# Major Business Integrations in FY2006

(Tentative translation)

June 19, 2007 Japan Fair Trade Commission

The Japan Fair Trade Commission, in an effort to improve the transparency and predictability of the review procedures for business integrations, set the "Guidelines to Application of the Antimonopoly Act Concerning Review of Business Combinations" on May 31, 2004 (hereinafter referred to as the "Business Combination Guidelines") and announced the results of reviewing major business integrations.

In March 2007, moreover, the commission revised the Business Combination Guidelines, taking into account the results of previous reviews; and compiled, categorized and announced their data – including Herfindahl-Hirschman Indexes (HHIs) – for said purposes.

As part of these approaches, the results of reviewing major business integrations in FY2006 along with their data (including HHI) are hereby announced. Those who are opting for business integrations are recommended to refer to the Business Combination Guidelines and take into account the results of the reviews and their data.

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# Case Study: Major Business Integrations in FY2006

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Reference 1	Number of Notifications of Mergers, Demergers, Business Transfers. Etc.,	
	Received and Reports on Shareholding Submitted in FY2006	50
Reference 2	Results of Reviewing Business Integrations in FY2006	51

Note: The cases above are summarized as follows in order of the products concerned listed in the Japan Standard Industrial Classification

# Case 1: Acquisition of Yamaki's Shares by Ajinomoto

# 1. Summary

This case concerns the planned acquisition of the shares of Yamaki Co., Ltd. (hereinafter called "Yamaki") by Ajinomoto Co., Inc. (hereinafter called "Ajinomoto"), to which Article 10 of the Antimonopoly Law applies.

# 2. Market

# 1 Product Summary

(1) Flavored Seasonings, Liquid Flavored Seasonings

Flavored seasonings were developed to meet the needs of users -i.e., to save the trouble of preparing stock and obtain flavors quickly that taste like natural stock. They are mixtures of powdered flavor materials (dried bonito, etc.), salt and condiments.

Flavored seasonings and liquid flavored seasonings are both used to prepare soup stock; the former comes in fine granules/powder that are put into hot water, whereas the latter can be used directly without the need to be dissolved in water. Liquid flavored seasonings are thus more convenient, but are more expensive per unit of preparation.

(2) Soup for Noodles, Etc.

Soup for noodles, etc. is a liquid condiment made primarily from materials for flavored seasonings, with soy sauce, sweet sake, etc. added. It is used as a dipping sauce for noodles (buckwheat/wheat noodles, etc.) as well as for Japanese cooked food and fries.

Soup for noodles, etc., like flavored seasonings, is used to flavor dishes. With soy sauce added, however, they cannot be used for dishes that should not contain soy sauce (miso soup, etc.).

# 2. Definition of Markets

As both of the manufacturers produce flavored seasonings, this case can be characterized as horizontal business integration. Ajinomoto, meanwhile, supplies Yamaki with sodium glutamate and nucleic-acid-based seasonings (sodium inosinate and sodium guanylate), which are used as ingredients for flavored seasonings and soup for noodles, etc. Thus, it can also be characterized as vertical business integration. This case, therefore, needs to be discussed and reviewed as a combination of both horizontal and vertical business integration.

## (1) Horizontal Business Integration

Flavored seasonings, liquid flavored seasonings and soup for noodles, etc. are all used to flavor dishes. Being different in form, application, use and cost, however, they do not generally substitute for one another and hence are considered to have their own markets. Moreover, each of these products is available for both commercial and home use, with distribution channels and sales units differing from item to item.

This case, therefore, involves six markets (product scope) as shown in the table below; the two manufacturers compete in the markets for flavored seasonings for commercial use, flavored seasonings for home use, liquid flavored seasonings for commercial use and soup for noodles, etc. for commercial use.

	Commercial use	Home use
Flavored seasonings	0	0
Liquid flavored seasonings	0	×
Soup for noodles, etc.	0	×

In general, users purchase these products from distributors throughout the country, while seasoning manufacturers distribute their products nationwide. As there are no exceptional circumstances whatsoever as far as these products are concerned, their geographic scope should cover the whole country.

## (2) Vertical Business Integration

Ajinomoto, as described earlier, supplies Yamaki with sodium glutamate and nucleic-acid-based seasonings. The market for savory seasonings is an upstream market and that for flavored seasonings made from sodium glutamate, etc., a downstream market.

In general, users purchase these products from distributors throughout the country, while seasoning manufacturers distribute their products nationwide. As there are no exceptional circumstances whatsoever as far as these products are concerned, their geographic scope should cover the whole country.

# 3. Review of the Impact of the Business Integration on Competition

# 1. Those Excluding Flavored Seasonings for Home Use

Both horizontal business integration (flavored seasonings for commercial use, liquid flavored seasonings for commercial use and soup for noodles, etc. for commercial use) and vertical business integration (savory seasonings), in this particular case, do not actually interfere with free competition in the market concerned for the reasons outlined below.

(1) Flavored Seasonings and Liquid Flavored Seasonings for Commercial Use

Ajinomoto has the largest share of the market for flavored seasonings and liquid flavored seasonings for commercial use, whereas Yamaki's share of the market is very small. Ajinomoto's share, therefore, will not increase significantly through the business integration.

There are several other manufacturers, each of which has a market share of about 10%. As they can readily expand their production capacity, any independent action of the two manufacturers does not actually interfere with free competition in the market concerned.

Given the small impact of the integration on Ajinomoto's share, and the fact that many competitors are jockeying for position in the market, any concerted action between the two manufacturers and their competitors does not actually interfere with free competition in the market concerned.

(2) Soup for Noodles, Etc. for Commercial Use

As for soup for noodles, etc., the market is crowded with many manufacturers, with Ajinomoto having a small share of it. The integration, therefore, does not actually interfere with free competition in the market concerned.

(3) Vertical Business Integration

While Ajinomoto has the largest share of the market for sodium glutamate and nucleic-acid-based seasonings, there are several other manufacturers producing these items.

Users, therefore, can opt for other suppliers even if Ajinomoto and Yamaki enter into an exclusive agreement for the supply of sodium glutamate and nucleic-acid-based seasonings.

Given that Yamaki's consumption of sodium glutamate and nucleic-acid-based seasonings accounts for a fraction of the total consumption, the chances are slim that Ajinomoto will deal exclusively with Yamaki, while controlling its supply to other customers.

The integration, therefore, does not actually interfere with free competition in the market concerned.

# 2. Flavored Seasonings for Home Use

(1) Market Size

The market for flavored seasonings for home use, estimated at 51.2 billion yen for FY2005, is shrinking due to an increasingly Westernized diet and a decrease in home cooking.

## (2) Market Share and HHI

The table below shows the market share of each manufacturer of flavored seasonings for home use. With the integration completed, the total share of the two manufacturers will be about 70%, leading the pack.

Ranking	Manufacturer	Market Share
1	Ajinomoto	About 60%
2	Manufacturer A	About 20%
3	Yamaki	About 10%
4	Manufacturer B	About 5%
5	Manufacturer C	About 5%
6	Manufacturer D	0-5%
7	Manufacturer E	0-5%
8	Manufacturer F	0-5%
	Others	0-5%
(1)	Ajinomoto and Yamaki	About 70%
	Total	100%

Accordingly, the HHI will increase by some 900 to 5,200.

Note: Prepared by the Fair Trade Commission based on data as of FY2004 provided by Ajinomoto and Yamaki

## (3) Substitutability of Products of the Two manufacturers

Both manufacturers are striving to differentiate their products, placing TV ads to enhance their brand image and emphasizing quality. Users, meanwhile, have a free hand to choose such products.

The integration of two manufacturers distributing highly substitutable products could actually interfere with free competition in the market concerned – when their products are differentiated through their brands, etc. and other competing products are not available – because they can readily increase prices without being impeded by competitors.

Based on the price and quantity of each product, the cross elasticity<sup>\*</sup> between the products concerned was measured to estimate the substitutability among them – Ajinomoto's products could be readily substituted with competing products and, to a lesser extent, with those of Yamaki.

- Note: The cross elasticity in demand refers to an index that shows an increase in the percentage of demand for Product B when the price of Product A (which competes with Product B) increases 1%. The higher the positive value of this cross elasticity, the higher the substitutability between Product A and Product B.
- (4) Price Trends

The retail prices of flavored seasonings for home use are declining.

## (5) Competitors Adopting Competitive Strategies

Some competitors are expanding their market shares by lowering the prices of products packed in large bags, while others emphasize their health-conscious, quality products using no savory seasonings and salt – each manufacturer is jockeying for position in the market.

#### (6) Excess Supply Capacity of Competitors

Although the market is shrinking, there has been no decommissioning of production facilities, with some manufacturers setting up new ones. Each manufacturer is thus considered to have excess production capacity.

- (7) Competitive Pressure from Neighboring Markets
  - a) Soup for Noodles, Etc.

Soup for noodles, etc. (a mixture of flavored seasonings and soy sauce, etc.) can be used for Japanese cooked food, fries and soup for noodles – which together account for about 40% of the applications of flavored seasonings for home use.

Soup for noodles, etc. itself is more expensive than flavored seasonings for home use but it can be more cost effective, depending on the costs of other ingredients such as soy sauce and sugar. Moreover, it is a foolproof seasoning that saves the trouble of seasoning dishes.

The cross elasticity between flavored seasonings for home use and soup for noodles, etc., meanwhile, has a significant positive value, indicating that the sales volume of the former decreases as the price of the latter declines.

In fact, the market for soup for noodles, etc. has grown about 50% over the past decade, whereas that for flavored seasonings for home use has declined more than 10% over the same period; the former is taking the place of the latter.

Of the two manufacturers, Yamaki produces and distributes soup for noodles, etc. but they account for only about 10% of the market, which is crowded with many powerful competitors.

b) Miso Paste Preblended with Soup Stock

Miso paste preblended with soup stock is a fermented soybean paste blended with flavored seasonings such as soup stock.

Miso soup is prepared with a fermented soybean paste and soup stock. Convenient miso paste preblended with soup stock, however, eliminates the use of flavored seasonings for home use; it can be used to prepare miso soup, which accounts for about 60% of the applications of flavored seasonings for home use.

When preparing miso soup, it is less expensive and more convenient to use miso paste preblended with soup stock instead of miso paste and flavored seasonings.

In fact, the market for miso paste preblended with soup stock has grown nearly 20% over the past decade, whereas that for flavored seasonings for home use has declined more than 10% over the same period; the former is taking the place of the latter.

# 4. Review in Terms of the Antimonopoly Law

# 1 Review of Independent Action That May Interfere with Free Competition

While flavored seasonings for home use are products that are somewhat differentiated by their nature, those of Ajinomoto and Yamaki appear to be substitutable with each other, but to a small extent. There are several powerful competitors, which, like the two manufacturers, have excess production capacity and are capable of expanding it. Ajinomoto and Yamaki, therefore, can hardly increase product prices as it could result in losing sales to their competitors.

In addition, "soup for noodles, etc." and "miso paste preblended with soup stock" are putting competitive pressure on flavored seasonings for home use.

Any independent action of the two manufacturers, therefore, does not actually interfere with free competition in the market concerned.

## 2 Review of Concerted Action That May Interfere with Free Competition

The market for flavored seasonings for home use is crowded with more than 70 manufacturers, small and large, with leading manufacturers including Ajinomoto and Yamaki competing for a larger share of the same pie by reducing product prices or putting quality products on the market. There has been no concerted action between them.

In addition, "soup for noodles, etc." and "miso paste preblended with soup stock" are putting competitive pressure on flavored seasonings for home use.

Each manufacturer has excess production capacity and is capable of expanding it.

Any concerted action between the two manufacturers and their competitors, therefore, does not actually interfere with free competition in the market concerned.

# 5. Conclusion

The analysis above suggests that the planned integration of Ajinomoto with Yamaki does not actually interfere with free competition in the market concerned.

# Case 2: Acquisition of Myojo Foods' Shares by Nissin Food

# 1. Summary

This case concerns the acquisition of the shares of Myojo Foods Co., Ltd. (hereinafter called "Myojo") by Nissin Food Products Co., Ltd. (hereinafter called "Nissin"), to which Article 10 of the Antimonopoly Law applies.

# 2. Market

## 1 Product Summary

(1) Instant Noodles

Instant noodles, which can be easily prepared, consist of noodles (made from flour/buckwheat flour, water, salt/brine and additives such thickeners) seasonings and other ingredients.

a) Packaged Noodles

Instant noodles packed in a bag are called "packaged noodles." Their "best before" date is usually six months after the production date

b) Cupped Noodles

Of instant noodles, those packed in a container that can be used as a bowl are called "cupped noodles." Their "best before" date is usually five months after the production date.

## (2) Cupped Soup with Noodles

"Cupped soup with noodles" is a soup laced with noodles (white noodles made from powdered mung beans, rice noodles, etc.), with other ingredients added; it is packed in a container that can be used as a bowl. This product hit the market in around 1999 and is now produced by instant noodle manufacturers and many other manufacturers.

(3) Chilled Noodles

"Chilled noodles" are made from flour/buckwheat flour, water, salt/brine and additives such thickeners, and packed in a bag. Their "best before" date is usually 7-14 days after the production date stored at a temperature between 0-10 degrees Celsius.

(4) Frozen Noodles

"Frozen noodles" are also made from flour/buckwheat flour, water, salt/brine and additives such thickeners, and stored and sold frozen. They come in two types: those that need to be put in a pot and cooked on the stove and those that can be cooked in a microwave.

## 2 Definition of Markets

(1) Product Scope

In this case, competing products between the two manufacturers are 1) packaged noodles, 2) cupped noodles, 3) cupped soup with noodles, 4) chilled noodles and 5) frozen noodles. All these products are noodle foods that can be easily prepared and served. Other noodle foods falling into this category include cooked noodles (ready-to-serve noodles), dried noodles (dried wheat noodles, fine noodles, etc.) and pastas.

Markets can be defined in terms of form (packaged, cupped, chilled, frozen noodles, etc.) and variety (Chinese, Japanese, fried noodles, etc.), each of which appears to be substitutable with other types of noodles.

In defining markets, therefore, the cross elasticity of demand was measured, based on form and variety of products (e.g., cupped Chinese noodles) – which produced no significant results due to constraints on data.

On the supply front, meanwhile, production facilities for Chinese noodles, fried noodles, etc. are basically the same when they are packaged in the same way – which suggests that these products are substitutable with one another.

Markets are thus defined, based on product form, with the competitive relationship between the products taken into account as part of competitive pressure from neighboring markets.

Accordingly, product scope is defined for each of the five items: packaged noodles, cupped noodles, cupped soup with noodles, chilled noodles and frozen noodles.

Note: The cross elasticity in demand refers to an index that shows an increase in the percentage of demand for Product B when the price of Product A (which competes with Product B) increases 1%. The higher the positive value of this cross elasticity, the higher the substitutability between Product A and Product B.

## (2) Geographic Scope

In general, users purchase the products from distributors throughout the country, while noodle manufacturers distribute their products nationwide. As there are no exceptional circumstances whatsoever as far as these products are concerned, their geographic scope should cover the whole country.

# 3. Review of the Impact of the Business Integration on Competition

# 1 Cupped Soup with Noodles, Chilled Noodles and Frozen Noodles

The total share of the two manufacturers in the market for "cupped soup with noodles," "chilled noodles" and "frozen noodles" stands at less than 10%. The integration, therefore, does not actually interfere with free competition in the market concerned, given its small impact on their market share.

# 2 Packaged/Cupped Noodles

# (1) Market Size

[1] Packaged Noodles

The market for packaged noodles is estimated at 90 billion yen for FY2005 and that for cupped noodles, at 360 billion yen; the former is declining, whereas the latter remains almost stable.

# (2) Market Share and HHI

The tables below show the share of each manufacturer in the markets for packaged/cupped noodles.

The total share of the two manufacturers in the market for packaged noodles stands at about 35%, leading the pack, with the HHI up 500 to about 2,400.

Their total share in the market for cupped noodles stands at about 60%, also leading the pack, with the HHI up 800 to about 3,500.

Ranking	Manufacturer	Market Share
1	Manufacturer A	25%
2	Nissin	25%
3	Manufacturer B	10%
4	Муојо	10%
5	Manufacturer C	5%
6	Manufacturer D	0-5%
	Others	25%
(1)	Nissin and Myojo	35%
	Total	100%

Manufacturer	Market Share
Nissin	50%
Manufacturer E	20%
Manufacturer F	10%
Муојо	10%
Manufacturer G	0-5%
Others	10%
Nissin and Myojo	60%
Total	100%
	Manufacturer Nissin Manufacturer E Manufacturer F Myojo Manufacturer G Others Nissin and Myojo Total

Note: Prepared by the Fair Trade Commission based on data as of FY2005 provided by Nissin and Myojo

## (3) Price Trends

In general, the retail prices of packaged/cupped noodles of the two manufacturers as well as those of competitors are declining.

#### (4) Competitive Pressure from Customers

Customers – retailers such as supermarkets and convenience stores – have an advantage over manufacturers because of their significant purchasing power. Large-scale retailers such as supermarkets, meanwhile, are exposed to fierce competition and hence put a lot of pressure on manufacturers to cut prices, particularly for special sales.

Convenience stores are very demanding of the quality and sales of the products they deal with as consumers are looking for quality products and those that cannot be found elsewhere.

The competitiveness of each manufacturer hinges on factors such as special sales and shelf space allocation at supermarkets and convenience stores, which, as described below, are at their discretion.

#### a) Shelf Space Allocation

Convenience stores, where about 20% of cupped noodles are sold, are very important customers. Tasked with increasing sales with limited shelf space, they give priority to good sellers – a policy that determines the allocation of shelf space in their stores. Manufacturers are competing for a larger share of the space. In fact, sales of products on the shelves are reported on a weekly basis, with slow-selling products removed immediately.

#### b) Special Sales

Supermarkets have their own annual sales plan, based on which they sell bargains. Such special sales play a key role in boosting sales of manufacturers. An interview with the two manufacturers shows that their sales representatives and supermarket buyers negotiate over the period of special sales and the products offered at bargain prices. The buyers, meanwhile, ask for lower purchasing prices because they need to set selling prices lower than those of competitors and yet squeeze profits out of them. Failure to accept the purchasing prices offered by the buyers (which appear to be non-negotiable) results in the loss of special sales opportunities.

- (5) Release of New Products
  - a) Frequency of Release of New Products

The number of new items\* launched annually is estimated at 60-100 for packaged noodles and 600-700 for cupped noodles.

On a weekly basis, 11-13 new items of cupped noodles are put on the market, with a large number of products competing for shelf space, resulting in fierce competition among manufacturers.

Underlying such frequent release of new products are 1) the diversified needs of consumers, who are looking for something new and 2) intensive sales management systems of convenience stores, etc.

For instance, as slow-selling products are immediately removed from the shelves of convenience stores, each manufacturer needs to develop new products in rapid succession to secure shelf space for its products.

Note \* "Item" in this case refers to a category based on the flavor and size of a product. For instance, a brand with two flavors (e.g., soy sauce and salt) comprises two "items."

#### a) Product Life Cycle

While a number of new products are launched every year, packaged/cupped noodles, except some long seller items, have short product life cycles.

#### b) Impact of New Products on Market Shares

As described above, new products with various types of noodles and contents are launched in quick succession, which makes their product life cycles shorter. Meanwhile, the release of novel products could have a significant impact on market shares.

## (6) Excess Supply Capacity of Competitors

Packaged/cupped noodles sell more during the winter than during the summer. Their production facilities, designed for the peak winter months, seem capable of churning out more products, with the conveyor speed increased and idle facilities put into use.

## (7) New Entries

There are no patents whatsoever that prevent newcomers from entering the markets for packaged/cupped noodles or existing manufacturers from expanding production.

Technical barriers are not so high to newcomers as the production processes are standardized and the facilities required can be set up in about a year with combinations of general-purpose machinery (when there is a building available).

Many newcomers, therefore, make inroads into the market for instant noodles, with more than 60 manufacturers producing packaged noodles and more than 50 manufacturers, cupped noodles (including small-to-medium-sized and local manufacturers). It is, however, by no means easy to build brand recognition and grab a market share comparable to that of the two manufacturers.

#### (8) Imports

Imports of packaged/cupped noodles accounted for less than 1% of the domestic market in 2004 in terms of sales.

With the world standards for instant noodles (FAO/WHO CODEX standards) set in July 2006, the framework applicable to imports of instant noodles through trading companies and retail distributors is being established. Their imports, however, are unlikely to increase dramatically because 1) Japanese consumers are particular about taste, and it remains to be seen whether they will accept imports and 2) there are constraints in terms of distribution (In general, products should be delivered to retail outlets within 50 days of production – too short a period for imports, given the period of time for shipment, quarantine, etc.)

## (9) Competitive Pressure from Neighboring Markets

A review of the substitutability among noodle foods\* through an interview with users and based on data on prices and volume reveals that packaged noodles are highly substitutable with cupped noodles, cupped soup with noodles and chilled noodles, each of which is putting competitive pressure on packaged noodles

Cupped noodles, meanwhile, are substitutable with packaged noodles, cupped soup with noodles and frozen noodles, each of which is putting competitive pressure on cupped noodles.

In reviewing competitive pressure from neighboring markets on packaged/cupped noodles, however, it should be taken into account that consumers have their own preferences for packaged/cupped noodles.

For instance, they buy cupped noodles (nonperishables) at supermarkets primarily to keep them in stock, while price is the key determinant of choice.

At convenience stores, meanwhile, consumers buy cupped noodles for immediate consumption (lunch, etc.); they do not generally compete with packaged noodles,

frozen noodles, etc, which need to be cooked, though there is some competition with precooked noodles.

Note \* "Noodle foods," in this case, refer to packaged noodles, cupped noodles, cupped soup with noodles, chilled noodles, frozen noodles, dried noodles and pastas

# 4. Review in Terms of the Antimonopoly Law

# 1 Packaged Noodles

(1) Review of Independent Action That May Interfere with Free Competition

There are several competitors, each of which has a market share of over 10% and excess supply capacity. Prices are declining. Customers, such as supermarkets and retail outlets, have an advantage over manufacturers in price negotiations. There is competitive pressure from neighboring markets. Any independent action of the two manufacturers, therefore, does not actually interfere with free competition in the market concerned.

(2) Review of Concerted Action That May Interfere with Free Competition

The market is crowded with more than 60 competitors, including small-to -medium-sized manufacturers. Customers such supermarkets and retail outlets have an advantage in price negotiations. The product life cycles are short, leading to price competition to secure profits. Each manufacturer has excess supply capacity. There is competitive pressure from neighboring markets. Any concerted action between the two manufacturers and their competitors, therefore, does not actually interfere with free competition in the market concerned.

# 2 Cupped Noodles

(1) Review of Independent Action That May Interfere with Free Competition

Prices have declined sharply in recent years, while manufacturers continue to put many new products on the market. There is fierce competition in prices and product development.

There are several competitors, each of which has a market share of over 10% and excess supply capacity. If the two manufacturers curtail supply to raise prices, competitors can readily ramp up production to make up for the shortage.

Customers such as supermarkets, meanwhile, have an advantage in price negotiations as they have a free hand in selecting bargains. In addition, there is competitive pressure from nonperishables such as packaged noodles, cupped soup with noodles, and frozen noodles. Convenience stores also have an advantage in price negotiations because of their discretion in allocating shelf space. There is competitive pressure from precooked noodles for immediate consumption (lunch, etc.).

Any independent action of the two manufacturers, therefore, does not actually interfere with free competition in the market concerned.

(2) Review of Concerted Action That May Interfere with Free Competition

As described above, there is fierce competition in prices and product development. The market is crowded with more than 50 competitors, including small-to-medium-sized manufacturers. The product life cycles are short. For these reasons, there is a great incentive to reduce prices to secure profits. Customers such as supermarkets and convenience stores have a significant advantage in price negotiations. There is competitive pressure from packaged noodles, cupped soup with noodles, and frozen noodles (at supermarkets) and from precooked noodles (at convenience stores).

Any concerted action between the two manufacturers and their competitors, therefore, does not actually interfere with free competition in the market concerned.

# 5. Conclusion

The analysis above suggests that the acquisition of Myojo's shares by Nissin does not actually interfere with free competition in the market concerned.

# Case 3: Transfer of Chisso Corporation's Greenhouse Covering Material Business to C. I. Kasei

# 1. Summary

This case concerns the planned transfer of the business of greenhouse covering materials – agricultural polyvinyl chloride film (PVC film) and agricultural polyolefin film (PO film) – of Chisso Corporation (hereinafter called "Chisso") to C. I. Kasei Co., Ltd. (hereinafter called "C. I. Kasei"), to which Article 16 of the Antimonopoly Law applies.

# 2. Market

# 1 Product Summary

Greenhouse covering materials refer to films used for greenhouses (vinyl houses), lining curtains, rainproof houses, tunnel covering materials, etc. In particular, 1) PVC film and 2) PO film are widely used in Japan.

PVC film, which outperforms PO film in light transmittance, contributes to improving the color of fruit and maintaining the temperature in greenhouses. PO film, meanwhile, is lighter and more durable than PVC film and has a long service life (the period the film can be used as a greenhouse covering material), which obviates the inconvenience of re-covering greenhouses frequently.

		PVC Film	PO Film
Material		PVC resin	Polyethylene
	Transparency	Parallel light transmittance: 85-90% (Contributing to improving the color of fruit)	Parallel light transmittance: 70-80%
(Impact on crops)	Heat-retention	Far-infrared radiation shielding rate: 80-90% (Excellent heat retention)	Far-infrared radiation shielding rate: 60-85%
	Drip-proof, fog prevention	Superior to PO film	Inferior to PVC film
	Specific gravity	About 1.34g/cm <sup>3</sup> (Relatively heavy and inconvenient to re-cover)	About 0.95-0.98 g/cm <sup>3</sup> (Relatively light and convenient to re-cover)
Workability (Convenience)	nience) Durability	Low (Need to re-cover once every year or two)	High (Need to re-cover once every 2-4 years)
	Damage	Susceptible to cuts (Tears easily)	Not susceptible to cuts (Durable)

Prepared by the Fair Trade Commission based on data provided by Chisso and C. I. Kasei

End users such as farmers opt for PVC film when they place a premium on performance (for the sake of crops), and PO film when they give priority to workability. With the aging of the farming population, however, they are switching from PVC film to lighter and more durable PO film, prioritizing workability over performance. PO film has another advantage: it has a long service life (about twice as long as that of PVC film) and hence is more cost effective.

# 2 Definition of Markets

While the performance of PO film is improving, matching that of PVC film, users appear to choose between the two, according to the crops they grow. In other words, PO film and PVC film are used properly, with their performance, workability, costs, etc. taken into account; they are generally not substitutable with each other. PO film and PVC film, therefore, each has its own market.

In general, users purchase these films from distributors throughout the country, while PVC/PO film manufacturers distribute their products nationwide. As there are no exceptional circumstances whatsoever as far as these films are concerned, their geographic scope should cover the whole country.

# 3. Review of the Impact of the Business Integration on Competition

# 1 PO Film

As Chisso's share of the PO film market remains small, C. I. Kasei's share will not increase significantly through the business integration, which, therefore, does not actually interfere with free competition in the market concerned.

# 2 PVC Film

# (1) Market Size

The shipment value of PVC film decreased from 51.5 billion yen in 1999 to 34.2 billion yen in 2005. Accordingly, its volume has decreased 20% over the past five years.

This downward trend is due primarily to a decrease in the farming population and the number of greenhouses, conservation of agricultural materials and a shift from PVC film to PO film.

# (2) Market Share and HHI

The table below shows the market share of each PVC film manufacturer.

With the integration completed, the total share of the two manufacturers will be about 35%, ranked second in the market.

Accordingly, the HHI will increase by some 500 to 3,300.

Ranking	Manufacturer	Market Share
1	Manufacturer A	40%
2	C. I. Kasei	25%
3	Manufacturer B	10%
4	Manufacturer C	10%
5	Chisso	10%
(2)	C. I. Kasei and Chisso	35%
	Total	100%

Note 1: Based on data as of 2005

Note 2: C. I. Kasei's share includes that of its wholly-owned subsidiary

(Prepared by the Fair Trade Commission based on data provided by C. I. Kasei and Chisso Prepared)

## (3) Competitors

There are competitors, each of which has a market share of over 10%.

#### (4) Excess Supply Capacity of Competitors

Given the estimated production capacity and actual production of each manufacturer, competitors appear to have excess supply capacity.

## (5) Competitive Pressure from Users

PVC film is distributed to users through 1) Japan Agricultural Cooperative (JA), JA prefectural headquarters and regional agricultural cooperatives (hereinafter called "the JA route") or 2) primary/secondary/tertiary wholesalers and agents (hereinafter called "the commercial route"). In general, the price is negotiated once a year between JA and PVC film manufacturers and then between distributors and primary wholesalers/agents, followed by further negotiations between downstream wholesalers.

With the quality of PVC film consistent among manufacturers, users (JA, primary wholesalers and agents) can easily switch suppliers, purchasing the film from several manufacturers. In particular, JA's purchases account for about 20% of the PVC film market. JA, therefore, has an advantage in price negotiations and great sway over the commercial route.

Wholesalers and agents, meanwhile, need to sell PVC film to JA prefectural headquarters and regional agricultural cooperatives to bring in sales. However, there are many distributors in the commercial route selling PVC film together with other

commodities such as seedlings and agrochemicals; PVC film is usually sold at discount prices. As a result, downstream markets are putting increasing pressure on PVC film manufacturers to reduce prices.

(6) Competitive Pressure from Neighboring Markets

While the market for greenhouse covering materials is shrinking, PO film is gradually taking the place of PVC film because of its improved quality (alleviating impacts on crops), excellent workability and cost effectiveness. Applications for greenhouse outer coverings and rainproof houses, which together account for more than 50% of the market, are no exception to this trend.

The more the price of PVC film rises, therefore, the more it will be replaced with PO film. As described earlier, the two manufacturers are minor players in the PO film market. PO film is thus expected to prevent the price of PVC film from increasing.

(7) Imports and Entry of Newcomers

There have been no imports of PVC films because of quality issues, a situation that is likely to continue. It is, moreover, not economically viable to attempt to make inroads into the shrinking PVC film market, considering the required investment in plant and equipment.

# 4. Review in Terms of the Antimonopoly Law

# 1 Review of Independent Action That May Interfere with Free Competition

Users can easily switch suppliers and hence have an advantage in price negotiations. There are powerful competitors with excess supply capacity. PO film is taking the place of PVC film, with competitive pressure from neighboring markets increasing. Any independent action of the two manufacturers, therefore, does not actually interfere with free competition in the market concerned.

# 2 Review of Concerted Action That May Interfere with Free Competition

Users can easily switch suppliers and hence have an advantage in price negotiations. Manufacturers, including the two manufacturers in question, have excess supply capacity. There is competitive pressure from neighboring markets. Any concerted action between the two manufacturers and their competitors, therefore, does not actually interfere with free competition in the market concerned.

# 5. Conclusion

The analysis above suggests that the planned transfer of Chisso's greenhouse covering materials business to C. I. Kasei does not actually interfere with free competition in the market concerned.

# Case 4 Acquisition of Komatsu Electronic Metal' stockholding by SUMCO TECHXIV Corporation

# 1. Outline of the case

This case is related to the plan of SUMCO TECHXIV Corporation (hereinafter referred to as SUMCO), which is a manufacturer and distributor of semiconductor wafers (hereinafter referred to as wafer), to acquire the stockholding of Komatsu Electronic Metal, Co., Ltd (hereinafter referred to as "Komatsu").

The relevant legislative provisions for this case are contained in Section 10 of the Antimonopoly Act.

# 2. Particular field of trade

# 1 Outline of the products

A wafer is a circular thin plate cut from a single-crystal silicon ingot (note) and used as a substrate on which circuits for semiconductor devices such as integrated circuits are provided.

There are also compound semiconductors such as gallium arsenide, gallium phosphide, and indium phosphide, all of which are more expensive than silicon and are used only for high-speed, high-frequency devices and light-receiving and light-emitting devices that are difficult to produce using silicon. Therefore, there is no competition between silicon semiconductors and compound semiconductors.

Note A large crystal lump in which all parts have the same crystallographic orientation is called a "single crystal" and a material made of randomly oriented crystallites is called a "polycrystal." Normally, crystals take the form of polycrystal, but because properties inherent to the crystal cannot be obtained from a polycrystal, when manufacturing silicon wafers, single-crystal ingots are produced from polycrystalline silicon as the raw material.

# 2 Types of wafers

(1) Diameter

The diameters of the wafers being produced on a large scale include 125 mm, 150 mm, 200 mm, 300 mm, etc. As the integration of large-scale integrated circuits is increasingly being promoted and cost reduction in the manufacturing of semiconductor devices is required, the wafer diameter is being increased (note). While the predominant size is currently 200 mm, the production of 300 mm wafers, whose commercial production started in 2001, is rapidly increasing and manufacturers are planning to further increase production capacity of 300 mm wafers. It is expected that the transfer from 200 mm to 300 mm wafers will accelerate rapidly.

Note As the high integration proceeds, the size of chips for semiconductor devices tends to increase. Since the loss at the edge of the wafer decreases, when cutting large-size chips from a wafer, as the wafer size becomes larger, the production cost is reduced when larger-size wafers are used. For smaller chips also, the production cost is reduced when more chips are cut from a wafer. This is because the efficiency of processes such as exposure is improved as these processes are carried out wafer by wafer.

Since the function as the substrate for semiconductor devices is the same for different wafers with different diameters, the semiconductor manufacturers who use wafers can basically use wafers of any size and they decide which size is to be used depending on the conditions of the facilities (different wafer diameters require different manufacturing facilities) and the scheduled production volume. However, when manufacturing ultra-high integration semiconductors, wafers with higher flatness and fewer crystal faults are required compared with normal semiconductor devices because miniature circuits at nanometer scale (one billionth of a meter) are fabricated. For this reason, when building a new production line for ultra-high integration semiconductors, semiconductor manufacturers choose a line for 300 mm wafers that enables the cutting of more chips from a wafer and a reduction in production cost. Consequently, technologies for producing high-quality wafers that can be used for ultra-high integration semiconductors are introduced into the production facilities for 300 mm wafers. On the other hand, since the semiconductor equipment makers only provide equipment for 300 mm wafers, as this is what is used for the production of ultra-high integration semiconductors, it is practically impossible to produce ultra-high integration semiconductors using wafers other than 300 mm. Thus, as a matter of fact, ultra-high integration semiconductors can be manufactured using only 300 mm wafers.

Note Technically, it is possible to manufacture 200 mm wafers that can be used for ultra-high integration semiconductors, and some manufacturers have begun developmental production of 200 mm wafers with properties corresponding to ultra-high integration semiconductors. However, since there is no demand for 200 mm wafers of the same quality, mass production of 200 mm wafers for this purpose is not implemented.

## (2) Types of fabrication

Wafers are produced according to the specifications required by the semiconductor manufacturers who use them. There are various types of wafers, as shown in the table below, in accordance with the types of fabrication, and wafer manufacturers possess the technology to produce any type of product.

Name	Description
Polished wafer	Single crystal silicon is sliced and mirror-polished.
	<applications> MOS-IC, bipolar IC, various types of memories.</applications>
Annealed wafer	A polished wafer is treated with hydrogen or argon to increase the perfectibility of the crystal surface. <applications> flash memory , DRAM, SRAM , various types of logics</applications>
Epitaxial wafer	A single crystal of silicon is grown on the surface of a polished wafer in the gas phase. <applications> CPU,MPU,CCD, flash memory.</applications>

Types of silicon wafers

(Source: Prepared by the Commission based on the data provided by the parties concerned)

## 3 Wafer trade

In addition to the parties concerned, there are five other major wafer manufacturers in the world and these companies hold most of the global market.

Since there are no differences in performance and quality regardless of the nationality of manufacturers and regional characteristics, and the transportation cost does not affect the selection of the supplier, users are procuring wafers from wafer manufacturers from around the world. In the case of leading manufacturers, in particular, it is a normal practice that the head offices procure wafers used by their global plants in a lump, which is also true for Japanese wafer manufacturers and semiconductor manufacturers.

Wafer prices are the same worldwide regardless of the location of the production site where the wafers are used.

## 4 Defining the particular field of trade

(1) Product region

Although various sizes of wafer are available, only the 300 mm wafers have the quality (high flatness, low crystal faults, etc.) that is required for ultra-high integration semiconductors, and semiconductor manufacturing equipment is also available only for 300 mm wafers. For this reason, the particular field of trade for 300 mm wafers was defined because wafers other than 300 mm cannot be substituted for the production of ultra-high integration semiconductors.

As to the semiconductors other than ultra-high integration semiconductors, since various wafer diameters including 300 mm are used depending on the production volume and production cost, the particular field of trade for all wafers was defined for the whole wafers of whatever diameter.

## (2) Geographical region

Since there are no differences in performance and quality of wafers regardless of the nationality of manufacturers and regional characteristics, and the transportation cost does not affect supplier selection, users are procuring wafers from wafer manufacturers worldwide regardless of nationality. The prices of wafers are the same worldwide regardless of the locations of production sites. Judging from these facts, one whole market exists including the Japanese market. Therefore, the effects of the present business combination on trade between wafer manufacturers and semiconductor manufacturers at a global level are analyzed below.

## 3. Review of the impact of the Business Integration on competition

# 1 Market size

After the bursting of the IT bubble in 2000, the production volume of wafers dropped to 4 billion square inches, but with the increase in the demand for semiconductors due to the expansion of personal computer and cellular phone use, the production volume recovered to the level that existed before the IT bubble in 2004. After 2005, the wafer market has been growing steadily thanks to the expansion of sales of personal computers and cellular phones in the BRICs market.

Situations by wafer diameter are as follows. Since ultra-high integration semiconductors have now entered full-scale production, wafer manufacturers are rapidly increasing the production volume of 300 mm wafers, the annual production of which has been increasing by more than 30% each year since 2002. The production volume of 200 mm wafers is also increasing. This is because the production of devices including integrated circuits (boosted by the increase in the production of digital devices) is on the rise, and the 150 mm wafers that have been used for power devices (devices used for power devices for the conversion from direct current to alternating current and voltage conversion) are rapidly being replaced by 200 mm wafers.

## 2 Market share/HHI

(1) 300 mm wafer

The global market shares of the parties concerned for the 300 mm wafer are as shown in the table below.

The total global share of the parties concerned in terms of sales values will be about 35% as a result of the business combination.

Although the shares of competitors for production and sales of 300 mm wafers are unknown, there are three major 300 mm wafer manufacturers other than the parties concerned.

Rank order	Rank order Company	
-	SUMCO	Approx. 30%
-	Komatsu Electronic Metal	Approx 5%
-	Total of the parties concerned	Approx 35%

(Note) As of 2005.

(Source: prepared by the Commission based on the data provided by the parties concerned.)

## (2) Total wafer market

The worldwide shares of manufacturers in the total wafer market are as shown in the table below.

As a result of the business integration, the total share held by the parties concerned in terms of sales value will become approximately 35%, which is the top ranking.

After the business integration, HHI will rise to approximately 2,300 and the increase in HHI is approximately 400.

Rank order	Company	Market share
1	Company A	Approx.30%
2	SUMCO	Approx.25%
3	CompanyB	Approx.10%
4	CompanyC	Approx.10%
5	Komatsu Electronic Metal	Approx.10%
6	CompanyD	Approx.5%
7	CompanyE	Approx.5%
	Others	Approx.5%
(1)	Total of the parties concerned	Approx.35%
	Grand total	100%

(Note) As of 2005.

(Source: Prepared by the Commission based on the data provided by the parties concerned.)

# 3 Investigation of relevant factors

(1) Existence of competitors

There are multiple competitors for both 300 mm wafers and all other types of wafers.

Although the market shares of these competitors in terms of production and sales for 300 mm wafers are unknown, judging from production capacities, all of them can be considered to be major competitors.

## (2) Ability to change suppliers

There are no technical differences that prevent users from changing suppliers. Rather, it is easy for users to change their suppliers because they are procuring wafers from multiple suppliers and the ratio of procurement changes based on negotiations every half year or quarterly.

## (3) Surplus supply capacity

Since all the wafer manufacturers are planning to increase production capacity in view of a future increase in demand, it is possible for users to procure wafers from manufacturers other than the parties concerned.

## (4) Competitive pressure from customers

It is recognized that users procuring wafers from multiple suppliers negotiate the price quarterly and change the ratio of procurement so that they are in an advantageous position in price negotiations.

Since the core product of SUMCO is 300 mm wafers and those of Komatsu Electronic Metal are 200 mm or smaller wafers, the companies complement each other, and it is expected that the advantageous position of users in terms of price negotiations will be maintained after the business merger.

## (5) Trends in technical innovation

Wafer manufacturers compete fiercely in the technical development of wafers with increasingly large diameters, improved flatness, and fewer crystal faults (aberration of crystal alignment). Such technical innovations are made in response to the requirements of users for higher quality and lower production cost and factors that determine market share and price.

## (6) Difficulty in predicting competitor behavior

Wafer manufacturers have to actively expedite sales in order to recover the capital investment made during the period of demand expansion and, at the same time, prepare for investment in facilities for next-generation wafers. On the other hand, capital investment to increase sales results in excessive supply in the market. Under such circumstances, it is difficult to predict the behavior of each competing entrepreneur.

# (7) Summary

Competition in the world market is as described above, and it is difficult for Japanese suppliers to increase the price in Japan because users in Japan can procure wafers from overseas suppliers in place of Japanese suppliers.

# 4. Review in Terms of the Antimonopoly Law

## 1 Review of Independent Action That May Interfere with Free Competition

Independent action taken by the parties concerned will not result in a substantial restriction of competition in the particular field of trade because users can easily change their supplier, there are major competitors who have enough surplus supply capacity, and semiconductor manufacturers, the users, are in an advantageous position when it comes to price negotiations.

## 2 Review of Concerted Action That May Interfere with Free Competition

It is difficult to predict the behavior of the competitors because semiconductor manufacturers procure wafers from multiple suppliers and frequently change the ratio of procurement so that price reduction is apt to be linked to the expansion of market share and differences exist in product quality, manufacturing technology, and production cost among wafer manufacturers. Therefore, cooperative action between the parties concerned and other competitors will not substantially restrict competition in the particular field of trade.

# 5. Conclusion

Judging from the above-described situation, it is concluded that the implementation of the case will not substantially restrict competition in the particular field of trade.

# Case 5 Acquisition of Maxtor Corporation by Seagate Technology as a subsidiary company

# 1. Outline of the case

In this case, Seagate Technology (headquarters in Cayman Islands, hereinafter referred to as Seagate), which manufactures and sells hard disk drives (hereinafter referred to as HDD), planned to acquire a majority stockholding in Maxtor Corporation (headquarters in U.S.A., hereinafter referred to as Maxtor) through a newly established subsidiary company, and then to merge the newly established company and Maxtor as a subsidiary company.

The relevant legislative provisions for this case are contained in Section 10 and Section 15 of the Antimonopoly Act.

# 2. Particular field of trade

# 1 Outline of the product

An HDD is a memory device in which a disk coated with magnetic material is rotated at high speed and a magnetic head is brought close to the disk to record or read data. An HDD consists of a "disk" that stores data, a "magnetic head" that reads and writes data on the magnetic surface of the disk, and a "spindle motor" that rotates the disk. The memory medium (=disk) and various electric components for recording are integrated and enclosed in an enclosure to prevent dust from entering.

Since an HDD has a large capacity and provides high-speed access, it has been used mainly as an auxiliary storage device for computers. However, as a result of recent digitization of electrical home appliances, digital recording for audio-visual applications has been developed and, at the same time, memory capacity has been increased and size has been reduced, thereby increasing the applications in electric home appliances including DVD recorders, portable audio devices, and car navigation systems.

# 2 Factors that determine HDD characteristics and applications

HDD characteristics are determined by the combination of various factors such as "disk diameter," which affects the capacity and size of the HDD; "capacity," which depends on the disk diameter and storage density; and "interface transmission rate (note 2)," which affects "access time (note 1), "seek time (note 3)" and "rotational speed." The required HDD characteristics differ according to applications as follows.

(1) Since 24-hour real-time operation is required for servers and data storage systems (hereinafter referred to as "for business use"), important characteristics are short access time for data and high reliability.

- (2) For desktop personal computers, large capacity as well as low cost are required because of more intense price competition.
- (3) Large capacity, small size, and shock resistance during transport are important characteristics for notebook personal computers.
- (4) In the case of electric home appliances, overall product size is important for small-size appliances such as portable audio equipment and cellular phones, and capacity and cost are major factors for other electric home appliances.

Regarding 3.5-inch and 2.5-inch HDDs for electrical home appliances, the same products are used for both desktop personal computers and notebook personal computers.

- (Note 1)The time required for a series of operations in which the magnetic head moves to the specified position, the disk rotates to the position to read the data, and the readout data are transmitted.
- (Note 2) Interface refers to the specifications for the connection of a computer to an HDD. The speed of data exchange between the computer and the HDD depends on the interface.
- (Note 3) The time required for the disk head to move to the position of recorded data in order to read or write the data kept in a storage device such as a hard disk.

(Note 4)	The speed of the rotating disk. The speed of reading and writing increases with an increase
	in the rotational speed.

Application	Disk diameter (inch)	Capacity (GB)	Interface transmission speed (Gbps)	Seek time (ms)	Rotational speed (rpm)
For business use	3.5	18 - 500	0.32, 1.5, 3.0, 4.0	3.5 - 8.0	7,200 - 15,000
For desktop computers	3.5	40 - 750	0.1, 1.5	8.0 - 8.5	5,400 - 10,000
For notebook computers	2.5	30 - 160	0.1, 1.5	10.5 - 12.5	4,200 - 7,200
For electrical	3.5	80 - 500	0.1, 1.5	-	7,200
home appliances	2.5 or less	-	-	-	-

(Source: Prepared by the Commission based on the data provided by the parties concerned,)

## 3 HDD trade

There are five major manufacturers of HDDs worldwide in addition to the parties concerned, and global users, including Japanese users, are procuring HDDs from the major manufacturers including the parties concerned. The market share of these major manufacturers represents the majority of global demand.

The major users of HDDs are computer manufacturers and electrical home appliance manufacturers, which are distributed worldwide. Although major production sites of HDD manufacturers are concentrated in the Asian region, there are no differences in performance

and quality of product regardless of the nationality of the companies and the transportation cost does not affect the selection of procurement source. Therefore, users procure HDD products from any manufacturer without regard to plant location. In particular, major manufacturers trade directly with the parties concerned and the headquarters of these organizations procure the HDD products used by plants located worldwide. Such a situation is also true for HDD manufacturers and computer manufacturers in Japan.

HDD prices are basically the same regardless of the global location of the users' manufacturing sites

## 4 Defining the particular field of trade

Since both the parties concerned are HDD manufacturers, this business combination involves horizontal integration. However, it also involves vertical integration because Seagate manufactures major devices required for the production of HDDs in-house while Maxtor procures such components from outside sources. Therefore, the investigation was made from the viewpoints of both horizontal and vertical integration.

- (1) Horizontal business integration
  - a) Range of products

The users of HDDs select HDD characteristics such as the disk diameter, capacity, and access time according to the application. Among the diverse range of applications, the characteristics required for HDDs used for desktop personal computers and 3.5 inch HDDs used for electric home appliances are similar, and HDDs for desktop computers are also sold for used in electrical home appliances. The HDDs for notebook personal computers and 2.5 inch HDDs for electrical home appliances are also in a similar relationship. In contrast, HDDs for business use cannot be replaced with HDDs used for other applications.

Therefore, particular fields of trade can be defined for "HDDs for business use (3.5 inches)," "HDDs for desktop personal computers, etc. (3.5 inches)," (HDDs for desktop personal computers and 3.5 inch HDDs for electrical home appliances), "HDDs for notebook personal computers" (HDDs for notebook personal computers and 2.5 inch HDDs for electrical home appliances). However, since Maxtor does not handle HDDs with a diameter of 2.5 inches or smaller, only "HDDs for business use" and "HDDs for desktop personal computers, etc." are investigated below.

# b) Geographical region

Since there are no differences in performance and quality regardless of the nationality of the manufacturing company and regional characteristics, and the transportation cost does not affect the selection of the supplier by users, users are procuring wafers from the wafer manufacturers they believe will provide products

meeting their required technical criteria at an appropriate price regardless of supplier nationality. Wafer prices are the same worldwide regardless of the location of the users' production site. Judging from these facts, a single global market exists including the Japanese market. Therefore, the effect of the business combination on trade at a global level is analyzed below.

(2) Vertical business integration

HDD manufacturers manufacture and sell HDDs by procuring major devices such as disks and magnetic heads. Therefore, the product region of the particular field of trade is defined below by referring to the manufacturing and sales of the devices as the upstream market and the manufacturing and sales of HDDs as the downstream market. Since the actual situation of the trade between the major device manufacturers and HDD manufacturers is similar to that between HDD manufacturers and personal computer manufacturers described in (1) a, the effect of the business integration on the trade between major device manufacturers at the global level is analyzed below.

# 3. Review of the Impact of the Business Integration on Competition

## 1 Market size

The number of HDDs shipped in 2004 was 295.8 million globally and 27.55 million in Japan, marking an all-time high due to the steady growth of the information industry. Since demand from applications other than computers including digital electrical home appliances is expected, and its position as the major device for computer systems will continue, demand for HDDs is expected to expand in the future.

Regarding the situation of 3.5 inch HDDs, which are manufactured by both the parties concerned, worldwide shipments in 2004 totaled 221.2 million, accounting for more than half of the total demand despite the fact that the demand for 2.5 inch HDDs is expanding as a result of the dissemination of notebook personal computers.

## 2 Horizontal business integration

- (1) Market share/HHI
  - a) HDDs for business use

The market share of HDDs for business use of each manufacturer in terms of sales quantity is as shown in the table below.

As a result of the business combination, the total market share of the parties concerned in terms of sales quantity will be ranked highest in the world with a share of 60 to 65%.

After the business integration, HHI will rise from 4,600 to 4,700, an increase of 1,400 to 1,500.

Rank order	Company	Market share
1	Seagate	45 - 50%
2	Company A	15 - 20%
3	Maxtor	10 - 15%
4	Company B	10 - 15%
5	Company C	0 - 5%
(1)	Total of the parties concerned	60 - 65%
	Grand total	100%

(Note) As of 2005.

(Source: Prepared by the Commission based on the data provided by the parties concerned.)

b) HDDs used for desktop personal computers, etc.

The market share of HDDs used for desktop personal computer, etc. of each manufacturer in terms of sales quantity is as shown in the table below.

As a result of the business combination, the total market share of the parties concerned will rise to 50 to 55%, ranking it first in the world.

After the business combination, HHI will rise from 3,600 to 3,700, an increase of 1,300 to 1,400.

Rank order	Company	Market share
1	Seagate	30 - 35%
2	Company A	25 - 30%
3	Maxtor	20 - 25%
4	Company B	10 - 15%
5	Company C	5 - 10%
6	Company D	0 - 5%
(1)	Total of the parties concerned	50 - 55%
	Grand total	100%

(Note)As of 2005.

(Source: Prepared by the Commission based on the data provided by the parties concerned.)

## (2) Investigation of relevant factors

a) Existence of competitors

There are multiple major competitors in the fields of HDDs for business use and HDDs used for desktop personal computers.

## b) Ability to change suppliers

HDD manufacturers are improving their technical capacity to provide products that meet the performance and quality required by major computer manufacturers, which are the main users, so that there is no technical disparity that prevents users from changing their suppliers. In addition, there is no difference in the quality of products of HDD manufacturers, the interface, which is the specification for the connection with computers, is standardized, major computer manufacturers procure HDDs from multiple sources, and the ratio of procurement changes at the time of negotiations that are held quarterly. Therefore, users can easily change their suppliers.

c) Surplus supply capacity

All the competing HDD manufacturers are planning to increase production capacity in view of the future increase in demand for HDDs. Major device manufacturers are also increasing their production capacity in view of the expected increase in demand for HDDs. Therefore, it is unlikely that the production of HDDs will be hindered by a shortage of main devices.

d) Competitive pressure from customers

Major computer manufacturers and other users are in a strong position when it comes to price negotiations because they procure HDDs in large quantities from multiple HDD manufacturers and revise the price and change the ratio of procurement at the time of trade negotiations that are held periodically.

Based on past experience, when a business combination occurs, users adjust the ratio of procurement backed by their strong position in price negotiations so that a particular manufacturer does not gain a lion's share of the market. Therefore, after the business combination, the parties concerned cannot necessarily assume that their market share will be the combined total of the market shares they had before the combination.

e.) Market entry

Although entry into the market from outside is difficult, it is relatively easy for existing HDD manufacturers to start the production of HDDs that are different from the products that they currently manufacture. After the business combination, the number of manufacturers of HDDs for business use will be four, but it is very likely that manufacturers of HDDs used for purposes other than business use will enter the field.

f) Technical innovation

HDD manufacturers are in a fierce competitive race to produce HDDs of smaller size and larger capacity, and it is now a major factor for attaining larger market share to provide products loaded with new technologies. As a result of frequent new product launches by manufacturers, actual product life has become shorter than the physical product life.

Since a reduction in sales price leads to an expansion of market share, HDD manufacturers are striving to reduce the sales price of HDDs through technical innovation related to the reduction of costs.

g) Summary

The status of global competition is as described above, and it is difficult to raise the price domestically because consumers in Japan can procure HDDs from overseas suppliers if the price in Japan is raised.

# 3 Vertical business integration

Among the major devices, Seagate produces disks and magnetic heads in-house, and Maxtor produces parts for disks. After the business combination, Seagate will provide these devices to Maxtor exclusively (note). For this reason, the major device manufacturers may lose the user, Maxtor, after the business combination. Therefore, the effects of the business combination on the sales of disks and magnetic heads by the major device manufacturers are investigated.

Note All the major devices manufactured by Seagate are consumed for captive use.

(1) Market share

As a result of the business combination, the combined global market share of the parties concerned in terms of HDD manufacturing and sales, which collectively represent the downstream market, will be between 40 and 45%.

HII after the business combination rises from 2,500 to 2,600.

Rank order	Company	Market share
1	Seagate	25 - 30%
2	Company A	15 - 20%
3	Company B	15 - 20%
4	Maxtor	10 - 15%
5	Company C	5 - 10%
6	Company D	5 - 10%
7	Company E	5 - 10%
	Others	0 - 5%
(1)	Total of the parties concerned	40 - 45%
	Grand total	100%

(Note)As of 2005.

(Source: Prepared by Commission based on the data provided by the parties concerned.)

## (2) Status of the disk trade

Since Maxtor has been manufacturing parts for disks in-house, the degree of dependence of disk manufacturers on Maxtor is not so high. In addition, there are multiple HDD manufacturers to which disk manufacturers can sell their products in place of Maxtor. Therefore, the influence on the disk manufacturers is small even if Maxtor significantly reduces the number of disks procured from disk manufacturers due to procurement from Seagate.

#### (3) Status of the magnetic head trade

Although the degree of dependency of magnetic head manufacturers on Maxtor is not small, it is possible that the market share of companies other than the parties concerned increases because HDD users may level the ratio of procurement after the business integration. Therefore, it is expected that magnetic head manufacturers will be able to increase procurement from such HDD manufacturers. Furthermore, since the HDD market itself is expanding and the demand for major devices including magnetic heads will also expand, the major device manufacturers will be able to compensate for the reduction in sales due to the decrease of sales to Maxtor.

## 4. Review in Terms of the Antimonopoly Law

## 1 Horizontal business integration

(1) Review of Independent Action That May Interfere with Free Competition

Although the combined market share of the parties concerned in comparison to the share before the combination is considerably higher, there is no difference in the quality among the products manufactured by different HDD manufacturers, so that users will not be hindered if they wish to change suppliers. Furthermore, there are multiple competitors in the field of HDDs for business use and those used for computers, and manufacturers are enhancing production capacity, resulting in surplus production capacity. Under such circumstances, major computer manufacturers, the main users, procure large numbers of HDDs from multiple sources and retain an advantageous position in price negotiations by requesting price reductions and by changing the ratio of procurement. When the ratio of procurement. Therefore, in this case also, it is expected that the users will change suppliers, and independent action taken by the parties concerned will not result in a substantial restriction of competition in the particular field of trade.

#### (2) Review of Concerted Action That May Interfere with Free Competition

Since major computer manufacturers, which are the main users, procure HDDs from multiple manufacturers, frequently changing the ratio of procurement, reduction in price is apt to lead to the expansion of market share, and so it is difficult to predict the behavior of competitors. To enhance competitiveness, it is beneficial to introduce products that reflect advanced technology and technical innovations are frequently made as a consequence. This leads to products having a shorter life cycle and price reductions. Therefore, cooperative action taken between the parties concerned and competing companies will not result in a substantial restriction of competition in the particular field of trade.

## 2 Vertical business integration

(1) Disks

Since both the parties concerned are manufacturing disks in-house and the dependency of disk manufacturers on Maxtor is not high and there are multiple HDD manufacturers which may purchase HDDs in place of Maxtor, the business combination will not result in a substantial restriction of competition in the particular field of trade.

## (2) Magnetic heads

Although the business dependency of magnetic head manufacturers on Maxtor is not low, it is expected that opportunities to sell magnetic heads to HDD manufacturers other than Maxtor will increase as a result of the change in HDD supplier due to the business combination and the expansion of the HDD market itself. Therefore, the business combination will not result in a substantial restriction of competition in the particular field of trade.

## 5. Conclusion

The analysis above suggests that this case does not actually interfere with free competition in the market concerned.

# Case 6 Business integration of SKY Perfect Communications Inc. and JASAT Corporation

# 6. Outline of the case

This case relates to the plan formulated by SKY Perfect Communications Inc. (hereinafter referred to as SKP), which has a platform business related to broadcasting using communication satellites (hereinafter referred to as "CS broadcasting") and JASAT Corporation (hereinafter referred to as JSAT), which has a transmission business using communication satellites, to merge to form a 100% subsidiary company of a holding corporation.

The relevant legislative provisions for this case are contained in Section 10 of the Antimonopoly Act.

## 2. Particular field of trade

## 1 Outline of broadcasting and communications

The provision of contents in Japan includes broadcasting and communications. Broadcasting includes, for example, satellite broadcasting, cablecast (hereinafter referred to as CATV), and terrestrial broadcasting; and communications include, for example, Internet and telephone. Furthermore, broadcasting and communications are divided into two fields: one whereby contents are provided to customers free of charge and one whereby contents are provided to customers with a charge. The main source of revenue for the former is advertising income and viewing fees for the latter.

In broadcasting, after digital broadcasting using CS began in 1996, all the broadcasting and communication enterprises have undergone (or are making) the transition from analog form (a method in which images are transmitted by analog modulation) to digital form (a method in which images are transmitted by digital signals) whereas CS broadcasting using analog signals does not presently exist and analog broadcasting using broadcasting satellites (hereinafter referred to as "BS broadcasting") is scheduled to be fully introduced by 2011. With countrywide broadbandization scheduled for completion in 2010 and the complete transition from terrestrial analog broadcasting to terrestrial digital broadcasting by July 24 of the following year, digitization is being vigorously promoted at the present time. In the area of communications, communication services similar to broadcasting are being realized as a result of broadbandization of the Internet Network and the development and dissemination of one-segment broadcasting so that the boundaries between broadcasting and communications are being blurred. In this document, communication services similar to broadcasting are included when "broadcasting business" is referred to.

#### 2 CS digital broadcasting

(1) The working structure

The parties concerned are involved in a business related to CS digital broadcasting. The digital broadcasting business in Japan consists of "commissioning broadcaster (note 1)," which provides programs, and "commissioned broadcaster (note 2)," which delivers the programs from the communication satellite using radio waves, and the "platform company." Among the three parties, the commissioning company pays the fees for the use of a transponder (a repeater installed on a satellite) and the fees for the commissioning of digitization of broadcasting signals to the platform company. The commissioned broadcasting company pays the fees for commissioning the operations from the multiplexing of the digitized broadcasting signals to the uplink to the platform company. SKP is the only platform company that exists at present, and there are two commissioned broadcasting companies including JSAT. Multichannel broadcasts are being provided by SKP using the communications satellites, "SKY PerfecTV!," which are located at longitude 124 degrees east and longitude 128 degrees east, respectively, and are owned by JSAT, and the communication satellite, "SKY PerfecTV! 110 (note 3)," which is located at longitude 110 degrees east and co-owned by two companies including JSAT.

- (Note1) A name according to the Broadcast Law. Although the name according to the Law Concerning Broadcast on Telecommunication Services is a broadcasting company on telecommunication services, such a company is collectively referred to as a "program provider" in this document.
- (Note2) A name according to the Broadcast Law. Although the name according to the Telecommunications Business Law is a telecommunication company, such a company is collectively referred to as a "transmission company" in this document.
- (Note3) The name was changed to "e2 by SKY PerfecTV !" in February 2007.

#### (2) Flow of reception and transmission

In CS digital broadcasting, broadcast programs are provided by program providers as in the case of terrestrial broadcasting. However, since most programs that are broadcast are transmitted using analog signals, it is necessary to digitize the analog signals in order to broadcast via the communication satellites. The digitized broadcast signals are further multiplexed (this is where multiple analog message signals or digital data streams are combined into one signal), and the multiplexed signals are modulated to high-frequency signals that can be transmitted to the satellite and sent to the stationary communication satellite located at an altitude of 36,000 km using a large-scale satellite antenna dish (this process is called "uplink"). The communication satellite receives the broadcast signals transmits the broadcast signals using the installed transponder to the ground (this process is called "downlink"). These signals are received by the small-scale satellite antenna dish installed at each home and the programs are viewed on a conventional TV through a dedicated receiving apparatus.

#### 3 Pay-broadcasting digital delivery business

(1) Outline of the pay-broadcasting digital delivery business

The CS digital broadcasting service provided by the parties concerned is a type of digital pay-broadcasting. In digital pay-broadcasting, in addition to CS digital broadcasting, there are BS digital broadcasting, CATV and IP broadcasting (multi-channel broadcasts are provided using the exclusive IP network on broadband circuits and programs are viewed on the TV receiver connected through dedicated equipment).

(2) Market trends

The number of subscribers to "Sky PerfecTV!" and "Sky PerfecTV ! 110" for CS digital broadcasting has increased each year for the past five years, with an additional 1 million subscribers compared with five years ago. On the other hand, CATV and IP broadcasting are promoting differentiation from CS digital broadcasting by providing a unit price system for "triple play" that includes video distribution, high-speed Internet, and telephone. As a result of the fierce competition for market share among the three businesses, the average viewing fees per subscriber are decreasing year by year.

## (3) Efforts to attract subscribers

In view of the full transition to terrestrial digital broadcasting in 2011, all the broadcasting companies are taking a range of measures to increase the number of subscribers

Satellite broadcasting companies are trying to increase the number of subscribers for the device common to three bands that enables terrestrial digital broadcasting, BS broadcasting, and 110-degree CS broadcasting to be viewed using only one receiver; and CATV companies are endeavoring to enhance multi-channel broadcasting and community broadcasting. IP broadcasting companies are increasing the number of channels while implementing a free trial campaign for a limited time.

Some of the CATV companies are changing the transmission route from satellites, which have the disadvantage of "rainfall attenuation" (distortion of images caused by bad weather) to terrestrial optical circuits.

In IP broadcasting, there is a trend where companies which started with VOD (a system in which the subscriber can view desired images when they want to view) are now entering the multi-channel broadcasting business.

#### 4 Defining the particular field of trade

CS digital broadcasting, which is the business of the parties concerned, is a type of digital pay-broadcasting. From the viewpoint of subscribers, there is little difference in the contents

and image quality among the types of broadcasting because functions and utility are similar, and the pay-broadcasting companies are competing for new subscribers. Therefore, the digital pay-broadcasting delivery business is the target of the investigation in this document.

In the digital pay-broadcasting business, the program providers provide the platform companies with programs, then the platform companies carry out digital processing, and the programs are finally delivered to the subscribers through the transmission companies, which transmit programs using satellites or terrestrial optical circuits. Of the parties concerned, SKP conducts the platform business and JSAT conducts the transmission business. Therefore, the business combination of both companies corresponds to vertical business integration and the particular fields of trade are defined by referring to the platform business as the upstream market and the transmission business as the downstream market.

Since these business fields cover the entire country and there are no special conditions, the geographical region is defined "nationwide".



< Flow of digital pay-broadcasting delivery >

# 3. Investigation of the effects of the business combination on competition

# 1 Changes in the number of subscribers and market size for pay-broadcasting

The number of the subscribers to pay-broadcasting, which is the only data available, has increased each year for the past five years resulting in slightly fewer than 25 million subscribers in 2005. The transition from analog to digital is being rapidly implemented and a battle for market share is being fought among CS digital broadcasting, CATV, and IP broadcasting, and this is expected to expand demand in the future.

2 Platform business

# (1) Platform business

The basic functions carried out by a platform company in digital pay-broadcasting delivery include: digital processing, contents delivery, EPG (electronic program guide) data delivery, and access control. All of these are indispensable for digital delivery.

## (2) Market share/HHI

Market share (based on the number of subscribers) of each company in the platform business is as shown in the table below. HHI is approximately 3,400.

Rank order	Company	Market share
1	SKP	Approx.45%
2	Company A	Approx.35%
3	Company B	Approx.15%
4	Company C	Approx. 5%
5	Others	0 - 5%
	Total	100%

(Note) Number of subscribers as of the time of examination

(Source: Prepared by the Commission based on the data provided by the parties concerned.)

(3) Existence of competitors

There are multiple competitors whose market share is 10% or more.

(4) Existence of a large number of program providers

There are as many as about 100 program providers and they provide all-round programs to any of the platform companies since they desire to acquire as many as subscribers as possible. For example, popular programs to which many people subscribe, such as hit animated cartoons, classic animated cartoons, and sports programs, are delivered to multiple platform companies.

(5) Ability to change partner company

As can be seen from the fact that some CATV companies have replaced SKP with other platform companies, it is easy for CATV companies to change platform companies.

(6) New market entry arising from the expansion of IP broadcasting

As a result of the increase in the number of subscribers to FTTH, new entrants into the market are expected due to the expansion of IP broadcasting.

3 Transmission business

## (1) Transmission business

The transmission business is one in which digitized contents are transmitted to subscribers using satellites or terrestrial optical circuits.

It is said that the transmission cost using terrestrial optical circuits is lower than that using satellites.

The transmission routes differ depending on the platform company, and SKP delivers contents through JSAT.

## (2) Market share

Market share (based on the number of subscribers) of each company in the transmission business is as shown in the table below.

Rank order	Company	Market share
1	JSAT	Approx. 50%
2	Company F	Approx.10%
3	Company G	Approx.10%
	Total of the companies using	Approx.30%
	terrestrial optical circuits	
	Grand total	100%

(Note) Number of subscribers as of the time of examination.

(Source: Prepared by the Commission based on the data provided by the companies concerned.)

#### (3) Existence of competitors

There are competitors whose market share is 10% or more.

## (4) Ability to change partner company

In some cases, when the platform company is changed, there is an automatic change in the transmission company.

(5) Superiority of terrestrial optical circuits

Terrestrial optical circuits enable program delivery at lower costs because the transmission cost is lower than that of satellites.

# 5. Review in Terms of the Antimonopoly Law

# 1 Review of Independent Action That May Interfere with Free Competition

(1) JSAT's rejection of accepting the commissioning of transmission business from companies other than SKP

Since major competitors other than JSAT exist and transmission using terrestrial optical circuits is superior to transmission using satellites in terms of cost, it is unlikely that the business of companies other than SKP will be jeopardized even if JSAT refuses the

commissioning of transmission business. Therefore, independent action of the parties concerned will not substantially restrict competition in the platform business.

(2) SKP's rejection of the commissioning of transmission business to companies other than JSAT

Since there are majorcompetitors which are provided with programs from companies other than the parties concerned and new entrants into the platform business are expected due to the expansion of IP broadcasting, it is unlikely that the business of companies other than JSAT will become more difficult even if SKP refuses the commissioning of transmission business to companies other than JSAT. Therefore, independent action of the parties concerned will not substantially restrict competition in the platform business.

# 2 Review of Concerted Action That May Interfere with Free Competition

Since new entrants are expected in the platform business, which is the upstream market, due to the expansion of IP broadcasting, competition is active in the market. In the transmission business, which is the downstream market, competition is also active between satellites and terrestrial optical circuits because terrestrial optical circuits are superior to satellites in terms of cost. Therefore, cooperative action of the parties concerned with other competitors will not substantially restrict competition in either the upstream business or the downstream business.

# 5. Conclusion

The analysis above suggests that this case does not actually interfere with free competition in the market concerned.

# Case 7: Acquisition of Hanshin Electric Railway's Shares by Hankyu Holdings

# 1. Summary

This case concerns the planned acquisition of the shares of Hanshin Electric Railway Co., Ltd. (hereinafter called "Hanshin") by Hankyu Holdings, Inc. (hereinafter called "Hankyu"), to which Article 10 of the Antimonopoly Law applies.

# 2. Market

# 1 Areas That Need to be Reviewed in Detail

The two companies compete in the businesses of 1) railways, 2) buses (service and chartered buses), 3) taxis, 4) real estate (dealings and management), 5) tourism, 6) hotels and 7) international shipment. As the two companies are minor players in these businesses except those of railways and service buses, the acquisition does not have much of an impact on their respective markets. The focus, therefore, should be on the businesses of railways and service buses.

# 2 Definition of Markets

# (1) Railway Business

The railway businesses of the two companies involve passenger services only (no freight transportation). Hankyu's Kobe Line (Umeda-Sannomiya), Hanshin's Hanshin Line (Umeda-Sannomiya only) and Competitor A's line (Osaka-Sannomiya only) compete with one another. From the viewpoint of demand substitutability on the part of passengers, a "competing section" can be defined as a section between stations located within 15 minutes walk from each other. Of the three lines, 10 sections are considered a "competing section." The market, therefore, is defined for each of these sections.

# (2) Service Bus Business

As in the case of the railway business, the market is defined for each of the six sections, where the two companies compete - e.g., between Taishacho Station (Nishinomiya City) and JR Nishinomiya Station).

# 3. Review of the Impact of the Business Integration on Competition

## 1 Railway Business

- (1) Summary of Business
  - a) Railway Business Environment

Osaka and Kobe, the two big cities in the Kansai region, are linked by expressways and railways, with other means of transportation such as buses and taxis available. According to the two companies, the number of passengers each railway company carries and its operating revenues are declining.

b) Railway Fares

The previous railway fare system, where the fares (hereinafter called "the fares") fixed by railway companies were approved unconditionally, gave way to the current system in 1997.

With the current system in place, railway companies need the approval of the Minister of Land, Infrastructure and Transport – in accordance with the Railway Operation Law – when they revise or set a ceiling on fares. In approving fare ceilings, the Ministry of Land, Infrastructure and Transport verifies that the total earnings from the maximum fares do not exceed the multiple costs (operating costs plus an appropriate amount of profit, calculated by a designated method).

Based on this fare ceiling system, railway companies have a free hand to set fares within the range approved by the ministry. For instance, they can offer a variety of fares by line, section, day of the week, and time of day. However, the minister has the power to instruct railway companies to revise the fares if they are set unfairly high for certain passengers or could result in unfair competition with other railway companies.

The two railway companies and Competitor A raised fares by an average of 1.9 percent in 1997; there have been no fare revisions since then.

(2) Market Share

The table below shows the share of each railway company in the railway business of the competing section (in terms of the number of passengers carried per year).

Competing Section #	Hankyu	Hanshin	Competitor A	Total
1	25%	15%	60%	100%
2	65%	10%	25%	100%
3	40%	20%	40%	100%
4	55%	5%	40%	100%
5	50%	5%	45%	100%
6	50%	5%	45%	100%
7	5%	15%	80%	100%
8	45%	0-5%	55%	100%
9	5%	15%	80%	100%
10	30%	0-5%	70%	100%

Prepared by the Fair Trade Commission based on data provided by Hankyu and Hanshin

## (3) Competitors

Competitor A, as described below, has a competitive edge over the two companies in the competing sections. In fact, the number of passengers it carries each year is increasing in most of the sections, whereas that of the two companies is decreasing.

a) Excess Transportation capacity

Both Hankyu and Hanshin have a double track line between Umeda (Osaka) and Sannomiya (Sannomiya). Competitor A, meanwhile, has a four-track line connecting the two stations; it seems capable of doubling the number of passengers it carries by increasing the number of trains.

b) Speed

Competitor A has a relatively straight line in the competing section, which enables trains to travel at higher speeds, thereby shortening commuting time. For instance, Hankyu, Hanshin and Competitor A take 27, 29 and 20 minutes, respectively, to travel between Umeda (Osaka) and Sannomiya (Sannomiya) during daytime hours when they operate express trains. Competitor A, therefore, has a clear advantage over the two companies. In fact, the number of passengers Competitor A carries increased dramatically in 1999, with its trains traveling at higher speeds in the competing sections.

c) Wide Area Networks to Take on More Passengers

Competitor A has a railway system connecting Kyoto, Osaka and Kobe, each of which is full of tourist attractions. In addition to commuters, it attracts tourists both from neighboring and distant areas.

## (4) Competition in Services and Fares

While the fares of Competitor A are higher than those of the two companies in five competing sections, its 6-month commuter pass fare between Umeda (Osaka) and Sannomiya (Sannomiya) is set at 57,450 yen as against 67,400 yen of the other two. Likewise, its commuter tickets (time-discount tickets and daytime special discount tickets) are less expensive than those of the two companies, whose student commuter pass fare, however, is lower than that of Competitor A suggesting fare competition between Competitor A and the two companies.

Competitor A plans to set up a new station – located about 600 meters from Hankyu Shukugawa Station and about 700 meters from Hanshin Kouroen Station – in the section between Nishinomiya and Ashiya this year. There is indeed competition between Competitor A and the two companies for passengers in the competing sections. Moreover, Competitor A will set up an additional two stations in the section, where there will be competition with Hankyu, this year. With these stations opening, Competitor A's line will become more convenient and competitive. Competitor A is going on the offensive to attract passengers, operating, for example, more express trains on the line that competes with Hankyu's Takarazuka Line.

## (5) Fare Revision

In line with the fare ceiling approval system based on the multiple cost method, railway companies generally adopt a fare system, where fares are set beforehand according to travel distance (the two companies adopt a kilometer-based system).

With the fare ceiling approval system in place, each railway company can revise fares for specific sections so long as they are not considered unfair. The two companies, however, do not offer special fares for specific sections as a fare system based on travel distance is taking root; such services involve significant changes in the current system, including fare adjustment with other railway companies with which they share tracks.

The passenger numbers the two companies carry and their revenues in the competing sections account for only a small part of those in the competing lines. There is thus not much of an incentive for them to revise fares in the competing sections; it is considered virtually impossible.

## 2 Service Bus Business

- (1) Summary of Business
  - a) Buss Business Environment

The number of passengers is declining due to an economic slump associated with employment adjustment, the spread of the five-day work week resulting in a decrease in commuter pass users, an increase in private cars, increasingly congested traffic, etc. – which force bus businesses to further reduce operating costs.

b) Bus Fares

The bus fare system also adopts the fare ceiling approval system based on the multiple cost method; the fares should be fixed within a prescribed range and notified beforehand.

Hankyu increased fares by 10 yen per section in 1997, whereas Hanshin switched from a section-based fare system to a flat fare system in 2000. With private cars increasing, fare hikes would likely result in a decrease in the number of passengers. There has been no price hike since 1997 in major cities.

(2) Market Share

The two companies together account for 100% of the service bus market in each competing section (based on the number of passengers carried each year).

# (3) Demand in Competing Sections

In the case of the two companies, the average number of passengers carried per service in the competing sections is much lower than that of their services in Nishinomiya City. There is not much demand for the competing sections in Nishinomiya City. As in the case of the railway business, therefore, its impact on competition is not significant.

# (4) Alternative Means of Transportation Such as Taxis

The competing sections comprise six sections, the longest of which is only 2 km (between Taishacho and JR Nishinomiya Station). For this reason, there are alternative means of transportation such as taxis.

# 4. Review in Terms of the Antimonopoly Law

# 1 Railway Business

There is a powerful competitor – i.e., Competitor A, which has an advantage over the two companies in terms of excess transportation capacity, speed and network – that is going on the offensive to attract more passengers. Meanwhile, the proportion of passengers the two companies carry and their revenues in the competing sections are relatively small, which makes it difficult to set fares separately for the competing sections. The integration, therefore, does not actually interfere with free competition in the market concerned.

# 2 Service Bus Business

The longest section of the competing sections is only 2 km. There are alternative means of transportation such as taxis. Demand for the competing sections remains low, which, as in the case of the railway business, makes it difficult to set fares separately for the competing sections. The integration, therefore, does not actually interfere with free competition in the market concerned.

# 5. Conclusion

The analysis above suggests that the acquisition of Hanshin Electric Railway's shares by Hankyu Hanshin Holdings does not actually interfere with free competition in the market concerned.

# Number of Notifications of Mergers, Demergers, Business Transfers. Etc., Received and Reports on Shareholding Submitted in FY2006

A total of 1,189 notifications were received in FY2006, up 11.0% year on year – 74 for mergers (between Japanese companies), 19 for demergers (of Japanese companies) and 136 for business transfers (including three from foreign companies). In addition, a total of 960 reports on shareholding were received, including 50 from foreign companies. The table below shows the results in the past three years.

Specifically, notifications of mergers, demergers and business transfers decreased, when compared with the results in FY2005, while reports on shareholding began to increase in FY2004, increasing by 135 in FY2006 (up 16.4% year on year).

(For details refer to: http://www.jftc.go.jp/ma/doukou.pdf)

- Note 1: Businesses of a certain size are obliged to notify authorities of their planned mergers, demergers and business transfers, and report on shareholding. (For mergers between Japanese companies, for instance, this provision applies when the transactions involve two companies with total assets of over 10 billion and 1 billion yen, respectively.)
- Note 2: The notification system for demergers (joint incorporation-type demergers and absorption-type demergers) was set up in May 2000, following the revision of the Antimonopoly Law, and was launched in FY2001.
- Note 3: With the revised Antimonopoly Law taking effect on May 1, 2006, following the enforcement of the Company Law, the term "transfer of operations" was replaced with "transfer of business" this report adopts the latter.
- Table:Number of Notifications of Mergers, Demergers, Business Transfers. Etc.,<br/>Received and Reports on Shareholding Submitted

	FY2004	FY2005	FY2006
Mergers	70 (100)	88 (126)	74 (106)
Demergers	23 (100)	17 (74)	19 (83)
Business transfers	166 (100)	141 (85)	136 (82)
Shareholding	778 (100)	825 (106)	960 (123)
Total	1,037 (100)	1,071 (103)	1,189 (115)

Numbers in parentheses show the percentage change from FY2004

# **Results of Reviewing Business Integrations in FY2006**

In addition to those announced as major business integrations in FY2006, there were requests for preliminary consultation in accordance with the "Guidelines for Preliminary Consultation About Business Integrations." All cases in FY2006 where the Japan Fair Trade Commission offered consultation services are included. The tables below show each company group's HHI and its increment (hereinafter called " HHI") after the integration as well as its total share of the market concerned, with focus on three categories: 1) transactions involving no competitive problems, 2) transactions on which a secondary review was conducted and 3) transactions involving competitive problems,

- Note 1: Data such as HHI with respect to the business integration of each company group are calculated based on the most accurate figures available; those for which figures cannot be calculated are not included.
- Note 2: As for some business integrations that were not officially announced, a detailed review comparable to a secondary review was conducted by extending the period of the primary review (a document review). The number of secondary reviews in the tables, however, does not include such cases.
- Note 3: HHI in the tables shows that of a company group after the integration, HHI refers to an increment in the HHI after the integration, and the total share is that of the company group concerned. The percentage shown in the lower case of each box indicates the ratio to the total number of cases, rounded to one decimal place.

$\square$	<1,500			1,500-2,500			2,500<			Total		
ННІ	Total number of cases	Number of secondary reviews	Number of problems identified									
-150	11	0	0	8	0	0	3	0	0	22	0	0
<150		0.0%	0.0%		0.0%	0.0%		0.0%	0.0%		0.0%	0.0%
150-250	3	0	0	7	0	0	3	0	0	13	0	0
130-230		0.0%	0.0%		0.0%	0.0%		0.0%	0.0%		0.0%	0.0%
250~	0	0	0	10	0	0	22	4	1	32	4	1
250<		0.0%	0.0%		0.0%	0.0%		18.2%	4.5%		12.5%	3.1%
Total	14	0	0	25	0	0	28	4	1	67	4	1
rolai		0.0%	0.0%		0.0%	0.0%		14.3%	3.6%		6.0%	1.5%

HH	•	HHI

# HHI, Total Share

	<1,500			1,500-2,500			2,500<			Total		
Total Share	Total number of cases	Number of secondary reviews	Number of problems identified									
-250/	13	0	0	9	0	0	2	0	0	24	0	0
<20%		0.0%	0.0%		0.0%	0.0%		0.0%	0.0%		0.0%	0.0%
25 250/	1	0	0	11	0	0	0	0	0	12	0	0
20-30%		0.0%	0.0%		0.0%	0.0%		0.0%	0.0%		0.0%	0.0%
25 500/	0	0	0	5	0	0	10	2	1	15	2	1
35-50%		0.0%	0.0%		0.0%	0.0%		20.0%	10.0%		13.3%	6.7%
-500/	0	0	0	0	0	0	16	2	0	16	2	0
<50%		0.0%	0.0%		0.0%	0.0%		12.5%	0.0%		12.5%	0.0%
Total	14	0	0	25	0	0	28	4	1	67	4	1
iotai		0.0%	0.0%		0.0%	0.0%		14.3%	3.6%		6.0%	1.5%