KIEP

Working Paper 00-10

Liberalization of Trade in Services and Productivity Growth in Korea

Jong-Il Kim and June-Dong Kim

KOREA INSTITUTE FOR
INTERNATIONAL ECONOMIC POLICY

Working Paper 00-10

Liberalization of Trade in Services and Productivity Growth in Korea*

Jong-Il Kim and June-Dong Kim

2000. 12

* An earlier version of this paper was presented at the Eleventh NBER Annual East Asian Seminar on Economics held in Seoul, Korea on June 22-24, 2000. The main rresults of this paper were also introduced to the WTO members at the special session of the Council for Trade in Services on October 6, 2000. The authors thank Takatoshi Ito, Kazumasa Iwata, mahazani Zainai-Abidin, and other participants of the NBER East Asian Seminar, for their invaluable suggestions and comments.

Executive Summary

Due to industrialization that had put priorities to manufacturing at the expense of services, the service sector in Korea was grossly underdeveloped up to the early 1990s. Numerous sector specific regulations and restrictions on FDI prevented competition and impeded the offering of higher value services. In 1990, the labor productivity of the Korean service subsectors was much lower than that of the advanced countries. The labor productivity of "distribution services, etc.", in particular, was less than one-fifth that of the U.S. in 1990.

Since the mid-1990s, the Uruguay Round negotiations and the OECD accession enabled the Korean government to gradually open its service sector to foreign suppliers. As a result, distribution services, business services, entertainment and recreational services and other personal services, in particular, have been almost completely liberalized.

The financial crisis of 1997 also gave momentum to the elimination of horizontal and sector-specific market access restrictions in the service sectors beyond the commitments made in the WTO and the OECD. The Korean government has accelerated its liberalization schedules for transportation services, financial services and telecommunication services since 1998. As of July 2000, the degree of liberalization of the Korean service sector is comparable to that of the developed countries, with almost all the service subsectors open, with the exception of a few areas sensitive to national security, culture, and political stability.

Thanks to the accelerated liberalization, Korea's trade in services increased rapidly in the 1990s. Trade in services, by the three modes of supply (cross-border supply, consumption abroad and movement of natural persons), except commercial presence, increased from $22.8 billion in 1991 to $49 billion in 1998. More significant increase in trade in services occurred through commercial presence. FDI inflows in services increased from $1.6 billion in 1982-90 to $6.3 billion in 1998-99. In particular, FDI in distribution services and transportation services increased remarkably in 1996-97. FDI in financial services and other services experienced a sharp increase after the financial crisis.

The liberalization of services is presumed to bring productivity gains in the service sector and also in the manufacturing sector which use liberalized services as inputs. By examining the changes in productivity of the service subsectors in 1970-97, we find that liberalization may have positively contributed to the productivity of the liberalized service subsectors.

"transport and communications", which was partially liberalized in the 1990s, showed a gain in total factor productivity growth in the late 1990s, from 2.2 percent in 1990-95 to 4.12 percent in 1995-97. The total factor productivity in "distribution, etc.", which was almost completely liberalized in 1996, also improved in the late 1990s, from –0.41 percent in 1990-95 to –0.02 percent in 1995-97. Whereas, "finance, etc.", which had been nearly closed until the late 1990s, showed negative total factor productivity growth rates throughout the periods studied.

The hypothesis that liberalization in services may increase the productivity of the

manufacturing subsectors which use liberalized services as inputs is also tested by comparing the growth rates of productivity by manufacturing subsectors and the input coefficients of services to those manufacturing subsectors. However, it seems to be difficult to extract any consistent pattern, possibly due to the relatively small input coefficients of services in the manufacturing subsectors.

Considering the positive impacts of the liberalization of trade in services on domestic economy, it is in the interest of the Korean economy to continue the liberalization process and refrain from retreating. As entry barriers have been widely removed, most remaining obstacles are the internal barriers faced by both foreign and domestic suppliers. These barriers are more difficult to remove because they are part operating practices, part regulation and part cultural.

In particular, the ambiguous tax laws as well as cumbersome regulations are regarded as the most serious impediment to foreign investors. This implies that deregulation should focus not only on reducing the number of regulations but also on enhancing its transparent enforcement. In the process of deregulation, the government should also be attentive to reducing excessive regulations for fulfilling their objectives.

Another important area which has not been adequately addressed is labor market inflexibility. The limitations on layoffs may discourage foreign service suppliers from establishing local subsidiaries, which otherwise can create employment. Establishing an adequate social safety net and effective retraining programs is thus needed not only because it enhances labor market flexibility but also because it enables the government to liberalize mode 4---temporary entry of service providers.

Dr. Jong-Il Kim, a professor of economics at the Dongguk University, earned his Ph.D. at Stanford University. He specializes in productivity and economic growth. Address: Department of Economics, Dongguk University, Pil-Dong, Jung-Gu, Seoul 100-715, Korea: (Tel) 82-2-2260-3274; (Fax) 82-2-2260-3684; (E-mail) jongil@dgu.ac.kr

Dr. June-Dong Kim, a research fellow at the Korea Institute for International Economic Policy (KIEP), earned his Ph.D. in Economics at the University of Chicago. He specializes in international trade policy and direct investment. Address: 300-4 Yomgok-Dong, Seocho-Gu, Seoul 137-747, Korea; (Tel) 82-2-3460-1129; (Fax) 82-2-3460-1077; (E-mail) jdkim@kiep.go.kr

Contents

Tables

Figures

I. Introduction

Korea's economic development over the past 25 years was based on industrialization with priority being given to the manufacturing sectors at the expense of services. However, since the financial crisis of late 1997, the importance of the service sector has been increasingly recognized and comprehensive reforms in the service sector were recommended in order to restore the crisis-ridden economy to its previous growth path (McKinsey, 1998).

The liberalization of services can bring potential gains in productivity in service sectors that are subject to technology transfers and economies of scale. These are similar to the productivity effects of foreign direct investment (FDI) in the manufacturing sector, since a significant portion of service supplies occur through FDI. Various studies show positive evidence of the productivity spillovers of foreign direct investment (Caves, 1974; Globerman, 1979; Blomstrom and Persson, 1983; Borensztein, de Gregorio and Lee, 1998). Foreign investment may also raise productivity by enhancing competition. Based on an analysis of approximately 670 U.K. companies, Nickell (1996) showed that competition, as measured by increased numbers of competitors or by lower levels of rents, is associated with a significantly higher rate of total factor productivity growth. Using firm-level panel data of U.S. automobile component manufacturers, Chung, Mitchell and Yeung (1994) found that productivity gains among the host country suppliers largely stem from the increase in competition created by foreign direct investment.

Moreover, the liberalization of trade in services may result in improved productivity in other sectors, including manufacturing, due to the resulting access to a broader variety, better quality and lower cost of inputs. Using a model of increasing returns due to specialization, Rivera-Batiz and Rivera-Batiz (1992) argued that foreign direct investment in the business service sector stimulates specialization and raises the productivity of the industry that uses them. Markusen (1989) also demonstrated that allowing trade in producer services is superior to allowing trade in final goods only, due to the complementarity between domestic and foreign producer services.

This paper investigates the changes in productivity growth rates of Korean service and manufacturing subsectors in relation to the liberalization of trade in services. Since Korea underwent accelerated liberalization of the service sector in the 1990s, we try to examine whether the service subsectors which were liberalized, and the manufacturing subsectors which use liberalized services as inputs, experienced productivity gains in this period.

This paper is organized as follows: Section II reviews the evolution of liberalization in services in Korea, as well as the recent trends of trade in services. Section III illustrates the case of distribution services, which were liberalized almost completely in the 1990s. Changes in productivity in the service and manufacturing subsectors are explored in Section IV by tabulating the trends of labor and total factor productivity. We then investigate whether liberalized service subsectors posted relatively higher productivity growth and contributed to productivity gains in the manufacturing sub-sectors. Concluding remarks and policy implications are provided in Section V.

II. Evolution of Services Liberalization and Recent Trends of Trade in Services

1. Evolution of services liberalization

Unlike the manufacturing sector in which FDI had been liberalized since the early 1980s, much of the services liberalization has only taken place since the mid-1990s. Table 1 shows that the Korean government has liberalized 154 business categories (at the KSIC five digit level) in the service sector, completely or partially, since 1993. Many of these service subsectors were liberalized as a result of the Uruguay Round negotiations and Korea's accession to the OECD in 1996. Additional liberalization took place after Korea suffered from economic crisis in 1997. Since 1998, as a way of attracting more foreign investment and enhancing efficiency, the Korean government accelerated the liberalization of the service sector beyond the level of its OECD and WTO commitments.

Comparison of service subsectors in which FDI was restricted as of January 1990 (Appendix Table 1) with those as of November 1997 (Appendix Table 2) shows that distribution services, business services, entertainment and recreational services and other personal services have been liberalized since 1990. Also, transportation services, financial services and telecommunication services were partially liberalized during this period.

More drastic liberalization has been implemented since the financial crisis of late 1997. Twenty two business categories, most of which are in the service sector, including real-estate rental and sales, land development, waterworks and investment companies, fully opened in 1998. By May 1999, three more service business categories, the publishing of books, outer maritime transportation and the operation of casinos, fully

opened. Furthermore, existing ceilings on foreign equity ratios were raised in six business categories, newspaper publishing, cable broadcasting, wire telegraph and telephone, and wireless telegraph and telephone, in 1999.

Table 1

Korea's FDI liberalization, 1993-2000 (As of May 2000)

Unit: Number of business categories[1)]

Classification	*Total*	*Liberalized*[3)]								
		1993	*1994*	*1995*	*1996*	*1997*	*1998*	*1999*	*2000*	*Remaining Restricted*
Manufacturing	585	2	1	-	6	1	2	2	-	0
Services	495	9	23	42	39	16	20	3	2	2 (22)[4)]
Others [2)]	68	5	6	2	4	10	-	-	1	2 (2)
Total	1,148[5)]	16	30	44	49	27	22	5	3	4 (24)

Note: [1)] The business categories are at the Korean Standard Industrial Classification (KSIC) five digit level.
[2)] "Others" denote agriculture, fisheries and mining.
[3)] "Liberalized" includes both complete and partial liberalization.
[4)] The number of partially restricted business categories is in parentheses.
[5)] The business categories including government services and nonprofit organizations, where FDI is prohibited by domestic law, are not counted.
Source: Ministry of Finance and Economy, "Five-Year Foreign Investment Liberalization Plan," various years, and Ministry of Commerce, Industry and Energy, "Consolidated Public Notice for Foreign Investment," May 2000.

As a result of the liberalization, only 24 business categories in the service sector remained to be completely liberalized as of May 2000. Among them, radio and television broadcasting are the two categories in which FDI is wholly restricted. FDI in 22 business categories, including the publishing of newspapers, coastal water transport, air transport, telecommunications, investment trust companies and electric power generation, are partially restricted (Table 2).[1]

[1] Even though FDI in legal services is not restricted, foreign lawyers are not allowed to practice unless they acquire domestic licenses.

Table 2

Service business categories in which FDI is restricted, Korea (As of May 2000)

Wholly restricted	Partially restricted
Radio broadcasting Television broadcasting	Wholesale of meats Publishing (newspapers, periodicals) Processing of nuclear fuel Electric power generation Coastal water transport (passenger, freight) Air transport (scheduled, non-scheduled) Telecommunications (leased line, wired, mobile, cellular, resellers, other) Domestic banking (special banking) Investment trust companies Program supplying Cable broadcasting, Satellite broadcasting News agency activities Radioactive waste disposal

Source: Ministry of Commerce, Industry and Energy, "Consolidated Public Notice for Foreign Investment," May 2000.

2. Recent trends of trade in services

The service sector is gaining importance in the Korean economy, with its share of GDP and employment having increased from 43.9 percent and 39.5 percent in 1980 to 52.7 percent and 59.8 percent in 1998, respectively. However, the share of the service sector in the domestic economy is lower than that of the United States, Singapore, and Japan, where its portion of the GDP in 1996 was 74.1 percent, 70.9 percent and 64.4 percent, respectively.

Table 3 shows Korea's trade in services by mode of supply in the 1990s. The sum of exports and imports, of cross-border supply, which were measured by commercial services in balance of payments (BOP), except for tourism, increased from about $16 billion in 1991 to $39.6 billion in 1998. Trade in services by the three modes of supply (cross-border supply, consumption abroad and movement of natural persons), except commercial presence, increased from $22.8 billion in 1991 to $49 billion in 1998. In 1998, the total amount of Korea's trade in services, except commercial presence, was almost 20 percent of the amount of trade in goods. The share in the world's total trade in services, except commercial presence, also rose from 1.2 percent in 1991 to 1.8 percent in 1998.

Table 3

Trade in services by modes of supply, Korea (1991, 1995, 1998)

Unit: US$ million, %

	1991		1995		1998	
	Exports	Imports	Exports	Imports	Exports	Imports
Cross-border Supply[1)]	7,158	8,953	17,677	19,465	18,647	21,053
Transportation	3,873	4,897	9,272	9,645	10,204	8,983
Communications	353	204	561	642	656	1,133
Consumption Abroad[2)]	2,856	3,214	5,150	6,341	5,933	2,898
Commercial Presence	NA	NA	NA	NA	NA	NA
Movement of Natural Persons[3)]	604	54	774	132	446	4.2
Total	10,618 (1.2)	12,221 (1.3)	23,601 (1.8)	25,938 (2.0)	25,026 (1.8)	23,993 (1.7)

Note: Percentage shares in the world's trade in services are in parentheses.

[1)] BOP commercial services minus travel.

[2)] BOP travel.

[3)] BOP compensation of employees.

Source: Balance of Payments Statistics Yearbook, 1999. International Monetary Fund.

Table 4 reveals that a significant increase in trade in services occurred, through commercial presence, since the 1980s. FDI inflows in services increased from $1.6 billion in 1982-90 to $6.3 billion in 1998-99. Hotels were the largest recipients through the 1980s. In the 1990s, FDI increased remarkably in distribution services (wholesale and retail), transportation services, financial services and other services, which are mainly composed of business services. FDI in distribution services increased from $20.1 million in 1982-90 to $586.6 million in 1996-97. FDI in transportation services also increased, from $9.9 million in 1991-95 to $150.2 million in 1996-97. FDI in financial services and other services experienced a sharp increase after the financial crisis. FDI in financial services increased from $480.8 million in 1996-97 to $2.3 billion in 1998-99. The increase in FDI in other services was almost six fold during the same period, from $367.4 million in 1996-97 to $1.8 billion in 1998-99.

Table 4

FDI inflows in service subsectors, Korea (1962-1999)

Unit: US$ million, %

Subsector	1962-81	1982-90	1991-95	1996-97	1998-99
Total FDI in services	412.2	1,600.2	2,078.7	2,213.1	6,330.9
Electricity & Gas	0	0	26.1	0	378.7
Construction	10.4	40.1	21.4	79.8	9.6
Wholesale & Retail	0	20.1	103.4	586.6	956.7
Trading	0.4	55.5	394.7	306.5	336.1
Restaurants	0	4.2	60.2	7.1	9.4
Hotels	206.0	956.9	362.3	211.4	64.5
Transportation	28.7	9.6	9.9	150.2	9.4
Financial	109.7	384.9	710.3	480.8	2,292.9
Insurance	3.0	77.3	158.0	23.2	407.9
Real Estate	0	0	1.8	0.1	33.0
Others	53.9	51.4	230.5	367.4	1,832.5
Total FDI into Korea	1,477.8	4,385.1	5,057.2	5,394.2	15,489.7

Note: Based on actual investment.
Source: "Trends in Foreign Direct Investment," Ministry of Commerce, Industry, and Energy, January 31, 2000.

III. The Experience of Liberalization in Distribution Services

In this section, we focus on the distribution sector, which experienced a significant liberalization during the 1990s, to illustrate how liberalization affects the productivity of a specific sector.

Distribution services had been one of the least developed sectors in Korea, up to the mid-1990s, along with financial services. Mom-and-pop stores having fewer than five employees accounted for approximately 80 percent of Korea's $116 billion retail market in 1996. The productivity of Korea's wholesale and retail service sector, in terms of sales per establishment or sales per employee, was far below that of Japan in 1994 (Table 5).

Table 5

Comparison of productivity in distribution services, Korea and Japan, 1994

Unit: US$ thousand

	Wholesale		Retail	
	Korea	Japan	Korea	Japan
Sales per establishment	693	11,724	117.8	935.2
Sales per employee	170	1,099	57.8	190.0

Note: Applied exchange rates are 1U$=716.4 Korean, 1U$=102.18 Japanese Yen.
Source: "Annual Report on the Survey of Wholesale and Retail Trade as of 1994," National Statistical Office, R.O.K. and "Annual Statistical Report of Commerce in 1994," Ministry of Industry and Trade, Japan.

We may attribute the low productivity of the Korean distribution services to the regulations on zoning, land development and to the restrictions on FDI. The regulations on zoning and land development reduced the availability of land, limiting the scale of operation, and the restrictions on FDI prevented exposure to foreign best practices.[2]

However, a remarkable transformation has taken place in Korea's distribution industry since the government lifted some of the restrictions that kept foreign service suppliers out of the country before 1996 (Table 6). [3] In particular, store- and space-related limits on retailing were eliminated for both domestic and foreign retail firms. As a result, a number of large-sized discount stores or hyper-markets have been established by both domestic and foreign firms since 1996. The total number of hyper-market stores will reach 164 in 2000 and almost 30 percent of them will have been established by foreign firms (Table 7).

The increasing number of hyper-markets is changing the manufacturer-dominated structure of the Korean retail industry which had deterred productivity improvements and price competition. The increased buying-power of the hyper-markets puts price determining in the hands of retailers rather than manufacturers, leading to price

[2] In terms of deregulation of zoning, the semi-agricultural and forest areas were redefined to allow retail stores occupying less than 30,000m^2 to be built in 1993. In 1996, large discount retailers, under 10,000m^2 were allowed to do business in the green areas, where development is regulated by the law. The objective was to promote discount stores. (Mckinsey, 1998)

[3] In most of the service subsectors, the Korean government implemented domestic deregulation and external liberalization almost simultaneously. It used external commitment to liberalization in reducing any opposition or resistance to domestic deregulation or implemented domestic deregulation to help domestic firms establish market position before foreign penetration. Hence, it is difficult to differentiate the impact of domestic deregulation from external liberalization.

competition. Foreign retail firms also transferred advanced techniques in merchandising and inventory management, as well as new technologies, such as point of sales (POS) systems.

Table 6

Liberalization of distribution services, Korea, 1989-2000

Year	Liberalization Measures
1989	·Allow FDI in wholesale of medicine ·Expand permissible imports by branches of foreign companies
1991	·Allow FDI in retailing, up to 10 stores of 1,000㎡ or less, for each foreign invested company
1993	·Expand store-and space-related limits to 20 stores of 3,000㎡ or less for each company
1996	·Eliminate requirements on the number of stores and space **(Allowed establishment of hyper-markets)** ·Liberalize 5 business categories, including commodity chains, and the retailing of meat
1997	·Liberalize 10 business categories, including general trading and the retailing of grain
1998	·Abolish economic needs tests on department stores and shopping centers ·Liberalize operation of gas stations
2000	·Allow FDI in the wholesaling of meat

Source: Ministry of Commerce, Industry and Energy, Department of Distribution.

Table 7

Trends of the establishment of hyper-markets in Korea, 1997-2000

Name	Year of Entry	Number of Stores			
		1997	1998	1999 (E)	2000 (E)
Carrefour	1996	3	6	11	20
Wal Mart	1996	4	4	5	10
Costco	1998 (1994)[1)]	2	3	3	5
Promodes	1999	-	-	2	5
Tesco	1999 (1997)	1	1	2	7
Total for foreign Companies	-	10 (15%)[2)]	14 (16%)	23 (20%)	47 (29%)
Total for Korean companies	-	55 (85%)	74 (84%)	92 (80%)	117 (71%)
Total	-	65	88	115	164

Note: [1)] Entry years of the acquired local company in parentheses.
[2)] Shares in total number of stores are in parentheses.
Source: "Management Revolution in 21st Century Asian Retailing," Korean Association of Retailers, 1999. 12. 27. (In Korean)

Table 8 presents the change in number of establishments per 1,000 residents, workers per establishments and floor space per establishments since 1982. The Korean distribution sector has experienced growth in terms of number of establishments as well as the size of establishments. Particularly, the number of wholesale establishments has grown fast from 1.2 per 1,000 residents in 1982 to 3.1 in 1998. The number of retail stores reached 16.6 per 1,000 residents in 1990, far surpassing Japan. Although the Japanese distribution sector is accused of inefficiency for its many small establishments, the Korean distribution sector may be regarded as worse with much smaller establishments in terms of their size.[4] However, since in the mid-1990s, the number of establishments in retailing began to decline, while the size continued to grow. During this period, the domestic retailing sector began to be exposed to foreign competition as foreign firms started to enter the market as shown in Table 7.

[4] For a discussion on the efficiency of Japanese distribution system, see Ito and Maruyama (1991) and Anwar and Taku (1993).

Table 8

Trends of sizes of establishments in distribution services, Korea and Japan, 1982-1998

Number of establishments per 1000 residents

	Korea		Japan	
	Wholesale	Retail	Wholesale	Retail
1982	1.2	13.8	3.3	14.5
1985	-	-	3.1	13.5
1986	1.7	15.5	-	-
1988	1.9	16.0	-	-
1990	2.1	16.6	3.8	12.8
1992	2.6	16.9	-	-
1994	2.7	17.0	-	-
1996	3.2	16.9	-	-
1998	3.1	15.6	-	-

Workers per establishment

	Korea		Japan	
	Wholesale	Retail	Wholesale	Retail
1982	3.8	1.7	9.3	3.7
1985	-	-	9.4	3.9
1986	5.0	1.9	-	-
1988	5.4	1.9	-	-
1990	5.5	1.9	-	-
1992	4.7	1.9	-	-
1994	5.1	2.0	-	-
1996	4.3	2.1	-	-
1998	4.2	2.0	-	-

Floor space per establishment (㎡)

	Korea		Japan	
	wholesale	retail	wholesale	retail
1982	-	-	-	55.4
1985	-	-	-	58.0
1986	-	-	-	-
1988	-	-	-	-
1990	-	-	-	-
1992	75.7	35.6	-	-
1994	92.7	38.7	-	-
1996	129.4	45.8	-	-
1998	136.4	52.8	-	-

Note: The data on Korea are constructed from various issues of the "Annual Report on the Survey of Wholesale and Retail Trade," published by the Korean National Statistical Office. The data on Japan are from Ito and Maruyama(1991) and Anwar and Taku (1993).

Figure 1 decomposes the growth of sales into the growth of the number of establishments and the growth of sales per establishment. The total amount of sales has grown steadily except for the period 1996-98, when Korea fell into a severe recession due to the financial crisis. In wholesale services, the opening of new establishments contributed to the growth of sales. However, in retail services, the growth of sales came largely from the growth of sales per establishment. Particularly, in contrast to the wholesale sector, opening of new retail stores has slowed down in the 1990s and the number of establishment even declined from 1996 to 1998.

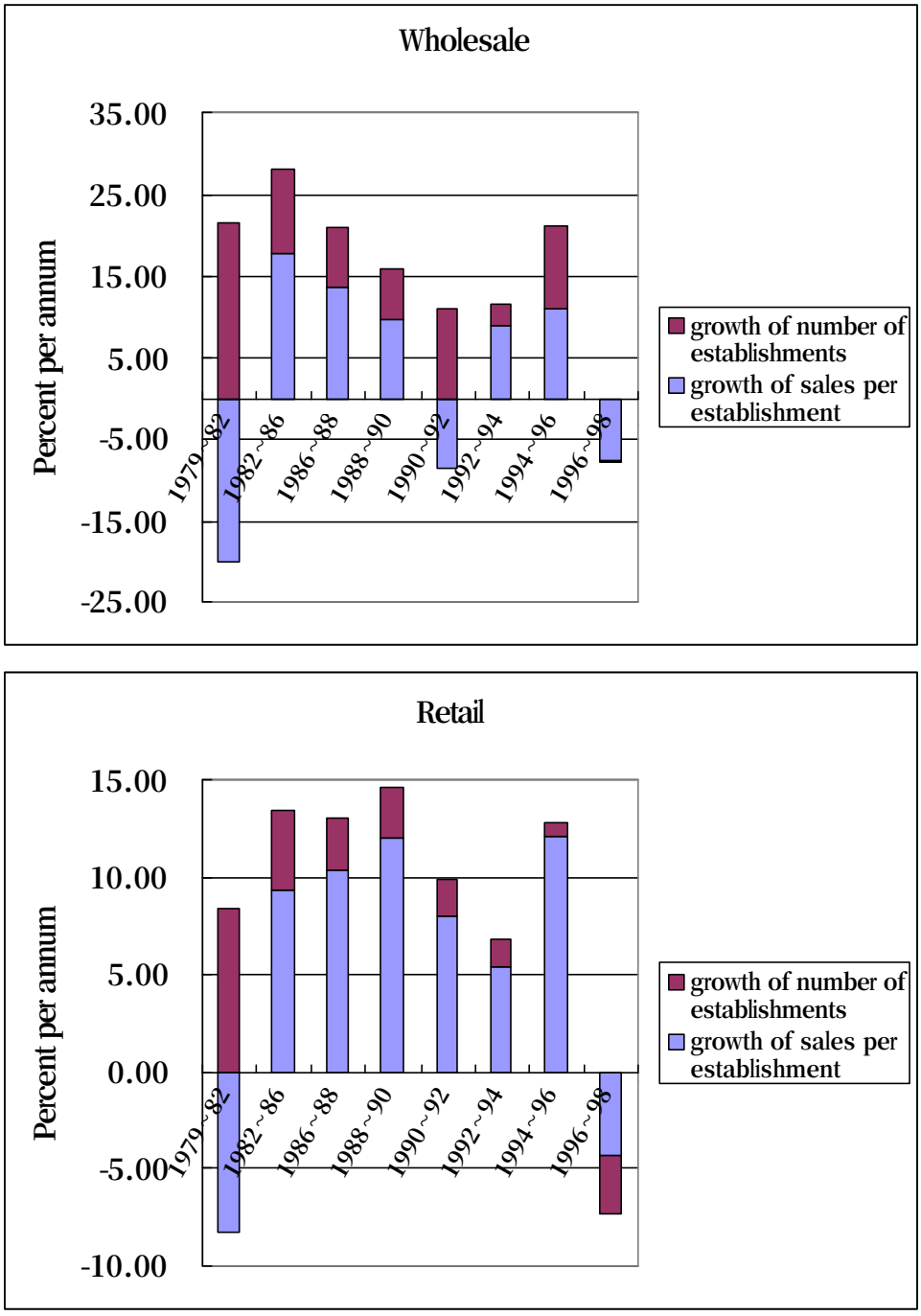
Figures 2 and 3 show sales per employee and sales per establishment. The sales per employee and sales per establishment, which are widely used as measures of productivity and efficiency of the distribution system, show that the productivity of the Korean distribution sector has continually increased over time. Both sales per worker and establishment increased notably in 1996, which may be a result of the service liberalization and resulting FDI inflow. However, we have to wait to see whether this trend will continue after the economy recovers from the deep recession in 1998.

Figure 4 breaks down the sales per employee of retail stores depending on their size. It shows that sales per employee of large retail stores, with 5 or more employees, recorded a noticeable increase in 1998, while sales per employee of small retail stores, with fewer than 5 employees, has been stagnate since 1996. This may be because liberalization of the retail sector brought about enhanced competition in the large-sized retail stores through the establishment of hyper-markets by foreign retailers. The role of liberalization in enhancing competition may be ascertained by the lowered price margins of the supermarkets and department stores, from 17.8 percent and 24.2 percent in 1995 to 13.6 percent and 21.7 percent in 1998, respectively (Table 9). This reveals that the supermarkets and department stores face direct challenges from foreign competitors.

In sum, a rough observation of the measures of efficiency points to enhanced productivity of the Korean distribution services with the liberalization in the 1990s, although we cannot provide definite evidence due to the limited data. Particularly, the inflow of FDI with the opening of hyper-markets by foreign firms introduced best practice management and challenged domestic retail stores. In addition, changing shopping patterns with the introduction of discount stores may have forced many small stores to specialize their services, and existing domestic retail firms to enlarge their size to take advantage of scale effect.

Figure 1

Decomposition of sales growth in distribution services, Korea, 1979-98



Note: The amount of sales is deflated using the producer and consumer price index for wholesale and retail, respectively.

Source: "Annual Report on the Survey of Wholesale and Retail Trade," various years, National Statistical Office, Republic of Korea.

Figure 2

Sales per employee in distribution services, Korea, 1979-98

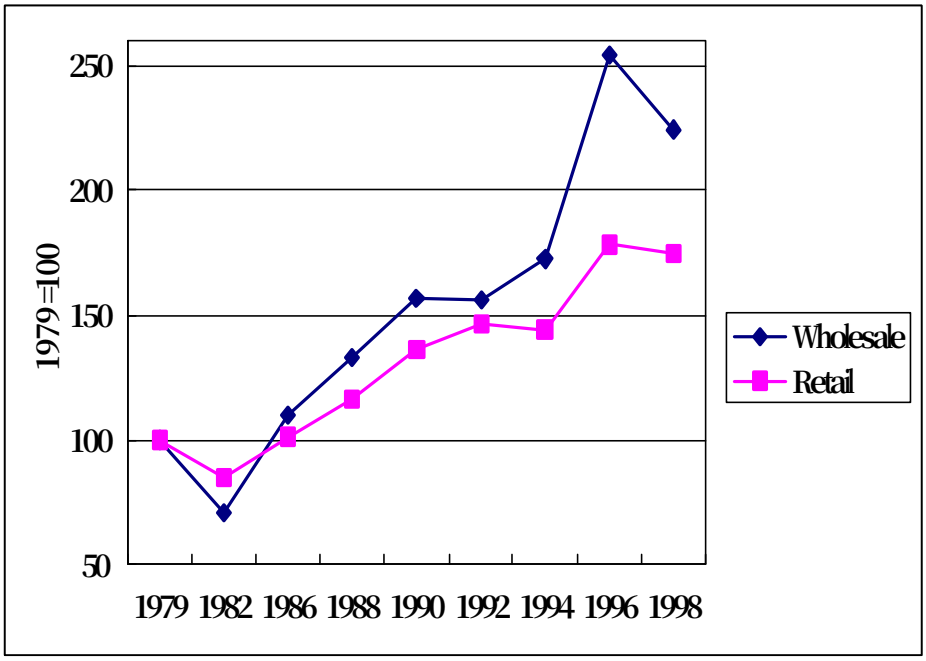
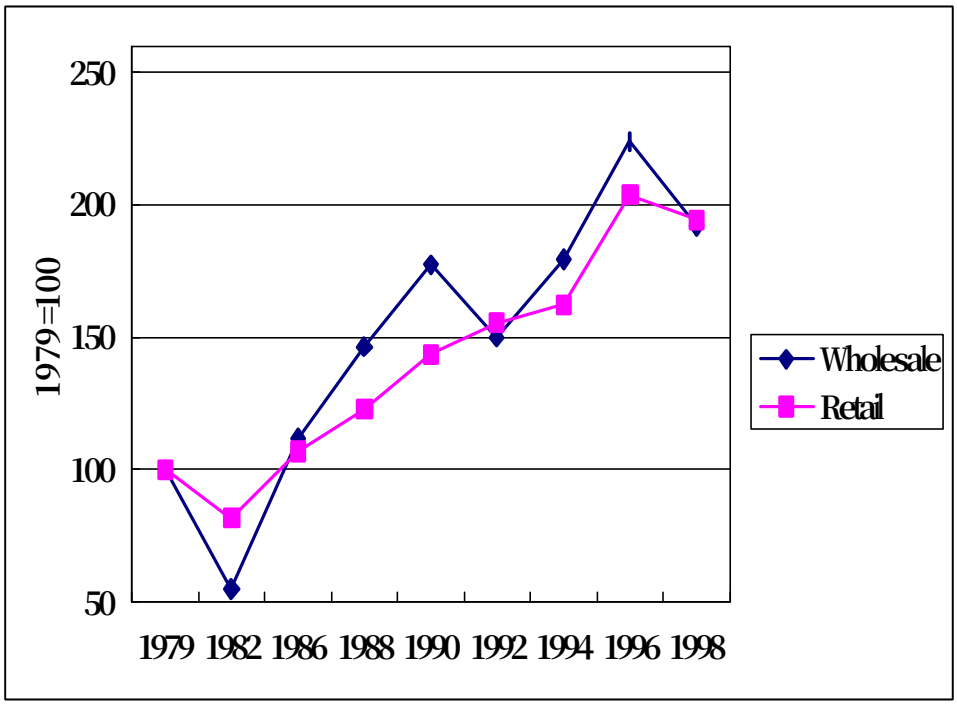


Figure 3

Sales per establishment in distribution services, Korea, 1979-98



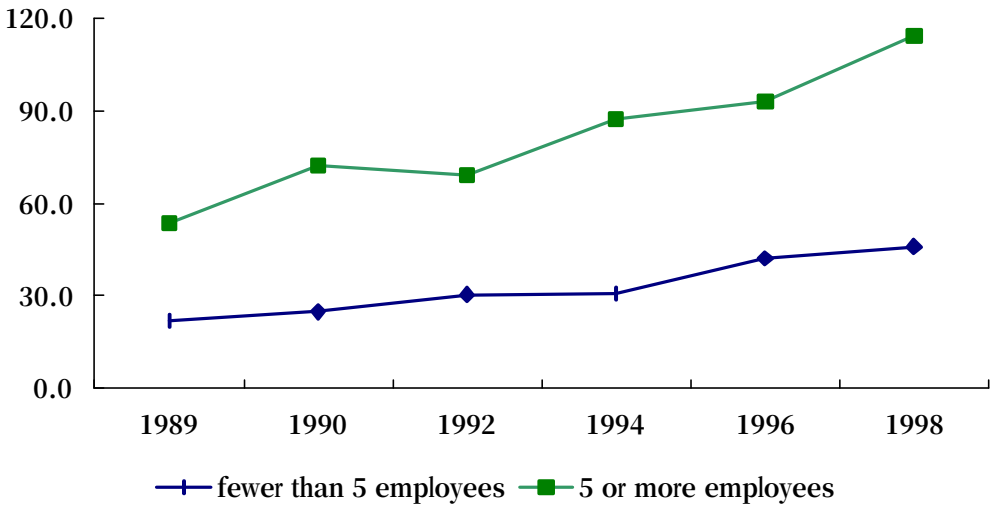
Note: Same as in Figure 1.
Source: Same as in Figure 1.

Figure 4

Sales per employee in small and large-sized retail stores

Korea, 1989-1998

Unit: million won



Source: "Annual Report on the Survey of Wholesale and Retail Trade," various years, National Statistical Office, Republic of Korea.

Table 9

Price margin trends for supermarkets and department stores

Korea, 1995-1998

(Unit: %)

	1995	1996	1997	1998	Change in 1995-98
Supermarkets	17.8	16.1	15.0	13.6	-4.2
Department Stores	24.2	24.8	22.6	21.7	-2.5

Source: "Impact of Changes in Distribution Structure on Price Levels," Bank of Korea, 2000. 1. 26. (In Korean)

IV. Changes in Productivity Growth Rates[5]

This section investigates whether or not the productivity changes in the service and manufacturing sectors in the 1990s were associated with services liberalization. We first compare the level of labor productivity of the Korean service industry with those in some of the advanced countries. The growth rates of labor productivity and total factor productivity (TFP) in the Korean service sector since 1970 are then examined. Finally, we will try to see whether or not productivity growth in the manufacturing sector is associated with services liberalization.

1. Sectoral labor productivity: an international comparison

In Table 10, we compare the levels of labor productivity in Korea with those of some developed countries in 1990. Labor productivity is calculated as the value added per worker. For the G-5 countries, the value added is converted, for comparison, by using the 1985 purchasing power parity exchange rates. Since the purchasing power parity exchange rate for each sector is not available for Korea, we convert the labor productivity of Korea by using the average market exchange rate for the period 1980-1990.

Table 10

Labor productivity of selected countries relative to the U.S. in 1990

	Agriculture	Mining	Manufacturing	Construction	Utilities	Transportation, Communication	Distribution, etc	Finance, etc	Social Services, etc	Total Economy
France	74	31	82	86	84	73	100	105	130	93
West Germany	53	19	70	81	63	60	70	166**	178	86
UK	53	NA	66	90	85	54	60	257**	86	73
US	100	100	100	100	100	100	100	100	100	100
Japan	25	31	79	89	106	50	70*	148	78	70
Korea	16	10	34	42	68	23	18	40	15	26

Note: "utilities" denote electricity, water and gas. "distribution, etc" denotes retail, wholesale, restaurants and hotels. "finance, etc" denote finance, insurance, real estate and business services. "social services, etc" denote community, social and personal services.

*The figure is for the comparison of retail and wholesale trade only, excluding restaurants and hotels.

** The figure is for the comparison of finance and insurance only, excluding real estate.

[5] The data used for this section are described in the appendix.

Table 10 shows that, in 1990, the labor productivity of the Korean service sector, except for "utilities," was much lower than that of the United States, the European countries and Japan. The labor productivity of "construction" and "finance, etc." in Korea was about 40 percent that of the U.S. Even worse was the labor productivity of "distribution, etc." and "social services, etc.," which were 18 percent and 15 percent of U.S. levels, respectively.

2. Productivity growth in services

Table 11 tabulates the growth rates of productivity in the Korean service subsectors since 1970. "finance, etc.," practically closed to foreign suppliers until the late 1990s, experienced the worst performance with negative growth rates in labor productivity throughout the period, except for 1985-90. It was during this period that the Korean economy was booming with a large trade surplus. Whereas, "distribution, etc.," which was almost completely liberalized in 1996, and "transport and communication," which was partially liberalized in the 1990s, showed increases in labor productivity in the late 1990s, from 5.09 percent and 0.41 percent in 1990-95 to 7.17 percent and 1.54 percent in 1995-97, respectively.

Table 11

Annual average growth rates for labor productivity in service subsectors, Korea, 1970-1997

Period	Manufacturing	Construction	Utilities	Transportation, Communication	Distribution, etc.	Finance, etc.	Social Services, etc.	Total Economy
70 - 75	5.62	- 4.60	10.62	11.20	5.13	- 2.45	7.64	5.26
75 - 80	6.06	2.10	12.54	2.24	- 2.87	- 6.26	3.16	4.40
80 - 85	6.39	6.16	15.95	4.26	3.39	- 1.70	7.65	6.96
85 - 90	4.76	4.19	3.05	3.49	7.37	1.02	3.65	6.08
90 - 95	8.63	- 0.14	9.43	5.09	0.41	- 1.06	6.46	5.34
95 - 97	9.87	1.48	6.32	7.17	1.54	- 1.13	0.57	4.83
70 - 80	5.84	- 1.25	11.58	6.72	1.13	- 4.36	5.40	4.83
80 - 90	5.58	5.17	9.50	3.88	5.38	- 0.34	5.65	6.52
90 - 97	8.98	0.32	8.54	5.68	0.74	- 1.08	4.78	5.20
70 - 97	6.56	1.54	10.02	5.40	2.60	- 2.02	5.33	5.55

Since labor productivity is influenced by the magnitude of capital, which is affected by FDI inflows, we next compare changes in total factor productivity in the same period. Total factor productivity is defined as:

$$TFP = \frac{Y}{K^{a} L^{1-a}}$$

where Y, K and L are output, capital and labor inputs, respectively and α is the elasticity of the production of capital. Thus, total factor productivity (TFP) growth is calculated as the residual of output growth net of the weighted growth of factor inputs. The underlying assumption is to use the factor shares in total costs as factor weights under constant returns to scale, Hicks neutral technical progress and the profit maximization of firms in competitive markets. In our study, we consider two inputs, capital and labor.

It is desirable to adjust capital and labor inputs by their quality measures. However, the data on the quality of inputs at the sectoral level is not available. We use gross fixed capital stock for capital inputs and total employment for labor inputs. It is also desirable to have actually utilized input levels by using working hours and utilized capital. However, the data on hours worked, both for capital and labor, is limited in its use for our purposes. Regarding working hours, the published data concerns the hours paid rather than hours actually worked. Also, the capacity utilization rate at the subsector level is not available, particularly for the service sectors. Therefore, due to the failure to allow for cyclical variations in hours worked and capacity utilization, there is a cyclical bias to our measurements of TFP growth in the short run. However, this problem is lessened in the long run by the booms being offset by recessions.

Table 11 shows that similar patterns can be detected for changes in total factor productivity. As was the case for labor productivity, “finance, etc.” recorded negative TFP growth rates throughout the period, except for 1985-90. “transport and communications” showed a gain in TFP growth in the late 1990s, from 2.2 percent in 1990-95 to 4.12 percent in 1995-97. The trend of TFP growth for “distribution, etc.” also improved in the late 1990s, from –0.41 percent in 1990-95 to –0.02 percent in 1995-97.

Table 12

Annual average growth rates of total factor productivity in service subsectors, Korea, 1970-1997

	Manufacturing	Construction	Utilities	Transportation, Communication etc	Distribution, etc	Finance, etc	Social Services, etc	Service Total	Total Economy
70 - 75	3.58	- 2.04	7.52	6.63	4.16	- 4.87	5.32	2.17	1.52
75 - 80	5.23	- 0.64	3.29	- 0.58	- 3.93	- 5.60	2.54	- 2.35	- 1.13
80 - 85	5.81	1.81	3.33	- 2.20	1.65	- 1.56	7.54	0.77	2.89
85 - 90	2.99	3.39	6.56	1.69	3.95	1.27	2.65	3.20	2.65
90 - 95	4.90	- 2.52	2.39	2.20	- 0.41	- 2.82	4.44	- 0.31	0.99
95 - 97	- 0.54	- 0.01	2.71	4.12	- 0.02	- 2.72	- 1.04	- 0.15	0.71
70 - 80	4.41	- 1.34	5.41	3.02	0.11	- 5.24	3.93	- 0.09	0.20
80 - 90	4.40	2.60	4.94	- 0.25	2.80	- 0.15	5.10	1.98	2.77
90 - 97	3.35	- 1.80	2.48	2.75	- 0.30	- 2.79	2.87	- 0.26	0.91
70 - 97	4.13	0.00	4.47	1.74	1.00	- 2.72	4.09	0.63	1.34

However, we cannot strictly prove that productivity improvement was caused by liberalization in services from the trend of labor productivity and TFP growth. As already mentioned, the two measures of efficiency considered above are subject to cyclical fluctuations and there may be a time lag for the liberalization measure to take effect on sector-wide productivity change. Considering that meaningful liberalization in the Korean service sectors has only been implemented since the mid-1990s, it may be too early to demonstrate any causal relationship between productivity changes and services liberalization.

3. Contribution of services liberalization to manufacturing

The hypothesis that liberalization in services may increase the productivity of manufacturing subsectors which use liberalized services as inputs can be examined by comparing the growth rates of productivity by manufacturing subsectors (Table 13) and the input coefficients of services to those manufacturing subsectors (Table 14).

Table 13

Annual average growth rates of total factor productivity in manufacturing, Korea, 1970-1997

	Food	Textiles	Wood	Paper	Chemicals	Nonmetals	Metals	Machinery	Other	Manufacturing Total
70 - 75	2.57	8.11	6.04	- 1.02	- 1.42	5.54	23.62	7.96	8.23	3.58
75 - 80	9.15	4.67	- 3.63	5.43	6.31	- 0.09	16.09	2.00	7.52	5.23
80 - 85	1.90	4.02	10.32	8.37	3.38	4.64	9.90	8.69	7.51	5.81
85 - 90	2.59	1.00	6.39	1.16	3.04	- 2.00	6.74	2.97	- 5.61	2.99
90 - 95	0.69	3.49	4.34	9.14	2.81	0.13	8.18	5.96	- 2.24	4.90
95 - 97	0.04	- 1.02	2.66	- 1.47	0.65	- 0.55	- 0.13	- 1.47	1.71	- 0.54
70 - 80	5.86	6.39	1.20	2.21	2.44	2.73	19.85	4.98	7.88	4.41
80 - 90	2.24	2.51	8.36	4.77	3.21	1.32	8.32	5.83	0.95	4.40
90 - 97	0.50	2.20	3.86	6.11	2.20	- 0.06	5.81	3.84	- 1.11	3.35
70 - 97	3.13	3.87	4.54	4.17	2.66	1.48	11.94	5.00	2.98	4.13

For “nonmetals,” which had a negative TFP growth rate of –0.06 percent in 1990-97, we can notice that the input coefficient of distribution services, which were liberalized in the 1990s, was 0.018, relatively lower than the input coefficients of the other service subsectors. Thus, “nonmetals,” which use the liberalized service subsector less intensively, shows poor performance in terms of TFP growth rates when compared with other manufacturing subsectors.

However, it seems to be difficult to extract any consistent pattern from the growth rates of the TFP in the manufacturing subsectors and their input coefficients of the service subsectors. In general, the sum of the input coefficients of services in the manufacturing subsectors is in the range of 0.1 and 0.17, which is not large enough to make a significant impact on their productivity.

Table 14

Input coefficients for selected manufacturing subsectors, Korea, 1995

Input \ Output	Food	Textile	Wood & Paper	Chemical	Nonmetal	Metal Product	Machinery	Electronic
Utilities	0.008	0.013	0.023	0.023	0.034	0.015	0.007	0.007
Construction	0.000	0.001	0.000	0.001	0.001	0.001	0.001	0.000
Distribution	0.026	0.029	0.032	0.023	0.018	0.025	0.028	0.026
Restaurants, etc	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Transportation	0.013	0.011	0.019	0.014	0.038	0.013	0.013	0.010
Communications	0.001	0.002	0.003	0.002	0.005	0.002	0.002	0.003
Financial services	0.014	0.038	0.033	0.024	0.029	0.025	0.024	0.018
Real estate, etc	0.028	0.024	0.018	0.032	0.023	0.020	0.022	0.025
Public administration	0	0	0	0	0	0	0	0
Education, health	0.003	0.003	0.002	0.014	0.006	0.004	0.014	0.030
Social services	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Other services	0.013	0.024	0.014	0.017	0.017	0.022	0.016	0.011
Total	0.108 (0.151)	0.146 (0.209)	0.148 (0.209)	0.152 (0.217)	0.173 (0.274)	0.128 (0.191)	0.129 (0.195)	0.132 (0.148)

Source: Input-Output Tables, 1995, Bank of Korea. The figures in parentheses are the share of service in total intermediate input.

V. Concluding Remarks

Due to industrialization that had put priorities to manufacturing at the expense of services, the service sector in Korea was grossly underdeveloped prior to the early 1990s. Numerous sector specific regulations and restrictions on FDI prevented competition and impeded the offering of higher value services. In 1990, the labor productivity of the Korean service subsectors was much lower than that of the advanced countries. The labor productivity of "distribution services, etc.," in particular, was less than one-fifth that of the U.S. in 1990.

Since the mid-1990s, the Uruguay Round negotiations and OECD accession enabled the Korean government to gradually open its service sector to foreign suppliers. The financial crisis of late 1997 resulted in the Korean service sector becoming almost completely open, except for a few areas sensitive to national security, culture and political stability.

The liberalization of services is presumed to bring productivity gains in the service sector and also in the manufacturing sectors that use liberalized services as inputs. In searching for some evidence of this in Korea, we examined the changes in productivity of the service and manufacturing subsectors in 1970-97. Since liberalization had taken place in the 1990s, and it takes time to see the full effects of liberalization, it is too early to give a definite answer to whether liberalization in services has caused an increase in

productivity in Korea. However, we see a productivity improvement in such a sector as distribution services, which had a large inflow of FDI with liberalization in the 1990s.

Considering the positive impacts of liberalization of trade in services on domestic economy, it is in the interest of the Korean economy to continue its liberalization process and refrain from retreating. As entry barriers have been widely removed, most remaining obstacles are the internal barriers faced by both foreign and domestic suppliers. These barriers are more difficult to remove because they are part operating practices, part regulation and part cultural.

In particular, the ambiguous tax laws as well as cumbersome regulations are regarded as the most serious impediment to foreign investors (KOTRA, 1998). A common problem faced by foreign businessmen is that regulations are subject to various interpretation by different regulatory authorities. This implies that deregulation should focus not only on reducing the number of regulations, but also on enhancing transparent enforcement.

In the process of deregulation, the government should also be attentive to reducing excessive regulations for fulfilling their objectives. In the case of financial service sector, there are minimum investment requirements in terms of paid-in capital. These requirements are considered prudential regulations but foreign investors complain that this requirement is so excessive as to deter entry by smaller investors (Kim, 1999).

Another important area which has not been adequately addressed is labor market inflexibility. In Korea, layoffs are still difficult to execute on a large scale and are allowed only in case of emergency. The limitations on layoffs may discourage foreign service suppliers in establishing local subsidiaries, which otherwise can create employment. Establishing an adequate social safety net and effective retraining programs is thus needed not only because it enhances labor market flexibility but also because it enables the government to liberalize mode 4---temporary entry of service providers.

References

Anwar, Syed Tariq and Michael A. Taku. 1993. "Productivity and Efficiency in the Japanese Distribution System: A Review and Developments." *Journal of World Trade* 27: 83-110.

Blomstrom, Magnus and Hakan Persson. 1983. "Foreign investment and spillover efficiency in an underdeveloped economy: evidence from the Mexican manufacturing industry." *World Development* 11: 493-501.

Borensztein, E., J. de Gregorio, and J. W. Lee. 1998. "How does foreign direct investment affect economic growth?" *Journal of International Economics* 45: 115-35.

Caves, Richard E. 1974. "Multinational firms, competition and productivity in host-country markets." *Economica* 41: 176-93.

Chung, W., Mitchell, W. and Bernard Yeung. 1994. "Foreign direct investment and host country productivity: the case of the American automotive components industry." Discussion Paper No. 367. Institute of Public Policy Studies, The University of Michigan.

Globerman, Steve. 1979. "Foreign direct investment and "spillover" efficiency benefits in Canadian manufacturing industries." *Canadian Journal of Economics* 12: 42-56.

Ito, Takatoshi and Masayoshi Maruyama. 1991. "Is the Japanese Distribution System Really Inefficient?" In Paul Krugman ed. *Trade with Japan*. Chicago: The University of Chicago Press.

Kim, J.-D. 1999. "Inward Foreign Direct Investment Regime and Some Evidences of Spillover Effects in Korea." KIEP Working Paper 99-09. Seoul: Korea Institute for International Economic Policy.

Kim, K.-S. and J.-K. Park. 1985. *Sources of Economic Growth in Korea: 1963-1982*. Seoul: Korea Development Institute.

KOTRA. 1998. *Survey on Business Obstacles Faced by Foreign Investors*. (In Korean) Seoul: Korea Trade and Investment Promotion Agency. (November)

Markusen, James R. 1989. "Trade in producer services and in other specialized intermediate inputs." *American Economic Review* 79: 85-95.

McKinsey. 1998. *Productivity-led Growth for Korea.* Seoul/Washington; McKinsey Seoul Office/McKinsey Global Institute.

Nickell, Stephen J. 1996. "Competition and corporate performance." *Journal of Political Economy* 104: 724-46.

Rivera-Batiz, Francisco L. and Rivera-Batiz Luis A. 1992. "Europe 1992 and the

liberalization of direct investment flows: services versus manufacturing." *International Economic Journal* 6: 45-57.

Appendix: Sources of Data

The sectors considered were selected on the basis of their availability for output and factor use. The sector classification used was the International Standard Industrial Classification System. Output was measured as value added in constant prices, the data for which was obtained from the National Accounts of Korea collected by the Bank of Korea.

The labor input is measured as total employment. The Annual Report on the Economically Active Population Survey (AREAPS) provides the data on total employment. However, AREAPS does not classify most of the service subsectors for periods earlier than 1991.[6] Thus, we computed the ratio for each service subsector based on the data from the Statistical Yearbook of the International Labor Organization (ILO) and the Employment Tables of the Bank of Korea and estimated the total employment for each subsector by applying the computed ratio to the total employment of the service sector of AREAPS.

Capital input is defined as gross fixed capital stock and was computed by applying the Perpetual Inventory Method (PIM) to the data on the gross fixed capital formation of each industry in constant prices obtained from the National Accounts. To use the PIM, we need data on benchmark capital stock and the depreciation rate. However, reliable data on these two variables is not available. Therefore, we extrapolated the gross fixed capital formation back to 1930 based on the time trend from 1953 to 1960 to avoid the problem of benchmark capital stock and accumulated the investment from 1930.[7] For the depreciation rate for each industry, we used the average rates of the corresponding Japanese industries, calculated from the International Sectoral Database (ISDB) published by the OECD, under the assumption that the structure of the Korean economy is most similar to Japan among the developed countries covered by the ISDB.

Finally, to compute the TFP, we need data on the share of labor in value added. The labor share is calculated by dividing the compensation of labor by value added. Since the data on the compensation of employees from the National Accounts does not include the compensation of self-employed labor, we adjusted the compensation of

[6] AREAPS currently classifies service sectors as electricity, gas and water, retail and wholesale trade, restaurants and hotels, transport, storage and communications, financial institutions, insurance, real estate and business services, and community, social and personal services,

[7] We assumed the investment to be zero between 1950 and 1952 during the Korean War.

employees under the assumption that the compensation of the self-employed is comparable to that of the employed. That is,

The share of labor in value added = (compensation of employees + (compensation of employees/total employees) x (total employment - total employees))/ value added.

The data on the compensation of employees and current value added are taken from the National Accounts. The number of total employees is taken from the ILO Statistical Yearbook and the Employment Table of the Bank of Korea. The share of agriculture and fisheries, communities, social and personal services, retail and wholesale trade, and restaurants and hotels, computed as above, are too high. The employment of these industries shows that a large proportion of unpaid family workers may be underemployed. Thus, when comparing with some of the advanced countries from the ISDB, we assumed that the unpaid workers were compensated at half the rate of paid workers. After adjustment, the shares of labor in value added for these industries were comparable to the estimate of Kim and Park (1985).

Finally, the data on some of the advanced countries used for international comparison was taken from the International Sectoral Database of the OECD, which provides the sectoral output and input data of OECD countries from 1970 to 1990.

Appendix Table 1

Service sub-sectors in which FDI is restricted (As of January 1990)

Wholly restricted	Partially Restricted
◆ Production, collection and distribution of electricity ◆ Publishing (newspapers, periodicals, and books) ◆ Collection, purification and distribution of water ◆ Drinking establishments ◆ Transport via railways ◆ Scheduled air transport ◆ Nonscheduled air transport ◆ Post and courier activities ◆ Telecommunications ◆ News agency activities ◆ Radio and television broadcasting ◆ Gambling	◆ Wholesale of agricultural raw materials, live animals, food, beverages and tobaccos ◆ Wholesale of household goods (medical goods and cosmetics) ◆ Wholesale of nonagricultural intermediate products, waste and scrap (fertilizers) ◆ Other wholesale (foreign trade brokers) ◆ Retail sale of food, beverages and tobacco in specialized stores ◆ Other retail trade of new goods in specialized stores ◆ Land transport ◆ Sea and coastal water transport ◆ Inland water transport ◆ Travel agencies ◆ General financial intermediation (banking) ◆ Other financial intermediation (investment, trust, securities) ◆ Insurance and pension funding ◆ Real estate rental and development ◆ Renting of other machinery and equipment (construction equipment) ◆ Research and experimental development on social sciences and humanities ◆ Legal, accounting, bookkeeping and auditing activities; tax consultancy; market research and public opinion polling; business and management consultancy ◆ Advertising ◆ Other business services (personnel supply services, investigation and security activities) ◆ Adult and other education (vocational training schools, etc.) ◆ Human health activities ◆ Veterinary activities ◆ Motion pictures, and other entertainment activities ◆ Libraries, archives, museums and other cultural activities ◆ Sporting and other recreational activities ◆ Other service activities (barber, beauty shops, wedding chapels, etc.) ◆ Other recreational activities (parks, beaches, etc.) ◆ Personnel services (tutoring, housekeeping, etc.)

Note: In KSIC three digit level.

Source: Ministry of Finance and Economy, "Five-Year Foreign Investment Liberalization Plan," various years.

Appendix Table 2

Service sub-sectors in which FDI is restricted (As of November 1997)

Wholly restricted	Partially Restricted
◆ Collection, purification and distribution of water ◆ News agency activities ◆ Radio and television broadcasting ◆ Gambling	◆ Wholesale of agricultural raw materials, live animals, food, beverages and tobaccos (meat) ◆ Production, collection and distribution of electricity ◆ Publishing (newspapers, periodical, and books) ◆ Other retail trade of new goods in specialized stores (gas stations) ◆ Land transport ◆ Sea and coastal water transport ◆ Scheduled air transport ◆ Nonscheduled air transport ◆ Telecommunications ◆ General financial intermediation (banking) ◆ Other financial intermediation (investment, trust, securities) ◆ Insurance and pension funding ◆ Real estate rental and development ◆ Credit information agency

Note: In KSCI three digit level.
Source: Ministry of Finance and Economy, "Five-Year Foreign Investment Liberalization Plan," various years.

-국문요약-

1960 년대 이후 제조업에 중심을 둔 산업화의 결과 우리나라의 서비스산업은 1990 년대초까지 낙후되었었다. 수많은 업종별 규제와 외국인투자에 대한 제한이 경쟁을 저해하고 보다 가치있는 서비스의 공급에 장애가 되었다. 그 결과, 1990 년 우리나라 서비스산업의 노동생산성은 선진국에 비해 훨씬 낮은 것으로 나타났다. 특히 유통, 숙박, 음식업의 경우 1990 년 기준으로 미국에 비해 20% 수준으로 나타났다.

1990 년대 중반 이후 UR 협상과 OECD 가입에 따라 정부는 서비스산업을 점진적으로 개방하였다. 그 결과, 유통서비스, 사업서비스, 연예 및 오락, 기타 개인서비스 등의 서비스업종들은 거의 완전히 자유화되었다.

1997 년 외환위기 이후 정부는 WTO 양허 수준 이상으로 서비스산업의 자유화를 가속화하였다. 1998 년 이후 운송, 금융, 통신서비스 등의 분야에서 자유화를 확대하였다. 그 결과, 2000 년 7 월 현재 우리나라 서비스산업은 국가안보, 문화, 정치적 안정에 민감한 소수 분야를 제외하고 거의 개방됨으로써 선진국 수준에 필적할 만한 상태에 이르렀다.

이와 같은 자유화의 덕택으로 1990 년대에 우리나라 서비스교역은 급격하게 증가하였다. 상업적주재를 제외한 나머지 세가지 공급형태의 서비스교역은 1991 년 228 억 달러에서 1998 년 490 억 달러로 증가하였다. 상업적주재형태의 서비스교역은 더욱 괄목할 만한 증가를 보였는데, 서비스산업의 외국인직접투자가 1982~90 년 16 억 달러에서 1998~99 년에는 63 억 달러로 증가하였다. 특히 유통서비스와 운송서비스의 외국인직접투자가 1996~97 년 크게 증가하였고, 금융서비스와 기타 서비스의 외국인직접투자는 외환위기 이후 급격히 증가하였다.

서비스교역의 자유화는 서비스산업 자체와 서비스를 중간재로 사용하는 제조업의 생산성을 향상시키는 효과를 갖는다. 1970~97 년 동안 서비스산업과 제조업의 업종별 생산성의 변화를 살펴보면, 서비스교역이 자유화된 서비스업종의 생산성에 긍정적인 효과를 가져온 것으로 나타났다.

즉, 1990 년대에 부분개방된 운송 및 통신의 경우 총요소생산성이 1990~95 년 2.2%에서 1995~97 년 4.12%로 높아진 것으로 나타났다. 1996 년에 거의 전면 자유화된 유통, 숙박, 음식업의 경우에도 총요소생산성이 1990~95 년 –0.41%에서 1995~97 년 –0.02%로 향상된 것으로 나타났다. 반면, 1997 년까지 거의 자유화가 안 된 금융, 부동산, 사업서비스의 경우 조사대상 전기간 동안 총요소생산성이 감소하였다.

서비스교역의 자유화가 자유화된 서비스를 사용하는 제조업의 생산성을

제고시킨다는 가설에 대해서는 제조업 업종별 생산성 증가율과 산업연관표상의 투입계수를 비교하였다. 비록 일관된 패턴을 찾아내지는 못하였으나, 1990 년대 생산성증가가 부진한 비금속광물의 경우 다른 제조업종에 비해 자유화가 이루어진 유통서비스의 투입계수가 낮게 나타난 것은 주목할 만하다.

이와 같이 서비스교역의 자유화가 국민경제에 긍정적인 영향을 가져온다는 점에서 서비스교역의 자유화를 지속적으로 추진하고 후퇴하지 않는 것이 국가경제에 이익이 될 것이다. 현재 국경간 장벽은 거의 제거되었다고 볼 때, 남아 있는 장애물은 외국공급자와 국내공급자가 같이 직면하는 국내 장벽이라고 할 수 있다. 이러한 국내 장벽은 운영관습, 규제, 문화적 요소를 지니고 있는 것이므로 제거하기가 보다 어려울 것이다.

특히, 복잡하고 불명확하여 자의적 해석의 여지가 많은 조세관련 규정들은 외국인투자자들에게 가장 심각한 장애로 간주되고 있다. 이는 규제완화에 있어 규제의 수를 줄이는 데뿐만 아니라 투명한 집행에도 중점을 두어야 한다는 것을 의미한다. 아울러 규제완화의 과정에서 목적을 달성하는 데 필요 이상으로 과도한 규제를 낮추는 데에도 주의를 기울여야 한다.

아직까지 장벽이 해소되지 않은 또 다른 중요한 분야는 노동시장의 유연성이다. 해고가 자유롭지 못한 것은 외국서비스공급자가 국내에 자회사를 설립할 유인을 감소시키는 것이다. 따라서 노동시장의 유연성을 제고시키기 위해서 뿐만 아니라 향후 mode 4, 즉, 인력이동의 개방에 대비하기 위해서도, 적절한 사회안전망의 구축과 효과적인 재교육프로그램의 정비가 요구된다.

저자약력

金鍾一
서울대학교 경제학과 졸업(1984)
미국 Stanford University **경제학 박사**(1992)
동국대학교 경제학과 조교수(**現**, E-mail: jongil@dgu.ac.kr)
著書 *The Sources of Economic Growth of the East Asian Newly Industrialized Countries* (**공저**, 1994)
Returns to Scale and Productive Efficiency in Korean Manufacturing Sectors (**공저**, 1999) **외 다수**

金準東
서울대학교 경제학과 졸업(1980)
미국 University of Chicago **경제학 석사**(1987)
미국 University of Chicago **경제학 박사**(1991)
대외경제정책연구원 연구위원(**現**, E-mail: jdkim@kiep.go.kr)
著書 *The Role of Foreign Direct Investment in Korea's Economic Development: productivity Effects and Implications for the Currency*(1998)
Inward Foreign Direct Investment Regime and Some Evidences of Spillover Effects in Korea(1999) **외 다수**

KOREA INSTITUTE FOR INTERNATIONAL ECONOMIC POLICY

300-4 Yomgok-Dong, Seocho-Gu, Seoul 137-747, Korea
Tel: (822) 3460-1114
Fax: (822) 3460-1122
URL: http://www.kiep.go.kr

94320
9 788932 240893
ISBN 89-322-4089-2
89-322-4026-4(세트)