October 2006
IMF Country Report No. 06/381

Republic of Korea: Selected Issues

This Selected Issues paper for the Republic of Korea was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on September 8, 2006. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of the Republic of Korea or the Executive Board of the IMF.

The policy of publication of staff reports and other documents by the IMF allows for the deletion of market-sensitive information.

To assist the IMF in evaluating the publication policy, reader comments are invited and may be sent by e-mail to publicationpolicy@imf.org.

Copies of this report are available to the public from

International Monetary Fund ● Publication Services
700 19th Street, N.W. ● Washington, D.C. 20431
Telephone: (202) 623 7430 ● Telefax: (202) 623 7201
E-mail: publications@imf.org ● Internet: http://www.imf.org

Price: $18.00 a copy

International Monetary Fund
Washington, D.C.

INTERNATIONAL MONETARY FUND

REPUBLIC OF KOREA

Selected Issues

Prepared by Varapat Chensavasdijai, Tarhan Feyzioğlu, Jacques Miniane,
Romuald Semblat (all APD), Edward Frydl (MFD), Kenneth Kang, and Song-Yi Kim
(IMF Resident Representative Office in Seoul)

Approved by the Asia and Pacific Department

September 8, 2006

Contents Page

I. Korea's Transition to a Knowledge-Based Economy: Prospects and Challenges Ahead[1]

A. Introduction

1. **Korea has made huge strides in economic development over the last three and a half decades**. Real GDP growth has averaged 7 percent per year over the period, increasing per capita income sevenfold. As a result, GDP per capita now stands at 70 percent of the OECD average (in purchasing power parity terms), compared with just 20 percent in 1970. The rapid accumulation of factor inputs, coupled with large productivity gains in the manufacturing sector, has been the driving force behind Korea's impressive growth.

2. **But looking forward, growth is set to decline substantially**. Already, potential output growth has fallen to about 4½ percent from 8 percent before the crisis, as investment and productivity have slowed. By 2030, it could drop to just 2½ percent, mainly because Korea's labor supply will start to fall in less than 15 years. This means that it will take longer for Korea to catch up with other advanced economies.

3. **The key to reversing this trend and improving growth prospects lies in stimulating productivity, especially in the service sector**. The service sector is large and growing, accounting for more than half of GDP and almost two-thirds of employment. However, productivity is low relative to other sectors and has been stagnating. The main problem lies in the retail sector, which is dominated by small mom-and-pop stores, but productivity performance in other service areas has also proved disappointing.

4. **Increasing productivity in the service sector requires a three-pronged strategy**. The first step would be to deregulate the service sector. The second would be to help small firms grow by increasing their access to finance. And the third would be to reform the labor market to enhance its flexibility and create a strong safety net, so that workers can move out of mom-and-pop shops to higher-quality jobs. This paper focuses on the first element of the strategy, while other studies in these *Selected Issues* discuss small business financing (Chapter IV) and labor market and income inequality (Chapter V) issues in depth.

5. **The paper is organized as follows**. Section B looks at potential output trends in Korea. It provides an update to similar studies by Ma (2001) and Zebregs (2003) in identifying the long-term determinants of growth. The key difference is that the analysis in this paper is forward-looking and potential output is evaluated at both the aggregate and sectoral levels. Section C explores the reasons why productivity is low in Korea's service

---

[1] Prepared by Varapat Chensavasdijai.

sector. Section D discusses progress in service sector reforms, especially the retail trade sector, and outlines what more can be done. Section E offers some concluding remarks.

B. Potential Output Trends in Korea

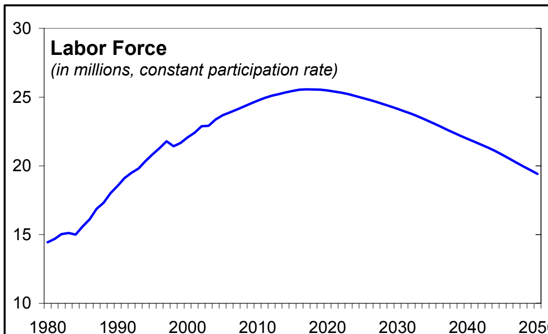
6. **The drivers of growth in Korea have changed in recent periods**. Based on the standard production function approach, in the 1980s employment growth accounted for half of GDP growth, while capital accumulation and productivity growth each accounted for one-fourth. In recent periods, however, the growth of factor inputs has been slowing, with labor growth more than halving since the 1980s and capital accumulation decelerating sharply since the Asian crisis. In addition, productivity growth has dropped compared with the 1980s.

Contribution to GDP Growth
(average annual percent change)

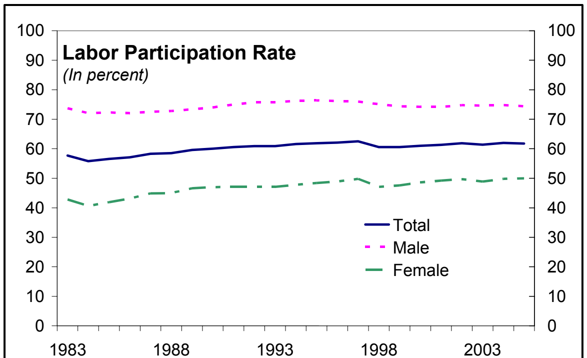
	GDP	Labor	Capital	TFP
1981-2005	6.4	2.7	2.0	1.7
1981-1990	8.4	4.1	2.1	2.1
1991-2000	5.3	1.7	2.4	1.5
2001-2005	4.6	1.7	1.3	1.6

Source: Staff estimates.

7. **Looking ahead, the labor supply is set to decline dramatically because Korea's society is aging rapidly**. By 2026, the elderly population (over 65 years of age) is expected to exceed 20 percent of the total population.[2] The birth rate is also falling, with Korea having one of the lowest birth rates of any advanced economy. According to the U.S. Population Reference Bureau (2006), Korea's fertility rate is at 1.1 births per woman, compared with 1.3 in Japan, 1.4 in Europe (including Eastern Europe), and 2.0 in the United States. In principle, there should be some scope to offset this low rate of birth through higher labor force participation, since Korea's female participation rate (50 percent) is relatively low when compared with 61 percent in Japan, and 69 percent in both the United Kingdom and the United States. But over the past decade there has been no



Sources: CEIC Data Company Ltd; National Statistical Office; and Fund staff projections.

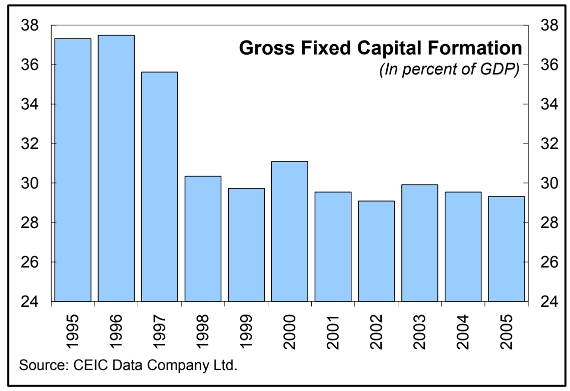


Source: National Statistical Office.

[2] See Chapter VI for the fiscal implications of population aging in Korea.

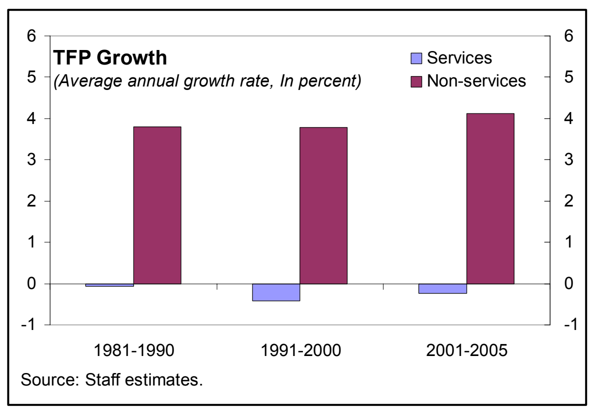
increase in the female participation rate at all. As a result, labor supply growth is slowing: based on population projections from the National Statistical Office and assuming a constant participation rate, the absolute size of the labor force is projected to decline from 2018.

8. **At the same time, investment growth has also been slowing due to higher perceived risk and structural impediments**. Investment as a share of GDP has fallen from around 36 percent during the pre-crisis period to less than 30 percent since the crisis. While overinvestment by *chaebols* during the 1990s may partly explain the investment decline, there are other factors that may have restrained investment. For instance, firms are now operating in a riskier environment as production has shifted from more traditional items to advanced technology products, where tastes and technology are constantly changing.[3] Moreover, corporations have limited scope for transferring risk, since cross-guarantees within business groups have been abolished and implicit government guarantees withdrawn, while banks are applying tighter risk management practices in their lending policies. Firms are also reluctant to invest due to strict labor protection for regular workers, which makes it difficult and costly to dismiss workers when projects prove unprofitable. Meanwhile, investment by small- and medium-sized enterprises (SMEs) has been held back by low profitability as a result of the growing global competition. Public credit guarantees have also increased barriers to entry and exit and delayed the much needed restructuring of SMEs, keeping many unviable firms in operation.[4]



Source: CEIC Data Company Ltd.

9. **Meanwhile, productivity growth is now lower than it was in the 1980s**. A key reason is that productivity performance in services has been poor, while the sector's importance in the economy has been growing. Productivity in services is difficult to measure, but the available indicators consistently point to a problem. According to the OECD (2005a), labor productivity in services is only 56 percent of that in manufacturing, well



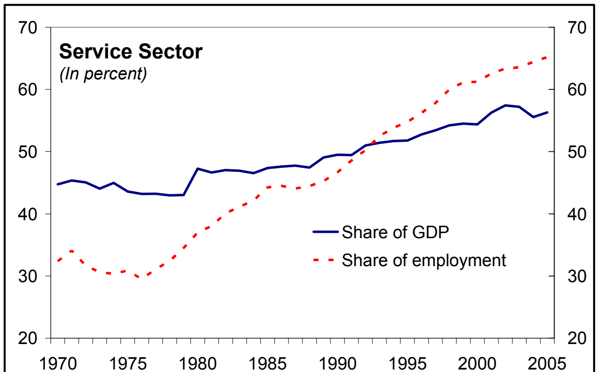
Source: Staff estimates.

[3] See IMF (2006) for a fuller discussion.

[4] See Kang and Miniane (2004) for a detailed analysis of problems facing SMEs in Korea.

below the 93 percent OECD average, the largest gap in the OECD.[5] In addition, only 14 percent of Korea's exports are related to services, compared with the OECD average of 22 percent. Pyo et al. (2006) note that labor productivity growth in Korea's service sector was about half the rate in the manufacturing sector during 1984–2002. In addition, the study finds that total factor productivity (TFP) growth in many sub-sectors including transportation, wholesale and retail trade, and public services was negative. Similarly, Kim (2006) finds that TFP growth in services declined from an annual average of 1.7 percent in the 1980s to 0.4 percent in the 1990s, while that of other developed countries actually increased over the same period.

10. **As the Korean economy shifts further toward services, overall productivity growth could decline even more**.[6] The share of services in value added has been rising from 45 percent in 1970 to 50 percent in 1990 and 56 percent in 2005.[7] And the share of services is likely to increase further in the future, closer to the OECD average of 69 percent. Indeed, there has been a strong shift toward services over the past two decades in OECD economies. This structural change is particularly striking in Australia, the United Kingdom, and the United States, where the service sector share rose by 15 percentage points between 1980 and 2003. This development has been driven largely by a shift in demand and increased competition in the service sector, mainly due to regulatory reform and a reduction in international barriers to trade and investment in services. Wölfl (2005) finds that the contribution of the service sector to overall productivity growth has increased in these countries.



Sources: Bank of Korea and National Statistical Office.

11. **In sum, assuming current trends continue, Korea's potential output growth would slow sharply**. It is important to note that potential output estimates are subject to measurement problems and different assumptions about growth of factor inputs and productivity, and thus involve large uncertainties, especially in projections covering a time span of 50 years. Nevertheless, with assumptions about the evolution of the structure of the

---

[5] For the wholesale and retail trade, and hotels and restaurants sector, labor productivity is only 23 percent of that in manufacturing.

[6] Wölfl (2005) finds a negative relationship between the share of services in total value added or employment and aggregate productivity growth for OECD countries during 1990–2001.

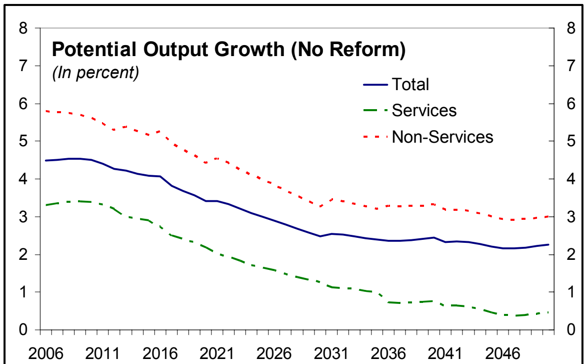
[7] In terms of employment, the service sector accounts for 65 percent of the labor force in 2005.

economy and growth of factor inputs, it is possible to make some reasonably robust estimates.

- In the baseline scenario, it is assumed that the labor force grows in line with population growth projections, with a constant participation rate.[8] Labor is expected to continue shifting into services, until Korea's service sector share of employment reaches the OECD average (69 percent) within 10 years, and rising gradually thereafter to Australia's level (74 percent) over the next 20 years.

- The capital stock is assumed to grow at the average rate of the past 5 years (about 4 percent per annum) for most of the projection period, with slower accumulation once the labor shift has stabilized.[9] The shares of capital stock in the service and nonservice sectors are derived from Pyo et al. (2006).

- Productivity (TFP) growth in services is assumed constant at its current rate which is close to zero, while productivity growth in non-services declines over time in proportion with the shift of labor into services. This implies that Korea is close to its technological frontier in manufacturing, so that nonservice productivity growth is converging to the levels of other advanced economies.



Source: Staff projections.

Under these assumptions, potential output growth will fall rapidly to around 2½ percent by 2030 and to 2 percent by 2050, from about 4½ percent at present. This projection is consistent with other recent estimates by the Ministry of Finance and Economy (4.8 percent for 2006–2010, and declining to

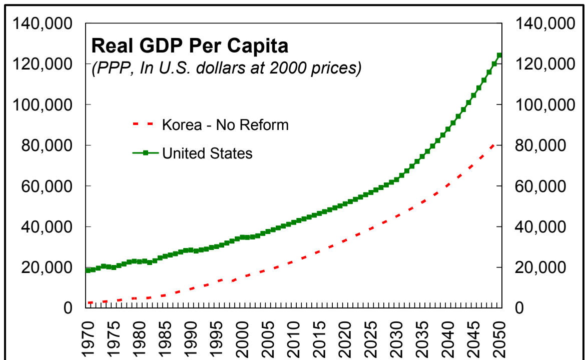
---

[8] Small variations in the participation rate do not affect the overall potential output trends much. See OECD (2005a) for projections of Korea's labor force under different scenarios for the participation rates. The labor force trend is adjusted to allow for quality changes, by taking into account each employed group's level of educational attainment and relative wages.

[9] Capital stock estimates for Korea, along with the National Wealth Survey (NWS), were discontinued by the National Statistical Office in 1997. Thus we compute the initial capital stock in a particular year following the procedure outlined in Young (1995), and use the perpetual inventory method to estimate capital stock for the remaining years. This methodology was adopted in Zebregs (2003), but capital stock was also adjusted to allow for quality changes. The adjustment produced a similar series to the raw capital stock series. Pyo et al. (2006) estimate Korea's capital stock with a similar methodology, linking one benchmark year for capital stock in the NWS with investment data from the national accounts, and also provide capital stock series for each economic sector.

1 percent by 2050), Korea Development Institute (2003) (4.6 percent for 2003–2012), Bank of Korea (2005) (4.6 percent for 2005–2014), OECD (2005a) (4.6 percent for 2003–2012), although it is somewhat below that in Pyo and Ha (2006) (5.4 percent for 2005–2015).

12. **Under this scenario, Korea will take a long time to catch up with other advanced economies in terms of per capita income**. For example, Korea will continue to lag behind the United States for the next 50 years, assuming potential output growth for the United States of 3.2 percent for 2006-2011 and 2.6 percent for the remaining period.[10] Based on projections from World Population Prospects of the United Nations Population Division, population growth in the United States remains positive, albeit slowing gradually, throughout the projection period.

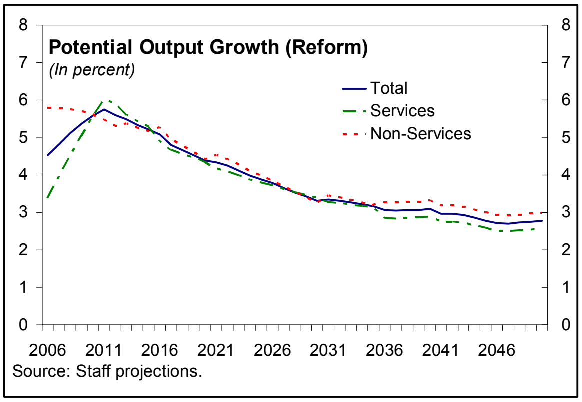


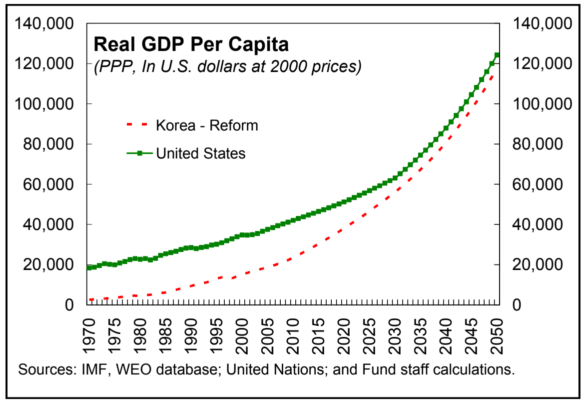
Sources: IMF, WEO database; United Nations; and Fund staff calculations.

13. **However, if service sector productivity could be improved, the outlook would be much better**. In the alternative scenario, we retain all the other assumptions mentioned above except that due to reforms productivity growth in the service sector now rises rapidly in the initial period and is then sustained at a higher rate (around 2 percent) for the rest of the projection period. This higher rate of service productivity growth is close to the level in Australia, the United Kingdom, and the United States during the 1990s, based on estimates in Wölfl (2005). Under these assumptions, potential output growth will increase to 5½ percent over the next decade, before gradually falling to 3 percent by 2035 and thereafter. Overall, this represents an average increase of 0.8 percentage point in potential output growth relative to the baseline scenario. This is expected to put Korea's growth on a stronger and more sustainable path so that Korea would be able to catch up faster with other advanced economies, including the United States. The speed of catch up could be even faster if reforms result in a higher female participation rate and a better investment climate.

---

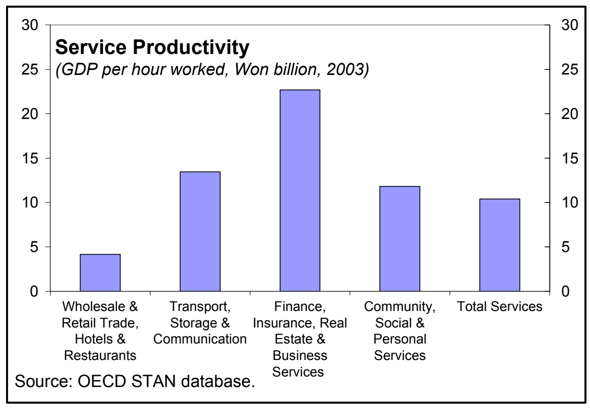
[10] Potential output growth estimates for the United States are based on Fund staff projections for 2006–2011 and the OECD *Economic Outlook* for the remainder of the projection period. Comparisons with other countries, such as Japan, are difficult given the uncertainty surrounding the path of potential output. For example, N'Diaye (2006) estimates Japan's potential output growth to be between 1.7 and 2.3 percent, depending on the estimated magnitude of the impact of structural reforms.



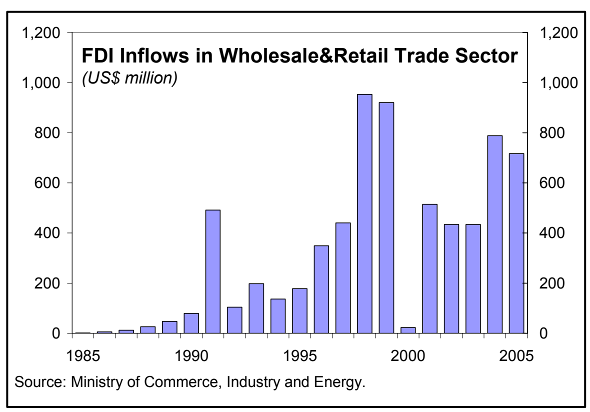


C. Why Is Service Productivity So Low?[11]

14. **Korea's service sector productivity varies by particular sub-sectors**. Finance, insurance, real estate and business services generate the highest value added per hour worked, exceeding by far the contributions from other service sectors. On the other hand, the wholesale and retail trade, and hotels and restaurants sector is the least productive sub-sector—and it accounts for the largest share of services, employing 40 percent of the service labor force (compared with around 20 percent in France, the United Kingdom, and the United States). According to Baek et al. (2004), labor productivity in Korea's retail sector is the lowest among OECD economies, around 30 percent of that in the United States. Consequently, the poor performance of retail services is dragging down the productivity of the service sector as a whole.



15. **Performance in the retail sector would be even worse, had the sector not benefited from a series of liberalization measures.**[12] Deregulation in the retail sector was initiated very early on. In 1988, the government began opening the retail sector to foreign investment. The first major reform



[11] This section benefited considerably from the analysis in Lee (2005).

[12] Baek et al. (2004) and Kim and Kim (2000) provide further details of retail trade deregulation in Korea.

took place in 1996, when limits on the number and size of stores for both domestic and foreign retail firms were eliminated, allowing the establishment of large-scale discount stores (hypermarkets). At the same time, foreign commercial presence in department stores and shopping centers was permitted, and foreign land ownership restrictions were eased. In 1998, the government allowed the construction of hypermarkets in quasi-industrial zones and relaxed restrictions on their establishment in natural greenbelt areas.[13] These reforms provided a more conducive business environment, and the number of large-scale discount stores rose from 34 in 1996 to 304 in 2005. At the same time, the reforms also attracted foreign direct investment. Three (Carrefour, Wal-Mart, and Costco) of the top twenty retailers were foreign-owned, and a partnership between Samsung and Tesco was formed in 1999. However, Carrefour and Wal-Mart have recently decided to leave the market, selling their stores to Korean retail groups.

16. **Deregulation has spurred productivity improvements in the retail industry**. Enhanced competition in the retail sector brought about many benefits including lower prices, transfers of technology and management skills, and a wider selection of shopping experiences. In particular, foreign competition has reshaped the local retail market by encouraging large domestic retailers to expand and become more efficient, and by forcing small stores to increase their specialization (Kim and Kim, 2000). The Ministry of Commerce, Industry and Energy (2002) estimates the value added per employee at discount stores to be two and a half times higher than that at supermarkets. According to ACNielsen (2004), the share of discount stores in total sales value rose from 25 percent in 2001 to 29 percent in 2004, while that of small supermarkets fell from 22 percent to 17 percent.

17. **But if large-scale stores are so efficient, why is the retail sector so unproductive?** The answer is that the sector still remains dominated by mom-and-pop shops. More than 90 percent of Korean retail firms employed less than four employees. According to Baek et al. (2004), the number of employees per retail firm in Korea was 2.3 in 2000 compared with 5.7 in Japan and 6.3 in the European Union. In fact, around one-third of workers in Korea's service sector as a whole are self-employed, well above the average of 19 percent in OECD countries, 11 percent in Japan, and 7 percent in the United States. In wholesale and retail trade, this number is even higher at 50 percent, compared to an average of 30 percent in the OECD area.

18. **The number of small retail businesses has been growing rapidly due to lack of better job opportunities**. Since the financial crisis, the manufacturing sector has been shedding permanent jobs, by around half a million jobs during the past decade. Many of

---

[13] Natural greenbelt areas are designated development-restricted zones in urban districts, accounting for about 10 percent of total land in Korea.

these workers have entered the service sector as self-employed due to the lack of equivalent high-paying jobs in services. A survey of 3,000 retail stores by the Small and Medium Business Association (2005) indicates that more than half of stores were established for lack of better job opportunities. As a result, the proliferation of mom-and-pop stores has driven down profitability and productivity in the retail sector.

19. **Meanwhile, the expansion of large-scale retail stores has been hampered by land use regulations, such as strict zoning and land development laws**.[14] According to Kalirajan (2000), regulations on the establishment of a business in retail services for both domestic and foreign firms are considered the most restrictive in the OECD.[15] While there are no regulations on building large-scale stores in commercial zones, such zones account for only 0.2 percent of the total country. Store size is also limited in residential and industrial areas. There are no regulations on operations such as limits on shop opening hours and price controls, but large-scale stores are still subject to other regulations such as limits on building- and volume-to-land ratios.[16] The application process for opening a large-scale store remains complicated and time-consuming. Moreover, the ambiguity in laws and the difficulty in resolving conflicts between small-scale and large-scale retailers through local governments pose additional constraints.

20. **In other areas of services, productivity is low for other reasons.**[17]

- *Extensive entry barriers remain across the service sector.* Nguyen-Hong (2000) finds that restrictions in accountancy services in Korea are amongst the highest in the OECD.[18] For example, there are residency requirements as well as restrictions on the establishment of foreign accounting firms and on investment by non-professional investors. The commercial presence of foreign law firms is also prohibited, and

---

[14] Baek et al. (2004) point out that the non-manufacturing sector is subject to more and stronger entry barriers compared with the manufacturing sector. See also OECD (2000) for a comparative study of regulatory barriers in retail trade services in a number of Asian countries.

[15] The restrictiveness index scores range from 0 to 1, with 0 being least restrictive and 1 being most restrictive. For Korea, the index is 0.59 for retail services.

[16] For natural greenbelt areas, ceilings of 20 percent for the building-to-land ratio and 100 percent for the volume-to-land ratio apply, which makes large-scale retail outlets unprofitable. The volume-to-land ratio refers the volume of all buildings divided by the entire area of development.

[17] OECD (2005a) also cites industrial policies favoring exports and the manufacturing sector as having had a negative impact on the growth of the service sector.

[18] The restrictiveness index for Korea's accountancy services is 0.72, with 0 being least restrictive and 1 being most restrictive.

foreign qualifications are not recognized.[19] In social services, only non-profit organizations can establish a school or hospital, and the leasing of educational buildings and land is not permitted. Meanwhile, restrictions on foreign ownership in telecommunications as well as foreign content quotas for broadcast and cable television are also in force.

- *Firms are faced with high startup costs*. According to the World Bank (2006), Korea ranks 97th out of 155 countries in terms of the ease in starting a business. It takes on average 22 days to launch a business, at a cost of over $2,000, compared to 3 days and about $252 in Canada, which is ranked first. These factors discourage new firms from entering the market, limiting incentives for incumbent firms to increase their efficiency.

Time and Cost in Starting a Business (2005)

	Korea	OECD
Procedures (number)	12.0	6.5
Time (days)	22.0	19.5
Cost (percent of income per capita)	15.2	6.8
Minimum capital (percent of income per capita)	308.8	41.0

Source: World Bank (2006).

- *Financing is constrained.* Firms in the service sector have difficulty obtaining financing to grow and become established, especially in light of high innovation costs, and therefore remain as mom-and-pop stores. This is partly a result of firms' limited collateral for securing credit (under current collateral laws) and the underdevelopment of the venture capital industry to support innovative start-ups.[20] In an OECD study (2005b), service firms identified the financing constraint as the most important barrier to innovation, which is essential for the growth of the service sector.

- *Exit costs are high.* There is little incentive for weak firms to close due to government subsidies and the high cost of restructuring associated with an inefficient bankruptcy system. According to a survey by the Presidential Commission on Small and Medium Enterprises (2005), only 3 percent of the self-employed (businesses with less than five employees) were willing to shut down their business despite poor revenue prospects, with most intending to continue, or relocate or change the type of business

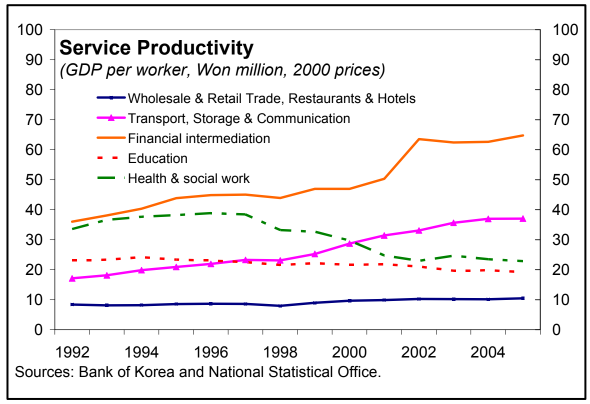
[19] Foreign lawyers can set up branch offices, form joint ventures with Korean law firms, and employ Korean and foreign lawyers, but cannot establish their own law firms.

[20] See Chapter IV for more details.

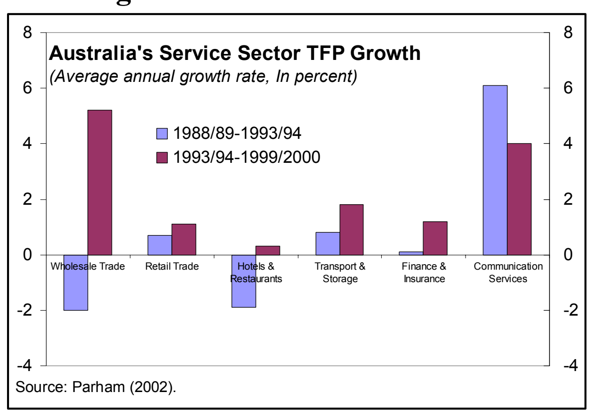
activity instead. In a survey of 500 retail stores in Seoul by Korea Chamber of Commerce and Industry (2004), most retailers were relying on the government to provide tax reduction and financial support, and to impose tighter restrictions on large-scale retail stores, to improve their profits rather than trying to raise productivity by training or adopting new technology.

D. What Can Be Done to Improve Productivity in Services?

21. **Deregulation could raise productivity in the service sector**. In Korea, deregulation has generated large productivity gains in financial services, and the same principle can be applied to other services.[21] Nicoletti and Scarpetta (2003) find strong negative correlations between product market regulations—particularly those related to administrative burdens for start-ups—and productivity growth in OECD countries during 1980–2000. The easing of entry restrictions in service industries is estimated to raise overall TFP growth by 0.1-0.2 percentage point in some countries. Similarly, N'Diaye (2006) estimates that product market reforms could raise TFP growth in Japan by about ¼ percentage point. The OECD (2005b) cites case studies of several international services firm to illustrate how the opening up of markets raises competition and encourages innovation, both of which contribute to improved performance in the service sector.



22. **Australia presents a good example of the strong links between reform and productivity**. According to Salgado (2000), structural reforms, including trade and product market liberalization and labor reforms, are estimated to have lifted TFP growth in Australia by 0.5–0.9 percentage points over the long run. In the service sector, Parham (2002) shows that TFP growth increased across nearly all sub-sectors, partly due to policy reforms introduced progressively from the mid-1980s through to the 1990s, which not



[21] Chapter II elaborates on financial sector deregulation in Korea.

only enhanced competition but also stimulated the adoption of advanced technologies and raised the rate of innovation. It is notable that TFP growth for the wholesale trade sector was negative in the early 1990s but turned sharply positive later in the decade.

23. **Australia's relatively open retail sector was key to its productivity improvements**. According to Kalirajan (2000), Australia's retail sector is among the least restrictive in the OECD, particularly with regard to the ease of establishing a business. Johnston et al. (2000) note that the high degree of competition in the retail sector induced rationalization, a shift toward larger-scale stores, investment in technology, greater integration of the supply chain, and better management practices. Rationalization was a key factor in boosting productivity in the retail sector. For example, in motor vehicle retailing, the number of car dealerships halved from 3,650 in 1984 to 1,800 in 1999. The number of service stations also fell from 20,000 to 8,000 over this period. The emergence of specialist chain stores intensified competition and allowed economies of scale in the supply chain and the use of more advanced store management systems.

24. **Some progress has been made in deregulating the service sector in Korea**. Special economic zones with tax and tariff incentives for foreign investors were set up in 2002 which helped to ease entry barriers. Within these economic zones, for-profit hospitals are permitted and since 2005 foreign hospitals have been allowed to treat Korean patients. Policies to strengthen competitiveness in the service sector have been formulated and implemented since 2003, including business support services and job training. The Korea Fair Trade Commission (KFTC) abolished or reformed 56 anti-competitive regulations in 2004 and is currently reviewing 94 additional regulations, while many regulations on foreign direct investment have been reformed. The KFTC also launched a two-year review of the existing 8,000 regulations in 2005. In addition, regulations on admission into the legal and accounting services have been eased.

25. **The government is continuing its efforts to promote the growth and competitiveness of service industries**. It recognizes the importance of knowledge-based service industries in generating jobs through enlargement and specialization, and the need for small businesses to strengthen their competitiveness. In early 2006, the government prepared a policy package to improve competition in ten service areas, including plans to allow more foreign engagement in law and accounting. It hopes that this will encourage the consumption of services provided in Korea, and thus help narrow the trade deficit in services of recent years, including in the areas of tourism, education, and health care.[22]

---

[22] Min (2005) considers the three key service sectors with greatest potential to be business, cultural and tourism, and medical services.

26. **But more needs to be done to raise productivity growth in Korea's service sector**. In line with OECD (2004, 2005a) recommendations, entry barriers could be reduced by further relaxing land use regulations to facilitate the development of large-scale retail stores, and easing restrictions on entry and business activity in professional services. Promoting competition in education is crucial in raising the level of human capital to support a knowledge-based economy and this can be achieved by deregulating and opening the market to foreign providers. In particular, this would encourage the restructuring and consolidation of tertiary education institutions which would help improve their quality. Regulations could be streamlined—with one-stop shops replacing multiple contact points and administrative procedures—and transparency in the regulatory framework increased. The exit of unviable firms could be facilitated with a more effective bankruptcy framework. Finally, innovation in services could be fostered, by providing firms with better access to financing so that they can invest more in R&D as well as become stronger in absorbing available technology.[23]

27. **Trade liberalization presents another opportunity to deregulate the service sector**. In line with the government's strategy of liberalizing services, the multilateral trade liberalization under the Doha development round of negotiations could provide a stimulus to opening up the service sector, for example in the medical, educational, and business service areas. The planned free trade agreement with the United States could help this process along. According to the Korea Institute for International Economic Policy, a Korea-United States Free Trade Agreement (FTA) could increase services value added by 0.3–0.5 percent and services employment by 80,000 jobs. Overall GDP is estimated to rise by 0.4–2.0 percent. The U.S. International Trade Commission estimates that GDP could rise by 0.7 percent, with services value added increasing by 1.4 percent. Realizing the potential gains from liberalization, however, will require that the FTA (and others in negotiations) be designed in a way that will complement multilateralism. It is also important to ensure that sectoral openings under such an agreement be as nondiscriminatory as possible, so as to simplify implementation and minimize the risks of trade diversion.

E. Conclusions

28. **Korea is well-positioned to make further progress in the 21st century**. Compared with other OECD countries, Korea ranks fifth in R&D expenditure (about 3 percent of GDP). It has the third strongest ICT infrastructure (measured in ratio of ICT production to GDP), with the highest rate of broadband internet penetration in the world. Korea also has the highest expenditure on education (8 percent of GDP), and ranks second on international student achievement tests.

[23] According to the OECD (2005a), Korea's service sector accounted for only 13 percent of business R&D in 2001, compared with the OECD average of 21 percent.

29. **But the future of Korea depends critically on improving its service sector productivity performance**. Deregulation of the service sector is necessary to facilitate this change, complemented by increased flexibility in the labor market and greater availability of financing for SMEs. These reforms will enhance competition and innovation, allowing the service sector to flourish, helping Korea to achieve its long-standing goal of catching up to the world's richest nations.

References

ACNielsen, 2004, *Large Discount Stores Marking the Decline of Door to Door Sales* October 27 (Seoul).

Baek, Yong-chun, Randall Jones, and Michael Wise, 2004, “Product Market Competition and Economic Performance in Korea,” Economics Department Working Paper No. 399, (Paris: Organization for Economic Cooperation and Development).

Bank of Korea, 2005, “Causes of Deterioration in the Growth Potential of and Future Outlook for the Korean Economy,” mimeograph, translated from Korean version.

International Monetary Fund, 2006, *Regional Economic Outlook*, Asia and Pacific Department, May (Washington).

Johnston, A., D. Porter, T. Cobbold, and R. Dolamore, 2000, *Productivity in Australia’s Wholesale and Retail Trade*, Staff Research Paper, October (Canberra: Productivity Commission, AusInfo).

Kalirajan, Kaleeswaran, 2000, *Restrictions on Trade in Distribution Services*, Staff Research Paper, August (Canberra: Productivity Commission, AusInfo).

Kang, Kenneth, and Jacques Miniane, 2004, “Too Small to Fail? Restructuring Korea’s Small and Medium Enterprise Sector” (unpublished; Washington: International Monetary Fund).

Kim, Hyun-Jeong, 2006, “The Shift to the Service Economy: Causes and Effects,” July (Seoul: Institute for Monetary and Economic Research, Bank of Korea).

Kim, Jong-Il, and June-Dong Kim, 2000, “Liberalization of Trade in Services and Productivity Growth in Korea,” KIEP Working Paper No. 00-10, (Seoul: Korea Institute for International Economic Policy).

Korea Chamber of Commerce and Industry, 2004, *Survey of Managerial Status and Views of Small Retail Owners*, translated from Korean version (October 29).

Korea Development Institute, 2003, *The Potential Growth Rate of the Korean Economy: 2003–2012* (Seoul).

Lee, Soohyung, 2005, “What’s the Matter with Korea’s Service Sector—And What Can Be Done to Fix It?” mimeograph (Washington: International Monetary Fund).

Ma, Henry, 2001, "Potential Output, The Output Gap, and Inflation in Korea," in *Republic of Korea: Selected Issues*, IMF Country Report No. 01/101 (Washington: International Monetary Fund).

Min, Ko Joeng, 2005, "Making the Service Industry Globally Competitive," *Korea Economic Trends*, Vol. 9, No. 30, pp. 13–20 (Seoul: Samsung Economic Research Institute).

Ministry of Commerce, Industry and Energy, 2002, *Survey of Small and Medium Retail Stores*, translated from Korean version, (May 21).

N'Diaye, Papa, 2006, "Japan's Potential Output and Productivity Growth," in *Japan: Selected Issues*, IMF Country Report No. 06/276 (Washington: International Monetary Fund).

Nguyen-Hong, Duc, 2000, *Restrictions on Trade in Professional Services*, Staff Research Paper, August (Canberra: Productivity Commission, AusInfo).

Nicoletti, Giuseppe, and Stefano Scarpetta, 2003, "Regulation, Productivity and Growth: OECD Evidence," Economic Policy Paper (Paris: Organization for Economic Cooperation and Development).

Organization for Economic Cooperation and Development (OECD), 2000, *Assessing Barriers to Trade in Services: Retail Trade Services* (Paris).

———, 2004, *Economic Survey of Korea* (Paris).

———, 2005a, *Economic Survey of Korea* (Paris).

———, 2005b, *Growth in Services: Fostering Employment, Productivity and Innovation*, Meeting of the OECD Council at Ministerial Level (Paris).

Parham, Dean, 2002, "Productivity and Policy Reform in Australia," *International Productivity Monitor*, No. 5 (Canberra: Australia Productivity Commission).

Population Reference Bureau, 2006, *World Population Data Sheet* (Washington).

Presidential Commission on Small and Medium Enterprises, 2005, *Extended Meeting of Special Committee for SMEs*, translated from Korean version (June 1).

Pyo, Hak-Kil, and Bongchan Ha, 2006, "The Estimation of Potential GDP in Korea: A Review," mimeograph (Seoul: National University).

Pyo, Hak-Kil, Kuen Hee Rhee, and Bongchan Ha, 2006, "Growth Accounting and Productivity Analysis by 33 Industrial Sectors in Korea (1984–2002)," mimeograph (Seoul: National University).

Salgado, Ranil, 1999, "Productivity Growth and Structural Reform," in *Australia: Selected Issues*, IMF Country Report No. 00/24 (Washington: International Monetary Fund).

Small and Medium Business Association, 2005, "Policies for Activating Traditional Retail Shops," translated from Korean version (June 11).

Wölfl, Anita, 2005, "The Service Economy in OECD Countries," in *Enhancing the Performance of the Services Sector* (Paris: Organization for Economic Cooperation and Development).

World Bank, 2006, *Doing Business in 2005* (Washington: World Bank).

Young, Alwyn, 1995, "The Tyranny of Numbers: Confronting the Statistical Realities of the East Asian Growth Experience," *Quarterly Journal of Economics*, Vol. 110, No. 3, pp. 641–80.

Zebregs, Harm, 2003, "Long-Run Economic Growth in Korea," in *Republic of Korea: Selected Issues*, IMF Country Report No. 03/80 (Washington: International Monetary Fund).

II. A Financial Big Bang in Seoul? The Development of the Financial Sector in Korea[24]

A. Why is the Development of the Financial Sector so Important for Korea?

1. **The development of the financial system is very important for Korea as its economy matures, becomes more open and integrates with the region**. With growth becoming increasingly dependent on productivity, raising the efficiency of capital allocation in the economy is key to boosting long-term prospects. The development of the financial system is needed to respond to the needs of a modern Korean economy and to reflect the type of financing required for high-tech firms to emerge and prosper. At the same time, the aging of the population will require the provision of sophisticated financial products. Finally, as its economy becomes more open and integrates with its neighbors, Korea may have a role to play in intermediating savings from the region. Indeed, the ambition of the government is to have Korea become an important trade and financial center in Northeast Asia and benefit from the rise of China.

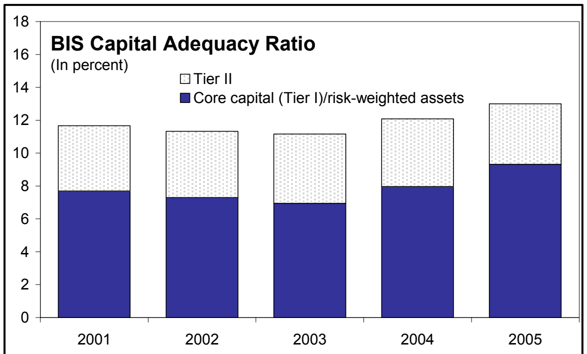
2. **This paper gives an assessment of recent government initiatives to develop capital markets**. In Section B, the paper describes the state of the financial sector, and points to the need for capital markets to be developed in order to complement an already large and vibrant banking sector. In Section C, it introduces the recent initiatives that have been adopted in the past few years by the authorities to deal with it. In Section D, it presents the government's first pillar: the deregulation of capital market activities and shows (in Section E) how it differs from global trends. Some lessons from the experience of Europe and the United States in dealing with the elimination of barriers between different financial activities are introduced in section F. The paper provides in Section G and H some recommendations on how to deal with potential risks that may arise during the liberalization process in Korea based on international experience. Section I presents the second pillar: the development of the foreign exchange market suggesting in Section J some ways to foster the development of the money and bond markets, prerequisite for an active foreign exchange market.

B. Why Is The Development of Capital Markets Lagging Behind that of the Banking Sector?

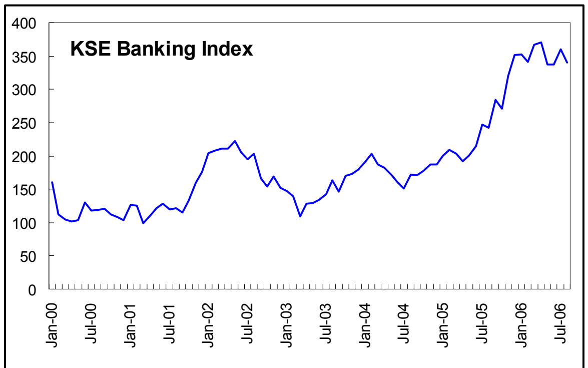
3. **Since the financial crisis, the Korean banking system has been restructured and stabilized**. The banking sector has consolidated into seven large banks. Banking system capitalization has improved with the BIS capital adequacy ratio now reaching 13 percent. Non performing assets have been cut to only one percent of total loans and banking

[24] Prepared by Romuald Semblat.

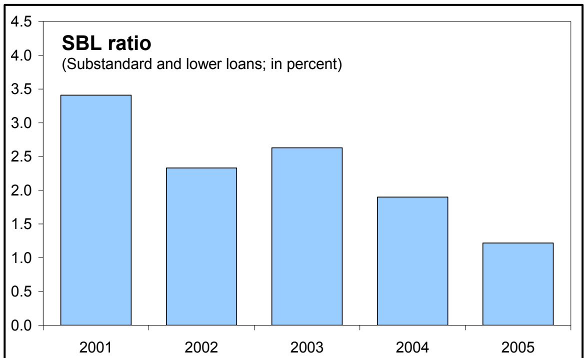
profitability has risen to world-class levels. As a result, credit ratings of Korean banks have been upgraded with most now benefiting from A- ratings, and banking shares have rallied over the past few years in tandem with the rise in the KOSPI.



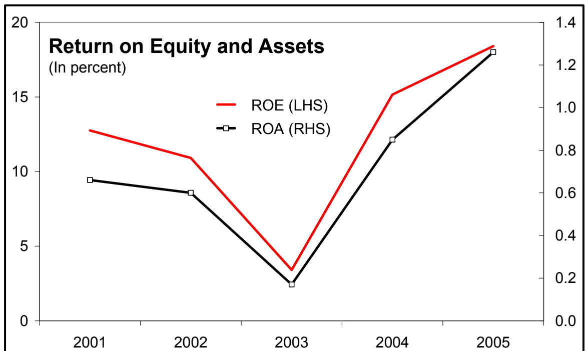
Source: Financial Supervisory Service.



Source: CEIC Data Company Ltd.



Source: Financial Supervisory Service.



Source: IMF, Corporate Vulnerability Utility.

S&P LT Local Issuer Rating At End Period

	2001	2002	2003	2004	2005	2006
Kookmin	BB+	BBB+	BBB+	BBB+	A-	A-
Woori	BB-	BB+	BBB-	BBB	A-	A-
Hana	...	BBB	BBB	BBB+	A-	A-
Shinhan	BBB-	BBB+	BBB	BBB	A-	A-
Citibank	...	...	...	...	A+	A+
SCFB	BB+	BBB-	BBB-	BBB-	A-	A

Source: Bloomberg LP.

4. **To a large extent, foreign capital has helped this transformation**. There were two waves of entry of foreign capital into the Korean banking system. First, from 1999 to 2003, foreign private equity funds acquired three banks that failed during the financial crisis and restructured them. Foreign capital helped restructure the failed banks through large capital

injections and reduction of NPLs. It also helped turn around the operations of the banks and introduced new financial products, such as mortgage-backed securities, thereby contributing to the development of capital markets. Once the banks became profitable, foreign private equity funds sold their stakes to banking groups, allowing, in a second wave, two major international banks, Citigroup and Standard Chartered to expand quickly in the Korean banking market. In addition, following the complete liberalization of portfolio investment into the equity market in 1998, foreign investors have acquired significant stakes in domestically-controlled banks, encouraging them to upgrade corporate governance and to focus on profitability.

Korean Banking System (as of end 2005)

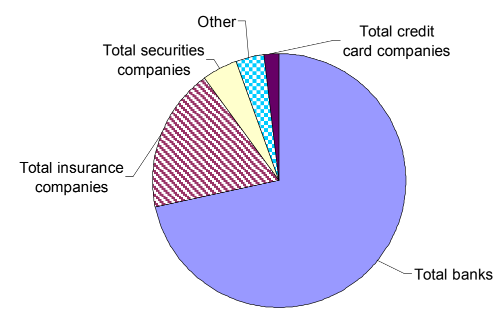
	Share in total banking system assets (in percent)	Foreign shareholders (in percent)
Korean nationwide banks		
Kookmin Bank	18.2	86
Woori Bank	10.6	11
Hana Bank	8.2	68
Shinhan Bank [1]	14.1	63
Foreign banks		
Citibank	4.5	100
Standard Chartered	3.9	100
KEB [2]	5.9	51
Others (regional and specialized banks)	34.6	...
Regional	4.4	...
Specialized	30.2	...

Source: Financial Supervisory Service.

[1] Includes data for Chohung bank.
[2] KEB is in the process of being acquired by Kookmin.

5. **The development of Korean capital markets, however, has remained behind that of the banking system**. During the high growth period (from the 1960s until the mid-1990s), the banking system was deliberately favored as the main channel of intermediation of savings to the corporate sector. Banking activities and capital market activities were kept separate. As a result, the development of non-bank financial firms has lagged that of banks, and securities firms are of relatively small size: the total assets of securities firms represent only six percent of assets of banks. At the same time, the sector suffers

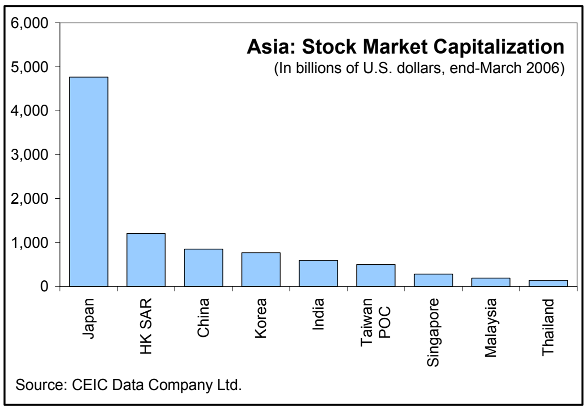
Financial Sector Assets, at end-2005

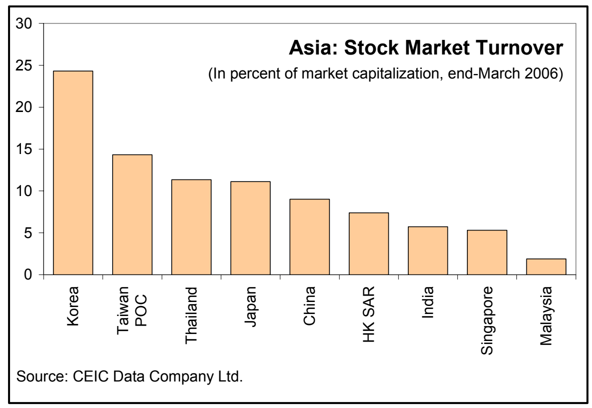


Source: Financial Supervisory Service.

from fragmentation and the coexistence of 56 small securities houses acting mostly as brokers.

6. **Even within different segments of capital markets, development is uneven**. While equity markets are already relatively developed, sizable and active**,** the bond market has remained largely underdeveloped and inactive. It is large in size, representing almost 50 percent of GDP, but suffers from a lack of an active secondary market: the turnover ratio is one of the lowest in Asia and bonds acquired through the primary market are usually held onto maturity.[25] The money market is also unevenly developed: the overnight market is very active, but the market for longer maturities is not liquid and the repo market is underdeveloped.

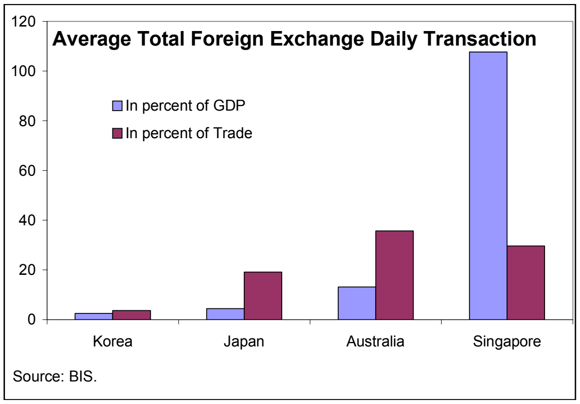


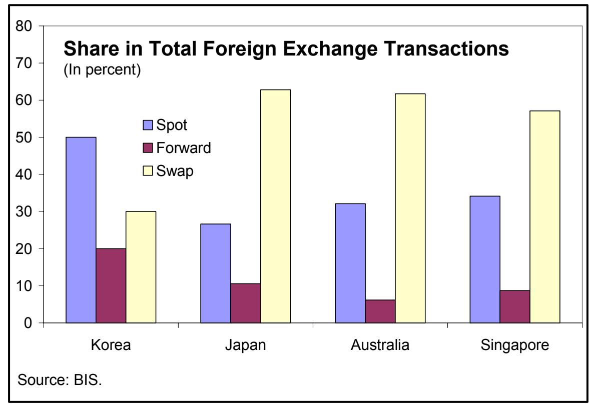


7. **Foreign exchange markets are not very active for such a large open economy**. Despite being a sizable economy with a large tradable sector, Korea's foreign exchange markets are relatively small. The daily market turnover on onshore spot transactions at around $6 billion or about 2 percent of GDP is still below that of its peers in the region. Half of the transactions are in cash and the share of trading done through swaps is much lower than in other regional financial centers. Another important feature is the large share of trading being done off-shore through the Non Deliverable Forward (NDF) market.[26] To some extent, this is due to the persistence until very recently of significant capital account regulations and extensive reporting requirements on foreign exchange transactions, which were seen as intrusive and raising transactions costs.

[25] See Soueid and Zebregs (2004) and Lee and Kim (2005).

[26] Daily transactions on the NDF market are estimated at around $2 billion.





C. What are the Authorities' Plans for Developing Financial Markets?

8. **In order to remove impediments to the development of capital markets, the government has launched a two-pillar strategy under the Financial Hub Strategy**. This plan aims to establish Korea as a major financial center in Asia by 2011 and it is part of the government's vision to have Korea become an important trade and economic center in Northeast Asia. The government also sees Korea as having a natural comparative advantage in developing an advanced financial industry because equity and bond markets are large and their scope for growth is significant given the increasing need for developed financial services in Korea as the population ages rapidly. Moreover, the authorities stress that Seoul benefits from a well-established legal and institutional framework and there does not seem to be any obvious financial center in Northeast Asia.

9. **This program was actively kicked-off in 2005**. The idea of a financial hub started actually in 2002. It was, however, limited mostly to the ambition of becoming an Asset Management Hub. The plan was revitalized and expanded on June 2005 by the 1st National Economic Advisory Council Meeting on the Financial Hub chaired by President Roh Moo-Hyun. There are now seven goals: (i) foster asset management business; (ii) advance financial markets; (iii) develop specialized financial services; (iv) strengthen global networks; (v) establish the Korea Investment Corporation (KIC) to manage actively a share of the foreign exchange reserves; (vi) innovate the regulatory and supervisory systems; and (vii) improve management and living conditions.

10. **To achieve these goals, the government envisages the twin objectives of easing barriers between financial activities and the complete liberalization of the capital account**. The logic of the two-pillar strategy is straightforward. Developing the financial system will require both addressing domestic impediments, as well as promoting cross-border transactions. Both are connected, as there won't be much cross-border transactions as long as domestic capital markets remain underdeveloped and illiquid; and there won't be much development of capital markets without active involvement of non-residents.

11. **The deregulation of capital markets is the first pillar**. Under the Financial Investment Services and Capital Market Act (FISCMA), the government plans to remove the current restrictions that strictly separate securities, futures, asset management, trust services and other financial services businesses (excluding banking) and move the Korean financial system into a three-pillar system divided into banks, insurance and investment banks by 2008. Already, financial holdings companies have been allowed since 2004 and banks are leading the way in setting up holdings.[27]

12. **As a second pillar, the government is pursuing a range of initiatives to liberalize the capital account framework and the foreign exchange system**. Under the "Foreign Exchange Master Development Plan" the government has launched a program to achieve the complete liberalization of foreign exchange transactions by 2009. The objective is to increase the depth and liquidity of the domestic foreign exchange market and bring the offshore NDF market onshore.

D. What are the Authorities' Plan to Upgrade Capital Markets in Korea?

13. **The FISCMA will allow the consolidation of a fragmented non bank financial system and lead to the emergence of strong financial investment companies**.[28] The law will be introduced in the second half of 2006, with its implementation currently planned for 2008. It provides for the easing of barriers between different capital market activities, i.e. securities, asset management and derivatives, and the setting up of financial investment companies which will be able to deal in these different activities.

14. **The law will radically alter the regulatory landscape for financial activities**. It will modify the current regulatory framework and shift it to one by functions. Therefore, financial functions of the same nature will be brought under one regulation, regardless of the type of financial institutions engaged in the transaction. Regulation for financial investment companies is also expected to move from a positive list system into a negative list system, whereby financial products not explicitly prohibited will be allowed.

15. **It will also contribute greatly to the development of financial services in Korea**. Not unlike the U.K. "big bang" approach of the late 1980s, the FISCMA, by eliminating barriers between different financial activities, will contribute to a major upgrading of capital markets in Korea. This is first and foremost because it will allow greater competition among financial firms. This could result eventually in the consolidation of financial firms and lead

---

[27] Already, three of the four big domestically-controlled Korean banks have set up financial holdings company: Hana Bank, Shinhan Bank and Woori Bank.

[28] Based on the proposed bill "Financial Investment Services and Capital Market Act" announced on Feb. 17, 2006 and posted on MOFE's website on May 8, 2006.

to the emergence of several strong and well-capitalized investment banks. Having greater capital, these investment banks, unlike current securities houses, should be in a better position to engage in market-making activities. But also, given that they will be subject to a negative list system type regulation, they will be able to develop new products, which should ultimately lead to greater financial innovation and improved financial intermediation.

16. **The level of investor protection will be raised**. Transparency requirements will be raised and financial investment companies will be obliged to provide investors detailed explanations on the products offered and the risks entailed in dealing in these products. Financial investment companies will be held responsible for losses and damages imposed on investors in case of incomplete disclosure or fraudulent sales.

17. **Provisions for dealing with potential conflicts of interest will also be introduced**. Conflicts of interests will be prohibited by law and made subject to sanctions. In addition, the law will provide mechanisms to prevent conflicts of interest, by obliging financial investment companies to set up internal control systems and impose organizational separation or personnel restrictions when potential conflicts of interest exist. Potential conflicts of interest will also have to be disclosed to investors.

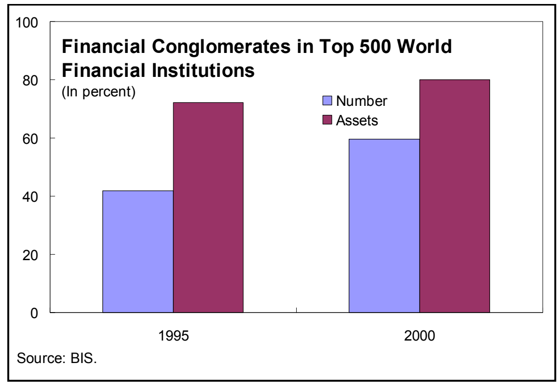
E. How does this Plan Compare to Global Trends?

18. **In many ways, the proposed plan reflects developments in advanced countries**. The deregulation between different financial activities, and the conglomeration of financial institutions is a global trend.[29] This phenomenon started in Europe, following the easing of barriers between financial institutions and banks (and insurance) during the late 1980s: in 1989, the German system of universal banking was extended through-out Europe following the adoption of the Second Banking Directive by the European Commission. More recently, the move toward conglomeration has accelerated in the United States, as the Glass-Steagall Act of 1933, which separated commercial banking from the securities business, was repealed in 1999. It was replaced by the Gramm-Leach-Bliley Act, which opened up competition between banks, securities and insurance firms. In Japan, the movement started in 1993 as banks and insurance companies were allowed to enter each other's business through subsidiaries and it deepened in 1998 with the authorization to set up holding companies.

19. **Given the size of their balance sheets and capital, banks in advanced economies are leading the way in conglomeration**. In response to customer demands for a large selection of financial services, banks are expanding into various financial areas. With the easing of barriers, banks have taken the initiative, taking over securities firms, asset management activities and insurance companies. As a result, the share of conglomerates

[29] See BIS (2001) and Bank of Japan (2005).

among the world's major banks has risen to more than four-fifths by asset, three-fifths by number. At the same time, given the size of their assets and their ability to provide a whole range of financial services and credits to corporates, banks have increased their market share in investment banking activities. This is not only true of Europe, but also of the United States following the repeal of the Glass-Steagall Act in 1999.



20. **However, the FISCMA differs from global trends in two important ways**. First, while global trends push toward the total elimination of barriers between different financial activities, the FISCMA will not remove the barriers between banks, securities firms and insurance companies. Only through subsidiaries will financial holdings companies be able to operate in different financial activities. At the same time, while international evidence shows that universal banks tend to increase their market share of investment banking activities, the FISCMA is pushing for the development of investment banks, separate of banking groups.

F. What Lessons can be Drawn from the Experience of Advanced Countries?

21. **There are a number of important lessons that can be drawn from the experience of advanced countries in dealing with financial deregulation and the easing of barriers between financial activities**. In general, conglomeration is beneficial for the efficiency of the financial system. Allowing conglomeration helps to reduce the "asymmetric information" problem and improves the information collection and production mechanism: a conglomerate can offer a wider diversity of financial products than a specialized entity and it is therefore in a much better position to expand its relationship with its customers, thereby gaining access to more varied and deeper information.[30] As such, it has a comparative advantage in allocating capital to its most productive use and generating higher returns than a specialized entity. At an aggregate level, this is reflected in increased efficiency of the financial intermediation process.

22. **Allowing banks direct access to capital market activities has also facilitated the development of financial markets**. The experience of Europe shows that eliminating barriers preventing commercial banks from entering capital market activities directly can spur effectively the development of financial markets. This is because commercial banks in Europe had a significant edge over other financial firms in terms of asset size and access to an investor base. Therefore, once financial barriers were lifted, banks were quickly able to

---

[30] See Mishkin (2003).

invest sizable resources into capital market activities. In addition, providing banks access to capital market activities gives them a strong incentive to foster the diffusion of non-deposit financial products, thereby helping to shift savings away from deposits to capital market-based financial products. Following the elimination of barriers for banks to enter capital market activities in Europe, capital markets have developed rapidly.

23. **However, the experience of Europe and the United States shows that easing barriers between financial activities can lead to a new set of risks**. Conglomerates are exposed to higher financial market risks and counterparty exposure to market risk and liquidity risk than non diversified financial institutions. Easing barriers and allowing firms to integrate a number of activities under one roof also gives rise to numerous potential conflicts of interest. There are several possible different conflicts of interest, such as conflicts of interest between asset management activities and securities firms, conflicts of interest between M&A activities and the proprietary trading arm of the same group, or between corporate finance activities and research. Conglomeration may finally allow contagion within the group as reputational risks between different activities become correlated.

24. **While there is ample evidence that financial deregulation improves the intermediation process, some empirical studies have shown that conglomerate firms exhibit levels of risk-taking higher than smaller and specialized firms**. Lown et al. (2000) show that U.S. banks' mergers with securities firms have increased risk modestly. A more recent study by De Nicolo et al. (2003) show that larger and conglomerate firms did not achieve higher levels of profitability than smaller and specialized firms.[31] At the same time, the study found that firms with a wider scope of activities are more leveraged and do not attain a lower volatility of returns than smaller and specialized firms. This is consistent with a finding that as financial firms grow in size and complexity, internal risk becomes more difficult to assess.

25. **Conflicts of interest between asset management and securities activities are among the most serious threats to the credibility and development of financial markets**. With the move toward conglomeration of activities in the financial industry and the development of universal banking, the possibilities for conflicts of interest between asset management activities and underwriting divisions of securities houses have increased, as asset managers may sometimes feel pressured to invest in companies whose securities have been underwritten by the investment banking arm of the group. These pressures may be especially strong in the case of failed issuance.

[31] See De Nicoló and others (2003).

26. **Serious violations to these rules occur even in countries with very developed financial systems and experienced regulators**. There have been indeed many cases where the investment banking arm of a financial firm put pressure on the asset management arm. In one of the most notorious cases, on March 12, 2003, the Wall Street Journal reported that the Chief Investment Officer at a major investment bank's asset management unit was asked by an underwriting executive to buy some of the shares in a struggling media company it helped bring public. There have also been numerous cases of conflicts of interest between research activities and underwriting division uncovered in the United States in the late 1990s. In many cases, analysts were under strong guidance or financial incentive to provide favorable research to ensure the success of underwriting. This was remedied in December 2002 through the "Global Settlement" reached by the Securities and Exchange Commission (SEC), the New York Attorney General and the ten largest investment banks forcing banks to sever the links between research and other investment banking activities.

G. How Advanced Countries Deal with Potential Conflicts of Interest

27. **Market discipline helps prevents potential conflicts of interest.** In theory, most advanced economies do not bar securities firms from directly managing assets. In the United States, the SEC does not require asset management activities to be legally separate from other securities lines. Rather, firms must disclose potential conflicts of interest prior to the completion of a securities transaction. In the EU, legal separation of asset management from securities firms is also not required, but disclosure rules are imposed on potential conflicts of interest. In practice, however, most asset management activities are usually kept as separate legal entities in response to both customer desires for improved governance and firms' concerns about liabilities under civil litigation. Another result of the increased consumer demand for transparency and efficiency in asset management activities has been the growth of independent asset management companies, such as PIMCO, Fidelity or Templeton.

Investment Banks and Asset Management Arms

	Investment Banks	Asset Management Activity	Legal Status
United States:	Goldman Sachs	Goldman Sachs Asset Management L.P.	Subsidiary
	JP Morgan	JP Morgan Investment Management	Subsidiary
	Merrill Lynch	Merrill Lynch Investment Managers	Subsidiary
	Citigroup	No (Sold Asset Management Business)	...
Europe:	Credit Suisse	Credit Suisse Asset Management	Subsidiary
	Deutsche Bank	DWS	Subsidiary
	BNP Paribas	BNP Paribas Asset Management	Subsidiary
	Societe Generale	Societe Generale Asset Management	Subsidiary

Source: Companies' annual reports.

28. **Market discipline requires transparency, strong disclosure rules and enhanced customer protection**. Thanks to the transparency requirements of advanced countries, customers are in a strong position to impose market discipline on financial institutions. To do

so, many countries have adopted laws protecting financial investors. Australia introduced such legislation in 2001 with the Financial Services Reform Act (FSRA). The FRSA was designed to contribute to the development of a transparent and competitive framework for the financial industry in Australia. It helped changed the emphasis of looking at the industry from being product based to looking at "financial services". By requiring the providers of all financial products and services to undertake the same licensing and disclosure practices, it strengthened consumer protection through better understanding, ease of comparison, as well as through ensuring that all market participants have the key financial and organizational capability requirements to hold a license and fostered competition between financial service providers.

29. **In countries with weak transparency and disclosure requirements or in transition toward meeting such requirements, however, market discipline can not function effectively and regulation needs to step in**. Avoiding conflict of interests is then best achieved through regulation, either by forcing the separation of functions so that agents are not in a position to respond to multiple principals ("Chinese walls") or more stringently by separating legally different activities.[32] These "Chinese walls" can take several forms: a formal separation of powers between management and business decision makers on the one hand and administrative functions on the other hand; a physical separation and limited contacts between personnel from different parts of the institution where there are potential conflicts of interest.

30. **A strong system of penalties for those who commit violations is required as a deterrent against possible violations**. In many advanced countries, the regulator can impose severe penalties for those who breach rules against conflict of interest. These penalties are often of a financial nature, but in some cases, individuals found guilty of committing severe violations can be barred for life from the financial industry.

H. What Does the International Experience Imply for Korea?

31. **Allowing banks to acquire investment bank activities could allow a more rapid development of financial market activities in Korea, but a gradual and cautious approach is appropriate**. Initially, keeping banks away from direct involvement in capital market activities while safeguards to deal with the risks of deregulated financial activities in terms of supervision and market discipline are being strengthened is reasonable. But once these safeguards are in place, allowing banks to directly enter capital market activities could be envisaged.

[32] See White (2004).

32. **Easing barriers will create new demands on financial supervision**. As this deregulation will create larger and more-complex financial institutions, consolidated, risk-based and functional supervision will become even more important.[33] At the same time, the move toward a more open and market-based financial system will raise the need for a fully transparent regulatory regime.

33. **Given Korea's nascent capital markets, the risks of potential conflicts of interests are significant and any problem could impact the development of the capital markets**. Korea's recent initiatives to develop capital markets will very likely transform the financial landscape and raise the potential benefits firms can gain from conflict of interests. Preventing those violations will require strong supervisory and legal regimes, as well as effective market discipline. Korea is very well-placed to develop these mechanisms, but the experience of other advanced economies shows that in the initial stages of market development and deregulation, accidents and violations do occur. Should any such problems also happen in Korea, the credibility of Seoul as a financial center could be seriously impaired thereby derailing the reform momentum.

34. **Keeping the securities business separate from asset management helps to minimize those risks**. In the transition to a strong supervisory and legal regime, and to an effective market discipline, Korea could keep asset management and securities activities legally separate. This does not preclude, however, that securities firms be allowed to own asset management arms as their subsidiaries so as to free up the synergies between those two activities and enable securities firms to offer savings products to their client base. But such a scheme, by establishing separate balance sheets and governance structure for asset management activities would guarantee some degree of transparency for asset management activities thereby allowing market discipline to flourish. This would also minimize the risks of coercion of asset managers by investment bankers as these would operate under different management and according to different financial incentives.

35. **Moreover, this separation should not be a major impediment to the development of capital market activities**. The current initiatives to deregulate the financial industry and promote the foreign exchange market are very likely going to lead to the transformation and modernization of the capital markets. All segments of the capital markets, including the bond, equity and derivatives markets will benefit from these initiatives, and their development will allow securities firms and investment banks to develop and prosper. Limiting securities firms to operate asset management arms only in the form of a subsidiary is not expected to be a major drag on their revenues, and would in any event bring Korea in line with international practices.

---

[33] See International Monetary Fund: "Republic of Korea: Financial System Stability Assessment" (2003).

36. **Finally, the projected increase in capital market activities calls more generally for stronger measures to secure market integrity**. Since the current level of penalties for financial fraud such as insider trading or accounting fraud may no longer be commensurate with possible profits, the level of penalties for financial fraud could be raised significantly.

I. What are the Authorities' Plans for Developing the Foreign Exchange Market?[34]

37. **The development of the foreign exchange market will help foster cross-border transactions and develop the financial sector**. To this aim, the government has developed an ambitious plan to liberalize the foreign exchange market, with a roadmap which should in three stages help it reach the level of advanced forex markets.

38. **Already, several measures have been taken**. Since January 2006, a reporting system has replaced the existing permit system for all capital transactions, and related regulations such as the reporting form that includes the purpose of transaction have been streamlined. Foreign currency borrowing by foreign exchange banks has also been eased. For foreign currency borrowing which requires a quick decision, a post facto reporting has been allowed. Asset management companies have also been allowed to issue foreign currency-denominated investment securities.

39. **There are further plans to eliminate most of the remaining controls on capital account transactions and foreign exchange trading**. Under the plan, remaining controls on nonresidents transactions in won will be removed. This should help grow the foreign exchange market, but would still leave two significant impediments to foreign exchange transactions: the current requirement to provide underlying documentation for foreign exchange transactions from non residents and the prior notification requirements for some transactions.

40. **At the same time, the development of the foreign exchange market won't be possible without an active money market**. The money market is an important element in the development of the foreign exchange market as it provides a pricing mechanism for forward transactions between won and foreign currencies and helps ensure liquidity of the foreign exchange market. But in Korea, the money market, outside of the uncollateralized overnight call market, is largely illiquid.

[34] This section includes findings and recommendations from an IMF Technical Assistance Mission (MFD) that visited Seoul on March 30-April 13, 2006 to discuss the reform and development of the foreign exchange market in Korea.

J. How can the Repo and Bond Markets Help?

41. **The repo market is an important element of the money market in many advanced countries**.[35] Repo transactions serve two important functions for central banks: they provide a monetary policy instrument which is attractive given the low credit risk it carries.[36] At the same time, repo transactions are a useful instrument for signaling market expectations. In addition, repos have the advantage of providing a lower cost of funding compared to the uncollateralized market given the collateral. But of course, ensuring the smooth functioning of repo markets requires having in place an adequate legal framework and settlement system.

42. **The repo market also helps to improve the liquidity of the money and bond markets**. Unlike unsecured transactions, repo transactions facilitate the development of a whole range of financial markets: they can serve as a source of demand for the underlying securities that may include short-term paper, corporate bonds or mortgage backed securities. At the same time, repo transactions facilitate arbitrage along the yield curve, thereby helping to develop an efficient yield curve.

43. **To improve the functioning of the money market, the authorities are trying to develop the repo market**. Some progress has already been made, notably by amending bankruptcy laws so as to protect collateral from the freezing of assets in the case of corporate or banking bankruptcy. Some other measures could be pursued. In particular, the access to the call market could be limited to banks, as it is the case in many advanced countries. This would force other financial institutions to go to the repo market for short-term financing. But at the same time, fostering the development of credit risk awareness among financial institutions and easing current maturities mismatch limits would enable the development of the full spectrum of the money market.

44. **The authorities are also trying to foster the bond market so as to develop a yield curve beyond the money market**. Currently, the secondary market for bond transactions is not very active as liquidity is limited, except for a few treasury issues.[37] One particular problem with the bond market is the absence of market making activities: the current system resemble more one of brokered transactions between securities firms, with ex-post notification of the transaction to the Stock Exchange, often with a significant lag.

---

[35] Repurchase agreements are contracts whereby one party sells securities to another party with the agreement to buy them back after a certain period of time.

[36] See BIS (1999).

[37] See Kang (2004).

45. **Many countries have adopted a system of primary dealers to develop the government bond market**.[38] Under this system, primary dealers play the role of exclusive financial intermediary for government issuance. By being primary dealers, financial institutions benefit from exclusive access to auctions of government securities, and sometimes the right to be counterparty to central bank market operations, and to have access to credit lines from central banks. Of course, this privileged status does not come without obligations: primary dealers are obliged to participate in the primary market in a consistent and sizable manner and to serve as market maker in the secondary market by providing two-way quotes on a transparent and continuous basis.

46. **The primary dealer system is especially useful in countries in need of developing market-making capacity and liquidity in the secondary market**. Given their obligations to provide two-way quotes on government bond securities, primary dealers are forced into developing their market making capacity and internal risk pricing models. At the same time, the secondary market becomes more active as transactions for sizable amounts can be done rapidly through market makers thereby improving the liquidity of the market.

47. **Improving the primary dealer system in Korea could be central in a strategy to foster market-making activity and the transparency of the bond market**. The primary dealer system was first introduced in 1999 in Korea.[39] Often, however, primary dealers do not provide two-way quotes on which they are willing to trade, and pricing is not fully transparent. The current primary dealer system could be made more attractive by notably introducing the non-competitive bid system for primary dealers. Under such system, primary dealers could acquire additional amount of bonds at the price set at the previous auction. Also, primary dealers should also respect current rules, including the trading rules. As such, they should report to the Stock Exchange their transactions quickly after completion of trading, so as to ensure the transparency of the bond trading system.

K. Conclusions

48. **Since the crisis, Korea has achieved a major transformation of its economy**. The banking sector, through its restructuring and opening up to domestic and foreign competition played a central part in this transformation. However, the challenge of a maturing economy with an aging population, as well the opportunities offered by the emergence of China put into question the adequacy of the current bank-centered financial system and calls for the development of capital markets, as a complement to bank finance.

---

[38] See Arnone and Iden (2003).

[39] There are currently 20 primary dealers, half of which are banks and the other half securities firms.

49. **Cognizant of these challenges, the authorities have embarked on an ambitious plan to develop the foreign exchange market and ease barriers between financial activities, so as to transform the financial system**. This plan contains several important elements, which could usefully be complemented by supporting measures to develop the money and bond markets, as well as facilitate foreign exchange transactions, as this paper has suggested. Such a major endeavor is of course not without risks, especially during the transition process of liberalization where accidents can be costly in terms of market credibility. This is why, giving proper consideration to balancing the benefits of a speedy liberalization ("Big Bang" approach) against assurances that mechanisms to deal with the risks are in place and running is appropriate.

References

Arnone, Marco and George Iden, 2003, "Primary Dealers in Government Securities: Policy Issues and Selected Countries Experience," IMF Working Paper No. 03/45 (Washington: International Monetary Fund).

Bank of Japan, 2005, *The Expansion of Corporate Groups in the Financial Services Industry: Trends in Financial Conglomeration in Major Industrial Countries,* December.

Bank for International Settlements, 1999, *Implication of Repo Market for Central Banks*, Report of the Working Group established by the Committee on the Global Financial System of the Central Banks of the Group of Ten Countries.

———, 2001, *Group of 10—Consolidation in the Financial Sector.*

De Nicoló, Gianni, Philip F. Bartholomew, Jahanara Zaman and M.G. Zephirin, 2003, "Bank Consolidation, Internationalization and Conglomeration: Trends and Implications for Financial Risk," IMF Working Paper No. 03/158 (Washington: International Monetary Fund).

International Monetary Fund, 2003, *Republic of Korea: Financial System Stability Assessment, including Reports on the Observance of Standards and Codes*, IMF Country Paper No. 03/81 (Washington).

Kang, Kenneth, 2004, "Developing the Government Bond Market in Korea: History and Challenges" (unpublished; Washington: International Monetary Fund).

Lee, Myong-Jong and Soo-Ho Kim, 2006, "Developing the Corporate Bond Market: The Korean Experience," in *Developing Corporate Bond Markets in Asia*, BIS Papers, No. 26.

Lown, C.S., C.L. Osler, P.E. Strahan, and A. Sufi, 2000, "The Changing Landscape of the Financial Services Industry: What Lies Ahead?" *FRBNY Economic Policy Review,* October.

Mishkin, Frederic, 2003 "Policy Remedies for Conflicts of Interest in the Financial System," in *Macroeconomics, Monetary Policy and Financial Stability: A Festschrift for Charles Freedman* (Bank of Canada).

Soueid, Mazen and Harm Zebregs, 2004, "Development of the Corporate Bond Market in Korea" (unpublished; Washington: International Monetary Fund).

White, Eugene N., 2004, "Can the Market Control Conflicts of Interest in the Financial Industry?" in *Current Development in Monetary and Financial Law* (Washington: International Monetary Fund).

III. RESTRICTIONS ON *CHAEBOL* OWNERSHIP OF KOREAN BANKS: ARE THEY WARRANTED?[40]

1. **Recently, some government officials and private bankers in Korea have called for a reconsideration of the prohibition on corporate groups, the *chaebol*, owning controlling equity shares in commercial banks**. While Korea had put in place relatively strong limits on corporate ownership, the changing conditions in the financial sector have prompted a reconsideration of whether these are still warranted. This section considers the benefits and costs and looks at how other countries deal with this issue. On balance, it finds that a relaxation of the banking/commerce separation in Korea would be detrimental, since the benefits would not be large, while risks of connected lending remain. Moreover, there are no examples in advanced financial sectors of major banks controlled by nonfinancial companies.

A. The Benefits and Costs of Corporate Ownership of Banks

2. **Allowing commercial enterprises to hold a controlling position in banks has both benefits and costs**. The principal points in favor of expanding ownership relate to increasing the supply of paid-in and contingent capital for banks, improving governance through concentrated ownership and realizing economies of scale and scope.

3. **Expanding industrial/commercial ownership could have the following benefits**:

- **Increase the supply of capital for banks**. Restrictions or prohibitions on the size of equity positions by classes of investors, if binding, limit the supply of capital to banks. Relaxing the constraint will expand the supply of capital, generally lowering capital costs and increasing the quantity of capital available to support operations and provide a buffer against risks. Korean banks, however, have already achieved a strong capital position under current arrangements; CARs now average 13 percent. Consequently, a relaxation of ownership restrictions to increase capital supply does not seem necessary to reach sound levels.

- **Improve the availability of contingent capital to banks**. Bank regulators typically look to existing major shareholders to infuse capital when banks are in distress. Such a "source of strength" is more dependable if the major shareholder is in a strong financial position when the bank is weak. Consequently, other things equal, it is preferable that banks be owned by shareholders whose financial position is negatively correlated with that of the bank. While earnings of industrial/commercial groups are not necessarily negatively correlated with bank earnings, they offer a wider

---

[40] Prepared by Edward Frydl.

opportunity for such a result compared to, say, strictly financial groups, whose earnings may be positively correlated with bank earnings over a wide range of financial shocks. However, since the Korean *chaebol* are already heavily involved in nonbank financial enterprises, the diversification benefits that they bring to banks as a source of contingent capital may be somewhat mitigated by already sharing a common set of financial risks with banks.

- **Improve bank governance through concentrating ownership**. This is because the controlling equity owner is better able to assert its interests vis-à-vis management compared to the case of widely disbursed ownership. However, this benefit to governance can be offset if the group's position in the bank is small relative to the group's overall capital. This would be the typical situation with *chaebol* in Korea. In this case, incentives work in reverse: there is a risk that the bank owners would sacrifice the earnings of the bank to provide risky credit to nonbank operations elsewhere in the group. By contrast, when the controlling interest in a bank is held by a large financial group, all elements of the group would normally be run on similar prudential principles.

- **Generate economies of scale or scope**. For example, a retailer with an extensive outlet system may generate scale economies by incorporating bank branches directly into the outlets. An information technology company may be able to design superior systems for electronic banking if the information exchange, technical and financial, between client and supplier is unfettered under common ownership. However, such economies may often be more apparent than real. If the value of the space for a bank branch within a retail outlet is appropriately valued at its opportunity cost, its economic worth may be independent of who owns it.

4. **There are also costs to expanding industrial/commercial ownership**:

- **Allowing commercial enterprises to hold a controlling position in banks creates conflicts of interest**. These conflicts can arise in its most virulent form when the bank equity is small relative to overall group equity and the nonbank operations are liquidity constrained.

- **For example, there is a major risk of connected lending**. If credit is scarce, the group has a strong incentive to draw on the bank on noncommercial terms and pass the resulting risk on to minority shareholders, relatively uninformed depositors, and the deposit insurance fund. Groups that are in a structural cash surplus—e.g., public utilities—do not present this kind of conflict of interest and are more likely to run the bank as a stand-alone investment on commercial terms. It is, however, difficult to operationally specify groups that are in structural cash surplus and it would be disruptive to mandate divestment if the group breaches operational parameters. Even though the *chaebol* may not have been liquidity-constrained in recent years because of their relatively low investment rates, the nature of their enterprise poses a high risk that they will again become demanders of liquidity in the future. The prudential restriction against *chaebol* ownership is appropriately drawn up to deal with times of stress when firms are under financial pressure.

- **Another risk is that *chaebol* owners may find ways to get the bank to engage in cross-shareholding equity positions in other components of the group**. These cross-shareholdings reduce transparency about governance structures and the true capital base for the bank.

- **Changing the ownership rules runs the risk of much broader spillover effects**. Even if the original intention is to allow the wall between industrial and banking capital to be breached only in exceptional cases, once precedent is established, other *chaebol* may demand similar treatment. Coalitions of industrial groups could then acquire controlling interests in banks throughout the system, which could raise investor concerns generally, leading to an expansion of the "Korea discount" (reducing the price of shares) and a rise in funding costs for the banking system.

- **These theoretical concerns have empirical support from evidence showing that acquisition of banks by industrial groups increases vulnerabilities**. One recent study specifically addresses the relative behavior of banks owned by industrial groups (Borbakri et al., 2004). For the post-privatization performance of banks in a geographically diverse group of 81 developing and emerging market countries, it found that the acquisition of a controlling interest by domestic industrial groups resulted in the greatest increase in both credit and market risk measures for all types of acquirers. Banks acquired by industrial groups showed relatively large increases in loan-to-deposit ratios and maturity gap mismatches and produced lower rates of return on equity than banks acquired by other types of investors, foreign or domestic. In contrast, purchase of a controlling interest by foreign-owned banks presented the lowest overall risk exposure. Banks acquired by foreign investors showed significantly higher asset growth, while also exhibiting significantly lower past due loans.

B. Regulation and Practice

5. **In advanced financial markets, even where ownership of banks by nonfinancial firms is legally permitted, approval thresholds and other regulations have prevented these groups from controlling positions in banks**. Authorities regulate the influence that commercial shareholders have on bank decision making by limiting the amount of shares that can be acquired and/or by restricting the ability of commercial shareholders to exert control.

6. **Table III.1 shows that regulatory restrictions in advanced financial sectors typically limit nonfinancial firm holdings of ownership positions in banks**. Although

commercial business ownership of banks is not legally prohibited outright in most countries, laws and regulations typically limit the percentage of voting equity that *any* shareholder can obtain with prior approval from the authorities. This restriction will often apply generally, whether to an industrial firm or other financial company.

Table III.1. Regulatory Restrictions on Investment in Banks by Nonfinancial Firms in Advanced Financial Sectors

Country	Regulatory restriction	Comments
Austria, France, Germany, Greece, Portugal, UK	EC Second Banking Directive	A "qualifying investment" by a firm (direct or indirect holding in a bank equal to 10 percent or more of capital or voting rights or permitting significant influence over management) requires regulatory approval based on suitability of shareholders
Canada	No shareholder may own more than 10 percent of a bank's shares	
Denmark	A firm may not have an interest that allows a decisive influence on a bank	Also complies with EC Second Banking Directive
Finland	A firm cannot vote at an annual meeting with more than 5 percent of the total voting rights present at the meeting	Also complies with EC Second Banking Directive
Ireland	Prior approval required for acquisition of 10 percent or more of shares or voting rights or any interest that confers a right to appoint or remove directors	
Italy	Persons who engage in significant business other than banking and finance cannot have more than 15 percent of the voting capital of a bank or control a bank	
Japan	Investment by a firm is limited to the firm's capital or net assets. Holding companies are not allowed.	
Luxembourg	Nonfinancial firms may be majority shareholders	General policy discourages nonfinancial groups or private persons from being major shareholders in banks.
Netherlands	Minister of Finance must allow an investment exceeding 5 percent of a bank's capital	Also complies with EC Second Banking Directive
Spain	A nonfinancial firm cannot hold more than 20 percent of the shares of a new bank during its first five years	Specified shareholder thresholds require authorization by Bank of Spain before additional investments. Also complies with EC Second Banking Directive
Sweden	Ownership is limited to 50 percent except when a bank is near insolvency	
Switzerland	Unrestricted	
United States	Nonfinancial firms can only make noncontrolling investments up to 25 percent of a bank's or bank holding company' shares. Any form of control is prohibited.	Investments in excess of 25 percent will classify the investing firm itself as a bank holding company

Source: Santos, (1998).

7. **Financial firms are much more likely to obtain supervisory approval to exceed these limits**. As noted above, financial conglomerates are typically less liquidity-constrained than nonfinancial groups and, therefore, have less incentive to "loot the bank." Also, financial firms are supervised in their own activities, providing an extra layer of monitoring against bank credit being put at risk on noncommercial terms. Country regulators, then, are

more likely to allow financial group ownership than nonfinancial group ownership, even when there are no outright legal impediments to either.

8. **In key advanced financial sectors, while the permissible limit on equity ownership is somewhat higher than the 4 percent threshold that Korea applies to the *chaebol*, there is no case in practice of an industrial group owning a controlling interest in a major bank**. The relatively more stringent limit on the noncontrolling investment position in Korea is appropriate since large industrial groups in other advanced financial sector countries are typically not so tightly held by family interests or corporate governance is more rigorous.

9. **The observed instances of industrial group control of banks represent exceptions for small or limited purpose banks or unintended loopholes, the effects of which the authorities try to contain**.

- In **Canada**, large banks are required to be widely held and no shareholder can own more than 10 percent of shares. Changes to bank ownership laws in 2001 allowed small banks to have a single nonfinancial owner and medium-sized banks (up to $5 billion in equity) to have commercial enterprise control. Firms such as Canadian Tire, Sears Canada, Loblaws (supermarkets) and Wheaton Group (car dealerships) have consequently set up banks.

- In the **United Kingdom**, there are no legal restrictions on ownership. In practice, industrial firms do not control major banks, but financial groups do. Sainsburys, the second largest supermarket chain, established a bank in 1997 that has grown to 1.5 million customers on the basis of the store network. The bank is limited purpose, however, offering household loans and savings accounts and other retail financial products but no checking accounts or full range banking. Banking expertise was brought to the venture by the Halifax Bank of Scotland Group, which owns a 45 percent minority share and runs operations, as authorities required.

- In the **United States**, the Bank Holding Company Act allows nonfinancial companies to own up to 25 percent of equity as an investment but any control is prohibited. Public policy has actively discouraged commercial ownership. But the fragmented regulatory structure has allowed different loopholes to emerge at different times. Most recently, in 1987, legislative action closed the so-called "non-bank bank" loophole in the Bank Holding Company Act under which commercial firms could control institutions that provided a broad range of banking services across state lines, but not simultaneously offer demand deposits and make commercial loans. Instead, banks were re-defined as institutions that are insured by the Federal Deposit Insurance Corporation (FDIC).

10. **However, an exception to the ownership restriction was allowed for industrial loan corporations (ILCs), an existing class of state-chartered institutions (regulated and insured by the FDIC) that could provide a range of banking services so long as they do not provide checking accounts**. Thereafter, this new loophole was utilized by a number of companies to establish ILCs, whose assets consequently grew from less than $4 billion in 1987 to over $140 billion in 2004. Most of this growth was concentrated in a few large ILCs owned by financial services firms but ILCs are also owned by GE, Sears, and the financing arms of automobile companies. Three of the six ILC charters issued since 2004 are owned by nonfinancial firms. Wal-Mart, which was thwarted by legislation in California from acquiring an ILC has now applied in Utah for one.

C. Conclusions

11. **Even though legal systems across countries do not generally ban control of banks by industrial/commercial groups, political and supervisory acquiescence to that outcome is not common**. The concern is that incentives for good governance of the bank are distorted by owners utilizing various methods of connected lending to channel credit to risky, liquidity-constrained nonbank operations on noncommercial terms. Many countries have restrictions similar to those currently in force in Korea that allow nonfinancial firms to own nonbank financial enterprises that provide a variety of financial services in insurance, securities, asset management, or even lending other than commercial lending. A hard line is drawn, however, against commingling commercial lending and industry for the good reason that it represents the biggest threat of conflict of interest.

12. **As a rule, advanced financial sectors have been willing to accept restrictions on the sources of equity capital for banks in order to protect the integrity of banking**. Such restrictions, however, do make it more difficult to develop domestic sources of banking capital. Consequently, in many cases the needed capital comes from large international financial groups. Typically, large international financial groups may offer better governance and risk management because they are not so liquidity-constrained and have more banking experience. On the other hand, large foreign ownership subjects a country's banking sector to importing risks that are affecting the owners elsewhere in the world. Foreign-owned banks may also be selective in the provision of banking services in a country, although evidence to support this conclusion applies to economies that are much poorer and smaller than Korea (Detragiache et al., 2005).

13. **A principal alternative is to rely on diversified ownership**. Some countries, like Canada, make diversified ownership an explicit regulatory condition by prohibiting any investor from acquiring a controlling interest for major banks. This will, of course, tilt control in the direction of management, which creates a risk of distorted incentives that must be kept in check in other ways. One such check is vigorous risk-based supervision, for which Korea should continue to accelerate its efforts. Another important check is to strengthen mechanisms of governance and accountability to protect shareholder rights. For example,

Hong Kong requires each bank to establish an audit committee made up of a majority of independent, non-executive directors and Singapore requires banks to separate financial and nonfinancial businesses and to change their audit firms every five years. Finally, a well-developed and liquid equity market is important to allow price signals for bank shares to efficiently reflect investor expectations about the bank's earnings prospects and risks.

References

Barth, James R., Gerard Caprio, Jr, and Ross Levine, 2003, "The Regulation and Supervision of Banks Around the World: A New Database" (Washington: World Bank).

Boubakri, Narjess, Jean-Claude Cosset, Klaus Fischer and Omrane Guedhami, 2004, "Ownership Structure, Privatization, Bank Performance and Risk Taking," Financial Management Association European Conference, June 3 (Zurich).

Detragiache, Enrica, Poonam Gupta, and Thierry Tressel, 2005, "Finance in Low-Income Countries: An Empirical Exploration," IMF Working Paper No. 05/167 (Washington: International Monetary Fund).

Santos, João, 1998, "Banking and Commerce: How Does the United States Compare to Other Countries?" *Federal Reserve Bank of Cleveland Economic Review*, No. 34(4), pp. 14-26.

IV. A STRATEGY FOR RESTRUCTURING THE SME SECTOR IN KOREA[41]

A. Introduction

1. **The small and medium-sized enterprise (SME) sector in Korea is facing numerous challenges arising from globalization and deeply rooted structural problems**. The rapid pace of globalization and the rise of China have weakened the traditional supply links between SMEs and the larger *chaebols* and intensified competitive pressures on the sector. At the same time, the slow progress in restructuring since the crisis has left the SME sector weak, holding back overall growth and investment.

2. **Looking ahead, Korea will need to rely more upon SMEs as source of innovation and growth**. To make the successful transition to a knowledge-based service-oriented economy, Korea will need a dynamic and flexible SME sector that can redirect resources quickly and efficiently to new growth areas. A healthy SME sector can also help raise the low productivity of Korea's service sector, providing an important boost to overall potential growth.

3. **This chapter examines the nature of the problems in the SME sector and outlines a strategy for helping SMEs to meet these new challenges**. The strategy centers around strengthening the incentives for restructuring, modernizing the financing system for small companies, and improving the business environment to help develop and nurture innovative start-ups. These reforms will also help SMEs become "more global" by upgrading their technology and enhancing their overall competitiveness.

B. Background and Nature of the Problem

4. **Contrary to popular perception, SMEs are an important part of the Korean economy**.[42] SMEs account for almost 50 percent of manufacturing output and around 32 percent of exports. It is difficult to characterize a typical SME since they cover almost all sectors in the economy, ranging from construction and retail to information technology. However, in general compared to large companies, Korean SMEs are geared more towards the domestic sector and account for a higher share of service sector production (58 percent of sales). Also since SMEs account for nearly 87 percent of total employment, they are an important source of jobs and spending for the economy.

---

[41] Prepared by Kenneth Kang and Song-Yi Kim.

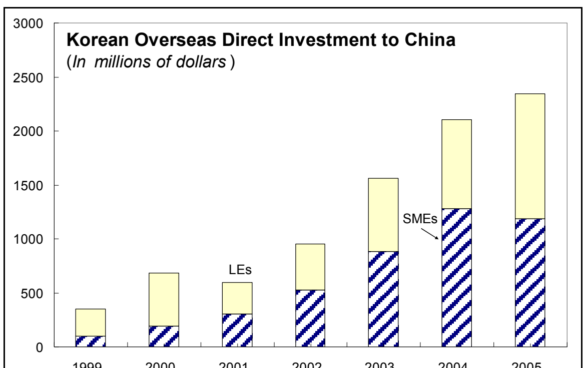
[42] Here, we follow the Korean National Statistics Office (KNSO)'s definition of a SMEs as a company with 300 or fewer employees.

SMEs' Share in Establishments and Employment, by Sector
(In percent)

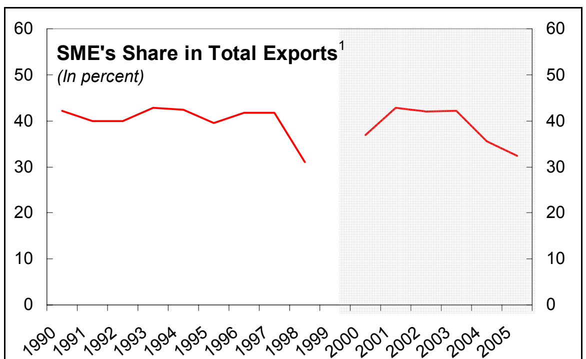
	Of total establishments				Of total SMEs	
	Number of establishments	Number of employees	Exports	Sales 1/	Number of establishments	Number of employees
All industry	99.8	86.5	…	…	100.0	100.0
Manufacturing	99.8	78.3	32.4	48.8	10.9	25.5
Services	99.8	89.6	…	58.4	86.3	67.9
Other industries 2/	99.9	90.9	…	…	2.8	6.6

Source: NSO.
1/ Figures for services, calculated excluding communication, financial intermediation and education.
2/ Including mining and quarrying, electricity, gas and water supply and construction.

5. **The role of SMEs in the Korean economy has largely been shaped by its pattern of industrialization**. As the large *chaebols* drove Korea's export expansion during the 1970s and 80s, SMEs played an important supporting role as domestic suppliers and subcontractors. With their more flexible (and largely non-unionized) labor force, SMEs provided low-cost inputs and savings for larger companies. As the *chaebols* rapidly made inroads in overseas markets, domestic SMEs also benefited and increasingly geared their production towards supporting the needs of the larger companies.



Source: The Export-Import Bank of Korea.

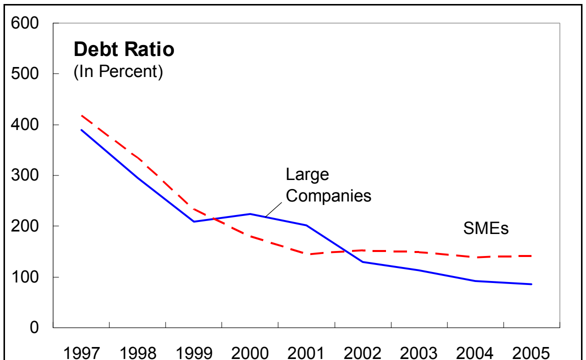


1/ The way that data was compiled by the KFSB was changed in 1999.

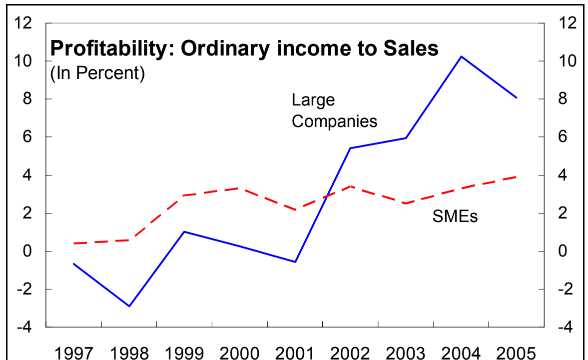
6. **However, the rapid pace of globalization and the rise of China have weakened these traditional links and intensified competitive pressures on the SME sector**. Korea's rapid integration with China and hollowing-out pressures from other low-cost countries has intensified competitive pressures on small firms in traditional industries, such as textiles and basic manufacturing. SMEs in these sectors have either downsized or shifted production overseas. Research by the Korea Development Institute has shown that this trend began as far back as the 1980s as the polarization in Korea between low- and high-technology firms and sectors has widened steadily due to competition pressures from China (Kim and Lee, 2003). The pressures appear to be intensifying as indicated by the sharp rise in overseas

investment to China which is being led largely by small companies which now account for more than 50 percent of the total, up from 28 percent in 1999. At the same time, SME's share in exports has declined by about 10 percentage points in recent years compared to the average in the 1990s, largely in basic manufacturing.

7. **At the same time, the *chaebols* are shifting more of their operations overseas and relying less upon Korean SMEs to meet their production needs**. As large companies have moved up the value added ladder, they are depending more on advanced technology inputs and sophisticated services from global rather than domestic suppliers. Since inward FDI remains low by international standards, Korea SMEs have not been able to benefit from the global integration of production processes and the transfer of new technologies.[43] As a result, unless they adapt, Korean SMEs face the risk of being left behind as production is becoming increasingly globalized.



Source: BOK Financial Statement Analysis (2006).

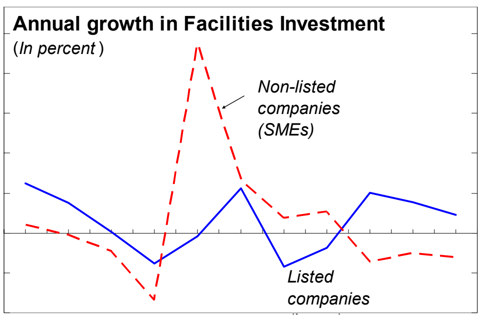


Source: BOK Financial Statement Analysis(2006).

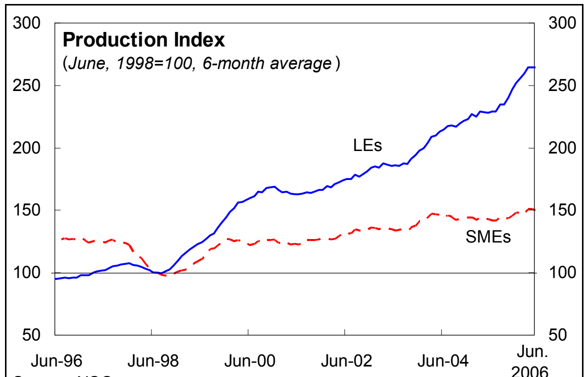
8. **Slow progress in restructuring since the crisis have also significantly weakened the SME sector**. According to BOK Financial Statement Analysis, about 1 in 4 manufacturing SMEs in 2004 were unable to generate enough operating profits to meet their interest expenses. Although the reason is partly cyclical due to the weak domestic economy following the burst of the credit card bubble in 2002–03, the problem is more fundamental and structural in nature. Since the crisis, SMEs have lagged behind in operational and financial restructuring compared to large companies. In 1997, manufacturing SMEs had lower debt-equity ratios and higher profitability than large companies. However since then, the picture has reversed. While large companies have made good progress in deleveraging and boosting overall profitability, SMEs have fallen behind. In 2005, SME's debt-equity ratio stood at 141 percent compared to 86 percent for large companies, while profitability has remained stagnant.

[43] FDI in Korea amounted to around 8 percent of GDP in 2005, well below the OECD average of 14 percent.

9. **These structural weaknesses have held back overall growth and investment**. According to research by the Korea Development Institute (KDI), the weak financial condition of SMEs is largely behind the recent slowdown in facility investment. They find that large listed companies have substantially increased their facility investment by 22 percent annually during 2003–05. On other hand, facility investment by SMEs has declined by 18 percent annually during the same period, keeping the overall level of investment flat (Lim, 2005). This can also be seen in the growing polarization between large and small companies which shows little signs of abating. Until the SME sector addresses these structural weaknesses, small companies will not be in a position to invest.



Source: Lim (2005).



Source: NSO.

C. How then to Meet these New Challenges? A Strategy for Revitalizing the SME Sector

10. **Looking ahead, a healthy and innovative SME sector will be crucial for accelerating Korea's shift to a more knowledge-based service-oriented economy and sustaining rapid growth**. The Korean economy has evolved from producing basic manufacturing goods to advanced technology products. To remain competitive in an increasingly globalized world, Korea will need to rely more upon a flexible and dynamic SME sector as source of innovation and change for the economy. Moreover, according to OECD data, with labor productivity in the service sector roughly one-half that of the manufacturing, the key for sustaining rapid growth over the medium-term is to restructure and enhance the competitiveness of the service sector. Boosting the productivity of SMEs which account for nearly 85 percent of service firms and employ 68 percent of service jobs will then be crucial.

11. **How then can SMEs adapt to meet these new challenges?** In order to help SMEs be a source of innovation and lead the transition to a more service-oriented knowledge-based economy, a three-pronged strategy for revitalizing the sector is needed.

- **First, the incentives for restructuring will need to be strengthened**. By exiting nonviable firms and rehabilitating distressed but viable ones, SME restructuring will help to free up resources for innovate start-ups and new investment. Here, the large public credit guarantee funds (CGFs) could play useful role in creating a market for SME restructuring, just as was successfully done for large companies after the financial crisis. At the same time, further reform of the corporate bankruptcy system, especially aimed at small companies, would help make bankruptcy a more attractive option for restructuring weak SMEs.

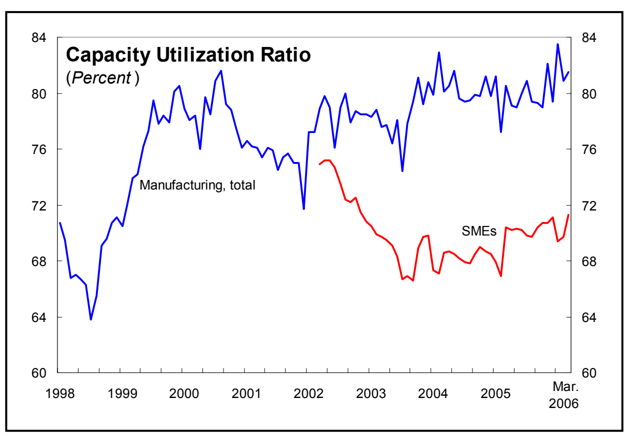
- **Second, the financial infrastructure for SMEs will need to be upgraded to expand the sources of financing and better serve the needs of new economy SMEs**. This will involve reforming the collateral laws to allow for a wider range of securitization, including for moveable assets such as trade receivables and even intellectual property. The venture capital industry will also need to be strengthened to help identify promising new technologies and guide creditor lending decision. As in other countries, to promote more risk-based lending and perhaps even a junk bond market for low-rated companies, the quality and coverage of positive credit information, such as through SME credit bureaus, will need to be improved. Deregulating the market for commercial credit insurance will also allow banks to better manage the risk of their SME lending and help develop a secondary market for SME loans.

- **Lastly, the environment for the growth of innovative SMEs should be improved**. Here, to promote greater entrepreneurship, further reform of the personal bankruptcy system would allow failed entrepreneurs to learn from their mistakes and start new businesses. Further deregulation of the service sector will also create more investment opportunities for SMEs, while greater incentives for FDI will help SMEs to reduce their reliance on supplying domestic *chaebols* and allow them to link more easily into the global production network.

The remaining sections outline the details behind this strategy.

Strengthening the Incentives for Restructuring

12. **Progress in restructuring remains slow**. As mentioned earlier, despite Korea's strong recovery following the crisis, SMEs continue to have high debt levels and low profitability compared to large companies. At the same time, sector suffers from excess capacity, limiting its ability to invest.



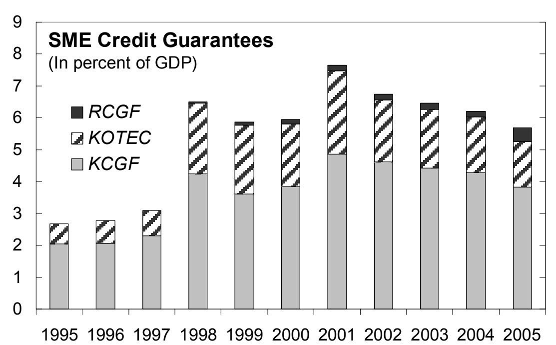
13. **One reason is that banks face little incentive for restructuring**. Given the high degree of collateral-backed loans and the fixed costs of restructuring smaller companies, banks have a strong incentive simply to collect on their guarantees or liquidate the underlying collateral rather than participate in restructuring. By some estimates, some 50 percent of SME loans are secured by real estate, 25 percent by credit guarantee, and a large part of the remaining amount through personal guarantees.[44] For distressed but viable firms, banks also face a strong incentive to rollover these credits given the low delinquency rates (2–3 percent) and risk premium. At the same time, the options for restructuring or selling to third parties are limited since the market for restructuring SMEs is largely inactive. Unlike for large companies after the crisis, the market for SME distressed assets has not had a chance to develop.

14. **At the same time, SMEs themselves face little incentives to take pro-active measures due to the high costs and risk of bankruptcy**. Given the strong tendency for banks to foreclose on collateralized loans, SMEs are reluctant to notify banks of emerging financial problems. Instead, they tend to wait, often until it is too late, hoping for a recovery. This has contributed to a large credibility gap between small companies and their banks. At the same time, the high cost of bankruptcy is a deterrent for SMEs to use bankruptcy for restructuring. Court procedural costs are estimated to be around W15 million ($15,800) which may be too high for troubled small companies to bear.

How then to provide stronger incentives for restructuring?

Gradually scale back the size of public credit guarantees to give a greater role to the market for allocating credit.

15. **The rapid expansion of credit guarantees for SMEs after the crisis have held back needed restructuring**. Between 1997–2001, SME credit guarantees roughly doubled in size, reaching a peak of nearly 8 percent of GDP, compared to only 1.5 percent of GDP in Taiwan Province of China, 0.2 percent in the United States and 0.6 percent in France (Ministry of Finance



Sources: Korea Credit Guarantee Fund, Korea Technology Credit Guarantee Fund, and Regional Credit Guarantee Funds.

[44] For all loans (household and corporate) in Korea, the share of loans backed by real estate and credit guarantees is estimated to be around 59 percent. In the United States, the share of corporate loans secured by collateral is 38 percent. In Japan, the share of loans secured by real estate or third-party guarantee is 63 percent (FSS of Korea, Bank of Japan, and U.S. Federal Reserve Board).

and Economy, 2004a). For a typical guarantees extended by the Korea Credit Guarantee Fund (KCGF), 85 percent of the risk of default is borne by the government and only 15 percent by the banks. Given the high degree of coverage, Korean banks tend to direct loans to those SMEs that can secure credit guarantees which are overwhelmingly well-established firms. Although these guarantees are typically given for only one year, they are usually rolled over. Therefore, the bulk of guarantees outstanding are directed towards existing firms, creating a barrier to new entrants.

16. **In recent years, the government has been limiting the growth in public credit guarantees and redirecting them towards start-ups and technology firms**. In addition, the government has resisted attempts to expand regional credit guarantee funds. Consequently, public credit guarantees as a share of GDP have fallen steadily from a peak of nearly 8 percent in 2001 to around 5.5 percent in 2005. Reducing further the reliance on public credit guarantees will promote restructuring in three ways. It will encourage banks to address their problem loans through either bankruptcy procedures or private workouts. This will also help strengthen risk management by the banks, forcing them to do their own risk analysis instead of simply relying on public guarantees when lending to SMEs. Reducing credit guarantees to existing firms will also lower the entry barrier for new SMEs, helping to promote restructuring in the sector.

17. **In addition, there is a need to reduce further the coverage ratio of public credit guarantees**. Lowering the coverage ratio to 60 percent, which is closer to the international average, would encourage banks to monitor more carefully and regularly the health of their SME borrowers. Transferring more risk to the banks would also provide greater incentives for banks to take proactive steps to address problems in their borrowers before they become intractable.

Strengthen the commercial orientation of the CGFs.

18. **Enhancing the commercial orientation of the funds would provide stronger incentives for restructuring**. To ensure that the CGFs have the proper incentives for restructuring, they could be given a clear mandate to maximize recovery value of their NPLs by whatever means are available. One possibility would be to spin-off their NPL portfolios into a separate AMC with such a mandate. This would also prevent a potential conflict of interest between the credit guarantee side that would prefer to avoid potential losses and the asset management side that is looking to maximize recovery returns. Such an approach has been effectively used by AMCs in other countries, such as Sweden and the United States, in order to clear out the backlog of NPLs following a banking crisis. Another way to strengthen

their commercial orientation would be to give credit guarantee funds more flexibility in setting their rates according to risk, essentially charging riskier borrowers a higher rate.[45]

19. **Credit guarantee funds would also need sufficient resources to write off past losses**. In order for the credit guarantee funds to face the proper incentives for managing their NPLs, they should have sufficient resources to write off past losses. One potential constraint to selling or restructuring NPLs would be the upfront recognition of unrealized losses. As a result, the fund will have the tendency to hold on to these assets in hope for a miraculous recovery rather than to take early measures to stem further losses.

Give public credit guarantee funds more flexibility to restructure SMEs.

20. **CGFs, with their large NPL portfolio, could help jumpstart restructuring by supplying the market with distressed assets**. In 2005, KCGF and the Korea Technology Credit Guarantee Fund (KTCGF) had a combined NPL portfolio size of around W7.8 trillion ($8.2 billion). Because of ambiguities in the laws that govern these funds, the CGFs do not actively restructure these assets or sell them to the market. Instead, they mainly collect through foreclosure and liquidation. The estimated recovery rate over the past 3 years for these NPLs is low, at 2.3 percent.

21. **One way to boost the recovery rate and create a complementary market for restructuring would be for CGFs to work more with the private sector in managing these NPLs**. KAMCO's experience after the financial crisis is a useful benchmark. By purchasing NPLs from banks and repackaging and selling them to market, KAMCO was able to create a new market for restructuring distressed debt that helped accelerate corporate restructuring. As KAMCO did for large companies, CGFs could help create a new market for SME restructuring by supplying the market with distressed assets from their NPL portfolio. This would imply a shift in the role of CGFs away from simply providing credit guarantees towards becoming more of an investor and promoter of restructuring.

22. **To achieve this, the laws governing the CGFs need to be amended to allow the funds to work more with the private sector to restructure distressed SMEs**. As done for large companies after the crisis, banks or restructuring funds could join with the CGFs to set up separate asset management companies or corporate restructuring vehicles to manage their SME NPLs. The CGFs could also sell directly to the distressed debt market or through an intermediary such as KAMCO. In order to retain some upside potential, the CGFs could include profit-sharing arrangements when selling the assets to the market.

---

[45] Another possibility would be to allow CGFs more flexibility in setting their fees to support promising but cash-poor SMEs. For example, instead of receiving a payment fee, CGFs could accept in return an option on future profits or limited equity in exchange for guarantee. See Kang (2006).

Develop the distressed debt market for SMEs.

23. **One of the key factors behind the success of large corporate restructuring after the financial crisis was the active market for distressed debt**. The introduction of private corporate restructuring vehicles, NPL asset management companies, bank workout units, etc. helped to attract needed capital and widen the investor base in creating a competitive market for restructuring. With an active secondary market for corporate loans, banks were better able to lend and manage the risk in corporate lending.

24. **As with large corporations, a private market for distressed SME debt could help accelerate restructuring**. In some ways, the environment for SME restructuring is more favorable now than during the financial crisis. Banks are now well capitalized and able to absorb the credit costs resulting from restructuring. They also have experience and expertise in restructuring the large firms, which can be applied to solving the problems of smaller companies.[46] Finally, compared to large company restructuring where foreign funds played an important role, local equity funds are likely to play a more prominent role in restructuring small companies given the high degree of local knowledge, higher fixed costs, and longer investment horizon that is required.

25. **Allowing public credit guarantees to sell more to the market, including possibly through KAMCO, would help to increase the supply of available assets for restructuring**. As proposed earlier, CGFs could play an important catalytic role by demonstrating that money can be made from restructuring distressed SMEs and drawing in other players, including commercial banks, to work with the private market. A distressed debt market would also provide valuable information on the pricing of risky assets, allowing banks and other institutions to do more risk-based lending to SMEs (see below).

Make corporate bankruptcy a more attractive option for restructuring viable SMEs and exiting the nonviable ones.

26. **In April 2006, the courts began implementing a new unified insolvency law**. By combining the three existing bankruptcy procedures for large companies, small companies, and individuals into one, the new insolvency law will help to streamline court procedures and remove some of the uncertainty involved in restructuring. In addition, the introduction of a "debtor-in-possession" system whereby debtors have the right to submit a restructuring plan to creditors and maintain management with creditor approval will encourage debtors to use bankruptcy to reorganize and to take proactive measures when problems emerge.

---

[46] Some domestic banks have already established SME workout units along these lines but the number of companies under workouts remains low.

27. **Further reforms could help make corporate bankruptcy a more attractive and effective instrument for restructuring for smaller companies**. Because of the high fixed costs, corporate bankruptcy in Korea has typically been used for large companies while liquidation and to a lesser extent composition was for smaller companies. Improving the bankruptcy system for smaller companies would provide a valuable tool for court-led restructuring and help sharpen the incentives for out-of-court workouts. Such reforms could include: introducing an automatic stay on assets; reducing some of the legal uncertainties on debtor's rights to submit a restructuring plan by removing the requirement of prior court approval, and streamlining further bankruptcy procedures for smaller companies.

- **Introducing an "automatic stay" would encourage distressed companies to use the court system for restructuring**. An automatic stay is a provision where the debtor, upon filing for bankruptcy, is given temporary protection from creditor action, such as foreclosure or lawsuits, subject to oversight of a bankruptcy judge. In the United States, for example, this temporary protection from lawsuits or immediate foreclosure provides a powerful reason to file for bankruptcy and allows for a more orderly resolution of a company's problem within the court system. It provides a "cooling off" period during which the debtor can submit a restructuring plan to the court. Although this would temporarily block creditor action, creditors would still retain the right to be paid out from court liquidation and have final approval of restructuring plan.

- **At the same time, removing the requirement for prior court approval for submitting a restructuring plan would help reduce uncertainty in filing for bankruptcy**. Making automatic the right of the bankrupt debtor to be the first to propose a restructuring plan would provide a strong incentive for management to use the court system before their problems become intractable. Although removing the requirement for prior court approval and introducing an automatic stay in the bankruptcy system may conflict with the Korean criminal code (so-called "boo-do" provision which treats loan defaults as a criminal matter), the commercial and the criminal side of corporate bankruptcy could be treated separately in order to improve the efficiency of the workout process.[47]

- **Court procedures and costs for small companies could also be further streamlined.** Court procedural costs are estimated to be around W15 million ($14,500) which may prohibitively high for troubled small companies. Reducing

---

[47] For example, in the event of a loan default, the debtor would be subject to the criminal code only when he or she is found to have committed a criminal act.

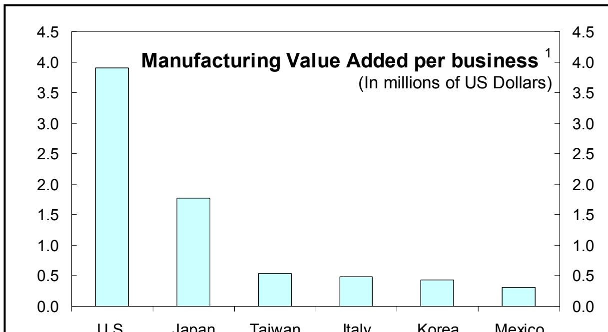
these costs and streamlining procedures for companies of below a certain asset size would help make bankruptcy a more viable commercial option for restructuring.

Modernizing the Financing System for SMEs

28. **Upgrading the financing infrastructure for SMEs would help accelerate the transition to a more service-oriented economy**. The financing system for SMEs is not well suited to support the creation of innovative knowledge-based firms. Because banks rely excessively on real estate or credit guarantees to lend to SMEs, start-ups with little or no fixed assets have difficulty in accessing financing and growing. Although this system may have been well suited for manufacturing SMEs, it is a constraint for service-oriented and knowledge-based companies that have few fixed assets.

29. **To do this, SME financing will need to shift away from relying upon real estate and guarantee collateral to one that focuses more on measuring and pricing risk**. Expanding risk-based lending would improve SME's access to financing and provide a new source of business for banks. Developing new risk-based instruments, such as credit insurance and venture capital, would help to support innovative start-ups and allow them to grow and mature more quickly. It would also contribute to the overall stability of the financial system by diversifying the risk of SME lending across a wider market (and away from the government). The keys to having such a system in Korea are to improve the provision of credit information, reform the collateral laws, deregulate commercial credit insurance, and develop a secondary market for SME loans.

30. **In addition, the venture capital industry in Korea could be further strengthened to help identify and support promising start-ups with new technologies**. Start-ups currently rely too much on bank lending as opposed to equity to finance their initial investment, leaving them more vulnerable to financial risk. The shortage of longer-term and risk-based financing is perhaps one reason why according to some studies, SMEs in Korea tend to remain small by international standards. For example, the average size of manufacturing firms in Korea is smaller than in other countries, such as the United States and Japan.



Sources: OECD Structural and Demographic Business Statistics, WDI (2006), and White paper of Taiwanes SMEs.
1/ Number of establishments.

Reform the collateral laws to allow for a wider range of securitization

31. **As in other countries, the collateral laws in Korea could be reformed to support the securitization of moveable assets**. Because the Civil Code in Korea is very clear on the treatment of real estate as a fixed asset and because the market for real estate is liquid and

deep, banks have a strong preference for real estate as collateral. In fact, because of the clear legal treatment and comprehensive coverage of real estate claims, title insurance, unlike in the United States, is not widely used in Korea. In contrast, because the law does not specifically address the issue of non-real estate assets or "movable" assets, such as future cash flow, inventory, or intellectual property, banks face some legal uncertainties and therefore additional costs in securing and enforcing collection of these moveable assets. Although some banks reportedly do use moveable assets for security, the amounts are small and the risk premiums are high. Clarifying the treatment of these alternative assets under the collateral law would enable SMEs with non-fixed assets to pledge these assets more easily when borrowing.

32. **Other countries have reformed their collateral laws with good success**. For example, Slovakia, as part of their collateral law reform in 2002, allowed debtors to pledge any asset, right or property interest, including future cash flow, when securing a loan. Following the reform, more than 70 percent of all new business credit was secured by movable assets and receivables (Bollardt, 2003, and World Bank, 2005b). In 2004–05, a wide range of countries, including Brazil, Croatia, India, and Japan, have also undertaken reforms that made it easier to create and enforce collateral contracts.

33. **The first step would be to introduce a "universal security interest" in the Civil Code that covers all types of assets and debts**. A universal security interest would allow a business to pledge all types of assets, fixed and movable assets, present and future cash flow, even copyrights and patents in order to secure a loan. It is a common feature of collateral laws in other countries, including the United States (Section 9 of the Uniform Commercial Code), the EU, and several CIS countries. Introducing a universal security interest in the Korean Civil Code would help elevate the treatment of moveable assets to the same legal status as real estate, both within and outside the bankruptcy courts. Since in Korea, this may imply a radical change in the treatment of moveable assets, consideration could be given to introduce a special clause in the Civil Code as an intermediate step that specifies which moveable assets are permissible, such as trade receivables, contracts, etc.

34. **The next step would be to introduce an electronic registration system for all types of collateral, including for moveable assets**. Changing the Civil Code may not be enough to allow banks to secure easily a wider range of moveable assets. Creditors and debtors will also need to be able to cheaply and easily register new claims and verify ownership of existing collateral. As in other countries, one simple way would be to introduce a centralized electronic system for all types of collateral. According to the World Bank, collateral registries work best when they cover all types of assets across the entire country.[48]

---

[48] Although most countries have some type of registry, usually over fixed assets such as real estate or vessels, only 30 countries, including Canada, New Zealand, Spain, and the United Kingdom, have registries that allow registration across all types of assets (see World Bank, 2005b).

This avoids confusion and additional costs arising over different systems and different treatment of collateral. If the system can be unified across the country and cover all types of assets, creditors and borrowers can easily and cheaply access information on liens and security interests to verify a contract and enforce their collateral rights.[49] To make access easy and inexpensive, the registry could be accessed electronically over the internet.

35. **In Korea, such a system already exists for real estate and could simply be extended to include moveable assets identified under the Civil Code**. Currently, owners of real estate register their claims with their local county (so-called "gun") offices where anyone can for a nominal fee verify ownership of the property. As a result, it is relatively easy and inexpensive to verify who owns what property in Korea. Extending this system to include other moveable assets identified in the Civil Code would complement the proposed legal reform by allowing for cheap and easy verification of all collateral contracts, including for moveable assets.

36. **At the same time, permitting out-of-court collateral enforcement would help minimize the cost of legal procedures and strengthen creditor collection**. In addition to collateral registration, it would be important to make it easy and inexpensive for creditors to collect on their collateral, preferably without direct court involvement. This would help lower the burden on the corporate bankruptcy system and reduce the cost and uncertainty involved in collection.[50] In Korea, this would require introducing in the Civil Code what is known as a "possessory right" or "self-help" featured in common law systems which allows a secured creditor to collect collateral on their own without court involvement, e.g., repossessing an automobile used to secure a loan. Since this may not be possible under the current civil law system in Korea, an intermediate step would be to amend the Civil Code to extend the same collection treatment for real estate to moveable assets. For example, local county offices could be given the same authority as for real estate to quickly approve the collection of moveable assets registered in their systems.

---

[49] As an example, in Canada, the Netherlands, New Zealand, the United Kingdom, and the United States, the fees, taxes, stamp duties are very small, and registration takes only one or two days (see World Bank, 2005b).

[50] According to the World Bank, more than three-quarters of collateral enforcement takes place outside of bankruptcy. For example, in Australia, the creditor would appoint a receiver to serve notice to the borrower and then seize and sell the underlying assets. As long as the debtor cooperates, the courts are not involved and enforcement is typically completed within 10 days. In Spain in 2000, after allowing debtors and creditors to enforce collateral outside the courts, Spain was able to reduce the time for enforcing collateral from more than one year to three months (see World Bank, 2005b).

Create a market for pricing and insuring SME credit risk

37. **The lack of adequate credit information is a major obstacle to pricing and insuring SME credit risk**. Because of the lack of timely and accurate information on SME financial health, banks are forced to rely on collateral and short maturities to manage their SME lending risk. Although a SME credit bureau (CB) was introduced in May 2005, positive credit information on SMEs is still not widely shared. The lack of timely information has held back the development of credit scoring models for SMEs that would allow banks to do more risk-based as opposed to collateral-based lending. Research has shown that payment history and trade credit data is a much better predictor of default risk than simple financial statement data (Petersen and Rajan, 1997).

38. **One constraint is the privacy laws that limit the wide sharing of credit information**. Since the credit information law ("Use of Protection of Credit Information Act") does not distinguish between personal and corporate data, corporate transaction data is treated the same way as personal data in terms of consumer protection and privacy rights. As a result, companies in Korea are reluctant to share payment information with SME credit bureaus because of the potential legal risk in providing potentially damaging information on other firms, such as on late payments or defaults.

39. **One solution would be to simply exclude corporate data from the coverage under the Credit Information Act**. This is in line with the privacy laws in other countries, such as the U.S. Fair Credit Reporting Act, which covers only personal, not corporate data. Excluding corporate data from the credit information law would then allow SME CBs to freely collect positive credit information, such as on payment transactions, and share them with other financial institutions. Looking ahead, SME CBs could also develop into becoming information providers under Basel II (so-called ECAI—"external credit assessment institutions") which would help support banks' own internal ratings model for assessing credit risk.

40. **However, since data privacy concerns have affected other areas, more fundamental reforms may be considered**. In Korea, since the multiple laws governing credit information are sector-specific, they tent to limit the sharing of positive information.[51] Moreover, each law is governed by different ministries and agencies, creating the risk of regulatory overlap and conflict. As in other countries, one possible approach would be to create a comprehensive credit reporting law that covers all credit data and providers and strikes the right balance between privacy protection and the data needs of financial

---

[51] They include: the Protection of Communications Secrets Act (1993); the Telecommunications Business Act (1991); the Medical Service Act (1973); the Real Name Financial Trade and Secrecy Act; the Use and Protection of Credit Information Act (1995); the Framework Act on Electronic Commerce (1999); and the Digital Signatures Act (1999).

institutions to manage credit risk.[52] In addition, since in Korea a close link exists between personal and SME credit information, expanding access to personal databases managed by public agencies, such as the tax authorities, public utilities, and health insurance, with appropriate safeguards would help to improve the timeliness and coverage of credit information.

41. **Developing a market for SME credit risk insurance could also help expand SME's access to financing**. Commercial credit insurance, unlike a credit guarantee which is purchased by a bank, provides insurance to companies against default on trade receivables. As in other countries, commercial credit insurance could help to bridge the gap between risk-averse banks and their more risky smaller borrowers and help spread the risk of SME lending across a wider range of investors.[53] Here, SMEs themselves would purchase credit insurance from a private insurer against the risk of default by a buyer. With this insurance against nonpayment, SMEs could then more easily apply for a bank loan. Credit insurers could then play a more important role the market, closely following the credit situation for small firms and setting a market price for SME credit risk (Kang and Yoon, 2003).

42. **However, in Korea, the market for commercial credit insurance is fragmented, underdeveloped, and small**. Part of the reason is that the market is split among three government agencies each of whom is granted a monopoly position.[54] Because the market is fragmented and closed to new entrants, its size has remained small and the range of products is limited. For example, the outstanding amount of credit insurance issued by KCGF and SGIC in 2005 amounted to around W1.8 trillion and W5 billion respectively. Both institutions have recorded high loss rates, reflecting the risky nature of the business. Because of the limited availability of credit insurance, SMEs face difficulties in transferring default risk other than to the government while banks are unable to hedge credit risk without using real-estate or public guarantees as collateral.

43. **Deregulating the commercial credit insurance market would help expand the market and introduce new risk-based products for SMEs**. Opening up the commercial credit insurance market to banks, non-life insurers, SME credit bureaus, and even multinational credit insurers would allow for a wider of credit insurance products for SMEs. Banks could then lend more based on these private insurance products. Since the public

---

[52] See World Bank (2005a).

[53] Although export credit insurance is more widely used, credit insurance for smaller domestic firms is used as a way of expanding SME's access to bank financing.

[54] They include: KCGF which provides credit insurance to SMEs with an annual turnover of below W15 billion; Seoul Guarantee Insurance Corporation (SGIC) which covers companies with a turnover above W15 billion, while the Korea Export Insurance Corporation (KEIC) provides insurance for exporters.

credit agencies already have a dominant position in the market, consideration could be given to privatizing their commercial credit insurance business, starting with the SGIC.[55] One criticism of this idea is that it would undermine the profitability of the credit guarantee funds and delay the repayment of public funds received after the financial crisis. However, since the funds are already experiencing losses from their credit insurance (not guarantee) business, deregulating the market may actually improve their profit margins by expanding the market and creating new demand for credit insurance products. This could eventually lead to the development of other instruments for risk-based lending, such as collateral loan obligations (CLOs) or even a junk bond market, which would depend very much on credit information and pricing.

44. **Over the longer-term, developing a secondary market for SME credit would help to improve risk-pricing as well as expand financing options for creditors**. Currently, Korea lacks an active market for SME loans and low-rated bonds, making it difficult for banks to price the risk of SMEs and restricting the liquidity of SME loans. Having a liquid secondary market for SME loans would not only make it easier for banks to manage their SME portfolio but also provide a market price for assessing SME risk. Banks would be more willing to extend unsecured credit to SMEs if they can sell the asset in the secondary market. A real-time market price for SME loans could also provide early warning signals of a problem and encourage banks to take proactive steps to address the situation. One way would be to create a standardized scoring system for SME credit risk that would could help banks to package their SME loans as asset backed securities (ABS) or as collateralized bond obligations (CBOs) and issue them in the secondary market. This could eventually lead to the development of other instruments for risk-based lending, such as collateralized loan obligations (CLOs) or even a junk bond market. However, developing this new market would also depend upon having adequate credit information and insurance mechanisms in place to price this risk.

Strengthen SME credit risk management

45. **Because of the higher cost of gathering credit information for small companies, the supervisors apply a different standard for loan classification and provisioning for SMEs compared to large companies**. In Korea, banks are required to apply so-called "forward-looking criteria" (FLC) only for loans greater than W500 million, covering about 20 percent of total SME loans. For the remaining 80 percent, banks rely on their own internal credit scoring system for classifying and provisioning. However, this lower standard for

---

[55] One model might be to follow the example of Coface, one of the top-3 companies worldwide in receivable management and credit insurance. Coface began as a French state-owned enterprise and was fully privatized in 1994. In addition to credit insurance, it also provides credit information to facilitate business-to-business trade.

evaluating SME loans has limited the incentives for banks to upgrade their credit risk management.

46. **Expanding the coverage of forward-looking criteria (FLC) to include more SMEs would encourage banks to examine more their borrowing capacity**.[56] To ensure more timely and accurate provisioning and loan classification, the supervisor could consider gradually lowering the loan size threshold for FLC to cover more SME loans. By encouraging banks to focus more on cash flow rather than on collateral, banks would then be able to better differentiate between borrowers and allocate more credit to promising firms. Tightening the loan standards would also raise the demand for better quality and more timely credit information from SME credit bureaus and from SMEs themselves. This would also help to address the credibility gap that exists between SMEs and their creditors on the transparency of their financial reporting.[57] Although the direct cost for SMEs of providing better data would be higher, it could be offset partially by the savings from better risk pricing and lower borrowing rates.[58]

Develop further the venture capital industry

47. **As in other advanced countries, an active venture capital (VC) industry can support the creation and growth of innovative start-ups**. Venture capital can also play an important complementary role to bank lending by helping banks to identify promising new technologies and providing a source of equity financing. For SMEs themselves, venture capital firms can also provide useful management advice to start-ups and help manage their development to maturity.

---

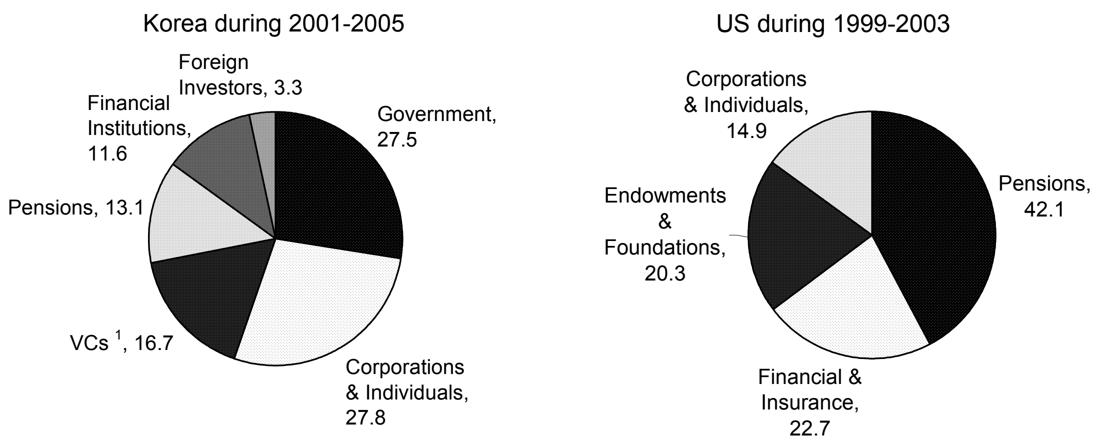
[56] In particular, expanding FLC to cover SME loans issued by nonbanking institutions, such as mutual savings banks (MSBs), would help to bring their loan classification and provisioning in line with commercial banks and limit the risk of regulatory arbitrage across different sectors.

[57] For example, according to a MOFE survey of SMEs and creditors, 71 percent of SMEs responded that their accounting is highly transparent, compared to only 3.9 percent by financial institutions (see Ministry of Finance and Economy, 2004b).

[58] Another possibility would be to lower the minimum asset threshold requiring companies to file audited financial statements to below the current level of W7 billion or by requiring external audits of loans above a certain size. Although SMEs would incur higher costs, the direct cost might be offset by the benefits from a lower borrowing charge and wider access to financing. Further simplification or standardization of financial statements could also help reduce this cost.

48. **The venture capital industry in Korea is held back by the small long-term institutional investor base**. In Korea, the government is the largest investor in the venture capital industry (31 percent). Since the budget for VC investment is reviewed annually, VC firms face some uncertainty in their funding—a problem given the long time needed to bring a company to maturation. This is in stark contrast to the United States where pension funds with their long investment horizon account for 42 percent of VC investment, followed by financial firms and insurers (23 percent).[59]

Limited Partners of VC Funds by Type



Source: KVCA and NVCA Yearbook 2004.
1/ Equivalent to general partner contribution to VC funds.

49. **A related problem is that average maturity (investment period) for VC funds is too short compared with the time needed for SMEs to mature**. The average tenure of VC funds in Korea is around 5 years compared to 10 years in the United States. However, the average time it takes for a start-up to an IPO is around 9 years in Korea. As a result, many start-ups fail to receive sufficient funding over the course of their development to grow in size and graduate.

50. **Given their large size and long-term perspective, the public pension funds in Korea could play an important role in developing further the VC industry**. For example, the National Pension Fund (NPF) of Korea in 2006 with assets of around W192 trillion invests only 11.3 percent of its portfolio in equity and only 1.4 percent in alternative assets, such as venture capital, private equity, and real estate. Consequently, there is room for expanding the NPF's allocation for VC with appropriate safeguards. CALPERS, for example, one of the largest public pension funds in the world, invests around 41 percent of

---

[59] Korea Venture Capital Association (KVCA).

its portfolio in equity and about 7 percent in private equity or venture capital. Pension fund investment could also help catalyze other private flows into the venture industry and reduce VC's current reliance on government budget support which can be distortionary and undermine the markets' pricing of VC risk.

51. **For the public pension funds to invest more in VCs, some organizational changes would be needed**. Given the different expertise required, the framework for evaluating VC investment should be separate from other investments, such as in fixed income and equity. One way would be to set up a separate investment sub-committee in the NPF for reviewing investments in alternative assets, such as VC. The sub-committee could also be given a longer-time horizon for evaluating VC investment performance. Currently, investment managers are given only a three-year time horizon and during that period face numerous audits and reviews that limit their incentives to accept long-term risk. Setting a time horizon of around five years would help to realize more of the full gains from VC investment.

52. **More foreign investment in the venture industry would help develop the industry and attract more domestic capital**. Foreign venture capital accounts for only 5.5 percent of VC financing, compared to 40 percent for all of Asia (Asian Venture Capital Journal). Some obstacles to foreign investment include the lack of tax haven benefits compared to other countries and the legal uncertainties surrounding limited partnership structures.[60] To attract more foreign investment, one possibility would be to allow for tax incentives for off-shore funds to invest in Korea VC funds and for joint ventures with foreign VC firms. Greater foreign capital in the VC industry would not only provide an additional source of private capital, but also allow Korean venture firms to work with international VC firms to expand globally.

53. **Relaxing the restrictions on M&A for SMEs would also help venture firms to graduate and grow**. An active M&A market provides an important channel for start-ups to grow and mature. However in Korea, M&A accounts for only 9 percent of SME exit compared to 78 percent in the United States (KVCA). The M&A market in Korea is largely dominated by the *chaebol*, making it difficult for smaller companies to grow. Reducing some of the regulations on the use of stock swaps in M&As, such as by allowing companies to use treasury stocks, would help to facilitate M&A activity. To address the problem of fraud in corporate disclosure for small company mergers, the punishments for false disclosure could be raised to discourage such behavior.

[60] According to KVCA, because foreign VC funds are required to be domiciled in Korea, they are unable to take advantage of various tax treaties as commonly done in other countries.

Improving the Environment for Innovative SMEs

54. **Fostering the development of innovative start-ups will be key for Korea to make the transition to a knowledge-based, service-oriented economy**. To do so, the incentives for entrepreneurship will need to be strengthened, and the orientation of SMEs will need to be redirected to take advantage of the rapid pace of globalization.

"Decriminalize" personal bankruptcy to encourage more entrepreneurship

55. **Research has shown a link between personal bankruptcy systems and the level of entrepreneurship for small companies**. Because often the liabilities of small businesses are the personal liabilities of the owners, personal bankruptcy also functions as a system for small nonincorporated businesses. Tougher bankruptcy provisions, such as a lower coverage for exempted personal assets, may deter entrepreneurship by raising the cost of bankruptcy to the debtor. Although tougher bankruptcy provisions may better protect the creditor and lower the interest rate for safe borrowers, it may also reduce the supply of credit for riskier borrowers who are looking to start a business. On the other hand, making it easier to declare bankruptcy may reduce the overall available supply of credit and raise borrowing rates by increasing the risk to the creditor for a given level of interest rates. Research for U.S. states has shown that higher bankruptcy exemptions result in a higher probability of families owning and starting a business. In the United States, entrepreneurs who declare bankruptcy under Chapter 7 must give up all their assets, but all future earnings and those assets that are protected under the code, such as personal housing, are exempted. This partial wealth insurance provides a strong incentive for entrepreneurial activity and is known as the "fresh start" in bankruptcy (see Fan and White, 2003, and for a summary of the literature, see "Economic Focus: Life After Debt," *The Economist*, 2005).

56. **In Korea, the strict personal bankruptcy law limits entrepreneurial activity**. Personal bankruptcy in Korea is very harsh on debtors, making it difficult for them to find jobs or start new businesses. For example, there are over 100 provisions in various laws discriminating against bankrupt persons. In some cases, bankrupt individuals have to give up their professional licenses and are unable to open a bank account; if they work for a public financial institutions, they must leave their job. This makes restarting a business or seeking new employment after bankruptcy very difficult. These tough bankruptcy provisions also produce perverse incentives for owners when their businesses suffer and their personal assets and future livelihood are at risk. Because of the high cost of bankruptcy, failed owners or those with personal guarantees may face strong pressure to cheat when businesses sour.

57. **Since many SMEs will inevitably fail, especially in the risky high-tech sector, "decriminalizing" bankruptcy will help give failed entrepreneurs an important chance to learn from their mistakes and start new businesses**. This is particularly important for the high-tech sector, where nine out of ten firms typically fail. To give entrepreneurs in

Korea a better chance to "restart" even after bankruptcy, employment and credit restrictions on defaulters could be eased. For example, the range of exempted assets could be widened, and the process of discharge after completing their bankruptcy plans could be accelerated. Moral hazard is always a risk when easing bankruptcy restrictions, but this could be contained more effectively by prosecuting harshly businesspeople who loot their company under the Criminal Code, not the Commercial Code.

More inward FDI to help SMEs globalize and upgrade their technologies

58. **By international standards, FDI inflows to Korea remain low**. FDI in 2005 amounted to around 8 percent of GDP, compared to the OECD average of 14 percent. According to UNCTAD, Korea ranks 109 out of 140 countries in terms of inward FDI performance, but 20 out of 140 in terms of inward FDI potential. Some reasons cited for the low level of FDI include: labor market rigidities that have raised the cost of risk investment, high wages relative to the rest of the region, and complicated administrative procedures, and higher barrier to foreign ownership of domestic assets relative to the OECD average (see OECD, 2006).

59. **Greater inward FDI could help Korean SMEs become "more global" and compete better with overseas supplies**. As the *chaebols* expand overseas to take advantage of cheaper labor and to be closer to their final markets, they are relying less on domestic SMEs and are looking more to overseas suppliers to meet their production needs.

60. **Encouraging more inward FDI by multinational companies would help SMEs in Korea to expand and diversify their supply dependence as well as to strengthen their relations with the domestic *chaebol***. More foreign investment would also allow SMEs to link more with rapidly expanding global production network and provide important benefits from the transfer of advanced technology.[61] For this reason, the proposed FTA with the United States may be especially helpful to SME suppliers as it holds out the promise of more U.S. foreign investment in Korea.

D. Conclusion

61. **As the Korean economy is evolving from basic manufacturing into an advanced technology, service-oriented economy, a dynamic and flexible SME sector will play an increasingly important role as a source of innovation and change**. At the same time, underlying structural weaknesses, the rapid pace of globalization, and increasing competition from China have intensified pressures on the SME sector. The keys for meeting these new challenges and revitalizing the SME sector would be to strengthen the incentives for restructuring, upgrade the financing system for SMEs, and improve the environment for innovative small companies.

[61] See Kim, Joo Hoon (2005) for ways to upgrade the innovation capability of small firms in Korea.

References

Bollardt, Peter, 2003, "Pledge of Movable Assets Now Possible Under Slovak Law," White & Case.

"Economic Focus: Life After Debt," *The Economist*, April 14, 2005.

Fan, Wei, and Michelle J. White, 2003, "Personal Bankruptcy and the Level of Entrepreneurial Activity," *Journal of Law and Economics*, Vol. XLVI (October).

Kang, Dongsoo and Taek Yoon, 2003, *Insurance as a Financial Assistance Vehicle to Small and Medium Sized Enterprises,* July (Korea Development Institute).

Kang, Jong-Ku, 2006, "Banks' Financial Intermediation Role in Korea," *Bank of Korea Economic Papers*, Vol. 9, No. 1 (August).

Kang, Jongku and Hyungkwon Chung, 2006, "An Analysis of the Effect of Policy Support for Small Medium Enterprises (SMEs)" (Seoul: Institute for Monetary and Economic Research).

Kim, Joo Hoon, 2005, "Sources of Korean SME Innovations in the Era of Globalization," Korea Development Institute (July).

Kim, Joon-Kyung and Chung H. Lee, 2003, "Korea's Direct Investment in China and Its Implications for Economic Integration in Northeast Asia," *KDI Journal of Economic Policy*, Vol. 25, No. 2, pp. 171–206 (Korea Development Institute).

Lim, Kyung-Mook, 2005, *An Analysis on Changes of Equipment Investment Patterns of Korean Firms Using Micro and Macro Data,* December (Korea Development Institute).

Ministry of Finance and Economy, 2004a, "The Current Situation of SME Finance and Countermeasures," July (Seoul).

———, 2004b, "Result of Study on Actualities of Small/Medium Enterprises," July (Seoul).

Organization for Economic Cooperation and Development (OECD), 2006, *Economic Policy Reforms: Going for Growth 2006* (Paris).

Petersen, Mitchell A. and Rajan, Raghuram G., 1997, "Trade Credit: Theories and Evidence," *The Review of Financial Studies,* Vol. 10, No. 3, pp. 661–91.

World Bank, 2005a, *Best Practices—Principles and Guidelines for Credit Reporting Systems*, available via the Internet at www.worldbank.org, "Credit Reporting Systems" section (Washington).

———, 2005b, *Doing Business in 2005* (Washington).

V. A Family Divided—Revisited: Income Inequality and Social Polarization in Korea[62]

A. Introduction

1. **In 2003, the Article IV consultation on Korea found that the country's labor market was actually two markets in one**, with regular workers enjoying stable jobs on one side, and a large share of non-regulars jumping from job to job on the other.[63] The particular paper that studied these issues was titled: "A Family Divided: Labor Market Duality in Korea."[64] In this paper we revisit the growing gap between the haves and the have-nots, but this time with a different focus: income inequality and social polarization.[65]

2. **Income inequality and social polarization have become major issues in Korea**. President Roh Moo Hyun's dedicated his 2006 New Year's address to this problem, stressing that "The issue of socio-economic disparity must be resolved." More dramatically, presidential chief of staff Lee Byung-Wan warned that "If the polarization problem is left unsolved, South Korea could be even divided into two, resulting in three Koreas on the peninsula."[66]

3. **Of course, concerns about income inequality are not new, nor are they confined to Korea**. Indeed, over the past few decades the combined effects of technological change and international trade have put downward pressure on the employment and wages of lower and middle-income households in most advanced countries, with concomitant increases in inequality measures.

4. **But the situation in Korea is arguably more dramatic than elsewhere**. To start, income inequality is rising at a pace unseen in other OECD countries. Moreover, income

---

[62] Prepared by Jacques Miniane. Particular thanks are due to Prof. Kyungsoo Choi of Korea Development Institute, both for his insights into the issue of income inequality in Korea and for sharing his data on Korea's labor income Gini.

[63] In keeping with the usual terminology in Korea, we will use the term "regular worker" to define someone under an open-ended salaried contract, and "non-regular worker" someone under a fixed-term contract.

[64] See He and Tressel (2004).

[65] In this paper we define social polarization as differences across individuals in terms of the precariousness of their jobs (permanent versus fixed-term contracts, full-time versus part-time, etc.), the security and predictability of their income, and their coverage under social insurance.

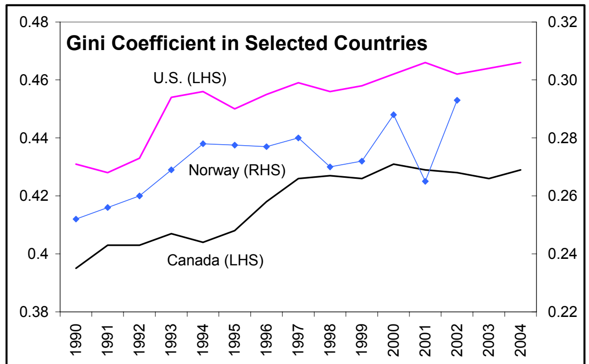
[66] As quoted in Business Korea, March 2006, page 12.

inequality is rising not just because the rich are getting richer: lower incomes in Korea have fallen substantially in absolute terms despite rapid economic growth.

5. **So why is Korea doing worse?** The links with the labor market are clear: Korea is doing worse because the loss of regular jobs in favor of more precarious forms of employment has been more severe than elsewhere. And this happened because, in Korea, the global forces of technology and trade were met with highly rigid policies on permanent employment, as well as stifling regulations that all but killed productivity growth and job prospects in the service sector. In other words, the key to reducing inequality in Korea lies in less, not more, regulated markets.

B. Income Inequality in the World and in Korea

6. **Over the last couple of decades, many advanced countries have experienced a substantial rise in income inequality**. This rise has cut across all continents, occurring in countries with significant income redistribution through taxation as well as in those with less protected labor and product markets. There have been important cross-country differences in the way the process has materialized, but overall the commonalities in income inequality dynamics among developed countries outweigh these differences.[67]



Sources: U.S. Bureau of Labor Statistics, Statistics Canada, and Statistics Norway.

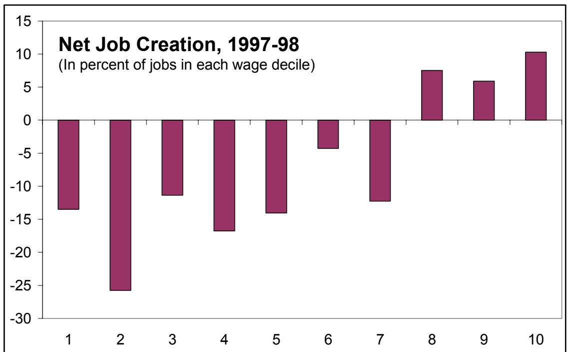
7. **Korea has not been immune to this global trend**. Korea used to be different, in that income inequality was falling for much of the 1980s, while it was increasing most elsewhere. As some Korean scholars have noted, the gradual liberalization of union activities during the transition to democracy led to a major redistribution of wages and incomes towards the bottom and middle of the distribution (Choi, 2003). But inequality started rising mildly in the early 1990s, and then surged during the financial crisis of 1997–1998 as massive corporate layoffs disproportionately affected lower-wage employees.[68,69] And real economic growth of

[67] Differences include the fact that the rise in inequality has been continuous in some countries (i.e., the United States), but has come in bursts in others (i.e., the United Kingdom, where inequality rose sharply in the 1980s and stabilized in the 1990s). Note that, while this paper concentrates on the trends in advanced countries, other authors have found that increases in inequality in regions such as Asia cut across countries' income levels (see IMF, 2006).

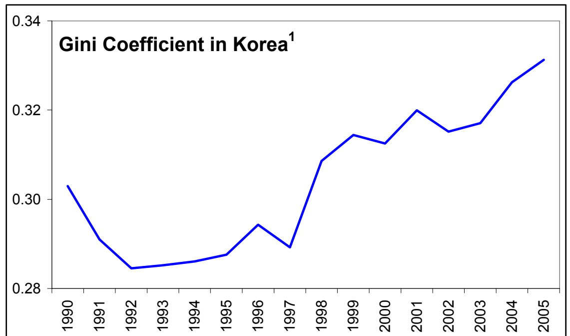
[68] Why this is so is not entirely clear, but one factor could be that severance payments—which on average are high in Korea—were substantially smaller for lower-wage employees. Note also that the seniority-based wage

(continued…)

close to 50 percent since 1998 has not been able to reverse the jump in inequality during the crisis; in fact, inequality rose further during this last period.[70,71] This is in sharp contrast to past historical experience in Korea, when high growth was typically accompanied by declines in inequality.



Sources: Korea Ministry of Labor, and staff calculations.



Source: Professor Kyunsoo Choi, Korea Development Institute.
[1] Based on labor income.

8. **There is consensus among academics that skill-biased technological change (SBTC) has been the main factor behind higher inequality in advanced countries.**[72] According to this theory, computerized equipment has replaced the jobs of many unskilled

---

system then prevalent in Korea pushed many firms to fire older workers, for whom wage was substantially above their marginal productivity.

[69] As IMF (2006) points out, Korea is the only Asian country where inequality rose during the financial crisis, perhaps because the other countries affected had much larger rural sectors, and the crisis predominantly hit the relatively affluent urban citizens.

[70] Korea's Gini coefficient computed by the National Statistics Office shows no trend increase since the crisis. The official Gini is computed based on total household income including severance payments, which are quite large in Korea. When one decomposes total income between regular labor income and others (including severance payments), a Gini based on the former shows a trend increase since the crisis, and a Gini based on the latter shows a strong trend decline. Adding the two explains why the official Gini has been relatively stable since 1998. Because severance payments are much larger in Korea than elsewhere, and because severance payments are very lumpy, a Gini based on labor income is more appropriate to compare trends in Korea with those in other countries.

[71] It is also worth stressing that up to 2003 household income in Korea was sampled from salaried households only, thereby excluding the self-employed. This is key in a country where the self-employed account for a rising share of the labor force, a share now close to 30 percent. In this paper we generally exclude the self-employed in our calculations (unless specifically mentioned) in order to obtain longer series. Note that once the self-employed are included the value of the Gini increases by some 15% percent.

[72] Authors that do not subscribe to the view that SBTC has been the main driver of wage and income dispersion include Card and DiNardo (2002) and Lemieux (2006). In the particular case of the Unites States, these papers have argued in favor of institutional factors such as the real decline in the minimum wage, or changes in workforce composition, notably age and experience.

workers while boosting the productivity of highly-skilled individuals.[73] Krussel et al. (2000) estimate a model where equipment capital is a complement to skilled labor and a substitute to unskilled labor, and show that growth in the stock of such capital can account for much of the rise in relative demand for skilled labor in the United States and concomitant rise in the skill premium.[74] Machin and Van Reenen (1998), Goos and Manning (2006) and Spitz-Oener (2006) among many others also find strong evidence of SBTC in European countries and Japan. More recently, some authors have emphasized a slight variant of SBTC which maintains the complementarity of capital with skills/education but refines the substitutability between capital and unskilled labor. In this view, computerized equipment can easily replace humans in jobs that require non-cognitive repetitive tasks (i.e., typical office work), but cannot (yet) replace humans in jobs based on non-repetitive manual tasks such as cleaning or waitressing. This theory then predicts a polarization of the labor market, with jobs disappearing in the middle of the wage distribution and growing at the two extremes. Autor, Levy, and Murnane (2003) and Autor, Katz, and Kearney (2005) have been proponents of this "polarizing" SBTC, arguing that it can explain why in countries like the U.S. higher incomes are rising relative to middle incomes, while the latter are falling relative to lower incomes.

9. **International trade and competition from low-cost countries have also played a role in fuelling inequality in most advanced countries, but a relatively minor one**. There has been much worry that competition from countries like China has hollowed out traditional manufacturing, leading to the loss of many heretofore stable jobs and putting downward pressure on the wages of unskilled workers. But most studies in this literature find a relatively small effect of trade on the employment and salaries of low-skill workers in developed countries.[75] At most, trade can account for 10–20 percent of the overall fall in the demand for unskilled labor, not enough to cause much widening of wage inequality. Another piece of evidence playing against international trade and in favor of SBTC is the fact that the demand for low-skill labor has fallen in non-tradable sectors and in manufacturing sectors

[73] Examples of capital and skill complementarity are countless: think of the asset manager who can now track instantaneously the performance of a global portfolio with countless assets, or the top doctor who can consult in real-time on a far-away surgical procedure.

[74] The skill premium is usually defined as the ratio of wages of college educated workers to wages of non-college educated workers.

[75] Freeman (1995) and Cline (1999) provide good reviews of this literature. Wood (1994) finds much larger effects of trade on inequality, but his views are not widely shared.

not exposed to competition from low-cost countries by as much as they have in sectors exposed to such competition.[76]

10. **The causes behind the increase in income inequality in Korea have not been as closely studied as in other countries, but preliminary evidence points to substantial SBTC effects**. A sizeable number of papers (Cheong, 2001, Choi, 2003, Yoo, 2004, among others) have examined the increase in inequality following the 1997-98 crisis. These studies quantitatively decompose inequality trends by type—between-groups versus within-groups—or measure the contribution of different income sources—labor income, nonlabor income, etc.—in these trends. But they do not test directly for one competing *theory* of income inequality or another. The few that do point to SBTC effects. Kang and Yun (2003), for example, find that the rise in the college premium can explain one-third of the rise in wage dispersion in Korea between 1994 and 2000. The rise in the college premium is confirmed by IMF (2006), who also find that employment of unskilled workers has declined in absolute terms in Korea, while that of skilled workers has risen strongly.

11. **There is no direct evidence on the effects of international trade on income inequality in Korea, but there is some reason to believe that they have been significant**. Competition from low-cost countries, in particular China, has led to a substantial hollowing out of traditional manufacturing sectors in Korea, affecting mostly small and medium enterprises (Miniane and Kang, 2004). For example, while overall exports have grown by over 130 percent since 1995, SME exports in sectors such as textile and apparel, plastic, or rubber have been flat or falling. Employment losses in these firms account for much of the total decline in manufacturing employment—over half a million in the last ten years. This being said, whether international trade has or has not worsened inequality in Korea remains to be empirically tested. Cross-sectional studies measuring the effect of trade on inequality in Asia find that trade worsened wage dispersion, but the effect on inequality was less pronounced (IMF, 2006).[77]

So far, it appears that Korea fits the pattern of many other advanced countries: SBTC and international trade have led to a deterioration in income inequality. But as we will now show, Korea is different in three key regards: (i) the increase in income inequality has been

---

[76] Skill-biased technological change and competition from low-cost countries need not be mutually exclusive explanations of the increase in inequality. To the contrary, they could be mutually reinforcing. Imagine that SBTC leads to greater polarization of work within services than within manufacturing. If so, competition from low cost countries could exacerbate the effects of SBTC by shifting labor from relatively egalitarian manufacturing into relatively polarized services. This hypothesis is only speculative, though.

[77] This may be simply due to the fact that, in many countries in the sample, salaried employees accounted for less than 50 percent of total employment. But this is not true in Korea, and certainly not in the early to mid-1990s when inequality started rising.

more rapid than elsewhere; (ii) income inequality is not worsening just because the rich are getting richer, but also because the incomes of the poor are falling in absolute terms, despite rapid economic growth; and (iii) beyond income inequality, Korea is experiencing strong social polarization—defined as disparities across groups in terms of job and income security, and access to social insurance—as "precarious" employment is replacing permanent contracts much faster than elsewhere.

C. Things Are Tougher in Korea

12. **It is hard to tell how inequality levels in Korea compare with those in other countries, but the pace of increase has been very rapid by international standards**. One should be careful in making cross-country comparisons of measures of inequality such as the Gini coefficient, as these measures are very sensitive to the definitions of household and income, and which change from country to country.[78] However, it is safer to compare *trends* in inequality, and on that measure the pace of increase in Korea since 1997 has been very rapid, arguably the fastest in the OECD (see footnote 6). The Gini coefficient has risen by more than 4 percentage points over the last eight years, compared with less than one percentage point in countries like the US or Canada.[79] Even excluding the crisis years 1997 and 1998, the pace of increase has been unusually fast. Other papers such as IMF (2006) find that Korea has experienced the sharpest rise in top-to-bottom income dispersion over the last ten years of any country in Asia, developed or developing.

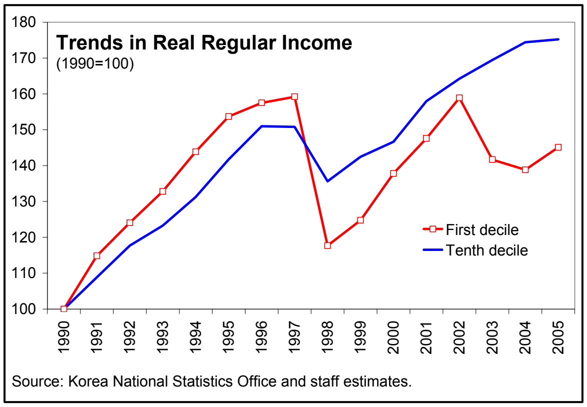
13. **Moreover, despite an impressive economic recovery following the crisis, lower incomes have fallen in absolute terms**. Real gross domestic product in Korea grew by some 50 percent between 1999 and 2005, after falling by 7 percent in 1998. Yet over the period 1998-2005 real incomes of the bottom decile fell by some 9 percent.[80] The path has been quite volatile, with a sharp fall during the crisis, a sharp recovery matching the recovery of the overall economy, and a renewed fall following the bursting of the credit card bubble. Yet note that incomes at the top fell much less during the financial crisis, and did not suffer from the 2002–2005 slowdown. By and large, real wages at the top and at the bottom exhibit similar patterns to incomes.

---

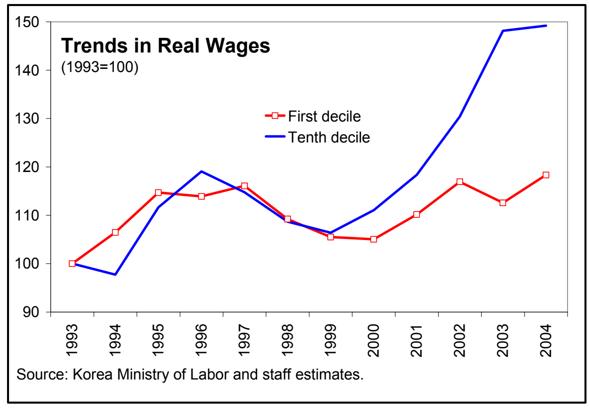
[78] The OECD has constructed harmonized measures of the Gini coefficient for most of its member countries, but unfortunately Korea is not part of the sample.

[79] The calculation for Korea is based on the labor-income Gini, not the total income Gini.

[80] This calculation is based on household income data from the National Statistics Office. Calculations using labor income data supplied by Prof. Kyungsoo Choi of Korea Development Institute show an 18 percent real decline for the bottom decile, and an 8 percent real decline for the second lowest decile. Bottom incomes have not fared well in the United States either, but the decline has been smaller than in Korea over this period despite lower overall economic growth.

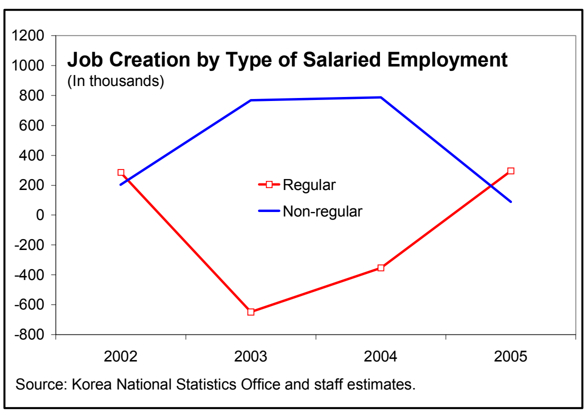


Source: Korea National Statistics Office and staff estimates.

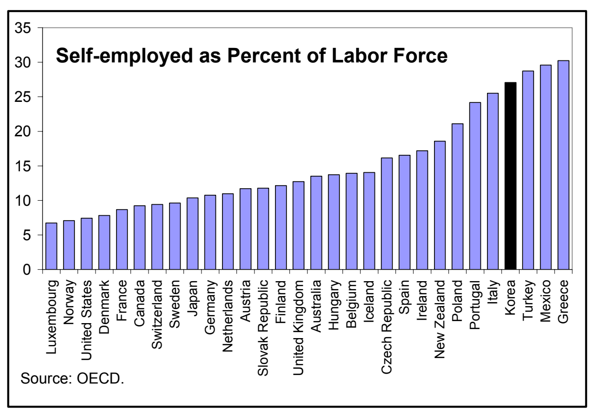


Source: Korea Ministry of Labor and staff estimates.

14. **One reason why inequality is rising faster in Korea than elsewhere is that the country is experiencing a much sharper decline in regular employment, with a concomitant rise in non-regular employment.**[81] According to OECD (2002), non-regular employment accounted for 11 percent of salaried employment in the OECD as a whole in 1985, and for some 14 percent in 2000. Compare this with Korea, where over the past four years alone the share of non-regular employment has gone from 27 percent to 37 percent, as the economy lost over four hundred thousand regular jobs while creating over 1.8 million non-regular jobs.[82] Similarly, some 30 percent of all new jobs created in the service sector in the past ten years have been accounted for by the self-employed, many of whom were unable to find regular employment and used their severance payments to open small, mom-and-pop shops. It is consequently not surprising that Korea has a higher share of self-employment than any country in the OECD except for Turkey, Mexico, and Greece, the former two having substantially lower income per capita levels than Korea.



Source: Korea National Statistics Office and staff estimates.



Source: OECD.

[81] To some extent, self-employment and part-time or fixed-term employment is the result of preferences. However, there is evidence, including for Korea, that much of it is not.

[82] These figures are from the October supplementary survey to the monthly Economically Active Population Survey (EAPS) conducted by the National Statistics Office. The supplementary survey was first undertaken in 2002, and hence no data exists for earlier periods. The standard EAPS is longer dated, but its classification of workers between regular workers and non-regular workers can be misleading, in that workers with fixed-term contracts of one year duration or longer are classified as regular workers.

15. **Nonregular employees are paid less than regular employees even adjusting for relevant characteristics, and the gap is particularly pronounced in Korea**. One cannot simply compare wages in regular versus non-regular jobs, because both work and worker characteristics are different. However, there is mounting evidence that non-regular workers face a negative premium even after adjusting for all relevant characteristics. In Korea, this negative premium has been estimated by Jeong (2003) to range between -20 to -30 percent depending on the econometric specifications.[83] In the thirteen European countries that participate in the European Commission Household Panel, the average premium is estimated at -15 percent and highly statistically significant (OECD, 2002).

16. **The "precariousness" of work has implications that go beyond earnings and income inequality**. For example, economic theory suggests that absent complete financial markets—a safe assumption in the real world—risk-averse individuals care about the volatility of their income. And the self-employed and non-regular workers face substantially higher income volatility than regular workers. According to OECD (2002), 58 percent of non-regular workers have been in their current job for less than a year, compared with only 13 percent of permanent workers. Non-regular workers also face a much higher risk of a return to unemployment at any point in time. Meanwhile, for the self-employed, income uncertainty is a feature of everyday life.

17. **Non-regular employees are also substantially less likely to be covered by work-based social insurance**. There are several reasons why this occurs: (i) minimum contribution periods are required for entitlement of benefits; (ii) the contribution records of temporary employees are fragmented across many employers; (iii) fixed-term workers are typically employed in smaller firms, which are more likely to evade taxes and contributions. And the numbers paint a bleak picture. In Korea, 47 percent of non-regular employees are covered by the National Pension, 49 percent are covered by health insurance, and 45 percent are covered by unemployment insurance. The numbers for regular employees, in contrast, are 76 percent, 76 percent, and 64 percent respectively.[84]

So why is regular employment disappearing so fast in Korea? Because the global forces of technical change and international trade - which put a premium on economic flexibility - were met in Korea with very rigid policies on regular employment and a highly regulated and very unproductive service sector.

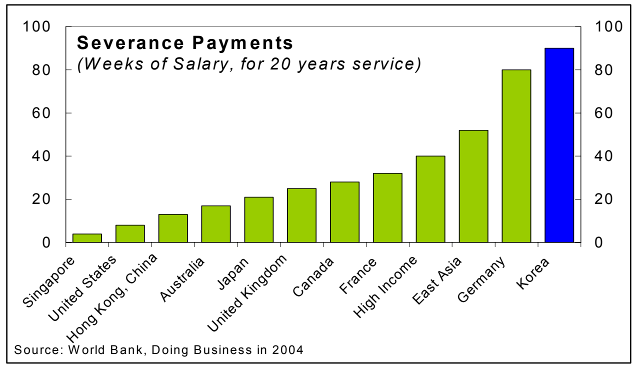
---

[83] Note that, even after adjusting for relevant *observable* characteristics, these specifications do not control for *unobservable* but potentially relevant ones, nor do they easily control for the potential endogeneity of temporary work.

[84] Not all regular employees are covered by social insurance, because many work in small enterprises that evade contributions.

D. Stemming Social Polarization in Korea

18. **Policies on regular employment remain very rigid in Korea**. In particular, the conditions for mass dismissal are strict, the consultation periods long, and severance payments high.[85] Among other things, the Labor Standards Act (LSA) stipulates that collective dismissals are allowed only for "urgent managerial reasons", and it requires that the employer make every effort to avoid layoffs, that it notify trade unions sixty days prior, and that it maintain discussions in good faith with trade unions on how to avoid dismissals.



In some cases, approval from the Ministry of Labor is required for dismissals. Since the crisis, firms have relied on the Supreme Court's more liberal interpretation of the conditions for dismissal attached to the LSA, but this interpretation remains narrow relative to the reality in other countries.[86]

19. **Strict protection of regular contracts likely explains why Korea is rapidly losing permanent jobs**.[87] Studies such as Booth et al. (2002) have found that countries with stricter employment protection legislation on permanent employment tend to have higher shares of fixed-term employment; conversely, countries like the United States, the United Kingdom, and Ireland have low protection on regular employment and have high shares of regular employment—even though they have, if anything, fewer restrictions on non-regular employment.[88] Moreover, non-regular employment need not be the only substitute for regular employment: rigid policies may also be pushing firms—notably the *chaebol*—to become more capital intensive. According to Pyo et al. (2006), the capital/labor ratio in Korea

---

[85] OECD (2004) attributes only a moderately high value to Korea's employment protection legislation on regular employment. But this is because, *de jure*, Korea has no legal provisions for monetary compensation in the case of dismissals. *De facto,* workers do receive severance payments. This being said, one should be careful when comparing these *de facto* payments with those in other countries (i.e., one should take the graph plotted above with a grain of salt). Severance payments in Korea are high because they are often in lieu of retirement benefits, which are paid to the dismissed worker in one lump sum. But the fact remains that high severance payments are a good proxy for the legal difficulty of dismissing workers discussed in the paragraph.

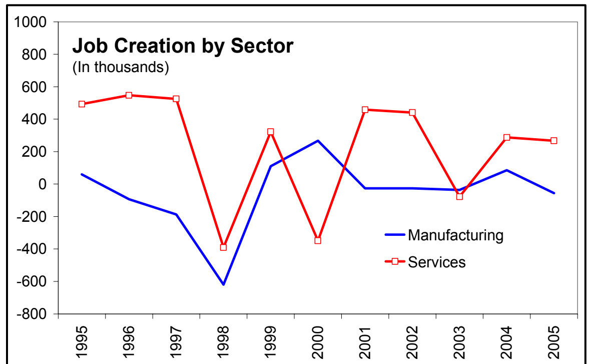
[86] Some authors such as Kim (2002) have gone so far as to argue that layoffs of regular workers have become even harder after the reinterpretation of the LSA.

[87] See He and Tressel (2004) for more detailed evidence on this issue.

[88] The fact that Korea now has a relatively liberal regime for fixed-term employment (OECD, 2004) only accentuates the perceived cost of permanent employment.

increased by 45 percent between 1996 and 2002. Finally, it is worth noting that strict regulations on regular employment are ranked by foreign CEOs as the number one deterrent to foreign direct investment in Korea (Kim and Lee, 2005).

20. **Besides rigid labor market policies, the "precarization" of employment in Korea can be explained by the flow of labor from manufacturing to services**. Over the last fifteen years, Korea has experienced a large flow of labor from manufacturing into services. Since 1995 manufacturing employment has declined by half a million, while service sector employment has increased by two and half million. Such a flow has happened in many countries, the result, among other things, of international trade pressures and changing social preferences as incomes rise. In the particular case of Korea, this transition from manufacturing into services was hastened by the financial crisis, which resulted in massive corporate layoffs in manufacturing, mostly of low-wage employees.



Source: Korea National Statistics Office and staff estimates.

21. **Since labor migration from manufacturing to services has happened elsewhere, why did it lead to such work precarization in Korea? Because productivity levels and productivity growth in services are weaker than in other countries, both in absolute terms and relative to manufacturing**. Korea's service sector is one of the least productive in the OECD; moreover, the gap in productivity growth between manufacturing and services is higher in Korea than in any other OECD country—twice the gap in France, four times the gap in the United States, and ten times the gap in the United Kingdom (OECD, 2005). Low productivity and growth in services has limited the creation of well-paying salaried employment, failing to compensate for the destruction of regular jobs in manufacturing, and resulting in an increase in non-regular jobs and self-employment. To witness, the proportion of self-employed businesses in the service sector in Korea is about 30 percent, well above 7 percent in the US and 11 percent in Japan. To a certain extent, productivity in the service sector is low precisely because there has been an influx of labor into this sector, opening up inefficient mom-and-pop stores. But productivity in services was already low before 1998. In fact, Chapter I finds that TFP growth in services has increased since the crisis, although it remains negative.[89]

22. **If service sector productivity is so low, it is because of a stifling regulatory burden**. As Chapter I argues, low productivity in services is due to: (i) high start-up costs

[89] Pyo et al. (2006) also find that TFP growth has improved in services, being slightly negative before the crisis and slightly positive after.

including costs of incorporation, which limit entry and protect incumbents; (ii) strict zoning and land law regulations, which particularly constrain growth and productivity in the distribution sector; (iii) high exit costs, due to generous public credit guarantees benefiting weak performers and an inefficient bankruptcy system[90]; and (iv) a host of restrictive regulations in particular areas, notably education, health, and professional services—for example, there can be no for-profit health organization in Korea.

E. Conclusions

23. **Korean society is experiencing a high degree of anxiety over issues of inequality and social polarization, and it is not hard to see why**. Income inequality is rising faster in Korea than elsewhere, and people at the bottom are losing out not just in relative but also in absolute terms. Growing gaps between the haves and the have-nots, be it in terms of income levels or income security, become all the more evident—and difficult to accept—in a society as ethnically homogeneous as Korea.

24. **This being said, the key to reducing growing social polarization lies in less regulation, not more**. Korea provides a perfect example that rigid policies, while well-meaning, often end up protecting a dwindling pool of insiders at the detriment of a growing body of outsiders. If Korea is to tackle social polarization, it has to stimulate regular employment, and this can best be achieved by making dismissal of regular employees less costly for firms, and by deregulating the service sector to create business opportunities. This process of deregulation could be accompanied by an expansion of social insurance, on which public expenditures remain low by international standards. In other words, protect the worker, not the job. By protecting jobs, Korea has hurt a lot of its citizens.

[90] See Miniane and Kang (2004) for more details.

References

Autor, David H., Lawrence F. Katz, and Melissa S. Kearney, 2005, "Trends in U.S. wage inequality: reassessing the revisionists," NBER Working Paper No. 11627 (Cambridge, Massachusetts: National Bureau of Economic Research).

Autor, David H., Frank Levy, and Richard J. Murmane, 2003, "The skill content of recent technological change: an empirical investigation," *Quarterly Journal of Economics,* 118:4, pp. 1279–1333.

Card, David, and John E. DiNardo, 2002, " Skill-biased technological change and rising wage inequality: some problems and puzzles," *Journal of Labor Economics,* 20:4, pp. 733–83.

Cheon, Byung-You, and BogSoon Kim, 2005, "Polarization of the Labor Market and Policy Tasks—with focus on job polarization," Korea Labor Institute Working Paper 68.

Cheong, Kwang Soo, 2001, "Economic Crisis and Income Inequality in Korea," *Asian Economic Journal,* 15:1, 39–60.

Choi, Kyungsoo, 2003, "Measuring and Explaining Income Inequality in Korea," Mimeo, Korea Development Institute, available at www.eadn.org/reports/iwebfiles/i05.pdf

Cline, William R., 1999, "Trade and Income Distribution: The Debate and New Evidence," Institute of International Economics Policy Brief 99-7, available at http://www.iie.com/publications/pb/pb.cfm?ResearchID=94

Freeman, Richard B., 1995, "Are Your Wages Set in Beijing?" *Journal of Economic Perspectives,* 9:3, pp. 15–32.

Goos, Maarten, and Alan Manning, 2006, "Lousy and Lovely Jobs: The Rising Polarization of Work in Britain." Forthcoming, *Review of Economics and Statistics.*

He, Dong, and Thierry Tressel, 2004, "A Family Divided—Labor Market Duality in Korea," *in Republic of Korea: Selected Issues*, IMF Country Report, No. 04/45 (Washington: International Monetary Fund).

International Monetary Fund, 2006, "Rising Inequality and Polarization in Asia," *APD Regional Economic Outlook*, Washington, DC (September).

Jeong, Jin-Ho, 2003, "Wages in Korea," Korea Labor Institute Issue Paper 25.

Kang, Byung-Goo, and Myeong-Su Yun, 2003, “Changes in Korean Wage Inequality 1980-2000,” Under submission, *Journal of Economic Inequality.*

Kim, Dae Il, 2002, “The Korean Labor Market: The Crisis and After,” in *Korean Crisis and Recovery,* ed. by David T. Coe and Se-Jik Kim (Washington: International Monetary Fund and Korea Institute for International Economic Policy).

Kim, Wan-Soon and Lee You-II, 2005, “The Chill Wind of Korean Xenophobia.” *Far East Economic Review* (December).

Krussel, Per, Lee E. Ohanian, Jose-Victor Rios-Rull, and Giovanni L. Violante, 2000, “Capital-Skill Complementarity and Inequality: a Macroeconomic Analysis,” *Econometrica,* 68:5, pp. 1029–53.

Lemieux, Thomas, 2006, “Increasing Residual Wage Inequality: Composition Effects, Noisy Data, or Rising Demand for Skill?” *American Economic Review,* 96:3, pp. 461-98.

Machin, Stephen, and John Van Reenen, 1998, “Technology and Changes in Skill Structure: Evidence from Seven OECD Countries,” *Quarterly Journal of Economics,* 113:4, pp. 1215–44.

Miniane, Jacques and Kenneth Kang, 2004, “Too Small to Fail? Restructuring Korea’s Small and Medium Enterprise Sector” (unpublished; Washington: International Monetary Fund).

Organization for Economic Cooperation and Development (OECD), 2002, *Employment Outlook* (Paris).

———, 2004, *Employment Outlook* (Paris).

———, 2005, “The Service Economy in OECD Countries,” STI Working Paper 2005/3 (Paris).

Pyo, Hak K., Keun Hee Rhee, and Bongchan Ha, 2006, “Growth Accounting and Productivity Analysis by 33 Industrial Sectors in Korea (1984-2002), ” Mimeo, Seoul National University.

Spitz-Oener, Alexandra, 2006, “Technical Change, Job Tasks, and Rising Educational Demands: Looking Outside the Wage Structure.” *Journal of Labor Economics,* 24:2, pp. 235–70.

Wood, Adrian, 1994, *North-South Trade, Employment, and Inequality* (Oxford: Clarendon Press).

Yoo, Gyengjoon, 2004, "Analysis of the Change and its Cause of Income Distribution Before and after the Financial Crisis: Income Mobility Perspective," *KDI Journal of Economic Policy,* 26:1, pp. 143–90.

VI. LONG-TERM FISCAL CHALLENGES[91]

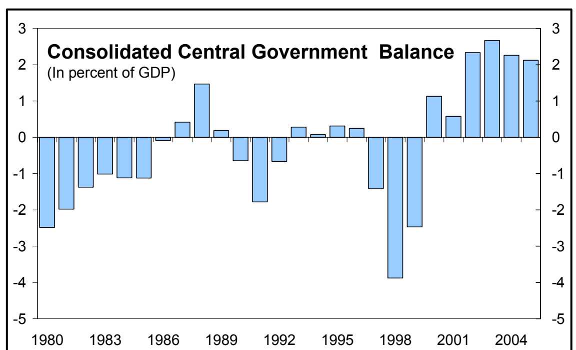
A. Introduction

1. **Since the 1980s, Korea's prudent fiscal policies have been the lynchpin of the country's macroeconomic stability**. However, difficult fiscal challenges are looming on the horizon, and in the coming decades maintaining this prudent stance will become progressively more difficult. Population aging is the driving force behind these challenges, which are expected to have relatively swift and profound impact in the long term—more so than for most other comparable economies.

2. **This chapter describes the key fiscal challenges and discusses possible ways to address them, arguing that there is already a great need to start taking remedial action**. Section B shows that Korea's fiscal policies have been prudent for many years. Section C describes how a number of factors, including population aging, are expected to increase the fiscal burden significantly. Section D then discusses several measures—in pension system, health care system, and taxes—that can help address the long-term challenges. Section E concludes.

B. Korea has Traditionally been Fiscally Prudent

3. **Over the past two decades, Korea has followed prudent fiscal policies**. The fiscal deficit had ballooned in the 1970s owing to active government support for investment in heavy and chemical industries and transfers to the agricultural sector (Jun, 2004). But by the early 1980s, fiscal policy shifted fundamentally to a much more cautious stance, as the authorities aimed at "spending within revenue" and maximizing government savings to finance investment in public infrastructure and public corporations, and provide credit to targeted sectors (Zebregs, 2004). Since early 1990s, the consolidated central government balance has been in surplus, with the notable exception of 1997–99, when fiscal deficits (excluding the social security funds) on average exceeded 4 percent of GDP in response to the Asian crisis.

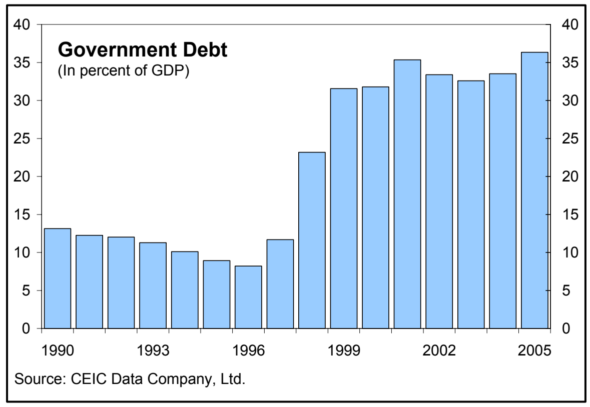


Source: CEIC Data Company Ltd.

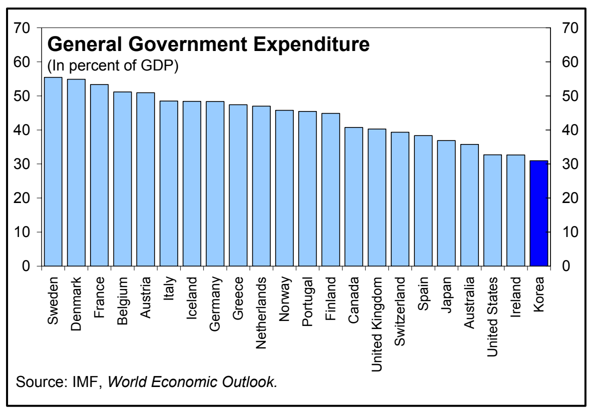
4. **As a result, Korea's public debt is small compared to the size of its economy**. Total public debt was below 10 percent of GDP before the Asian crisis, and although it

[91] Prepared by Tarhan Feyzioğlu.

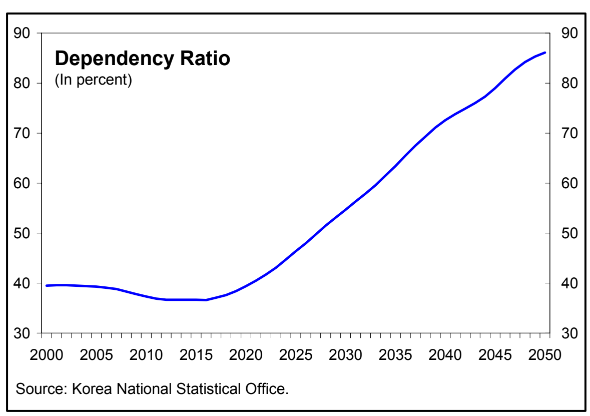
increased sharply afterward, by 2005 public debt, including the cost of restructuring the banking system, stood at just 36½ percent of GDP. Moreover, in net terms (including the government's financial assets), the Korean government is actually a creditor, similar to only a handful of other OECD countries. Looking forward, the authorities aim to keep public debt, excluding the cost of restructuring the banking system (amounting to 6½ percent of GDP), around 30 percent of GDP.



5. **Although the fiscal position has remained close to balance, the size of the government has increased over the past three and one-half decades**. Total spending of the consolidated central government increased from 16½ percent of GDP in 1970 to 21½ percent of GDP in 2005. While official figures on the consolidated general government are not available, its size must have increased even faster, because the size of local government increased significantly during this period as fiscal decentralization efforts intensified, giving a bigger role to the local governments in providing public services.



6. **Nevertheless, the general government remains small compared with other OECD countries**. The OECD estimates the size of the general government to be around 31 percent of GDP in 2003 (OECD database). Since central government expenditure increased as a share of GDP in the last two years (by ½ percentage point), it is safe to assume that this figure indicates a lower bound for the current size of the general government.



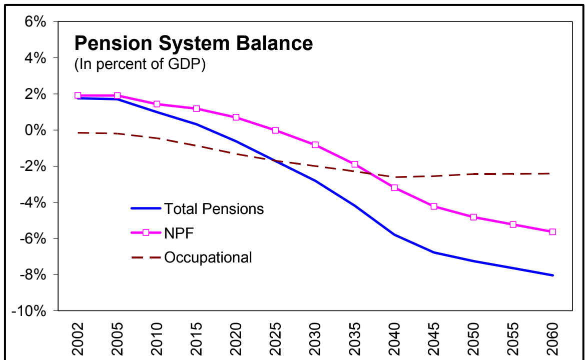
C. The Fiscal Burden Is Set to Increase Substantially

7. **By far the most important factor that will dominate public finances in the coming decades is population aging**. As mentioned in Chapter I, Korea has a significant aging population problem. The fertility rate is low and is expected to decline

even further. Moreover, life expectancy is projected to increase substantially in the coming years. As a result, National Statistics Office of Korea projects that total population will peak around 2025 and then decline rapidly, and the share of elderly in total population will increase sharply (National Statistics Office 2001). As a result, the dependency ratio is projected to increase above 80 percent, compared with less than 40 percent today.

8. **While most of the OECD countries are facing population aging, Korea's case is unusual in two ways**. First, its dependency ratio by 2050 is projected to be one of the highest among OECD countries. Only Japan and Italy are projected to have similar dependency ratios. Second, the rate of change of the dependency ratio is the fastest among the OECD countries. For example, it will take 26 years in Korea for the proportion of elderly in total population to increase from 7 percent to 20 percent, while the same change will occur in Italy in 80 years (Young, 2005, and OECD, 2005).

9. **Population aging is expected to put severe strains on the National Pension Fund (NPF)**. Under the current population trends and pension parameters—60 percent replacement rate and 9 percent contribution rate—the assets of the NPF are projected to peak in the mid-2030s and then rapidly decline and be exhausted around 2047 (Ministry of Planning and Budget, 2006). Without parametric reforms, funding the pension system would require additional annual funds worth 5¾ percent of GDP (Gruenwald 2003). Increasing the share of equity allocation in the pension portfolio from the current 12 percent to 16½ percent, as currently planned by the government, could marginally reduce the required additional funds to 5–5½ percent of GDP.



Sources: KDI (2002) and staff calculations.

10. **Occupational schemes will also be adversely affected**. The pension schemes introduced for civil servants, military personnel, and private school teachers during 1960-1975 have relatively generous benefits, with a replacement rate of 76 percent. These schemes already have a small overall deficit, which, under unchanged parameters would worsen steadily before leveling off at 2–2½ percent of GDP around 2030. Combined with the funds required to sustain the NPF, the total fiscal burden of the pension system could be around 7-8 percent of GDP per year by mid-century.

11. **Population aging is also expected to increase expenditure for health and long-term care sharply.** OECD (2006), in a cross-country study, estimates that aging of the population alone could increase expenditure for health and long-term care by 5½ percentage points of GDP by 2050. This projection does not take into account any (likely) efforts to contain expenditure. But at the same time it is somewhat optimistic, because it assumes that expenditure increases due to aging will come only from the increase in the share of older

people in total population, and that any gains in longevity will not have any affect on health and long-term care expenditure.

12. **Apart from population aging, other factors are putting pressure on health and long-term care expenditure:**

- **Higher income.** The range of income elasticities estimated in the literature for health care expenditure in a number of countries is wide and falls on both sides of unity. Nevertheless, the elasticity could be higher than unity in Korea, because total health expenditure is far lower than what is implied by Korea's income level and may drift up to levels more consistent with what is observed internationally.

- **Technological change.** Health expenditure could also go up with technological change, as the resulting availability of new services could create additional demand for health care services.

- **Labor force participation.** Demand for long-term care may also increase because labor force participation may rise, which would reduce the availability of informal provision of long-term care.

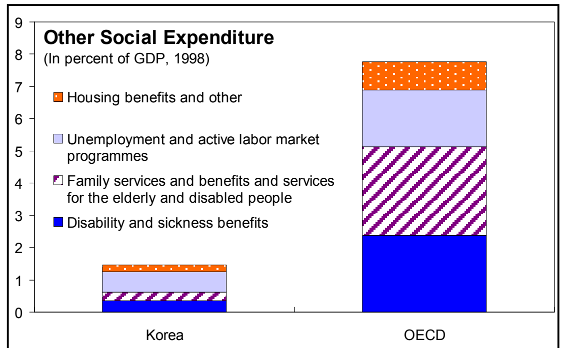
- **Structure of the health care system.** Finally, Kim (2005) argues that other Korea-specific factors—minimum regulation of health care provision, incentives for physicians to encourage frequent office visits, and almost unconstrained freedom in terms of choosing health providers—reinforce the upward pressure on total health care costs.

13. **All factors combined, under current policies, the health and long-term care expenditure of the government could increase from the current 3¼ percent of GDP to 12 percent of GDP by 2050** (OECD 2006). This 9 percentage points of GDP change is the highest among OECD countries because the rate of population aging is the highest. Sensitivity analysis suggests that under different but plausible income elasticities, the change could vary by ¾ percentage point of GDP in either direction. These results are consistent with Yun (2005) who projects that the health expenditure of the government will increase 7-fold in today's prices by 2050.

14. **Population aging also has an indirect effect on public finances, through slower growth**, as discussed in Chapter I. As Korea's annual GDP growth rate drops toward 2 percent, the ability to "grow out of the problem" of debt accumulation will be more difficult. This could be seen in the following illustration: if real GDP had grown on average 2 percent per annum during 2001–05 instead of the actual 4½ percent, while the increase in nominal debt remained the same, Korea's public debt in percent of GDP would have increased 5¼ percentage points, instead of 1 percentage point, and total debt would have reached 41 percent of GDP by 2005.

15. **Beyond pensions and health care costs, there will be additional pressures on the budget in coming years**. For example, contingent liabilities, including guarantees to small- and medium-size enterprises and public-private partnership arrangements could have sizable affects on the budget. Currently, the former amounts to 5½ percent of GDP, while the latter is projected to cover investments worth close to 3 percent of GDP.

16. **Public expenditure on the social safety net, excluding expenditure on health and pensions, in particular is set to increase substantially**. Currently, Korea's public expenditure on the social safety net is lower than the OECD average by a wide margin, in all categories.[92] The gap is partially closed by private expenditure (e.g., voluntary social benefits many employers pay), and by family support. However, the level of family support provided by the young for the elderly and others in need will likely diminish as the share of young in the population declines. This will boost the need for higher public expenditure on the social safety net. In fact, the government's medium-term budget plan already envisages expenditure on the social safety net (excluding expenditure on health and pensions) to increase by around 10 percent per year until 2009, significantly faster than the growth of nominal GDP. This increase entails expanding the Basic Livelihood Guarantee System and thus increasing the number of citizens that receive subsistence support and providing medical support to children under 18 in low income households (Ministry of Planning and Budget, 2006). In addition, an Emergency Welfare Support System will be introduced to help households facing difficulties from deaths or accidents. Housing support will also be boosted, both by constructing more public rental apartments and by providing financial support for housing rent.



Source: OECD.

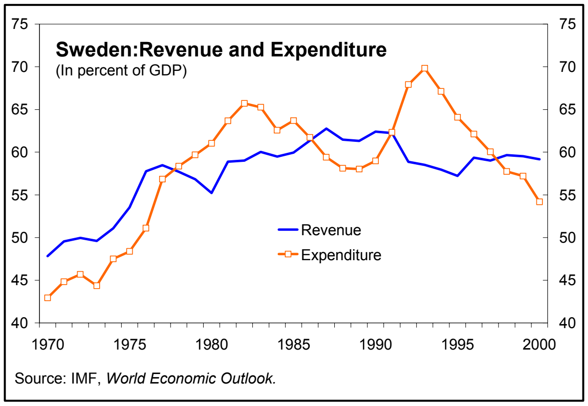
17. **Finally, it is worth noting the fiscal cost associated with unification could be an order of magnitude larger than any of the cost pressures mentioned so far.**

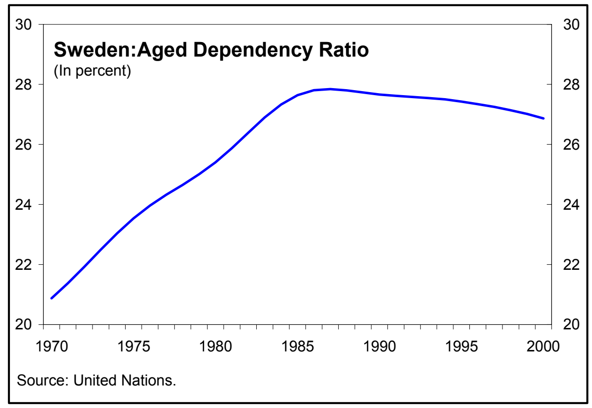
18. **What will all this imply for the fiscal position?** Sweden, a rare example of a country that has already experienced significant population aging, provides a cautionary lesson. The Swedish population started aging relatively early, in mid 1960s. Soon after that, government expenditure begun to drift upward, mainly because of strong demographic effects, combined with a political consensus in favor of extending welfare arrangements.

---

[92] However, net public social expenditure (after tax) is estimated to be higher in Korea than most of the other OECD countries, because many governments tax more than provide tax advantages for social purposes (OECD 2003 and Adema 2001).

This upward drift in expenditure required progressively higher taxes to achieve fiscal balance. This trend continued for two decades until the early 1990s, when the expenditure ratio had reached 62 percent of GDP, 20 percentage points higher than in 1970. At that point, Sweden experienced a severe crisis. The crisis gave way to a steady fiscal retrenchment, and since then the size of the government has been shrinking in Sweden.



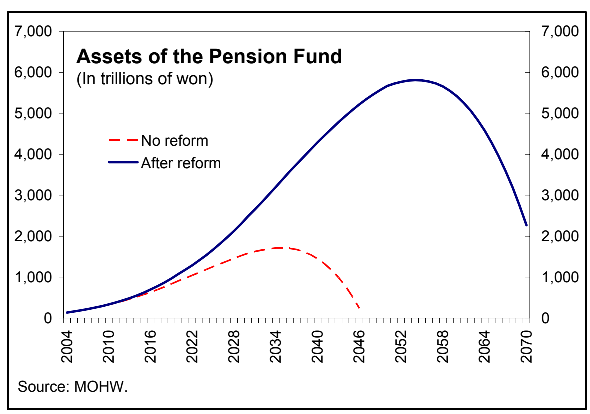


D. How to Handle the Additional Fiscal Burden

19. **Such broad and strong pressures on public expenditure requires consideration of an equally broad set of measures**. This chapter focuses on three: reforming the pension system to ensure its sustainability; slowing the increase in health and long-term care expenditure; and raising taxes.

Reforming the pension system

20. **The government has put forward a proposal to help bring the National Pension Fund back to financial health**. The main elements of this proposal include lowering the replacement ratio from the current level of 60 percent to 40 percent, and increasing the contribution rate from the current level of 9 percent to 12–13 percent by 2020. Moreover, with a view to increasing the average return to NPF's investments, starting in 2007, the share of the NPF assets invested in stocks would rise from 12 percent to 16½ percent. These changes will go a long



way in helping NPF remain solvent for a number of additional years. Under official projections, its assets, instead of starting to decline by mid 2030s, will continue to grow until the mid 2050s.[93]

21. **Early action is needed in changing the parameters of the NPF**. Even in the current circumstances, it will take 15 years to phase in the parameter changes. If the parameter changes are delayed, say, until the assets of the NPF peak, then the assets at that time would be only 50 percent of the amount needed to maintain the NPF solvent until 2070, requiring much more drastic changes in the pension system.

22. **Reforms are also needed to put the occupational pensions on a financially healthy footing**. Given that the Government Employee Pension and the Military Personnel Pension are already in deficit, and that the Private School Teachers Pension Scheme is projected to begin registering deficits in about 10 years, parameter changes in these pensions are also urgent. A combination of lower replacement ratios and higher contribution rates for these pensions appear inevitable.

Containing the health and long-term care expenditure

23. **The main fiscal challenge in health and long-term care is how to control the growth of public expenditure in these areas**. It is difficult to argue that these costs should be shifted to the consumers, because the current system already puts a significant financial burden on them. The National Health Insurance finances only about 40 percent of total health care expenditure in Korea (Kim 2005), while consumers pay 42 percent. The rest is covered mainly by revenues from general tax and earmarked tobacco tax, and private insurance. This burden sharing is set to shift somewhat in the coming years, as the government plans to gradually expand the treatments covered by insurance from 65 percent of total treatments in 2005 to 71 percent by 2008, but the out-of-pocket payments will still remain high.

24. **One option is for Korea to continue to maintain a high out-of-pocket payment system and further develop private insurance schemes**. This will help reduce the projected rate of increase in government's total health and long-term care expenditure. An additional advantage is that it would reduce the need for direct government involvement in controlling health and long-term care supply. However, in this case, the roles of private health insurance and medical savings accounts need to be enhanced to make coverage more adequate to Koreans. The potential drawback that needs to be avoided is that developing these schemes could lower consumers' sensitivity to prices, thereby increasing demand for total health care services (OECD, 2003), and partially reversing the intended benefits to the

---

[93] However, given the rapid pace of the demographic changes in Korea, even this favorable position is expected to change and the assets of the NPF, under the new parameters, are projected to be exhausted soon after 2070.

budget. Therefore, setting up an appropriate regulatory framework for private health insurance schemes to work properly would be important.

25. **Another option is to expand the public coverage of the health and long-term care services and implement strict supply-side controls**. Such broad coverage would likely lead Korea's health care system to resemble the systems of a number of high-income countries like France or Germany. These countries control among other things, the number of doctors, hospital beds, high-cost technology, and prices of pharmaceuticals. But such a system would increase the size of the government and require significantly higher contribution rates, or larger subsidies from the central budget.

26. **Either one of these strategies would help control public expenditure.** There are no "correct" paths; which path to choose will depend on social preferences. And these social preferences will dictate the measures to which the authorities need to give priority.

Expanding the tax base

27. **To address the growing fiscal pressures, as well as to better position Korea in the global economic environment, an overall tax reform is needed**. The authorities are considering a broad reform plan. They would like to expand the tax base, rather than raise rates, and most of the key elements of the package are still undecided, although some measures have been announced.[94] The key elements of the tax reform pertinent to addressing the growing fiscal pressures are reviewed below.

28. **The government has recently announced a set of measures to broaden the tax base also by capturing more of the transactions previously gone undetected in the informal sector**. Specifically, the government will oblige business owners and professionals to accept credit cards when receiving payments for the goods and services they provide, and issue certified receipts for cash payments. Use of business bank accounts in every business transaction for the high-income self-employed will also become obligatory. Penalties will also increase to 40 percent of original taxes, for evasions and delinquencies, from the current 10–30 percent.

29. **At the same time, the government has announced measures to help increase growth prospects and reduce income inequality, but would also reduce tax revenue.** In particular, the government is planning to extend tax breaks to companies that invest in research and development, with a view to maintaining Korean businesses' competitiveness in the global environment. The government will also grant larger tax cuts to households with more children starting next year, while reducing income tax deductions for single-member

[94] An FAD TA mission discussed the overall tax reform agenda in Seoul in September 2005.

households and those without children (Korea Times, 2006). These measures are expected to help reverse the low fertility rate in Korea, thereby increasing the potential growth rate. Finally, to support low-income salaried workers, the government plans to phase in an earned income tax credit (EITC). The EITC is designed to provide refundable tax credit that would offset taxes paid by low-income salary workers, and qualified households could get tax refunds, if their tax credits exceed the taxes owed.

30. **Apart from the measures already identified, what else could be done to reform the tax system?** One potential element could be broadening the base of the personal income tax (PIT). Currently, revenue from personal income tax is low, at 3 percent of GDP, compared with 10 percent of GDP observed on average in other OECD countries. It is also low as a share of total tax revenue, even though the PIT rates are in line with rates observed in many countries. One reason for the low PIT revenue is that relatively few people pay PIT in Korea: in 2003, the bottom half of wage and salary employees in the tax system had virtually no taxable income, and the bottom 80 percent accounted for only 10 percent of the taxable income. Moreover, it is suspected (although there are no official estimates) that many workers do not even file a return. Another problem is that a large number of deductions are allowed, including for insurance premiums, medical expenses, and education expenses. Because these deductions are not subject to an overall ceiling, they benefit disproportionately employees with high income, despite their progressive abatement. These deductions are estimated to have reduced the potential tax base by nearly 43 percent of wage and salary income. Capping the wage deduction and honoring all existing related sunset clauses would help broaden the PIT tax base.

31. **Another potential element of tax reform would be a revamping of consumption taxes**. Korea already makes heavy use of consumption taxes, which raise over one-third of all tax revenue. These indirect taxes comprise a VAT and wide range of excises. VAT is charged at 10 percent, low compared with other OECD countries (unweighted average for OECD countries is 17¾ percent), and total revenue as a share of GDP was 4½ percent in 2003, compared with the OECD average of 7 percent. This framework could be further strengthened by expanding the base of the VAT. In particular, there is scope for reexamining some of the zero rates and exemptions (e.g., zero rates on machinery, fertilizer, and pesticides for agriculture, and exemptions on finance and insurance services, medical, health, and education services). A number of excise taxes, on the other hand, contribute little to the total revenues, and eliminating them and moving the freed tax administration resources to more productive uses could be beneficial.

32. **Broadening the corporate income tax (CIT) base may also need to be considered in the near future**. There are already pressures around the world to lower statutory rates of corporation tax. Over the coming years, these pressures are expected to be felt in Korea also, which has a current corporate tax rate of 25 percent (13 percent on taxable income below W100 million). Therefore, reductions in statutory corporate tax rates cannot be ruled out over

the medium-term horizon. However, CIT is an important source of revenue in Korea (13½ percent of total taxes; fourth largest among OECD countries). This makes it important to safeguard this core source of revenue by preserving, and ideally expanding, the base of the CIT. This could be achieved by reducing tax incentives, with a view to eliminate them in the medium term.

E. Conclusions

33. **The fiscal pressures are intense**. The additional financing needed for the pension system and the cost of health and long-term care under current policies could, by themselves, exceed 15 percentage points of GDP. This will require equally intense spending discipline on non-welfare spending. The pension system should be put quickly on a sustainable path, and the health and long-term care costs need to be contained. Even then, taxes will need to be increased. While there is room to increase the tax base, in the long run, it may be necessary to increase some of the rates also. Most important, early action will help alleviate the impact of population aging, but if pressures are allowed to accumulate, the necessary measures to achieve fiscal sustainability will be much more severe, and difficult to implement.

References

Adema, Willem, 2001, "Net Social Expenditure, 2nd edition," Labor Market and Social Policy Occasional Papers, No. 52 (Paris: Organization for Economic Cooperation and Development).

Gruenwald, Paul F., 2003, "Options for Pension System Sustainability in Korea," *in Republic of Korea: Selected Issues*, IMF Country Report, No. 03/80 (Washington: International Monetary Fund).

Jun, Joosung, 2004, "The Fiscal Policy Response to the Crisis," in *The Korean Economy Beyond the Crisis*, ed. by Chung and Eichengreen (Northampton, MA: Edward Elgar).

Kim, Minah Kang, 2005, "The Korean Health Insurance System: Opportunities and Challenges," International Social Security Association, ISSA Meeting of Directors of Social Security Organizations in Asia and the Pacific (Seoul).

Korea Times, 2006, *More Children Mean Less Tax* (August 21).

Ministry of Planning and Budget, 2006, *Budget Overview, Fiscal Year 2006* (Seoul).

National Statistics Office, 2001, *2001 Population Projection of the Future* (Seoul).

Organization for Economic Cooperation and Development (OECD), 2003b, *OECD Reviews of Health Care Systems: Korea* (Paris).

———, 2005, "Assessing the Robustness of Demographic Projections in OECD Countries," Economics Department Working Papers No. 464, ECO/WKP(2005)51 (Paris).

———, 2006, "Projecting OECD Health and Long-term Care Expenditure: What are the Main Drivers?" Economics Department Working Papers No. 477, ECO/WKP(2006)5 (Paris).

Young Jun Chun, 2005, "Population Aging, Fiscal Policies, and National Saving: Prediction for Korean Economy," mimeo (Incheon, Korea: Department of Economics, University of Incheon).

Yun, Hee Suk, 2005, *Population Aging and Healthcare,* eds., Korea Development Institute, (Seoul).

Zebregs, Harm, 2004, "Fiscal Policy in the Korean Business Cycle," in *Republic of Korea: Selected Issues*, IMF Country Report, No. 04/45 (Washington: International Monetary Fund).