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BOOSTING PRODUCTIVITY IN KOREA'S SERVICE SECTOR

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By

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ABSTRACT/RÉSUMÉ

Boosting productivity in Korea's service sector

Labour productivity growth in the service sector has been low relative to manufacturing. This is explained in part by weak competition in services resulting from strict product market regulation and the low level of import penetration and inflows of foreign direct investment (FDI). Increasing productivity growth in the service sector, which accounts for 67% of employment and 58% of value added in Korea, is essential to sustain high potential growth. The priority is to strengthen competition by eliminating domestic entry barriers, accelerating regulatory reform, upgrading competition policy and reducing barriers to trade and inflows of FDI. Another challenge is to enhance the performance and accelerate the restructuring of small and medium-sized enterprises, which account for over 90% of service-sector employment. Furthermore, it is essential to boost productivity in service industries with high growth potential, such as telecommunications and financial and business.

This Working Paper relates to the 2008 *OECD Economic Survey of Japan* (www.oecd.org/eco/surveys/japan).

JEL classification: R11, R21, R31.

Keywords: Korea; service sector; productivity growth; small and medium-sized enterprises; regulatory reform; competition policy; KFTC; service trade; foreign direct investment; FTAs; telecommunications; financial services; business services; legal services.

Rehausser la productivité dans le secteur des services en Corée

La croissance de la productivité du travail dans le secteur des services a été lente par rapport à celle du secteur manufacturier. Cela s'explique en partie par la faiblesse de la concurrence dans les services, due à une réglementation stricte des marchés de produits et à un niveau peu élevé de pénétration des importations et d'entrées d'investissement direct étranger (IDE). Un renforcement des gains de productivité dans le secteur des services, qui représente 67 % de l'emploi et 58 % de la valeur ajoutée en Corée, est essentiel pour soutenir un taux élevé de croissance potentielle. Il faut en priorité intensifier la concurrence en supprimant les barrières intérieures à l'entrée, en accélérant la réforme de la réglementation, en améliorant la politique de la concurrence et en réduisant les obstacles au commerce et à l'afflux d'IDE. Une autre tâche difficile sera de rehausser les résultats et d'accélérer la restructuration des petites et moyennes entreprises, qui représentent plus de 90 % de l'emploi dans le secteur des services. Il est par ailleurs indispensable de stimuler la productivité dans les domaines qui ont un fort potentiel de croissance, comme les télécommunications et les services financiers et aux entreprises.

Ce Document de travail se rapporte à l'*Étude économique de l'OCDE du Japon 2008* (www.oecd.org/eco/etudes/japon).

Classification JEL : R11, R21, R31.

Mots clés : Corée; secteur des services; croissance de la productivité; petites et moyennes entreprises; réforme réglementaire; politiques de la concurrence; KFTC; commerce de service; investissements directs de l'étranger; télécommunications; services financiers; service aux entreprises; services légaux.

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BOOSTING PRODUCTIVITY IN KOREA'S SERVICE SECTOR

Randall S. Jones¹

1. Although the share of the service sector increased from 50% of GDP in 1990 to 58% in 2007, it is still far below the OECD average of 70%. The upward trend in the share of the service sector in GDP and total employment² in Korea is expected to continue in the context of rapid population ageing and intense competition with low-cost manufacturers in Asia. Moreover, the competitiveness of manufacturing increasingly depends on the performance of the service sector, given growing outsourcing. The expansion of the service sector and its impact on other parts of the economy make it a key determinant of economic growth. However, productivity in the service sector has consistently lagged behind that in manufacturing, thus weighing down economy-wide labour productivity, which was only 34% of the US level per hour worked in 2006. There is thus significant scope to boost productivity in the service sector, and to thereby sustain Korea's long-term growth potential.

2. This paper addresses the challenges of fostering a more dynamic and competitive environment conducive to higher productivity in services. It begins by discussing the main reasons for low productivity and the problems of small and medium-sized enterprises (SMEs) in the service sector. The following sections analyse policies to improve the overall productivity of the service sector as well as the major issues in key service industries. The paper concludes with recommendations, summarised in Box 2.

Reasons for low productivity in the service sector

3. Labour productivity growth in services decelerated from an annual rate of 2.6% during the 1980s to 1.2% between 1997 and 2007, in contrast to nearly 9% growth in manufacturing since 1990 (Table 1). Services accounted for only a quarter of the growth of value added per person employed between 2000 and 2006, compared with the OECD average of 39% (Figure 1). The poor performance of services has widened the labour productivity gap between sectors; productivity in services fell from 76% of that in manufacturing in 1997 to 60% in 2005, the largest gap in the OECD area, where productivity in manufacturing and services is roughly equal.

4. To some extent, low service-sector productivity is the legacy of an export-led growth strategy that attracted the most productive resources into manufacturing. In recent years, the government has removed some policies favouring manufacturing in the areas of taxation, mandatory charges (quasi-taxes)

1. Randall S. Jones is head of the Japan/Korea Desk in the Economics Department of the OECD. This paper is based largely on material from the 2008 *OECD Economic Surveys: Korea* published in December 2008 under the authority of the Economic and Development Review Committee (EDRC). The author would like to thank Andrew Dean, Robert Ford, Vincent Koen, Masahiko Tsutsumi, Byeongseo Yoo and Taesik Yoon for valuable comments on earlier drafts. Special thanks go to Lutécia Daniel for technical assistance and to Nadine Dufour for technical preparation.

2. The share of the service sector in total employment increased from 57.8% in 1997 to 66.7% in 2007.

and energy prices.³ However, considerable discrimination remains. For example, the manufacturing sector is exempted from the Comprehensive Property Tax and mandatory charges for site development and the environment that are imposed on services, which also face higher energy charges.

Table 1. Labour productivity growth in manufacturing and services

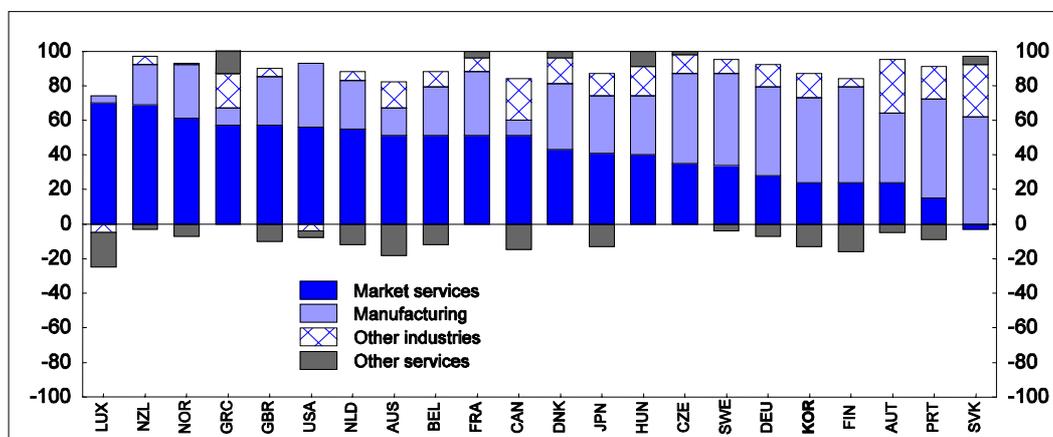
A. Annual growth rate of value added per employee in per cent				
Industry	ISIC code	1980-1990	1990-1997	1997-2007
Manufacturing	15 to 37	6.4	8.7	8.7
Market services	50 to 74	4.3	1.6	2.6
Non-market services	75 to 99	-0.2	1.7	-2.0
Total services	50 to 99	2.6	1.5	1.2
Total economy	1 to 99	5.5	4.4	3.3

B. Output growth by sector				
Industry	ISIC code	1980-1990	1990-1997	1997-2007
Manufacturing	15 to 37	11.9	7.5	7.7
Market services	50 to 74	9.5	8.1	4.1
Non-market services	75 to 99	5.7	5.0	2.7
Total services	50 to 99	7.9	7.1	3.7
Total economy	1 to 99	8.5	6.8	4.3

Source: Bank of Korea, National Accounts.

Figure 1. Contribution by sector to growth in OECD countries

Contribution to growth of value added per person employed in percentage points during 2000-06



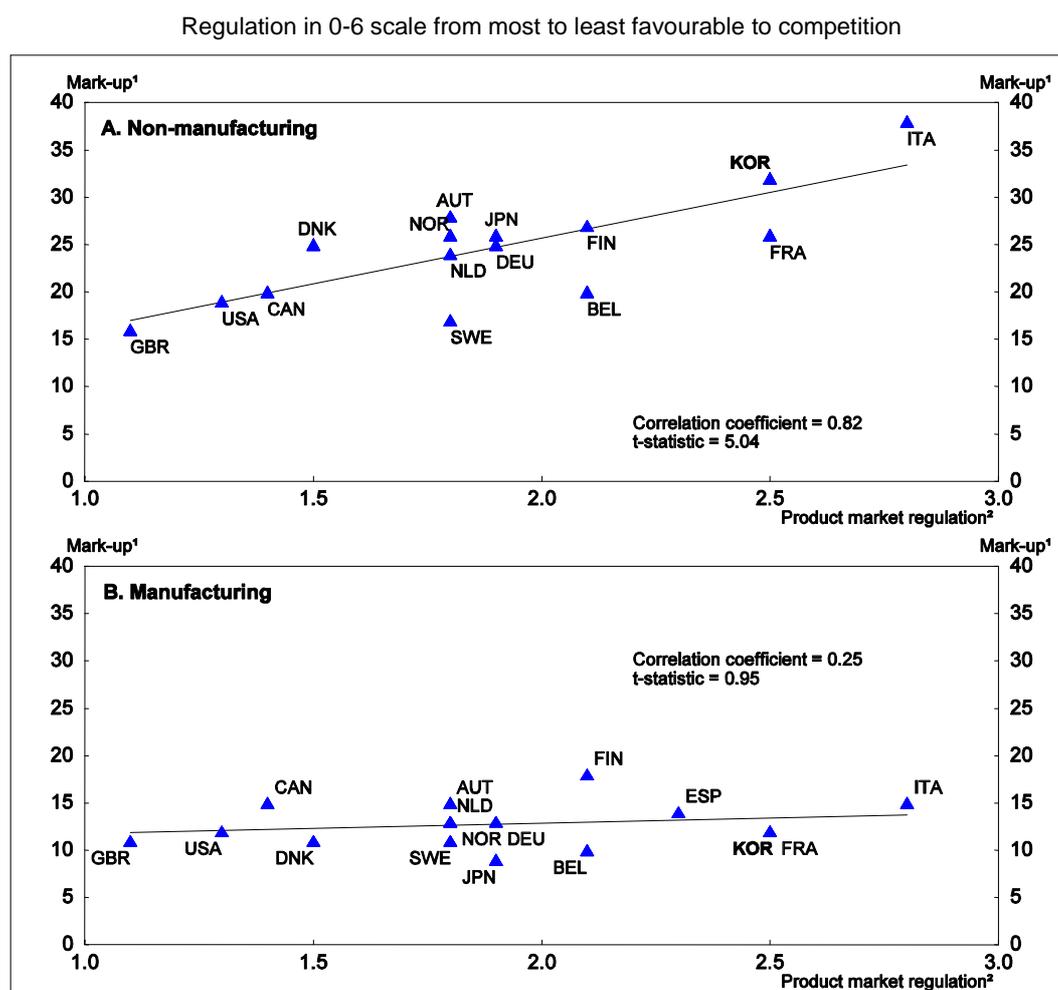
Source: OECD (2008c), *OECD Factbook 2008*, OECD, Paris.

5. Insufficient competition in services also explains its productivity gap with manufacturing, which widened from 24% in 1997 to 40% in 2005. In manufacturing, efficiency gains have been driven by intensified competition as Korea became more integrated in the world economy. Low mark-ups in manufacturing in Korea, which at 12% are only a third of those in non-manufacturing, indicate that

3. For example, electricity charges for the logistics and tourism industries were reduced to the same level as for manufacturing and the mandatory development contribution for site development was cut in half.

competition is stronger in manufacturing (Figure 2).⁴ Services are more sheltered from international competition and subject to numerous domestic regulations deterring potential competitors. Of the 543 service business lines, almost a third impose entry barriers (on top of registration and declaration), and the proportion is more than half in financial intermediation, communications, education and transport and storage, according to a central bank study (Table 2). Regulations limiting entrepreneurship are especially harmful for productivity growth in sectors where firms are dynamic and better placed to adopt new technology.

Figure 2. Mark-ups in manufacturing and non-manufacturing and economy-wide product market regulation



1. Mark-ups are calculated for individual two-digit ISIC sectors and aggregated using country-specific final sales as weights.
 2. Product market regulation is the overall indicator for 1998.
- Source: Høj *et al.* (2007).

4. In practice, the concept of competition is difficult to measure. Given that direct indicators are lacking, they must be substituted by proxies such as mark-ups.

Table 2. Legal entry barriers in the service sector
Number in June 2007

Service industry	Number of business lines	Government monopoly	Authorisation	Approval	License	Permission	Subtotal	Percent of total business lines	Registration and declaration	Total
Wholesale and retail trade	162	–	2	21	2	–	25	15.4	42	67
Restaurants and hotels	22	–	–	4	–	–	4	18.2	18	22
Transport and storage	48	2	1	7	13	1	24	50.0	18	42
Communications	9	1	–	4	–	–	5	55.6	4	9
Financial intermediation	34	4	3	15	–	5	27	79.4	7	34
Real estate and leasing	21	–	–	1	3	–	4	19.0	10	14
Business services	70	–	–	4	7	–	11	15.7	26	37
Education	23	–	–	–	–	12	12	52.2	11	23
Health and social work	22	1	–	7	–	1	9	40.9	13	22
Recreational & cultural activities	55	–	2	6	–	3	11	20.0	30	41
Other public and personal services	49	1	–	10	2	–	13	26.5	15	28
Other ¹	28	27	–	–	–	–	27	96.4	–	27
Total	543	36	8	79	27	22	172	31.7	194	366

1. House-keeping services, public administration and social security and international and foreign organisations.
Source: Lee *et al.* (2007).

6. International comparisons suggest that Korea's services are heavily regulated: the OECD's indicator of product market regulation for the non-manufacturing sector ranked Korea as the fifth-most restrictive country in the OECD area in 2003 (Conway and Nicoletti, 2006 and Conway *et al.*, 2006). For the economy as a whole, however, Korea was close to the OECD average,⁵ suggesting that the stringency of regulation in manufacturing is low by comparison. Market-unfriendly regulations in product markets disproportionately damage entrepreneurship in services (Nicoletti, 2001). Moreover, stringent product market regulations are positively correlated with high mark-ups in the non-manufacturing sector, indicating weak competition (Figure 2). The mark-ups in Korea were the second highest among OECD countries. The correlation is much weaker in manufacturing, suggesting that product market regulation is more critical to competition in non-manufacturing. Moreover, according to a study by the World Bank, starting a business in Korea is relatively complicated, costly and time-consuming: Korea ranks 26th in the OECD area and 126th among 178 economies in the world (Table 3). The number of procedures, as well as their time and cost, and the minimum capital requirement, were all significantly above the OECD average.

7. Another factor explaining low productivity in services is R&D and ICT investment. In Korea, manufacturing accounted for 90% of R&D, as against only 7% in services. In contrast, the service sector's share averaged 25% in the OECD area and 43% in the United States. Moreover, over 90% of R&D in the service sector in Korea is concentrated in telecommunications and business services, including computer-related services. A number of studies have found that increased investment in ICT boosts labour productivity growth (Nicoletti and Scarpetta, 2005). For example, a large share of the increase in US labour productivity achieved since the mid-1990s originated in services that use ICT intensively. In Korea,

5. Updated indicators suggest that Korea ranks in the top third of OECD countries in terms of the restrictiveness of product market regulation for the economy as a whole (OECD, 2009).

though, the contribution of ICT-using services to labour productivity has diminished since the early 1990s (Figure 3), partly because the level of ICT investment over the period 1995-2003 lagged behind top OECD performers (Panel B). Finally, there is a large inflow of older workers, with lower-than-average human capital, from manufacturing into services, given the early age of retirement from firms (see the 2008 *OECD Economic Surveys: Korea*). Lacking other alternatives, two-fifths of workers over the age of 55 are self-employed in the service sector. Moreover, one-third of workers in services are either self-employed or family workers compared with an average of around one-fifth in the OECD area.

Table 3. Time and cost of starting a new business

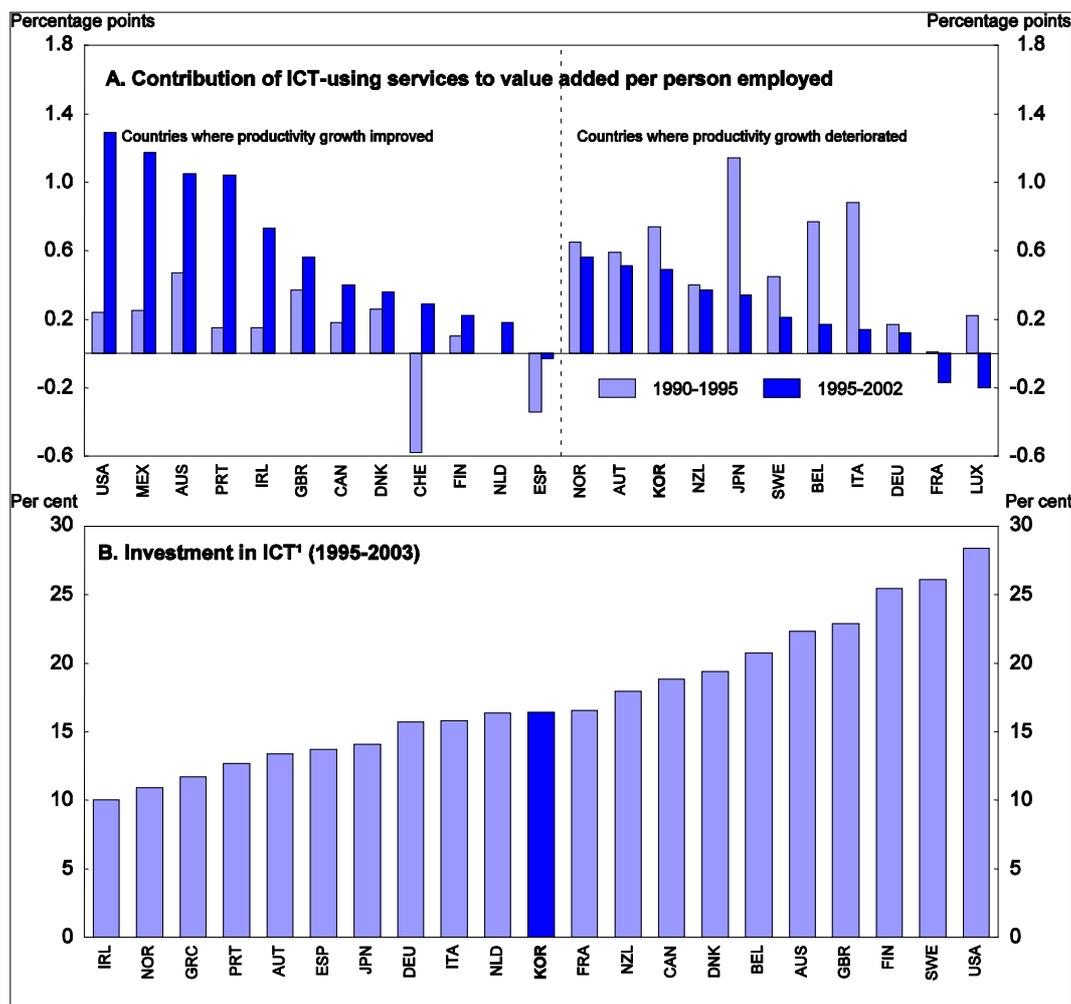
Countries shown by their rank from least to most restrictive

Countries	Rank in the world	Number of procedures	Time (days)	Cost (% of income per capita)	Minimum capital (% of income per capita)
New Zealand	1	1	1	0.4	0.0
Canada	2	1	5	0.5	0.0
Australia	3	2	2	0.8	0.0
Ireland	5	4	13	0.3	0.0
United States	6	6	6	0.7	0.0
United Kingdom	8	6	13	0.8	0.0
France	14	5	7	1.0	0.0
Denmark	16	4	6	0.0	40.1
Iceland	17	5	5	2.6	13.6
Finland	18	3	14	1.0	7.4
Belgium	20	3	4	5.2	19.9
Hungary	27	4	5	8.4	10.8
Sweden	30	3	15	0.6	30.3
Norway	33	6	10	2.1	21.0
Portugal	34	6	6	2.9	34.3
Turkey	43	6	6	14.9	10.9
Slovak Republic	48	6	16	3.3	30.4
Netherlands	51	6	10	5.9	51.7
Switzerland	52	6	20	2.1	27.6
Italy	53	6	10	18.5	9.7
Japan	64	8	23	7.5	0.0
Luxembourg	69	6	26	6.5	21.3
Czech Republic	86	8	15	9.6	31.8
Germany	102	9	18	5.6	42.2
Austria	104	8	28	5.1	52.8
Mexico	115	9	28	12.5	11.0
Korea	126	10	17	16.9	53.8
Greece	133	15	19	10.2	19.6
Spain	140	10	47	14.9	13.1
Poland	145	10	31	18.8	168.8
Average		6.1	14.2	6.0	24.1

Source: World Bank (2008), *Doing Business 2009*.

8. Encouraging investment in R&D and ICT in services requires an efficient reporting system for intellectual and intangible assets and a better intellectual property rights system that balances incentives to innovate with adequate access to and sharing of knowledge. In business services in particular, investment in intangibles, such as training, customer relationship management, brand image, internal organisation and software plays a key role (OECD, 2007a). Reliable information about the intangible assets of firms reduces uncertainty and can thereby increase their valuation in financial markets, thus facilitating outside funding and the creation of such firms. This promotes efficient resource allocation and helps encourage innovation.

Figure 3. The role of ICT-using services in labour productivity growth



1. As a share of non-residential investment.
Source: OECD Productivity Database and Pilat (2007).

The link between low productivity in services and problems in small and medium-sized enterprises

9. The problem in services is linked to the weakness of SMEs, which play a dominant role in services, accounting for 79% of output and 91% of employment, with particularly high shares in such areas as hotels and restaurants (97%), wholesale and retail trade (95%) and personal services (95%).⁶ However, the performance of SMEs has consistently lagged behind large corporations in terms of profitability (Table 4). In addition, the SMEs, which were less indebted than the large companies at the time of the 1997 crisis, are now significantly more so. Lagging SME performance has widened the gap with large companies. By 2005, productivity per employee at SMEs in services was only 45.2% of that in large companies (Table 5). Given the overlap between the service sector and SMEs, the factors noted above as a cause of low productivity in services - the export-led development strategy, weak competition, the inflow of older workers and weak investment in ICT and R&D - also explain low productivity in SMEs.

6. Two service industries – hotels and restaurants and wholesale and retail trade – account for 36% of total SME employment, exceeding the 25% share of manufacturing.

Table 4. Comparison of large corporations and SMEs
Per cent

		1997	1999	2001	2003	2005	2006	2007
Operating profits/sales	Large firms	9.7	7.4	6.0	8.2	7.2	6.0	6.7
	SMEs	5.0	5.2	4.5	4.6	4.4	4.3	4.5
Salary/sales	Large firms	--	8.7	8.4	8.9	8.3	8.3	8.2
	SMEs	--	11.7	12.9	12.7	12.6	12.5	12.5
Borrowing-to-asset ratio	Large firms	56.5	44.5	42.0	25.9	19.1	18.1	18.0
	SMEs	46.8	37.8	34.6	33.5	30.8	30.9	32.0
Average borrowing rate ¹	Large firms	10.3	11.9	9.9	7.0	5.8	6.1	6.1
	SMEs	11.8	10.2	8.1	6.6	6.2	6.5	6.7
R&D/sales	Large firms	--	1.8	1.5	2.0	2.1	2.3	2.2
	SMEs	--	0.5	1.0	0.8	1.0	1.1	1.1

1. Interest expenses divided by total borrowings.
Source: Bank of Korea.

companies. By 2005, productivity per employee at SMEs in services was only 45.2% of that in large companies (Table 5). Given the overlap between the service sector and SMEs, the factors noted above as a cause of low productivity in services - the export-led development strategy, weak competition, the inflow of older workers and weak investment in ICT and R&D - also explain low productivity in SMEs.

Table 5. Value-added per person employed in the service sector by firm size
In 2005 in million won

	Average	SMEs	Large firms	Productivity in SMEs as share of large firms (%)	Share of SMEs in output (%)
Wholesale and retail trade	38.1	35.5	89.2	39.8	95.2
Hotels and restaurants	17.7	17.2	51.3	49.9	97.2
Telecommunications	180.2	160.9	377.8	42.6	91.1
Financial intermediation	133.8	72.9	175.6	41.5	40.7
Business services	35.0	34.1	37.6	90.7	74.2
Education	22.6	21.8	33.1	65.9	93.0
Healthcare and social services	36.2	36.0	38.2	94.2	89.7
Personal services, etc.	20.9	20.4	31.9	63.9	95.6
Service sector	32.6	29.4	65.1	45.2	91.1

Source: Korea Federation of SMEs (2008) and Korea National Statistical Office, *National Statistics*.

10. However, perhaps the most important factor explaining weak SME performance is extensive government assistance, which has damped competitive pressure and slowed restructuring. In the wake of the 1997 crisis and widespread restructuring of the big business groups, the authorities increased support to SMEs to prevent widespread bankruptcies. Indeed, SMEs were supported by 163 subsidy programmes in 2007, with total spending of 0.7% of GDP (Table 6). Although this is less than the 216 programmes and

0.9% of GDP in 2001, it remains high. In addition, SMEs pay a corporate income tax rate that is only half that levied on larger firms (see the 2008 *OECD Economic Surveys: Korea*).⁷ Furthermore, the government funnels considerable support to SMEs through financial markets:⁸

Table 6. Programmes to assist small and medium-sized enterprises
Billion won

Ministry	2007	2007	Selected programmes
	Outlays	Number of programmes	
Small and Medium Business Administration	4 074	65	- Restructuring and start-up support - Stable operation support - Regional SME support - Technology development support - Venture company support
Ministry of Commerce, Industry and Energy	1 485	44	- Industrial technology development - Modernisation of distribution networks - Activation of industrial complexes - Energy-saving support
Ministry of Labour	815	22	- Workplace accident prevention - Workplace environment improvement - Vocational training support
Ministry of Information and Communication	236	4	- ICT equipment investment support - Technology development support - Multi-media industry support
Ministry of Environment	131	5	- Software development support - Anti-pollution facility support - Environmental technology development support
Intellectual Property Office	63	4	- Recycling industry support - Technology evaluation support
Ministry of Agriculture and Forestry	45	5	- Rice processing factory support - Agricultural product processing - Agricultural machine product support
Ministry of Maritime Affairs and Fisheries	44	5	- Marine product distribution support - Fishing net support
Ministry of Health and Welfare	15	1	- New drug development support
Ministry of Culture and Tourism	14	3	- Film promotion fund support - Sporting goods development support
Defence Acquisition Program Administration	5	2	- Defence industry R&D support
Ministry of Construction and Transportation	5	2	- Construction technology innovation support
Ministry of Science and Technology	1	1	- Technology development support
Total	6 933	163	

Source: Presidential Commission on SMEs (2007).

7. SMEs also received 6% of all tax expenditures in 2006.
8. The rationale for public support is based on: *i*) information asymmetries between financial institutions and SMEs; *ii*) the SMEs' lack of tangible collateral; and *iii*) fixed administrative costs associated with lending, such as information gathering and credit evaluation, which discourage lending to SMEs (Kang, 2005).

- *Policy loans*: the Small Business Corporation provides loans at below-market interest rates to SMEs. The amount of loans is around 0.5% of GDP per year, with the total stock amounting to 1.5%. Loan size and the share of firms receiving loans rise with the age of the firm.
- *Credit guarantees*: public financial institutions⁹ guarantee loans to SMEs, helping them reduce their financing costs close to the level of large firms (Table 7). The guarantee is between 50% and 85% of the loan depending on its maturity and the firm's credit rating. The proportion of firms receiving guarantees is highest among young SMEs. The stock of guarantees doubled after the 1997 crisis, but has since levelled off. In 2007, they amounted to 5% of GDP and covered almost 12% of total loans outstanding to SMEs, down from 23% in 2001.
- *Venture capital investment*: The public sector accounts for 42% of investment in this sector. However, the proportion of SMEs that attract venture capital investment is quite low.

11. Of the three types of financial assistance, credit guarantees have had the least positive effect on firm performance, suggesting that they are used, in part, to rescue unviable firms. Venture capital investment had the most positive effect, reflecting the role of the private sector in selecting firms with greater potential. The role of policy loans was more neutral (Kang, 2007). The use of public financial assistance for SMEs is at most a second-best approach that distorts the price mechanism, thus reducing the efficiency of resource allocation. Indeed, the average effective borrowing rate for SMEs has been close to that for large companies (Table 4), despite the higher risk, suggesting that some companies receive more credit at lower cost than they should based on their creditworthiness and debt service capacity. In addition, the performance of companies with credit guarantees deteriorates over time in terms of profitability and debt ratios and their performance has been significantly worse than companies without guarantees (Kang, 2007).

Table 7. Credit guarantees for small and medium-sized enterprises
Trillion won

	(1) Balance of guarantees	(2) Defaults	(2)/(1) Default rate (in per cent)	Net loss
1997	17.1	3.0	17.5	1.8
1999	31.4	1.0	3.2	1.8
2001	38.5	1.9	4.8	1.7
2003	45.1	3.4	7.5	2.4
2005	44.0	3.0	6.8	2.6
2007	44.3	1.8	4.1	1.3

Source: Small and Medium Business Administration.

12. The decision to limit the eligibility for credit guarantees to eight to ten years, while focusing on newer firms is a positive step. In addition, the new administration has introduced important reforms in SME policies, in particular by streamlining 22 loan programmes into six and establishing a single window for providing support to SMEs. The authorities are concerned that the extensive programmes to help SMEs tend to encourage some firms to remain small in order to receive such benefits. To prevent this, the government plans to revise the definition of SMEs. In addition, it announced plans to introduce a

9. The guarantees are provided by the Korea Credit Guarantee Fund, the Kobo Technology Fund and 16 regional Credit Guarantee Foundations (CGFs). While the guarantees of the Korea Credit Guarantee Fund and the Kobo Technology Fund have fallen in recent years, those by the regional CGFs rose from 1.0 trillion won in 2000 to 4.6 trillion won in 2007 in an effort to promote regional development.

graduation system to remove SMEs that are relatively large and capable of surviving on their own from government programmes and to exclude the affiliates of large companies. The government expects that these changes will reduce the number of SMEs by around 2 000, thus increasing the number of large companies (i.e. those not qualifying as SMEs) by almost 50% from its current level of about 4 300. Finally, the authorities intend to shift the policy focus to market failures by providing support for entrepreneurship and R&D by SMEs.

13. However, the government is also planning new initiatives to ease the financial distress of SMEs in the wake of the global financial crisis and economic slowdown. The government will:

- Provide 1.3 trillion won to state-owned banks, such as the Korea Development Bank, to expand financial assistance to SMEs.
- Expand credit guarantees to SMEs by 6 trillion won (0.7% of GDP), with an additional 1.5 trillion won provided by the Regional Credit Guarantee Fund.
- Increase financial aid through the Korea Exim Bank (from 7.5 trillion won in 2008 to 8.5 trillion won in 2009) and expand export and foreign exchange insurance by 3.5 trillion won.
- Support small businesses through financial aid, education, consulting support and business start-up services.
- Encourage banks to roll over loans to viable SMEs by signing MOUs, as a follow-up measure for the government guarantee on banks' external debt.

14. Public assistance to SMEs, including subsidies, financial assistance and tax incentives, weakens small companies by sheltering them from competition and should thus be scaled back in the longer run. Korea should instead focus on policies to strengthen competition and encourage more FDI, while avoiding preferential measures that cause distortions. Programmes to support SMEs should thus shift from financial support to management consulting and training. In particular, it is important to reduce the use of guarantees, which are among the highest in the world, along with Japan, and well above the 0.2% of GDP in the United States and 0.6% in France (IMF, 2006). Credit guarantees should focus on new start-ups rather than on existing firms. In addition, the share of loans that is guaranteed should be lowered to reduce moral hazard problems, while the price of guarantees should be raised to reflect credit losses. Directly addressing the deterrents to SME financing would be a better approach. The recent creation of a specialised credit bureau to increase the availability of information about SMEs is a step in the right direction. In addition, measures to facilitate the use of intangible assets as collateral would promote private-sector lending to SMEs. Scaling back public support would reduce the disincentive for SMEs to grow and thereby lose access to the wide range of assistance available to them.

Box 1. The government roadmap for the service sector

The government announced "Service PROGRESS-I" in April 2008 to improve Korea's service account balance, focusing on deficit areas such as tourism, medical care, overseas language training and knowledge-based services. This was followed in September 2008 by PROGRESS-II, which aimed at streamlining regulations in services. These two initiatives are summarised below. PROGRESS-III, which is to be announced in December 2008, is intended to make the service sector a main growth engine alongside manufacturing. The word "Progress" stands for productivity growth, regulatory reform, openness to know-how from abroad, global standards, rivalry, environmental improvement, specialisation and scale economy to raise efficiency.

Service PROGRESS-I

Tourism

The government will increase financial support and ease regulations on the tourism industry in an effort to build the necessary infrastructure and facilitate co-operation by the private sector and local authorities to create new projects. Local tourism boards will be formed and their projects will receive financial and promotional support from the government. In addition, Jeju Island will be exempted from three tourism-related laws to help it develop into an international tourist destination. The government also plans to: *i)* increase financial assistance to attract well-known budget hotel chains; *ii)* include more foreign languages on road signs; *iii)* revise the Tourism Promotion Act to offer one-stop services to tourism resort developers; and *iv)* expand the coverage of zero value-added taxes for tourists.

Medical service

The rules covering medical services will be reformed to attract more foreign patients. *First*, the visa-issuing process will be streamlined. *Second*, specialised medical tourism products, such as plastic surgery, will be developed to attract foreign patients. *Third*, regulations on medical institutions will be eased to bring more diversity to medical services. *Fourth*, the legal framework will be reformed to facilitate M&As in the medical sector. *Fifth*, Korean hospitals will be encouraged to seek international accreditation to improve their credibility among foreign patients.

English-language education

In response to rapidly growing spending on English-language education abroad, the government is developing measures to help Korean students meet their educational needs locally. Rules on the establishment of foreign educational institutions will be eased to allow students to attend high-quality language programmes in Korea. In addition, the ceiling on the share of Korean students in international foreign schools in Korea will be increased from 10% to 30%. The quality of English classes in local schools is to be raised by increasing the number of teachers who are native speakers. Finally, the plan to build an English-only city on Jeju Island will be implemented as scheduled.

Knowledge-based services

The government will promote the creation of a high value-added business service market by extending export assistance, including guarantees, which has thus far been limited mainly to manufacturing. It will also encourage outsourcing to boost demand for knowledge-based services. For example, SMEs will receive subsidies for management consulting services. In addition, "Partnership Taxation", which includes only personal income tax rather than both personal and corporate income taxes, will be applied to qualified law and accounting firms to encourage knowledge-based companies to expand. Finally, the share of government R&D in industrial technology that goes to the service sector is to be doubled from 3.1% in 2008 to 6.2% in 2012.

Service PROGRESS-II

***Broadcasting and telecommunications*¹**

Restrictions on the ownership of broadcasting facilities by large businesses and newspaper publishers will be relaxed. For example, ceilings on the ownership of satellite broadcasting, including digital multimedia broadcasting (DMB), will be abolished and shareholding of up to 49% will be permitted in the case of land-based DMB. The ownership ceilings for cable and satellite broadcasting facilities by daily newspaper publishers and for foreign ownership of satellite

broadcasting facilities will be raised from 33% to 49%. In addition, regulations on broadcasting will be streamlined. For example, prior approval of cable TV subscription fees will be converted to a reporting requirement. Entry regulations will be relaxed for key telecommunication operators. Licensing standards will be simplified to help them integrate segmented “facilities-based” telecommunications businesses and deliver a wider range of services. In addition, key telecommunication operators will find it easier to gain approval for side businesses.

IT services, software and contents

Regulations restricting the location of software workstations to the neighbourhoods of their customers will be eased. Data centres will be designated as “knowledge-based service firms”, and thus subject to lower electricity rates. Protection against illegal copying will be reinforced by offering users of copyrighted works “exclusive usage rights” to thwart copyright infringement by third parties. Restaurants and coffee shops will be allowed to sell music CDs.

Legal services¹

Regulations on the establishment of law firms will be eased. For instance, law firms will be permitted to open branches in counties and cities, and the ceiling on a law firm’s investments in other law firms will be relaxed. In addition, electronic notarisatation systems will be introduced.

Employment services

Competition among private job placement services will be strengthened by easing price regulations and by allowing such firms to offer a wider range of services, including pre-employment services, job training and employee outsourcing. The market for job training services will be expanded by paying training grants directly to job seekers, who can choose appropriate training. Educational institutions will be encouraged to take part in providing job training.

Healthcare and food

An institutional and legal foundation will be established to create markets for healthcare services. Case studies of foreign countries will be conducted to explore ways to permit private insurance companies to provide healthcare insurance as a sideline business. The food service industry will receive greater support, in part by allowing it to benefit from the SME support programmes. The phasing out of the VAT deductions on purchases of agricultural products planned for the end of 2008 will be delayed by two years.

Overhaul of the business services market¹

Competition in business services has been very limited due to regulations on entry and business activities (see below). As a result, consumer dissatisfaction with the quality and prices of business services has continued to grow. Zero-based reviews of the business service sector will be aimed at strengthening competition and providing customer-oriented services. This will include studies of business service markets in other countries in order to develop reforms and lay the legal and institutional framework. Key options for upgrading the business service market include easing regulations on business boundaries and investments in other business service providers and improving disclosure of fees.

1. Reforms in this sector are covered below in more detail.

Policies to promote higher productivity in the service sector

15. OECD research shows that strengthening competition through regulatory reform, upgrading competition policy and lowering barriers to trade and FDI can increase the level and rate of productivity growth by stimulating business investment and promoting innovation (Nicoletti and Scarpetta, 2005 and Conway *et al.*, 2006). It also suggests that overly strict product market regulation and non-trade barriers are associated with low R&D intensity (Nicoletti *et al.*, 2001; Bassanini and Ernst, 2002; and Jaumotte and Pain, 2005).¹⁰ Pro-competitive reforms promote capital deepening in key non-manufacturing industries

10. On the other hand, some research suggests that the link between innovation and concentration is non-linear, with both high and low concentration levels associated with a low level of innovation (Aghion

(Alesina *et al.*, 2005) and increase multifactor productivity, partly by allowing faster catch-up to the technological leader (Nicoletti and Scarpetta, 2003). Another OECD study (Conway *et al.*, 2006) found that competition has a positive impact on investment in ICT and labour productivity growth. In sum, competition, both domestic and international, is key to boosting productivity in the service sector.

16. In April 2008, the government announced a roadmap for the service sector (Box 1) that is motivated by: *i*) the deficit in services in the balance of payments, which has averaged around ½ per cent of GDP in recent years; *ii*) concern that low productivity in services is undermining the competitiveness of manufacturing; and *iii*) the impending opening of the service market in the context of free trade agreements with the United States and the European Union. Given the diversity of service activities, this sector is affected by a wide range of policies. This section will focus on the key priorities of regulatory reform, competition policy and international competition, while labour market flexibility, which is also essential to productivity and restructuring in the service sector, is discussed in the 2008 *OECD Economic Surveys: Korea*.¹¹

Pursuing regulatory reform

17. Korea has made progress during the past decade in introducing policies, institutions and tools to assure high quality regulation (OECD, 2007b). The initial impetus for reform was to promote recovery from the 1997 crisis through the creation of the Regulatory Reform Committee (RRC)¹² and the Regulatory Reform Task Force (RRTF).¹³ The large role of the private sector in these institutions demonstrates the government's commitment to address the issues that are most important to the business sector.¹⁴ Finally, the creation of Free Economic Zones (FEZs) since 2003 to attract more FDI (see below) and Special Economic Zones (SEZs) since 2004 for regional development has led to the liberalisation of regulations in certain geographic areas. The 58 SEZs allow deregulation in such areas as education, healthcare, immigration and land use for both domestic and foreign firms. One risk of such an approach, as illustrated by the experience of other OECD countries, is that these zones prefer to maintain their competitive advantages, thus posing an obstacle to the implementation of nationwide reforms (*OECD Economic Surveys: Japan*, 2008). In addition, the special zone approach distorts locational decisions.

et al., 2005). Overall, though, the long-run relationship between competitive pressures and aggregate labour productivity growth is likely to be positive.

11. See the 2008 *OECD Economic Surveys: Korea*. The 2005 OECD Ministerial (OECD, 2005b) also stressed the importance of improving education and training and upgrading innovation policies to develop the service sector.

12. The review of existing regulations by the RRC resulted in the abolition of 4 973 of the 11 125 regulations between 1998 and 2002, while 2 298 regulations were improved, in some cases by establishing a legal basis. According to one study (KIIET, 1999), the reforms reduced private-sector costs by 3.7 trillion won per year (0.7% of GDP). In addition, the RRC introduced new tools to enhance regulatory quality, such as Regulatory Impact Assessments (RIAs), which have been made mandatory.

13. The RRTF has improved the business climate by relaxing regulations on the creation of firms and the construction of factories. The on-line registration of businesses is now allowed and the time needed to establish a factory was shortened from 180 days to 100, thereby reducing the administrative cost from 150 million won to 15 million won. The time required for approval of the development of land for industrial purposes has been reduced by two to three months. The RRTF also shortened the procedure for building tourist complexes from ten steps over four years to five steps over two years.

14. In the RRC, 18 of the 25 members are from the private sector, as are 24 of the 50 members of the RRTF.

18. Services accounted for more than two-thirds of the 671 reforms implemented by the RRTF (Table 8). Table 9 shows the impact of reform by the size of the affected industry and the strictness of the regulations that were liberalised. By this measure, four of the seven industries most affected by reform were in services: telecommunications, financial intermediation, public services and business services. The average prices in these industries were estimated to have fallen between 0.8% and 1.3% during the year following the reform, while output was projected to increase by 2% to 3% over ten years, thanks to the reform.

Table 8. Number of regulations addressed by the Regulatory Reform Task Force
Between August 2004 and August 2007

Industry	Number of Regulations
Agriculture	5
Manufacturing	82
Construction	89
Services	464
Electricity and gas	12
Wholesale and retail trade, hotels and restaurants	98
Transport and storage	71
Telecommunications	28
Financial intermediation	43
Business services	113
Public services	57
Entertainment	42
Other (services for citizens)	31
Total	671

Source: Regulatory Reform Committee (2007), *Regulatory Reform White Book*, Seoul.

19. The new government has made regulatory reform a top priority to improve the business environment. The Presidential Council on National Competitiveness (PCNC), composed of private-sector experts and high-level government officials and chaired by the president, is playing a leading role in regulatory reform. In April 2008, the government decided 30 core tasks, which have not been disclosed publicly, along with 815 deregulation objectives. The priority should be to focus on entry barriers, as shown in Table 2. The RRC will continue to pursue regulatory reform, while the RRTF was abolished in 2008.

Table 9. Impact of regulatory reform by industry

Rank	Industry	Regulatory reform index ¹	Price change (%) ²	Output change (%) ³
1	Construction	22.0	-1.6	4.1
2	Telecommunications	13.7	-1.2	2.6
3	Financial intermediation	11.8	-1.3	2.9
4	Food and cigarette	11.3	-0.9	1.9
5	Public services	8.6	-0.8	2.9
6	Oil and chemicals	7.5	-0.6	2.8
7	Business services	6.9	-0.9	2.5
8	Electronics	6.8	-0.7	5.7
9	Transportation equipment	5.2	-0.5	2.7
10	Metals	4.7	-0.4	2.8
11	Wholesale and retail trade, hotels and restaurants	4.1	-0.7	3.0
12	Entertainment	3.9	-0.9	2.9
13	Transportation	3.7	-0.7	1.4

1. Regulations are given a weight of 1.0 for prior approval, 0.78 for input standard, 0.64 for output standard and 0.38 for information regulations. This index includes only reforms implemented by the RRTF.
2. Change in price during the four quarters following the implementation of the reform.
3. Projected increase in output during the decade following the implementation of the reform.

Source: Regulatory Reform Committee (2007), *Regulatory Reform White Book*, Seoul.

20. Progress in regulatory reform has fluctuated with the business cycle, with more reform momentum during downturns than during expansions. More consistent commitment to reform would lead to better results. In addition, successful regulatory reform requires correct goals, proper policies and the administrative machinery to carry them out, backed by political support at the highest level. The process of regulatory reform in Korea should be improved by:

- Enhancing the role of RIAs through training, including in local governments, and adopting an explicit rule that regulations can be introduced only if benefits outweigh costs.
- Ensuring that the reform process is comprehensive and consistently applied across policy areas. For example, important topics such as industrial policies, the tax system and regional development policies should be included in the reform process.
- Creating a permanent mechanism in the National Assembly to ensure the regulatory quality of laws initiated by members of the Assembly. The growing proportion of legislation that is initiated in the Assembly escapes detailed scrutiny by the RRC and is not subject to RIAs.¹⁵
- Setting a government-wide strategy on public consultation on proposed regulations, lengthening the minimum comment period from 20 days and making all comments publicly available.
- Extending reforms that are successful in FEZs and SEZs to cover the entire country and phasing out the special zone approach.

15. The share of bills initiated by members increased from 55% during the 16th National Assembly (2000-04) to 69% in the 17th National Assembly (2004-08).

- Improving co-ordination among the many institutions currently working on regulatory reform.
- Reducing reliance on administrative guidance – recommendations by regulatory bodies that are not legally binding – by reducing the scope for discretion in the administration of regulations.

Upgrading competition policy

21. Competition policy is central to regulatory reform, as its principles provide a benchmark to assess the quality of regulations, and should therefore be integrated into the policy framework for regulation. Moreover, as regulatory reform stimulates structural change, vigorous enforcement of competition policy is needed to ensure that violations of competition law do not prevent the realisation of the benefits. The competition agency, the Korea Fair Trade Commission (KFTC), has played a central role in reform efforts (OECD, 2007b). The “Clean Markets” campaigns of 2001-03, which produced a surge in actions against violations, focused on the service sector.¹⁶ In 2003, the KFTC launched “the Market Reform Roadmap” and the “Task Force for Advancing the Market Economy”,¹⁷ which led to the amendment of the Monopoly Regulation and Fair Trade Act (MRFTA) in the spring of 2007. *First*, a number of steps were taken to improve the leniency programme introduced in 1997.¹⁸ *Second*, the merger review system was streamlined through a pre-notification system, bringing it more closely into line with other OECD countries. *Third*, the surcharge against cartels was doubled from 5% to 10% of turnover, comparable to the rate in most European countries. At the same time, the base was changed from the firms’ average total turnover during the previous three years to the relevant turnover during the violation period, making the surcharge lower in effective terms than in other countries.¹⁹

22. In addition, policies toward large business groups (*chaebol*) were reformed. The KFTC strengthened *ex post* supervision while minimising *ex ante* regulation, relaxed the requirements to create holding companies, and reinforced the monitoring function of markets to counter complex shareholding structures and undue subsidisation. The shift in KFTC priorities from its historic focus on *chaebol* financial structure and governance toward core competition problems, as recommended in past *OECD Economic Surveys: Korea*, is reflected in the changing allocation of KFTC staff. In addition, the ceiling on the total amount of shareholding in other domestic companies by *chaebol* affiliates was increased from 25% to 40% of net assets and the asset threshold of groups subject to the ceiling was raised from 6 trillion won to 10 trillion won. In March 2008, the government announced that it will abolish the shareholding ceiling.

23. The improvement in competition law was accompanied by strengthened enforcement. The total amount of surcharges jumped from 36 billion won in 2004 to 423 billion won in 2007 (Table 10). In

16. These campaigns targeted such services as telecommunications, broadband Internet service and shopping, medical services, wedding and funeral services, media, private tutoring institutions, credit cards, non-life insurance, real estate agents, home maintenance services, job-search agencies, banking and advertising.

17. The taskforce was composed of eight subgroups involving relevant government agencies, academia, businesses and civic organisations. One focused on the policy for large business groups.

18. Violations discovered through the leniency programme accounted for 40% of the surcharges between 1997 and 2007 and 64% between 2005 and 2007. The KFTC hiked the reduction in the surcharge rate for the second applicant for leniency from 30% to 50%, while prohibiting such reductions for cartel coercers. In addition, the protection of the confidentiality of leniency applicants was strengthened.

19. In most OECD countries, financial sanctions can be as high as 10% of total firm turnover, not of the commerce affected, and there is no time limit in applying the sanctions, except in a few countries. Moreover, financial sanctions can be up to two times the gain in the United States and up to three times in New Zealand. The 2007 reform in Korea set the rate at 2% for unfair trade practices and 3% for abuse of market dominance, compared to the 10% for cartels.

addition, 48 criminal cases were filed by the KFTC in 2007, up from 22 in 2004.²⁰ Increased enforcement partly reflects greater resources: the KFTC's budget doubled between 2000 and 2007 while the number of staff rose from 402 to 503. Vigorous enforcement contributes to Korea's high ranking in the OECD's indicator of competition policies (Høj, 2007).

Table 10. Enforcement activity by the KFTC

	1996	1998	2000	2002	2004	2005	2006	2007
Warning, etc.	606	649	520	2 013	2 388	2 421	2 514	2 124
Recommendation for correction	179	57	35	110	100	163	178	124
Corrective order	250	538	441	497	478	754	644	927
Total	1 035	1 244	996	2 620	2 966	3 338	3 336	3 175
Surcharges								
Number of cases	22	69	49	91	91	274	157	325
Billion won	16	136	226	88	36	259	175	423

Source: Korea Fair Trade Commission (2008).

24. While significant progress has been achieved, further challenges remain. *First*, although financial penalties have risen, their deterrent effect is still weaker than in most other OECD countries, indicating a need for further increases. Criminal penalties, which are rarely applied, should be more credible. No one has ever spent any time in jail for violating the competition law,²¹ although the KFTC treats horizontal cartels as illegal *per se*. *Second*, the KFTC's investigative powers, originally designed for voluntary processes, need to be strengthened. The administrative fine for non-compliance with an investigation is so low that some firms prefer to pay the fine rather than provide sensitive information. The KFTC cannot conduct a "dawn raid" to enter premises and take possession of evidence, a right that is granted to other administrative enforcement bodies that deal with labour, tariffs, environment and taxes. The KFTC needs such compulsory investigative powers to be more effective.²² *Third*, special protection for SMEs should be further scaled back. In particular, the MRFTA provision that prevents large companies from acquiring small firms in industries dominated by SMEs should be repealed.²³ The possibility of entry by large firms would encourage small firms to increase their efficiency and the prospect of acquisition by a larger firm could increase their value and improve their access to financing. *Fourth*, remaining exemptions from the MRFTA should be scaled back or eliminated.

Strengthening international competition

25. Strengthening links to the world economy is another means to boost productivity growth. Despite increasing openness, Korea's level of integration with the world economy is still very low in terms of

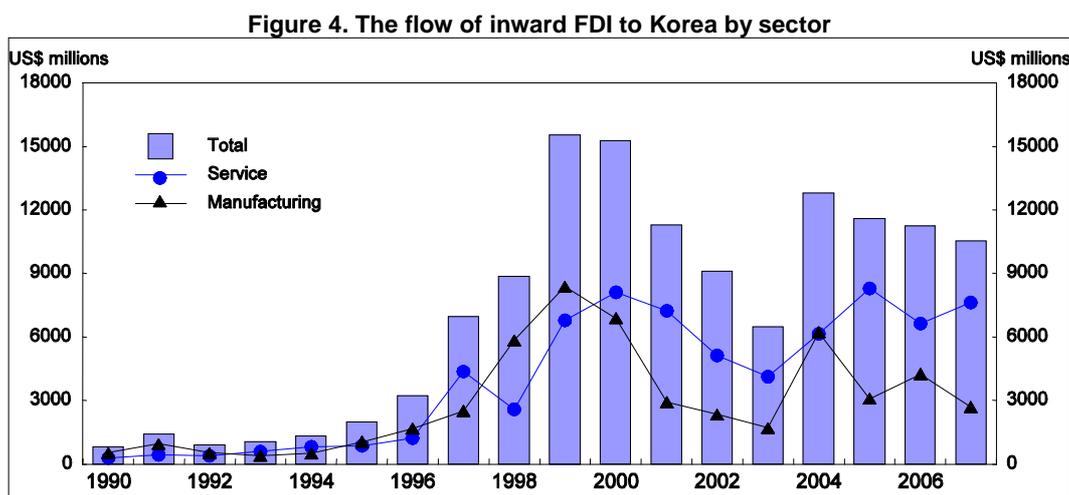
20. Between 1981 and 2007, 396 cases were filed with the prosecutor's office, of which 75% resulted in indictments and 4.8% are still under investigation. There is no information on the number of convictions.

21. Since 2000, imprisonment was imposed in six competition cases, but the sentence or its service were suspended in each case. Increased use of criminal sanctions in hard-core cartel cases to make the threat of individual liability more realistic requires co-operation with the prosecutors.

22. The Ministry of Justice has opposed giving the KFTC stronger investigative powers as long as the KFTC has a monopoly on initiating prosecutions. On the other hand, the KFTC is concerned that the Ministry of Justice would pursue prosecutions of alleged competition violators purely from a criminal law perspective, without economic input, thus harming competition.

23. In addition to protecting SMEs, this rule aimed at preventing the "indiscriminate" expansion of *chaebol*.

import penetration, the share of foreign workers and the stock of inward FDI (*OECD Economic Surveys: Korea, 2007*). Korea experienced a big surge in FDI inflows in the second half of the 1990s as a result of reductions in barriers and the restructuring of the economy in the wake of the 1997 crisis (Figure 4).²⁴ Nevertheless, the stock of inward FDI in Korea in 2006 was the third lowest in the OECD area, at 8% of GDP. Moreover, inflows have slowed since 2004 despite policies aimed at attracting foreign investors, notably the three FEZs launched in 2003 that offer financial incentives to foreign companies, such as preferential tax treatment and exemptions from some regulatory requirements.



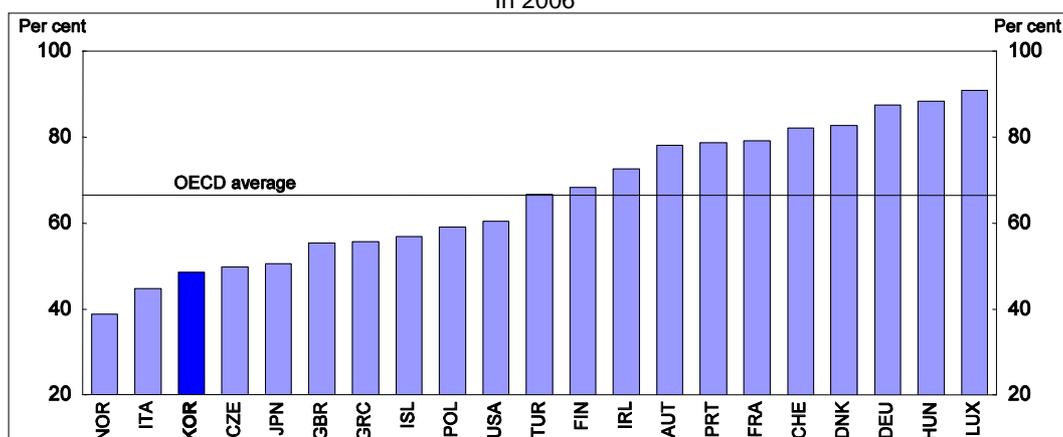
Source: Ministry of Knowledge Economy.

26. The globalisation of services has been driven by technological advances, such as broadband networks and digitalisation, regulatory reform and trade liberalisation. The share of the service sector in FDI inflows in Korea has increased, accounting for half of the total since 1997, primarily due to the financial sector, as banks that had been re-capitalised using public money after the financial crisis were privatised.²⁵ Nevertheless, the share of the service sector in the cumulative inward FDI stock was the third lowest in the OECD area, at 49% in 2006 (Figure 5). As a result, foreign affiliates accounted for only 8% of service sector turnover and 4% of employment in 2004 (MOCIE, 2005), compared to OECD averages of 19% and 10%, respectively (OECD, 2005c). As for trade, imports of services amounted to only 20% of Korea's total imports of goods and services in 2007, below the OECD average of 26%.

24. *First*, the extensive restructuring in the financial and corporate sectors in the wake of the crisis created a large market for cross-border M&As. More than half of the 30 largest business groups in 1998 either went bankrupt or entered workout programmes and the number of financial institutions fell by 40% in 1998-99. Many of the rest survived thanks to links with foreign investors. *Second*, the government removed restrictions on FDI while making vigorous efforts to attract foreign investors. Of the 52 sectors previously prohibited or restricted to foreign investment, 30 have been opened completely or partially. *Third*, a significant decline in stock and land prices made investment more attractive for foreign investors.

25. The privatisation of banks re-capitalised using public funds boosted the foreign ownership share from 16% in 1997 to 64% in 2004. Foreign investors now own more than 50% of nine of the 14 commercial banks.

Figure 5. Share of the service sector in the stock of inward FDI in OECD countries
In 2006¹



1. For France, Germany, Greece, Iceland, Italy, Luxembourg, Norway and Portugal, data are only available for 2005.
Source: OECD Economic Globalisation Indicators Database.

27. Strengthening international competition and thereby promoting faster productivity growth in services requires measures to reduce barriers to inflows of FDI and service imports. Despite a significant fall between 1998 and 2003, the OECD's indicator of barriers to trade and investment ranked Korea as the sixth highest in the OECD area in 2003. To reverse the downward trend in FDI inflows, Korea should further relax FDI restrictions, including foreign ownership ceilings in key services, and liberalise product market regulations. In addition, it is important to foster a foreign investment-friendly environment, thereby encouraging more cross-border M&As, enhance the transparency of tax and regulatory policies and reform the labour market. The treatment of manufacturing and services in FEZs should be more balanced. While all manufacturing industries qualify for benefits, including tax breaks and rent support, logistics, tourism, education, R&D and medical services are the only service industries eligible. Finally, the emphasis on special zones should not distract policymakers from the top priority of improving the business climate.

28. Measures to improve the FDI environment should be accompanied by trade liberalisation, which in turn promotes inflows of FDI. Although Korea did not belong to any FTAs prior to 2004, it has since implemented FTAs with Chile, Singapore, the European Free Trade Association and ASEAN (Table 11). The Korea-US FTA, which is awaiting ratification in both countries, takes steps to open the service sector in such areas as law, accounting and finance. Negotiations with India were completed in 2008. At present, Korea is pursuing a multi-track approach in negotiating FTAs with Canada, the European Union, Mexico and the Gulf Co-operation Council,²⁶ which combined with existing FTAs, would cover half of Korea's trade. However, the high level of agricultural protection in Korea²⁷ limits the coverage of FTAs and hinders the negotiation of additional agreements.

26. Korea's policy aims at: *i*) pursuing FTAs with large advanced economies and promising emerging markets; *ii*) achieving FTAs that have a high degree of liberalisation and are comprehensive in terms of coverage and scope; and *iii*) adopting a multi-track approach of simultaneous negotiations with more than one country.

27. The level of Producer Support Estimate over the period 2003-05 was 62%, double the OECD average.

Table 11. Korea's FTA strategy

Country	Status	Share of exports in 2007 in per cent		Share of imports in 2007 in per cent	
		Total	Agriculture	Total	Agriculture
Chile	Took effect in 2004	0.8	0.1	1.2	1.6
Singapore	Took effect in 2006	2.6	0.8	1.9	0.2
EFTA	Took effect in 2007	0.4	0.1	1.0	0.5
ASEAN	Took effect for trade in goods in 2007	9.6	9.2	9.3	15.4
United States	Negotiations were completed in 2007	14.5	10.6	10.4	18.6
India	Negotiations were completed in 2008	1.6	0.3	1.3	1.7
Canada	Negotiations are underway	1.2	0.9	0.9	2.6
Mexico	Negotiations are underway	1.3	0.2	0.3	0.3
EU	Negotiations are underway	15.4	4.4	10.3	9.7
GCC	Negotiations are underway	2.9	3.7	15.5	0.2
MERCOSUR	Joint government study completed in 2006	1.0	0.2	1.0	6.4
China	Joint study at government level is underway	21.8	12.1	17.7	20.9
New Zealand	Joint private study was completed in 2007	0.2	2.2	0.3	4.0
Australia	Joint private study was completed in 2008	1.3	2.0	3.7	8.6
Peru	Joint private study was completed in 2008	0.1	0.0	0.3	0.3
Russia	Joint study at private level is underway	2.2	6.6	2.0	3.0
Turkey	Joint study at private level is underway	1.1	0.1	0.1	0.2

Source: MOFAT, Korea International Trade Association and Korea Agricultural Trade Information.

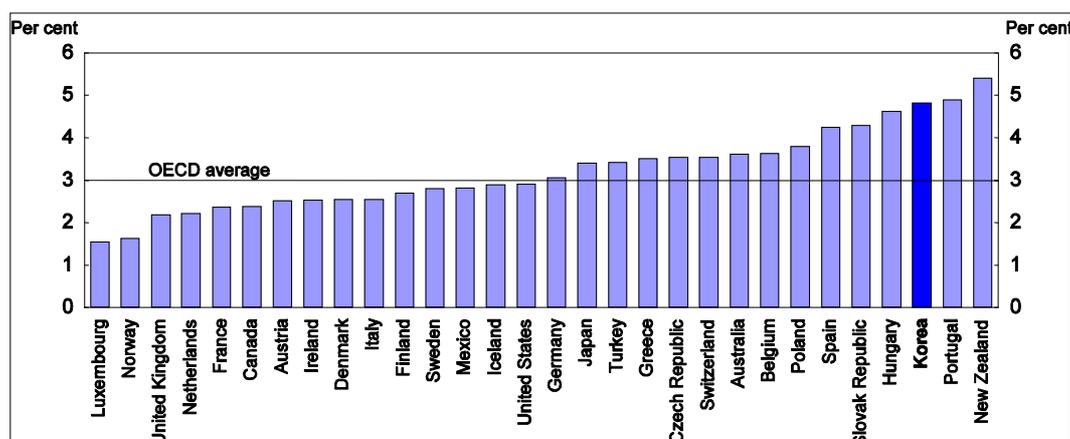
Policies to boost productivity in key service industries

29. This section focuses on specific issues in some of the service industries that have high growth potential, namely telecommunications, financial services and business services.

Telecommunications

30. Regulatory reform helped Korea make impressive progress in developing its telecommunication service markets, resulting in better services, lower prices and rapid innovation. The telecommunication sector generated nearly 5% of GDP in 2005, well above the OECD average of 3% (Figure 6). In addition to the rapid diffusion of broadband penetration, Korea is a technological leader in other areas such as wireless broadband and digital multimedia broadcasting. There is a need, though, for further reform to stimulate competition, which would encourage the private sector to choose the appropriate technology and services. It is important that the objective of technological leadership in ICT manufacturing does not lead to distortions in the telecommunication services market.

Figure 6. Telecommunication revenue as a percentage of GDP in OECD countries
In 2005



Source: OECD (2007c), *OECD Communication Outlook 2007*, OECD, Paris.

31. Korea's regulatory framework, based on detailed service categories, had become increasingly outdated as communication networks became integrated. Such an approach has limited competition between services by dividing the market.²⁸ In addition, regulations on price and bundling have slowed the development of innovative services. The government's 2007 "Roadmap for Telecommunication Policy and Regulation" aims at encouraging the development of new services through deregulation, competition and greater predictability of regulation. In addition, the Roadmap will promote the integration of service categories by: *i*) allowing bundling by major operators; *ii*) permitting number portability from PSTN to VoIP and improving the numbering policy; *iii*) introducing MVNO wireless services and USIM;²⁹ *iv*) relaxing price regulation; *v*) phasing out regulation of handset subsidies; and *vi*) reducing entry barriers and facilitating M&As.³⁰

32. Another major reform was the restructuring of regulatory organisations. In February 2008, the Ministry of Information and Communication (MIC) and the Korea Broadcasting Commission (KBC) were integrated into the Korea Communications Commission (KCC), which regulates telecommunication, broadcasting and convergence sectors. The KCC should help resolve the past conflicts between the industry promotion activities in the MIC and the efforts of the former KCC, which operated in the same ministry, to foster competition. Under the new framework, industry promotion belongs to the Ministry of Knowledge Economy. The creation of the KCC is a major step towards an independent body that deals with regulatory issues, although the chairman may attend cabinet meetings.³¹ In addition, the new KCC is

28. For example, the development of IPTV (Internet Protocol TV) was delayed by the lack of agreement between the KBC, which regulated broadcasting, and the MIC, which regulated telecommunications.

29. The acronyms in this paragraph stand for PSTN (Public Switched Telephone Network), VoIP (Voice over Internet Protocol), MVNO (Mobile Virtual Network Operator), and USIM (Universal Subscriber Identity Module).

30. The implementation of some of these steps has already resulted in significant benefits. In particular, allowing bundled service, including Korea Telecom's local telephony, resulted in price discounts of up to 10% and the end of regulations on handset subsidies benefited consumers.

31. The KCC consists of five permanent commissioners, one of whom serves as chairman, a minister-level post. Two of the commissioners are appointed by the president, one of whom, designated as chairman, needs a prior hearing by the National Assembly. The current chairman was inaugurated in March 2008.

better able to deal with the convergence of broadcasting and communications, ending the conflict between the former MIC and the KBC,³² and should make it easier to address issues of market power and vertical integration.

33. Regulatory reform has also eased the conditions for market entry. Operators are classified as facility-based (requiring licenses to enter the market), special (requiring registration) and value-added (requiring notification). Previously, facility-based operators were required to get an individual license for each type of service. In 2007, services were reclassified into the categories of transmission, services that require spectrum allocation, and facility leasing, thereby easing the entry of new operators in more than one type of service.³³ Easing entry requirements is especially important in the fixed-line market, where KT's market share for local telephone calls exceeds 90%, reflecting the small number of participants³⁴ and the lack of effective competition. Another concern is that facility-based and special service providers are required to contribute between 0.5% and 0.75% of their annual revenue for R&D conducted by a public research institute.³⁵ Such charges reflect the priority given to ICT manufacturing and should be abolished.

34. Although operators are allowed to set service prices through notification, those that are considered to have market power in terms of business size and market share are subject to authorisation. The problem of weak competition in the mobile market should be addressed directly by providing spectrum to and licensing more market players and by requiring existing mobile operators to support MVNOs, rather than regulating prices.

35. Korea has used a fee-based system since 2000 for the allocation of spectrum, rather than the auction approach recommended by the OECD. The government sets a higher and lower limit for spectrum fees. The applicants that offer to pay the higher price receive more points in the "beauty contest" procedure, but this is only one criterion in choosing which firm obtains the spectrum. The winners of the contest are allowed exclusive rights for spectrum use, including the right to transfer or lease the spectrum, thus creating a type of secondary market. However, in principle, the transfer or lease is not possible until three years after the licensing, with some exceptions specified by the law, and requires approval by the KCC. An auction system, combined with a deregulated secondary market, should be implemented to achieve more efficiency in the allocation and use of spectrum.

36. The law on Internet Protocol Television (IPTV) in 2007 and the creation of the integrated KCC in 2008 is promoting the convergence between telecommunications and broadcasting, but there is still much scope to improve the framework. Regulation should be shifted from a vertical approach based on the type of business to a horizontal approach based on transmission and content. Another issue is the deregulation of cable TV (CATV) to create a level playing field with IPTV. At present, CATV operators are limited to regional markets, putting them at a disadvantage *vis-à-vis* telecommunication operators (KT and SK Broadband), which can offer nationwide IPTV services. Providing CATV operators with a nationwide franchise area would be an option. Another option is local loop unbundling, which has been little used

The other three permanent commission members are recommended by the National Assembly, one by the president's party and two by the opposition parties.

32. In 2007, the Internet Multimedia Broadcasting Business Law, which covers IPTV service, was passed.
33. For example, facility-based services for fixed-line communication for local, long-distance and international calls, which previously required three licenses, are now treated as a single transmission service.
34. As of the end of 2007, the number of participants in the fixed-line category was three for local calls, five for long-distance calls, five for international calls, and nine for VoIP.
35. For KT, for example, such charges amounted to \$64 million in 2004.

since its introduction in 2002. According to the new law, all IPTV operators shall open their facilities to competitors, although the degree of opening is still under discussion.³⁶ The government decision that optical fibre cables deployed after 2004 should not be subject to unbundling requirements in order to promote investment in optical fibre may restrict competition and strengthen dominant positions in this new technology. Unbundling should thus be extended to all local loops of dominant carriers regardless of their technology or the date of implementation.

37. Korea limits foreign investment to 49% in the two facility-based operators (KT and SKT).³⁷ In addition, the authorities can prevent an investor, regardless of nationality, from becoming KT's largest shareholder, although currently the largest shareholder in KT is a foreign investor. More generally, when more than half of a company is owned by a foreigner, and the company is investing through acquisition, it is required to report to the authorities. It should be noted, however, that this is a general requirement, applying to all sectors, not just telecommunications. The government argues that such investment restrictions are justified by national security considerations. However, most countries have the capacity to protect national security and public interest through the general legal framework rather than by foreign investment restrictions. Accordingly, such ownership restrictions should be eased, particularly as new entrants are often short of capital.

Financial services

38. As in other countries, the financial sector in Korea is regulated to limit systemic risk and to address information asymmetries between small investors and financial institutions. The financial sector is one of the most heavily regulated areas in Korea, accounting for 16% of the 5 223 regulations registered with the RRC. Over half of them are *ex ante* regulations such as licensing, permission and registration. Korea's positive-list system, which prohibits all activities except those that are explicitly approved, increases the burden of regulation, as every new product or practice requires the approval of regulators. Regulatory reform has been slowed by the use of administrative guidance, which is not based on any explicit law or regulation, by financial supervisors. In addition, the segmentation of the financial sector between banking, securities and insurance remains strict. However, regulatory reform has advanced in recent years, making Korea more attractive to foreign financial institutions. Since 2004, the number of foreign banks in Korea has increased from 28 to 39 and their assets have nearly doubled from \$28 billion to \$53 billion.

39. The Financial Services Commission (FSC) launched a major regulatory overhaul in 2008. In the *first* stage, to be completed by the end of 2008, all regulations will be reviewed from a zero-base approach from the perspective of global standards. The *second* stage aims to integrate similar regulations in different sectors by 2010 while maintaining the distinct sectors of banking, securities and insurance. In the *third* stage of reform, the consolidation of laws across the three sectors will be reviewed as part of a possible shift to universal banking. This reform would allow financial institutions to develop a wider range of products and services. At the same time, the FSC will shift the basis of regulation from the type of business to the type of function and enhance the transparency of its monitoring activities.

40. Regulatory reform will be further advanced by the Capital Markets Consolidation Act (CMCA) to be implemented in early 2009, which integrates seven related laws comprising 420 provisions governing capital markets and investment services industries. The firewalls between different investment services will be lowered, allowing a single firm to provide a broader range of services. The CMCA is expected to lead to

36. A study of prices for unbundled local loops would help clarify whether the limited extent of unbundling thus far is due to pricing or the existence of alternative infrastructure that reduces the need for unbundling.

37. It ought to be borne in mind that FDI restrictions should be considered together with state ownership of telecommunication operators.

consolidation of the securities industry and the emergence of domestic investment banks. The law will also increase the scope for innovation by replacing the positive-list by a negative-list system, which allows all products and practices except those that are specifically prohibited (Cho, 2007). The implementation of the CMCA during a period of extreme turbulence in world financial markets underlines the importance of proper supervision. Given that the new law is likely to sharply boost transactions in over-the-counter markets, it is critical to ensure that enhanced supervisory capacity precedes market growth and innovation. In particular, OECD country experience suggests that the planned reform is likely to raise liquidity risk for banks by increasing their already-high reliance on wholesale funding as household savings move away from deposits.³⁸

41. The CMCA is an essential part of Korea's Financial Hub Initiative, launched in 2003 to create a specialised financial centre based on asset management by 2010 and to become one of the top three financial hubs in Asia by 2015. The government selected four core strategic tasks as part of this initiative: *i*) deregulation, including further reform of the foreign exchange market; *ii*) fostering the asset management business, in part by the creation of the Korea Investment Corporation in 2005 to help manage the country's foreign exchange reserves; *iii*) encouraging the overseas expansion of domestic financial companies; and *iv*) improving the financial infrastructure and developing skilled professionals.

42. Becoming a financial hub for Asia would increase the productivity and efficiency of Korea's financial services industry by strengthening competition with foreign financial institutions. However, Korea faces severe competition from existing financial centres and other cities with ambitions to become a hub.³⁹ In a 2007 survey of persons working in Korea's financial sector (KDI, 2007a), 43% responded that strict regulation makes it difficult for Korea to become a hub. In addition, domestic companies need to achieve international competitiveness,⁴⁰ which is complicated by a general lack of expertise. Indeed, Korea ranked 45th in terms of financial experts, compared to 11th for Hong Kong, China and 15th for Singapore (IMD, 2008). In sum, creating a financial hub depends on modernising the regulatory structure and increasing the number of financial experts by improving business and living conditions, in part through reforms in education and healthcare, to attract more foreign investment.

43. As the liberalisation of Korea's financial market increases competition with global companies, domestic banks face challenges. Easing the ownership restrictions that separate banking and commerce by applying *ex ante* and uniform regulations on the ownership of banks by industrial capital is being considered as a way to boost efficiency and allow the emergence of strong owners that could enhance the competitiveness of banks. At present, non-financial entities can own a maximum of 4% of the shares in banks and bank holding companies (15% for local banks) while other entities can own up to 10% (15% for local banks). This regulation reflects a number of concerns about mixing industrial and financial capital.⁴¹ *First*, the capital of a financial institution that is owned by an industrial firm can be used for the benefit of

38. In Japan, for example, the loss of existing customers to capital markets was a key factor in the problems in the banking sector during the 1990s (Hoshi, 2001).

39. For example, Shanghai announced its so-called "three-step strategy" in 2002 to become a regional financial centre. Sydney has also been focusing on attracting foreign companies related to asset management and venture capital business as part of its "Axis Australia" initiative. Tokyo has undertaken financial reform programmes aimed at revitalising its financial industry.

40. At the end of 2006, the share of overseas operations in total assets of domestic banks was only 2.5%, much lower than the 91% for UBS and the 56% for Citibank and HSBC.

41. Among OECD countries, 14, including France, Germany and the United Kingdom, have no direct regulations on industrial capital's ownership of banks. In seven countries, including Japan, the financial supervisor can allow industrial capital to own banks.

that firm, which could undermine the soundness of the financial institution and endanger market stability. *Second*, it is difficult for a financial institution to carry out its lending role, including the oversight of company management, when it is owned by industrial capital. *Third*, a level-playing field is not possible among industrial companies when some own financial companies. The risk of allowing industrial capital to own banks in Korea has been reduced by the improvement in market discipline and financial supervision since the 1997 crisis. Given the reduced risks and the need to increase competitiveness, the government plans to raise the limit on industrial capital's ownership of banks from 4% to 10%. The government should advance very cautiously in relaxing rules on bank ownership, given the potential risk and past experience and ensure that there are proper supervisory tools in place before any changes.⁴²

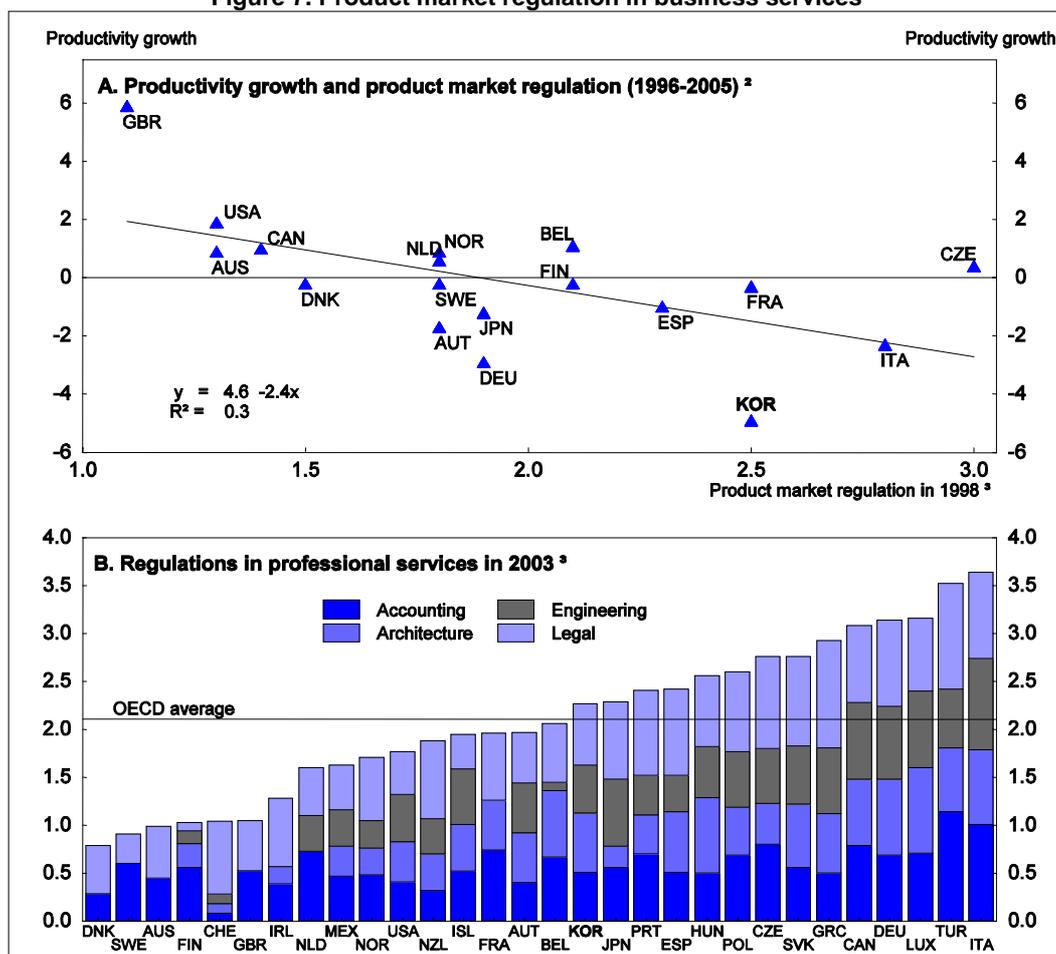
Business services

44. The business services sector – which includes *inter alia* accounting, legal services, architecture, consulting, R&D, marketing and advertising – has risen from an average of 6.5% of GDP in the OECD area in 1993 to 8.7% in 2006, as firms outsourced to take advantage of economies of scale and scope. In contrast, its share increased from only 4% to 5% in Korea over that period. Given its importance as an input in many industries, an efficient business services sector is essential. In Korea, though, productivity growth per employee was significantly negative between 1996 and 2005 (Figure 7). As in other sectors, there is a negative correlation between the strictness of product market regulations and productivity growth. In 1998, the regulation index for Korea in four services - accounting, architecture, engineering and legal services (which account for the major share of the business services category) – was the third highest in the OECD. Korea has made progress since, for example by ending the fee-setting arrangements for nine professional services and reducing the minimum number of license holders needed to set up a legal entity. In addition, the number of persons allowed to pass the bar exam each year was raised from 300 in 1995 to 1 000 in 2001 and restraints on advertising were relaxed. By 2003, Korea's ranking on the regulation index was close to the OECD average, although there is scope for further progress (Panel B).

45. One key priority is legal services. Despite the increase in the annual quota since 2001, and some decline in the number of cases per lawyer, Korea had 5 758 persons per lawyer in 2006, the highest ratio in the OECD area and almost four times higher than the OECD average (Lee *et al.*, 2007). A law was passed in 2007 to create law schools in 2009. A total of 41 universities applied to open law schools, with a total combined annual enrolment of almost 4 000. In February 2008, however, the government decided to limit enrolment to 2 000 in 25 law schools, with an average enrolment of only 80 students, which may be too small to achieve economies of scale. It is also questionable whether the government can accurately forecast the future demand for legal services in Korea, where the number of lawsuits is rising rapidly from a low level. According to one study, an increase in the annual supply of lawyers from the current 1 000 to 3 000 would not significantly reduce the average income of lawyers in the long term (KDI, 2007b). Ensuring an adequate number of lawyers is essential to a market economy. The ceiling on the number of law students should therefore be increased or abolished, while raising and eventually eliminating the ceiling on the number of persons allowed to pass the bar exam.⁴³

42. The ownership of some non-bank financial institutions, particularly the merchant banks, by industrial companies, who used them as cash cows, played a role in triggering the 1997 crisis.

43. Each year, only 1 000 of the approximately 17 500 who take the bar exam are permitted to pass.

Figure 7. Product market regulation in business services¹

1. ISIC 71-74.

2. For Denmark, the period is 1996 to 2004.

3. Index is 0 to 6, from least to most restrictive.

Source: OECD STAN Database and Conway and Nicoletti. (2006).

46. The government should take additional steps to strengthen competitive pressures in business services by liberalising restrictive regulations, which purportedly address market failures related to information asymmetries between service providers and their clients. There is little empirical evidence that such regulations actually improve consumer welfare. Instead, they tend to boost prices and reduce innovation (Nguyen-Hong, 2000 and Patterson *et al.*, 2003) and should thus be liberalised. The fact that the stringency of regulation of professional services varies significantly across countries (Figure 7) suggests that entry is more restricted than necessary for client protection or market integrity. In Korea, strengthening competition in business services, which has been weak compared to other sectors, requires relaxing barriers on entry, advertising, relationships with other businesses and limits on the participation of foreign nationals. In addition, setting common industry-wide standards would increase market transparency and competition, thus enabling service providers to realise economies of scale. Reform should follow the OECD principles for regulation of business services (OECD, 2007a):

- Exclusive rights should not be granted when there are other mechanisms available to address market failure directly.
- Entrance requirements for a profession should not be disproportionate to the necessary skills.

- Regulation should focus on protecting small consumers.
- Restrictions on competition between members of a profession should be eliminated while encouraging competition between professional associations.
- Professional associations should not be granted exclusive jurisdiction and should be subject to independent scrutiny of their decisions about entrance requirements and mutual recognition.

47. Rapid advances in information technology and the liberalisation of trade and investment in services have expanded international competition in business services. The Korea-US FTA will help foster a competitive environment in legal services in three steps. In the *first phase* (when the agreement enters into force), US-licensed lawyers will be permitted to provide advice related to the laws of the jurisdiction in which they are allowed to practice. In addition, foreign law firms will be permitted to establish a representative office in Korea. In the *second phase* (no more than two years later), representative offices of US law firms will be allowed to enter into agreements with Korean law firms to jointly deal with cases involving domestic and foreign legal issues. In the *third phase* (no more than five years later), US law firms will be allowed to establish joint ventures with Korean law firms that can employ Korea-licensed lawyers and practice Korean law. These measures will bring high quality legal services to Korea and encourage domestic law firms to grow in size and efficiency. The FTA's provision for legal services provides a blueprint for the opening of other business services. However, even after the three phases, US legal firms will not be allowed to establish themselves in Korea. The FTA also includes a mutual recognition arrangement for engineers, architectural designers and veterinarians, which will help foreign professionals enter the Korean market.⁴⁴

Conclusion

48. An efficient service sector is essential to Korea's overall economic performance and the welfare and living standards of its citizens. While reforms to enhance productivity in services have many benefits, the resulting structural changes also entail adjustment costs. However, such costs should not prevent reforms to create more open and competitive service markets. Faster productivity growth in the service sector requires strengthening competition through regulatory reform, upgrading competition policy and increasing openness to international trade and FDI inflows. A traditional industrial policy approach of targeting specific service activities for expansion should be avoided. A summary of specific recommendations to achieve these objectives is presented in Box 2.

Box 2. Summary of recommendations to enhance productivity growth in the service sector¹

Provide a favourable environment for the service sector

- Scale back government assistance to SMEs, including subsidies, financial assistance, credit guarantees and tax incentives, to make small companies less dependent on public support.
- Eliminate discrimination against the service sector by ensuring equal treatment with manufacturing.
- Establish an efficient reporting system for intellectual and intangible assets and provide adequate protection of intellectual property to encourage investment in intangible assets.

Accelerate regulatory reform

44. This will also help Korean professionals enter the US market. However, becoming a successful global supplier of business services requires a stable ICT infrastructure, a highly educated and language-proficient workforce and an efficient infrastructure, simplified administrative procedures and reasonable regulatory burdens in the domestic market (Engman, 2007).

- Enhance the use of RIAs and public consultations, to improve the quality of regulation and adopt an explicit policy that regulations can only be adopted if the benefits justify the costs.
- Step up the pace of regulatory reform to reduce entry barriers and regulations that limit competition and expand the scope to cover additional areas, such as industrial and regional policies.
- Create a mechanism in the National Assembly to ensure the regulatory quality of proposed legislation.
- Extend successful reforms introduced in special zones on a nationwide basis and phase out the special zone approach.

Upgrade the competition framework

- Strengthen the deterrent effect of surcharges and criminal penalties, including individual sanctions.
- Provide the KFTC with compulsory investigative powers for more effective enforcement.
- Scale back remaining exemptions from the competition law and preferential measures, particularly for SMEs.

Strengthen international competition

- Promote inward FDI by eliminating restrictions on foreign ownership and improving the business climate.
- Liberalise product market regulations, which tend to discourage potential foreign investors.
- Utilise FTAs to strengthen competition in the service sector and reduce barriers that limit trade.

Remove restrictions and enhance competition in key service industries

Telecommunications

- Safeguard in practice, as spelled out in the law, the independence and transparency of the KCC's regulatory decisions.
- Relax foreign investment restrictions.
- Further liberalise entry requirements for facility-based services.
- Introduce an auction system for the allocation of spectrum, while promoting a secondary market.
- Liberalise regulations on CATV to create a level playing field with the converged services of IPTV.

Financial services

- Implement the Capital Markets Consolidation Act to promote the creation of new investment products and enhanced competition between securities firms, while upgrading supervision.
- Encourage the globalisation of Korea's financial sector by modernising the regulatory framework and improving the business and living environment to attract firms and experts from overseas.
- Be cautious in revising limits on bank ownership to limit the risk of mixing financial and industrial capital.

Business services

- Remove unnecessary constraints on entry, form of practice, advertising, and foreign participation, in line with the OECD guidelines for the regulation of business services.
- Encourage international competition by expanding recognition of certificates acquired overseas.

- Raise and eventually abolish the ceiling on the number of law students and persons passing the bar exam.

1. Recommendations in each section are ranked in order of their priority.

BIBLIOGRAPHY

- Aghion, P., N. Bloom, R. Blundell, R. Griffith and P. Howitt (2005), “Competition and Innovation: An Inverted-U Relationship”, *The Quarterly Journal of Economics*, Vol. 120, No. 2.
- Alesina, A., S. Ardagna, G. Nicoletti and F. Schiantarelli (2005), “Regulation and Investment”, *Journal of the European Economic Association*, Vol. 3, No. 4.
- Bassanini, A. and E. Ernst (2002), “Labour Market Institutions, Product Market Regulation and Innovation: Cross-Country Evidence”, *OECD Economics Department Working Paper No. 316*, OECD, Paris.
- Cho, Sang-hoon (2007), “Big Bang in Korea’s Capital Markets: Reform Legislation and Its Impact”, *Korean Economy 2007*, Korea Economic Institute of America, Washington, D.C.
- Conway, P., V. Janod, and G. Nicoletti (2005), “Product Market Regulation in OECD Countries: 1998 to 2003”, *OECD Economics Department Working Paper No. 419*, OECD, Paris.
- Conway, P. and G. Nicoletti (2006), “Product Market Regulation in the Non-Manufacturing Sectors of OECD Countries: Measurement and Highlights”, *OECD Economics Department Working Paper No. 530*, OECD, Paris.
- Conway, P., D. de Rosa, G. Nicoletti and F. Steiner (2006), “Regulation, Competition and Productivity Convergence”, *OECD Economics Department Working Paper No. 509*, OECD, Paris.
- De Serres, A., S. Kobayakawa, T. Sløk and L. Vartia (2006), “Regulation of Financial Systems and Economic Growth in OECD Countries: An Empirical Analysis”, *OECD Economic Studies*, No. 43, OECD, Paris.
- Engman, M. (2007), “Expanding International Supply Chains: The Role of Emerging Economies in Providing it and Business Process Services”, *OECD Trade Policy Working Paper No. 52*, OECD, Paris.
- Høj, J. (2007), “Competition Law and Policy Indicators for the OECD Countries”, *OECD Economics Department Working Paper No. 568*, OECD, Paris.
- Høj, J., M. Jimenez, M. Maher, G. Nicoletti and M. Wise (2007), “Product Market Competition in the OECD Countries: Taking Stock and Moving Forward”, *OECD Economics Department Working Paper No. 575*, OECD, Paris.
- Hoshi, T. (2001), “What Happened to Japanese Banks”, *Monetary and Economic Studies*, (February), Bank of Japan.
- IMD (2008), *World Competitiveness Yearbook 2008*, International Institute for Management Development, Lausanne.

- IMF (2006), *Global Financial Stability Report*, April, Washington, D.C.
- Jaumotte, F. and N. Pain (2005), “Innovation in the Business Sector”, *OECD Economics Department Working Paper* No. 459, OECD, Paris.
- Kang, D. (2005), “Corporate Distress and Restructuring Policies of Korean Small and Medium-sized Enterprises: Role of Credit Guarantees”, mimeo, Korea Development Institute, Seoul.
- Kang, D. (2007), “Empirical Evaluations on the Government Financial Assistance toward SMEs in Korea”, in *Financing Innovation-Oriented Business to Promote Entrepreneurship*, edited by D. Kang, Korea Development Institute, Seoul.
- Korea Development Institute (KDI) (2007a), *Survey on Financial Hub Policy*, Seoul (in Korean).
- Korea Development Institute (KDI) (2007b), “Policy Issues to Advance the Service Sector”, Seoul (in Korean).
- Korea Fair Trade Commission (KFTC) (2007), “Recent Development in Korea’s Competition Laws and Policies”, Seoul.
- Korea Fair Trade Commission (KFTC) (2008), *Annual Report, 2008*, Seoul (in Korean).
- Korea Federation of SMEs (2008a), *Statistics of Small and Medium Enterprises*, Seoul (in Korean).
- Korea Federation of SMEs (2008b), *SMEs Status Indicator*, Seoul (in Korean).
- Korea Information Society Development Institute (2008), *Korea’s Telecommunication Service Market Outlook, 2008*, Seoul (in Korean).
- Korea Institute for Industrial Economics and Trade (KIIET) (1999), *An Analysis of the Economic Effects of Regulatory Reform*, Seoul (in Korean).
- Kox, H. and H. Nordas (2007), “Service Trade and Domestic Regulation”, *OECD Trade Policy Working Paper* No. 49, OECD, Paris.
- Lee, Byounghee, Byungik Cho and Youngmin Kim, (2007), “Analysis of Entry Barriers to the Service Industry”, Research Paper of the Bank of Korea, August, Seoul (in Korean).
- Ministry of Commerce, Industry and Energy (MOCIE) (2005), *Survey on the Management of Foreign-Invested Firms*, Seoul (in Korean).
- Ministry of Science and Technology (2007), *Report on the Survey of Research and Development in Science and Technology*, Seoul (in Korean).
- Nguyen-Hong, D. (2000), “Restrictions on Trade in Professional Services”, Productivity Commission Staff Research Paper, AusInfo, Canberra.
- Nicoletti, G. (2001), “Regulation in Services: OECD Patterns and Economic Implications”, *OECD Economics Department Working Paper* No. 287, OECD, Paris.

- Nicoletti, G., A. Bassanini, E. Ernst, S. Jean, P. Santiago and P. Swaim (2001), “Product and Labour Market Interactions in OECD Countries”, *OECD Economics Department Working Paper* No. 312, OECD Paris.
- Nicoletti, G. and S. Scarpetta (2003), “Regulation, Productivity and Growth: OECD Evidence”, *OECD Economics Department Working Paper* No. 347, OECD, Paris.
- Nicoletti, G. and S. Scarpetta (2005), “Regulation and Economic Performance: Product Market Reforms and Productivity in the OECD”, *OECD Economics Department Working Paper* No. 460, OECD, Paris.
- OECD (2000), *Competition in Professional Services*, OECD, Paris.
- OECD (2005a), “The Benefits of Liberalising Product Markets and Reducing Barriers to International Trade and Investment in the OECD”, *OECD Economics Department Working Paper* No. 463, OECD, Paris.
- OECD (2005b), *Growth in Services: Fostering Employment, Productivity and Innovation*, Report for the Meeting of the OECD Council at Ministerial Level, OECD, Paris.
- OECD (2005c), *OECD Economic Globalisation Indicators*, OECD, Paris.
- OECD (2005d), *OECD Economic Surveys: Korea*, OECD, Paris.
- OECD (2007a), *Globalisation and Structural Adjustment: Summary Report of the Study on Globalisation and Innovation in the Business Services Sector*, OECD, Paris.
- OECD (2007b), *Korea: Progress in Implementing Regulatory Reform*, OECD Reviews of Regulatory Reform, OECD, Paris.
- OECD (2007c), *OECD Communication Outlook*, OECD, Paris.
- OECD (2007d), *OECD Economic Surveys: Korea*, OECD, Paris.
- OECD (2008a), *OECD Compendium of Productivity Indicators*, OECD, Paris.
- OECD (2008b), *OECD Factbook*, OECD, Paris.
- OECD (2009), “Product Market Regulations in OECD Countries 1998-2007: Update and Extension of the OECD Indicators”, (forthcoming), OECD, Paris.
- Oliveira Martins, J. and C. de la Maisonneuve (2006), “Projecting OECD Health and Long-Term Care Expenditures: What Are the Main Drivers?”, *OECD Economic Studies*, No. 42, Paris, OECD.
- Paterson, I., M. Fink and A. Ogus (2003), “Economic Impact of Regulation in the Field of Liberal Professions in Different Member States”, Institute for Advanced Studies, Vienna.
- Pilat, D. (2007), “Productivity in Business Services”, in *Business Services in European Economic Growth*, edited by L. Rubalcaba and H. Kox, Edward Elgar.
- Presidential Commission on SMEs (2007), *The Report on Evaluation and Prior Adjustment of Budget for SMEs in 2007*, Seoul (in Korean).

Regulatory Reform Committee (2007), *Regulatory Reform White Book*, Seoul (in Korean).

Small and Medium Business Administration (2007), *Policies for SMEs in 2008*, Seoul (in Korean).

Wöfl, A. (2005), “The Service Economy in OECD Countries”, OECD Science, Technology and Industry Working Paper No. 2005/3, OECD, Paris.

World Bank (2008), *Doing Business 2009*, Washington, D.C.

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