no more than 2,500, and the HHI increase[*4] is no more than 250; or

(c) The HHI after the business combination is more than 2,500, and the HHI increase is no more than 150.

*3. The HHI score is calculated as the sum of the squares of the market shares of each relevant party in the particular field of trade.

*4. When there are two parties in a transaction, the HHI increase caused by the business combination can be calculated by multiplying by two the result of multiplying together the market shares of the relevant parties.

(2) Safe-harbor criteria for vertical business combinations and compound business combinations

In cases where the market share of the relevant corporate group after the business combination meets either (a) or (b) below, the vertical business combination or compound business combination is not normally considered to substantially restrain competition in the particular field of trade.

(a) The market share of the relevant corporate group after the business combination is no more than 10 percent in all particular fields of trade related to the relevant parties; or

(b) The market share of the relevant corporate group after the business combination is no more than 25 percent and the HHI after the business combination is no more than 2,500 in all particular fields of trade related to the relevant parties.

Appendix 3

Status of Notifications of Recent Acquisition of Share, etc. Received and Reviewed

Table 1. Processing status of notifications received in the past three fiscal years

	FY2013	FY2014	FY2015
Cases closed at the preliminary investigation	257	275	281
Cases where the waiting period was shortened among above	(80)	(119)	(145)
Cases withdrawn prior to the conclusion of the preliminary investigation	3	11	8
Cases which were sent to the secondary investigation	4	3	6
Total	264	289	295

* Please refer to the website of the JFTC for state of notifications in FY2015.
(http://www.jftc.go.jp/dk/kiketsu/toukeishiryo/joukou.html)

Table 2. Processing status of secondary investigation in the past three fiscal years

	FY2013	FY2014	FY2015
Cases concluded by the secondary investigation	3	2	4
Cases decided to raise no issues given the implementation of remedies	1	2	1
Cases in which a cease and desist order was issued	0	0	0

* The above table shows the number of notifications processed in each fiscal year regardless of whether they were received during the same fiscal year.

Table 3. Transition of the number of business combination plans that include a foreign enterprise in the Parties

	FY2012	FY2013	FY2014	FY2015
Integration plans between Japanese enterprises and foreign enterprises	12	7	7	8
Integration plans between foreign enterprises	14	18	41	45
Total	26	25	48	53