Changing Food Retail Sector in Korea: Consequences for Consumer, Producer, and Trade of Agriculture

May 2005

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Ⅰ INTRODUCTION

Food industry is a typical domestic market oriented industry in Korea. Every year more than 95 percent of food produced is sold in domestic market. Also, because of higher prices of domestic agricultural products, almost 95 percent of grains which is used as a raw material for processed food are imported from abroad. Annual average agricultural import during 2000-2003 period is over 10 billion US Dollars while that of export stayed below 3 billions.

Another characteristic of Korean food industry is that it is directly affected by changes in foreign exchange rates. Due to the chronic trade deficits and abnormally huge agricultural imports, food production costs cannot help depending on the international prices. As long as the up-valuation trend of Korean Won maintained, it will be helpful for food industry to improve its profitability.

Third point of food industry is that it is closely related with domestic business cycles in general. Consumption of food, however, is not so much sensitive to the change in income as that of luxurious goods, elasticity of consumption is relatively not too high. It is well known that domestic business cycle affects food sector with three to six months of time lag in Korea.[1]

The forth characteristic of food industry is that a few large retailers took the market power. Traditionally, Korean food market was the wholesalers‘ market. With huge financial capacity and organizing power, wholesalers have executed dominant power in the food market for more than several decades until recently. At that time the market was suppliers’ market where changes in consumer tastes cannot be reflected in production as well as marketing stage.

Recent development of Korean food retail sector can be classified into three stages. It was not until the beginning of the 2000s that some significant qualitative changes are appeared in Korean food retail sector. The changes have been achieved through raising prices or developing high value-added product mix, which might result in increasing profits as well as sales. Before then, food retail sector has experienced only quantitative growth in production and sales. During the foreign exchange crisis period at the end of the 1990s, food retail sector has faced with external pressure of downsizing and structural readjustment.

[1] Food Journal(2004) p.62.

Ⅱ STRUCTURAL CHANGES IN FOOD RETAIL SECTOR

1. Changes in Consumption

Consumers‘ demand for food and consumption patterns have been diversified nowadays. As the job opportunity of female were expanding, cooking convenience of food became one of the most important factors that determine consumers’ decision making. Another direction of diversification in food consumption is toward higher quality of food. In some cases, customers considered food consumption as their own differentiated life-styles and willing to pay more for premium food. Recent survey, however, shows that demand for food safety and specific functions are increasing while that for convenience tends to be constant. The outbreak of BSE and birds‘ flu might affect the criteria of food consumption.

<Table 1> Demand for High Quality and Food Safety

Unit: %

Year	Food Safety	Convenience	High Quality	Special Functions	Others
2001	22.8	17.8	43.5	9.9	6.0
2004	26.6	17.8	33.3	15.8	6.6

Source: Agriculture and Fisheries Marketing Corporation(2004.9). *Survey on Agricultural Marketing Pattern of Huge Retailers and Producers*(In Korean).“ p. 38.
Note 1) Convenience is represented by small packing and semi processing.
2) High quality includes freshness.

Recently, consumers‘ interests in health increased substantially as their income grow and so does their purchasing power. Naturally, sales of health food and functional food have increased. Moreover, a law on health and functional food has come into force as of March 1, 2004. This law is to regulate labeling and advertisement of health and functional food. With this law, sale of health and functional food are expected to increase through active marketing of incumbent and newly entered firms in the food retail sector.

So far, this kind of food has been sold mainly through the channels of multi-stage or visiting sales. According to this law, almost all types of food retailers can deal with these foods as long as they get a permit of the dealer and satisfy some conditions for business of this food. Market size of health and functional food is prospected to grow more than double by 2006.

Another big change in Korean food retail sector is rapidly growing processed food and eating-out. As they proceeded the economic shock of foreign exchange crisis, almost all aspects of the society including food consumers might be divided into two opposite directions in Korea. So called, polarization seems to be able to express food consumption patterns. Consumers are segmented by two opposite groups, one pursuing high quality and service at any price and the other searching for low price with low service. The former tends to expand their consumption of eating-out.

2. Changes in Retail Markets

Since the first discount store, “E-Mart” appeared in 1993, discount stores have become a most promising type of store in Korean retail sector. With complete liberalization of Korean service market since 1996, a number of foreign retailers also entered into the market, which were ended up accelerating the structural changes of food retail sector. Various types of retail stores were introduced but large-size discount stores have successfully taken root and grew up in competition with some native stores.

The number of discount stores increased from 116 in 1999 to 267 in 2004 while that of department stores, which were the dominant type of retailer until recently, reduced from 97 to 89 during the same period. Also, the number of new type of retailer, convenient shop(CVS) exploded from 2,339 in 1999 to 8,247 in 2004 while small retailer dwindled down from 705,916 to 625,986 during the similar period of 1999 and 2003.

<Table 2> Number of Store by Types

Type of Store	1999	2000	2001	2002	2003	2004
Department	97	99	90	89	87	89
Discount Store	116	164	193	235	254	267
CVS	2,339	2,826	3,870	5,680		8,247
Small Retailers	705,916				625,986	-

Source: Korea Department Association, 『Journal of Marketing(in Korean)』 Jan. 2005.
Korea Supermarket Cooperative, 『Market World(in Korea)』 Jul. 2004.
Agriculture and Fisheries Marketing Corporation, 『Survey on Agricultural Marketing Pattern of Huge Retailers and Producers(In Korean). Sep. 2004.

Not only the number of stores, but also sales of discount stores expanded rapidly since the 1990s. Sales index of discount store increased almost nine-times from 20.1 in 1996 to 176.8 while that of department store were almost constant moving only from 93.3 to 95.1 during the same period. It has decreased to 77.2 in 1998 before it resumed to 110.1 in 2002, since then it has dropped again.

Another newly emerging store, CVS also expanded its sales index three times from 83.3 to 247.6. But sales index of supermarket decreased from 114.4 to 89.8 and that of other retailers from 97.9 to 86.2.[2] The CVS might be interpreted as a niche market type between discount store and supermarket or other retailers.

<Table 3> Indices of Sale by Types of Store

(2000=100)

Types of Store	1996	1997	1998	1999	2000	2001	2002	2003	2004
Department	93.3	91.8	77.2	88.7	100.0	105.4	110.1	103.4	95.1
Discount Store	20.1	33.2	47.8	71.5	100.0	126.8	153.8	167.1	176.8
CVS	83.3	89.6	79.2	81.7	100.0	142.6	195.8	239.2	247.6
Supermarket	111.4	112.8	104.3	98.8	100.0	96.7	95.8	96.6	89.8
Other Retailers	97.9	100.6	86.7	92.5	100.0	98.8	100.1	91.6	86.2

Source: Korea National Statistical Office, *Sales Index of Wholesale and Retailer*(in Korean). Each year.

Actual sales amount by types of store also shows that there exists great change in retail sector. Sales of department was 13.3 trillion Korean Won while that of discount store was only 7.6 trillions in 1999. In 2003, however, sales of discount store surpassed that of department by 2.2 trillions showing 19.5 trillion Won versus 17.3 trillion Won. The sales gap between the two split further to 5 trillion Won in 2004. More serious fact for sales in department is that it turned to decrease not only in relative term but also in actual amount since 2002. As the share of large retailer in total increased from 15.1 percent in 1999 to 20.7 in 2004, discount store became the most rapidly growing types of retail sector in Korea.

Other change in retail market is that concentration ratios of huge brand of department and of discount store are increasing. That means market structures are changing from perfect competition to oligopoly. Market share of big three brand(CR3) of department increased from 35.5 percent in 1996 to 73.0 percent in 2002. The portion expanded more than doubled during only 6 years. Through the severe competitions with new

[2] Supermarket in this paper is defined as a retail store with large-sized area to cover neighbor hood area with or without national chain. Discount store is different only in that it covers wider range with lowered prices.

types of retail store, small- or medium-sized department stores were driven out of the market.

<Table 4> Sales of Store by Types

Unit: Trillion Korean Won

Types of Store	1999	2000	2001	2002	2003	2004
Department	13.3	15.0	16.1	17.8	17.3	16.6
Discount Store	7.6	10.5	13.9	17.4	19.5	21.6
Large Retailers Total	21.5 (15.1)	26.2 (16.4)	31.0 (18.0)	36.1 (18.8)	37.6 (20.8)	38.7 (20.7)
Retailer Total	142.1	159.6	172.2	192.4	180.9	187.4(E)

Note 1) Retail total in 2004 is expected one by applying 3.6% growth rate. Refer to *Marketing Journal*(in Korean), 2005. 3. p. 34.
2) Large retailer total includes sales of other retailers.
3) In parenthesis is share to retailer total.
Source: Korea Department Association, *Marketing Journal*(In Korean). Jan .2005.
Korea National Statistical Office, KOSIS D/B. 2005

Also, the share of big four brand(CR4) of discount store increased from 58 percent to 75 percent during 2000 and 2002. It grew up by 17 percent point only in two years. Most of the share earned by discount store might be that of department. Discount store market also becomes oligopoly.

<Table 5> Concentration Ratios of Huge Retailer

Unit: %

	1996	1999	2000	2001	2002	2003
Department (Big 3)	35.5	51.6	59.9	67.0	73.0	
Discount Store (Big 4)			58.0	72.0	75.0	

Source: Agriculture and Fisheries Marketing Corporation(2004.9). “Survey on Agricultural Marketing Pattern of Huge Retailers and Producers(In Korean).” p. 7.

Ⅲ IMPACTS OF OLIGOPOLISTIC RETAIL MARKET

Severe competition in the retail sector might affect food retail market, too. Market structure already has changed drastically. Since more food and agricultural products have been dealt in discount stores rather than in department, the growth of discount store may have positive effects to the sales of food. In fact, sales of food and agriculture in department increased from 0.9 trillion Won in 2001 to 1.1 trillion Won in 2004. But sales of food in discount store surged from 2.2 trillion Won to 3.8 trillion

Won during the same period. In summation of the two types, food and agricultural sales increased by 58 percent from 3.1 trillion Won to 4.9 trillions in three years.

It seems that structural changes in retail sector substantially improved the sales of food in discount store and other large retailers. How does it come? The tip is low price or as it is, discounted prices of food and agricultural products. So far, farmers need to sell their products to the wholesale market through any marketing paths whether they are commissioner or cooperative. They don‘t have to pay attention to the tastes of consumers since it was the suppliers’ market until that time.

With emerging huge stores in food retail market, they tried to purchase directly from farmers or farmers cooperatives. They became price maker in a moment and wanted farmers to make contract to sell more quantity at lower prices. Considering consumer responses to the food they sold, huge retailers frequently changed specification and order to farmers or food processors.

If domestic farmers or processors cannot meet consumers‘ desire, the huge retailers may turn their eyes to the international market and can participate in global networking. Now, farmers should compete not only with domestic producers but also with global farmers. The same is true for other domestic retailers than huge stores. Food market has changed to the consumers’ market.

<Table 6> Changes in Shares of Food in the Large Retailers

Unit: %

Types of Store	2001	2004
Department	5.6	6.6
Discount Store	16.0	17.5

Source: AFMC, *Survey on Agricultural Marketing Pattern of Huge Retailers and Producers*(In Korean). Sep. 2004

In an oligopoly market, huge retailers should purchase strategically in order to survive in the market. Their strategy is to have competitive advantages in price as well as quality. Since they can purchase significant volume of products, they can hold the bargaining power over the price and specification of the products and can choose the seller they want. As a price taker, farmer or food producer has no choice but selling products to the huge retailers. As a result of unbalanced bargaining, farm prices tend to drop through severe competitions among farmers.

In fact, recent data on agricultural retail prices of discount store and traditional market showed that prices are generally lower in discount store than in traditional market in Korea. Price of rice is almost same in both store but those of onions and strawberry are much lower in discount store. Prices of agricultural products in discount store range from 69 and 97 percent of that in traditional market.

Usually, it needed tremendous investments for farmers in this kind of market to deal with the huge retailers directly. Marketing facilities such as, storage with cold-systems, automated sorting machines and loading equipment costs too much for single farmer in Korea. Economies of scale are strongly required at this point.

As a result, neighboring farmers organized a cooperative by their products and raised fund to invest together hoping stable business relations with the huge retailers. Ironically, however, such an approach often failed to hit the core. Once they invested to such area, it might become sunken costs that prevent farmers from improving bargaining power over the oligopolist. Rather, the oligopolist made use of the sunken costs of farmers cooperative to beat the prices of their products.

<Table 7> Prices in Discount Store and Markets

Unit: Korean Won

Commodity	Size	Grade	Discount Store(D)	Traditional Markets(M)	Price Ratio (D/M)	Remarks
Rice	20kg	First	43,000	43,000	1.00	Dec. 2004
Pork	1kg	Fresh	5,111	5,310	0.96	Aug. 2004
Tomatoes	1kg	First	5,000	5,800	0.86	Apr. 2004
Apple	1kg	First	3,867	4,000	0.97	Nov. 2004
Onions	1kg	First	760	1,000	0.76	Jun. 2004
Strawberry	1kg	First	4,500	6,500	0.69	Mar. 2004

Source: Agriculture and Fisheries Marketing Corporation(2005). *2004 Marketing Perspectives of Main Agricultural Commodities.*(In Korean) pp.948~1035

Ⅳ POLICY IMPLICATIONS

As some huge discount stores have become dominant in rapidly changing retail sector of Korea, marketing patterns of food also changed. Wholesaler has been superseded by discount store in food and agricultural marketing. Empirically, it is evident that food sale tended to increase as the number of discount store expanded.

More often than not, farmers inevitably deal directly with the huge discount store instead of wholesaler. In many cases, however, individual farmer has insufficient bargaining power over the huge retailer. In order to achieve the economies of scale, farmers need to organize a cooperative to take charge bargaining with the oligopolist. But, there‘s another obstacle, sunken costs.

There may be a few policy implications for farmers to improve their profitability and maintain farming in this changing environment;

First, most important thing for farmers to improve their bargaining power is market information including consumer information. So government should pay attention to how to collect and analyze market information and feedback it to farmers to reflect it in farming.

Second, farmers should be able to use this information to develop new product that fits well consumers‘ desire. Ability to produce new and striking product may reduce the problem of sunken costs.

Third, farmers should be encouraged to organize cooperative to get economies of scale in dealing with the huge retailers. This organization, in turn, should be able to supply plenty of standardized products continuously.

Finally, farmers and farmers‘ organization should develop niche markets for food. In a digital economy, where everything including basis changes continuously, they need to catch the “first-mover advantage.”

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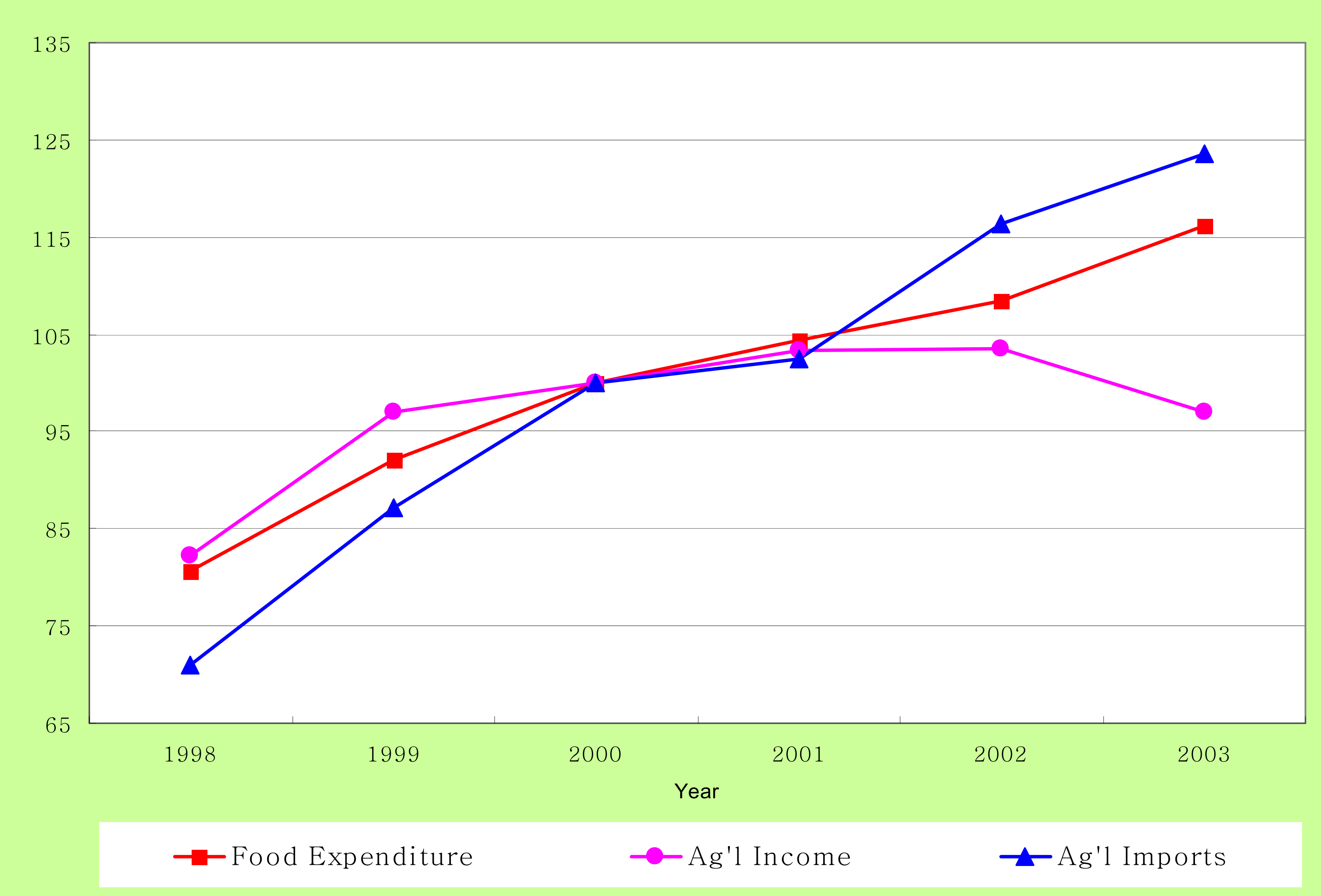
Ⅰ. INTRODUCTION

1. Characteristics of Korean Food Sector

- Mainly Orienting Domestic Consumptions
  - Domestic business cycles affect food sector

- Strongly Dependent on Imported Raw Materials
  - During 1998–2003, food expenditure increased by 7.6%, while agricultural incomes by 3.7% annually
  - Importing 95% of grains for processing food
  - Direct impacts of foreign exchange rates

Figure 1. Expenditure for Food, Agricultural Income, and Agricultural Imports



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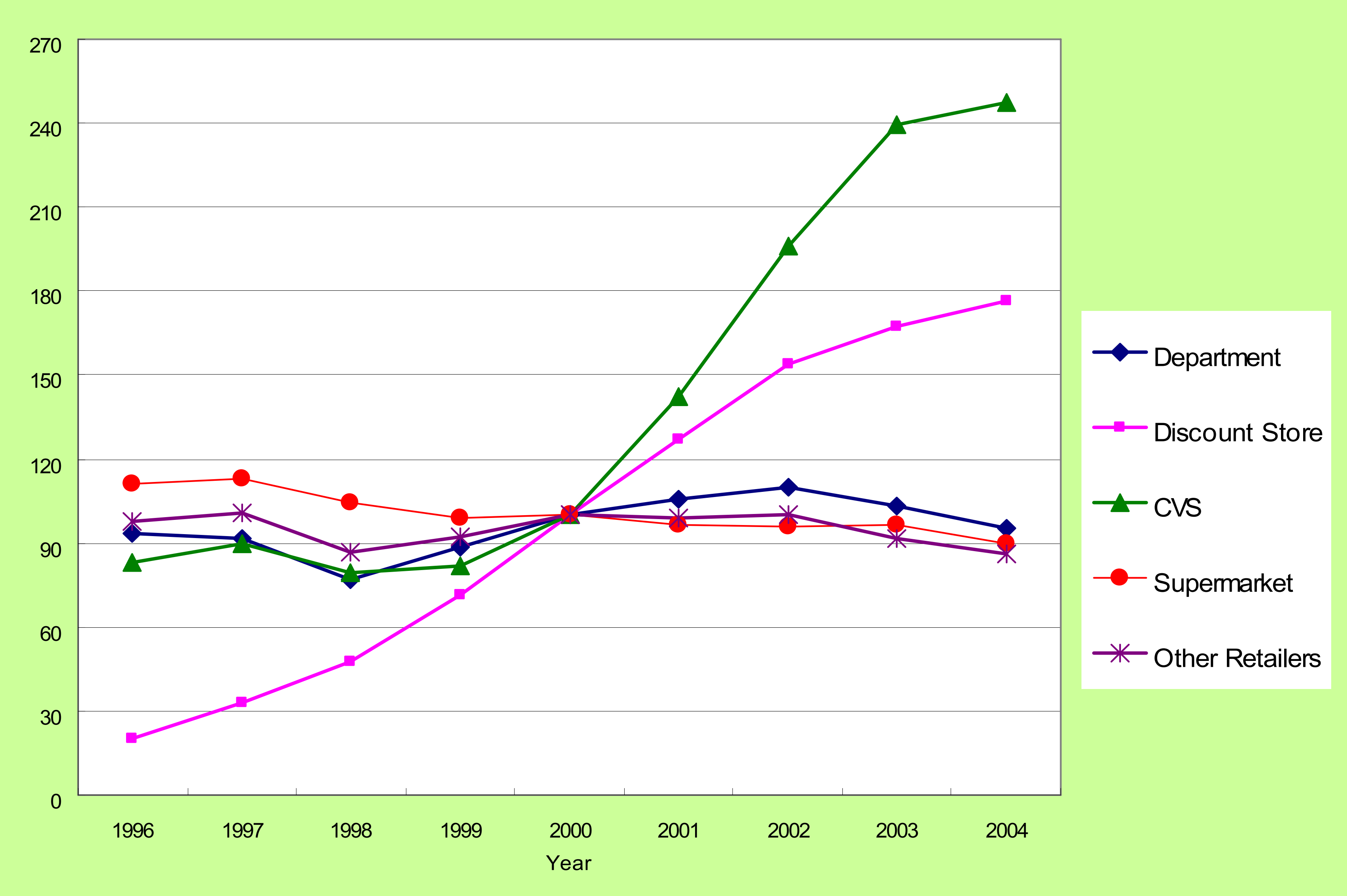
- Wholesalers Played Dominant Roles until beginning of the 1990s
  - Suppliers' market

- Retailers Took Over Wholesales since the 1990s
  - Some retailers were expanding while other types of retailers were reducing

Figure 2. Indices of Sale by Types of Store



2. Three Stages of Development

- Quantitative Growth Stage: the 1980s ~ 1990s
  - Produce more, sell more

- Structural Adjustment Stage: End of 1990s
  - Downsizing for Profitability

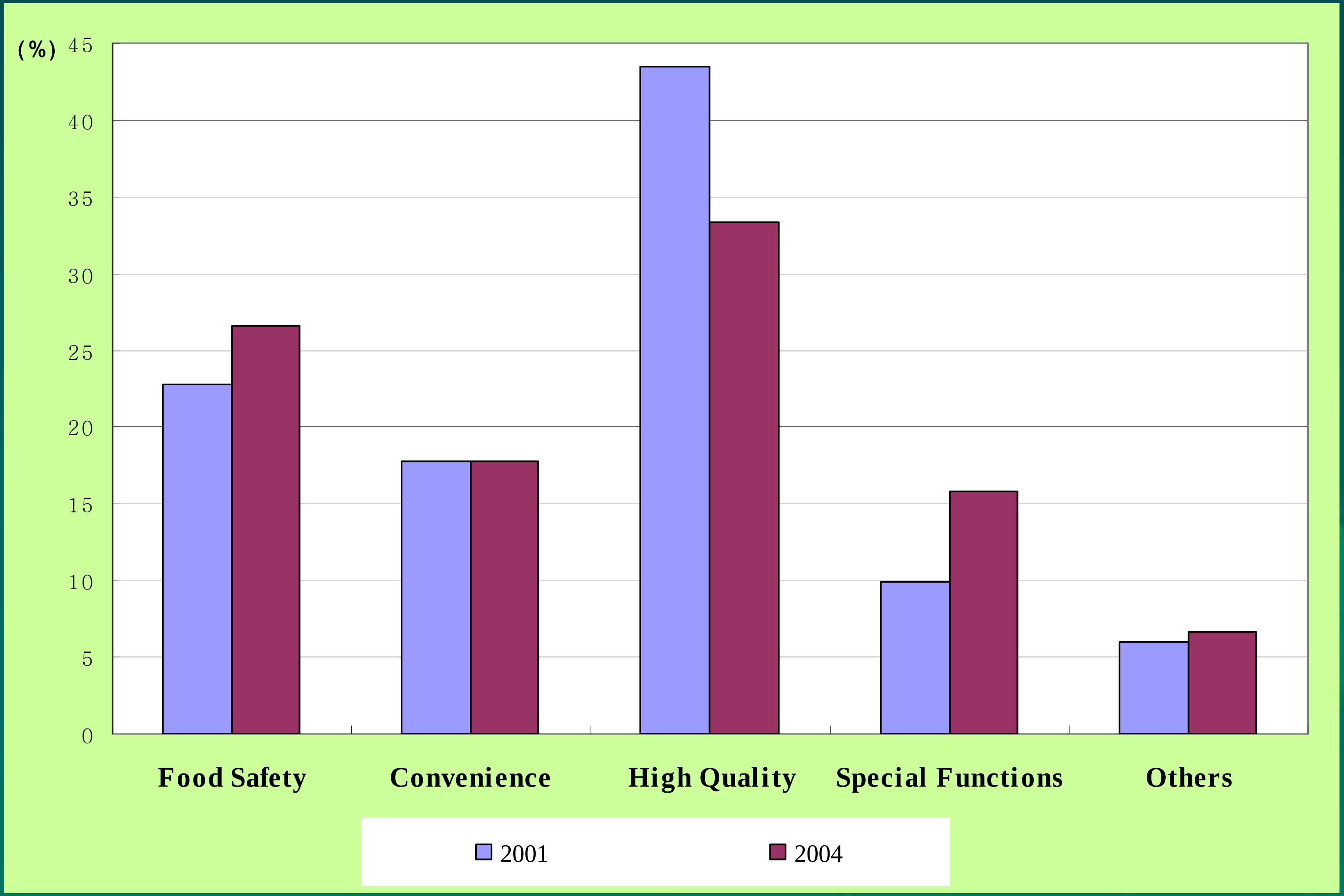
- Qualitative Growth Period: 2000s~
  - Increasing consumers' interest on health as incomes grew
  - Expanding profits by price increases or developing high value-added products

Ⅱ CHANGES IN FOOD MARKETS

1. Changes in Consumption

- Diversified Food Demand and Consumption Patterns
  - Increasing demand for food safety and specific functions

Figure 3. Demand for High Quality and Food Safety



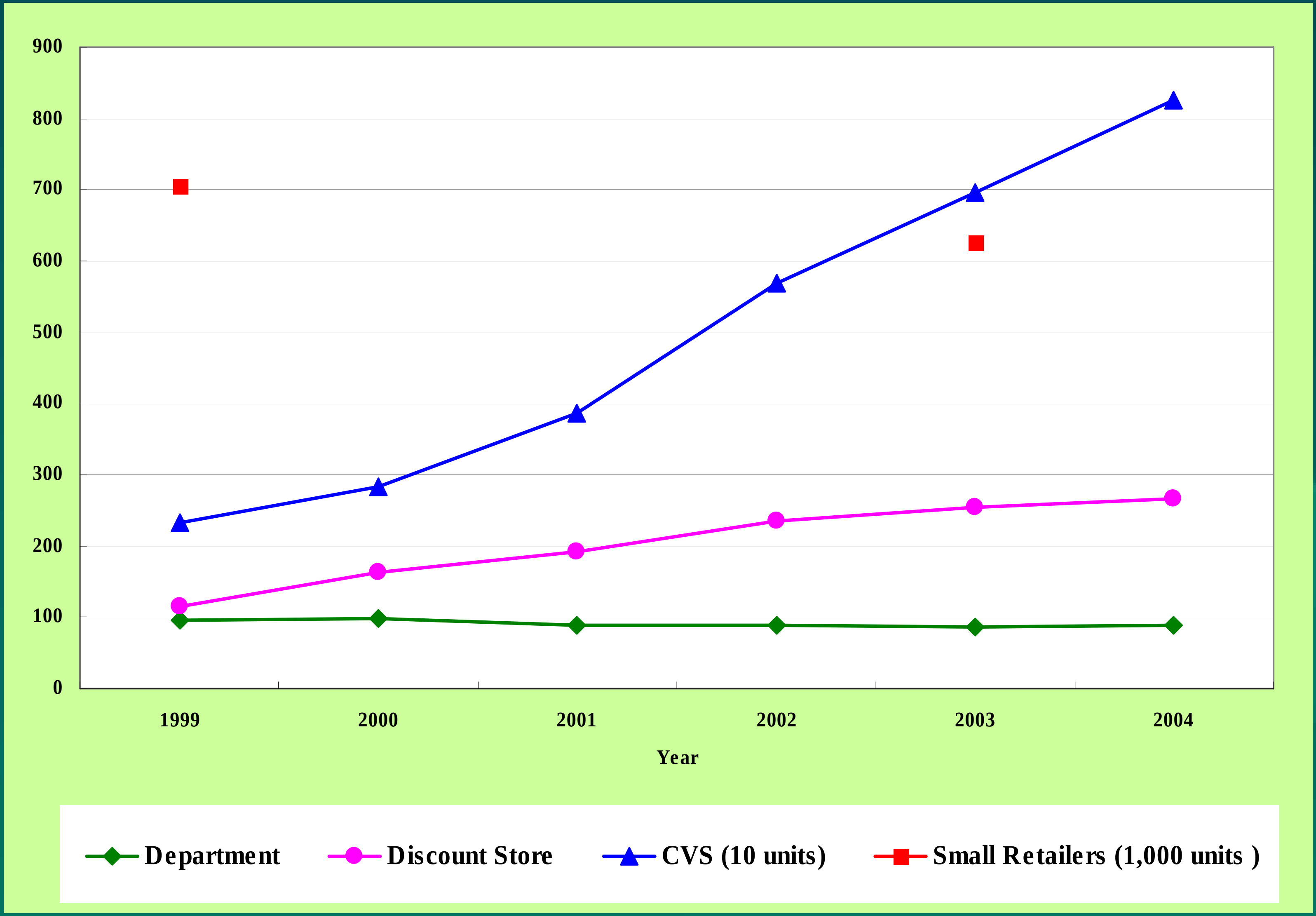
- Rapidly Growing Processed Food and Eating-out

- Segmented consumers into high-price/high-services and low-price/low-services

2. Changes in Retail Markets

- Complete Liberalization of Service Markets in 1996
  - Expanding huge discount stores with reducing departments

Figure 4. Number of Stores by Types



Increasing Concentration Ratio of Discount Store and Departments: Oligopolistic Markets

Table 1. Concentration Ratios of Huge Retailers

Unit: %

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- Severe Competitions in Retail Sector
  - Direct purchasing from producers
  - Move from supplier's market to consumer's market
  - Competitions not only with domestic stores but with global chains

Ⅲ IMPACTS OF OLIGOPOLISTIC RETAIL MARKET

- Strategic Procurement of Oligopolistic Retailers
  - Possibility of Global Networking
  - Lowering farm prices through competitions among farmers

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- Importance of Consumer Information
  - Sensitive to changes in consumer tastes
  - Need efficient feed-back systems

- Requiring Huge Investments on Marketing Facilities
  - Increasing "sunken costs"
  - Weakening "bargaining power" of farmer or farmer's coop against huge retailers

Ⅳ POLICY IMPLICATIONS

- Encouraging Farmers to Participate Directly in Retail Markets
  - Stable and sustainable supply of standardized food

- Effectively Reflecting Changes in Consumer Desire
  - Supporting adoption of new technologies, IT and BT

- Organize and assist farmers to improve "bargaining power" against huge retailers
  - Educations of management, marketing skill
  - Develop "Niche Markets" among huge retailers