

## **The global economy and Korea's development and restructuring**

By Wendy Dobson, University of Toronto

Integration into the global economy on its own terms, primarily through trade, has been a significant factor in South Korea's outstanding record of catch up that, by 1996, propelled it into the ranks of the OECD. Indeed, globalization has been a major theme in South Korea's economic policy discussions for much of the past decade. By 2001, South Korea had become the world's thirteenth largest trading nation, exceeded in the region by Japan (#3), China (#6) and Hong Kong (#10).<sup>1</sup> In 2002, the United Nations identified it as the world's third most competitive exporter and the fourth-ranked high-tech manufacturer. Five high-tech exports – semiconductors, computers and parts and accessories, telecom equipment and electrical machinery and apparatus – account for more than a third of its total exports.<sup>2</sup> These outstanding accomplishments resulted both from Korean effort and ingenuity as well as a liberalized world trading environment. But the world economy is now experiencing the ICT revolution. Further changes are required if Korea is to be in the forefront in future.

This paper is organized into three parts. I begin with a brief examination of South Korea's<sup>3</sup> “first generation” of reforms -- that opened its economy to the rest of the world and closed the growth gap. I then examine the “second generation” of reforms that commenced in earnest after the crisis -- reforms, mainly to institutions, to *sustain* economic growth in a globalized world by narrowing the knowledge gap, and then turn to the future, identifying some lessons Korean experience holds for other countries and key future challenges.

### **1. Reforming to catch up**

Korea's post war growth and development was part of a neighborhood phenomenon that began in Japan but was soon followed by the “tigers”, other Southeast Asian countries, and more recently China. The remarkable growth performance of the East Asian economies over the past 30 years is attributed in part to their openness and to high propensities to save and invest. Much economic debate in the 1990's was about the

relative importance of the sources of that growth. Growth results ultimately from the accumulation of labor and capital that are increasing in quality through the development of skills, managerial capabilities and technological change. But skills and technology do not develop without effective incentives. And the creation of effective incentives, in turn, reflects the success of a society's institutions. Indeed, sociologists and economists have argued about the direction of the relationship. Economists argue that efficiency and competition create economic organizations, while sociologists argue the opposite: economic actions are embedded in social relationships and institutions that existed before the onset of industrialization.<sup>4</sup>

Institutional aspects of a society include, not only organizations, but how power is exercised by the state through laws, rules and regulations and standards; the conventions and norms of economic behavior (which can supplement the law and can also be more effective than it), and how these formal and informal constraints are enforced.<sup>5</sup>

Institutions help to minimize transaction costs in a market economy because they facilitate economic exchange and investment in the production of private and public goods by reducing information and enforcement problems. But institutions that work in closed economies and at earlier stages of modernization must adapt to the new challenges and risks as the economy modernizes and becomes more integrated into the world economy. The role of government has been a variable of particular interest in the East Asian debate, a topic to which I return.

In historical terms, Koreans see their country as highly distinctive, and for good reason.<sup>6</sup> An ancient kingdom dating back to the 14th century, it has always had a homogeneous population. Located between Japan and China, it also has a long history of adapting Chinese technology and developing its own innovations. In the late 19th century, Korea became increasingly dominated by Japan and after 1910 was a Japanese colony administered by Tokyo. Following Japan's defeat in World War II, Korea was partitioned by the allies in 1945 when the United States and the Soviet Union could not agree on a common governance arrangement. A fierce war followed, during which some 10 percent of the population perished and per-capita incomes plummeted. At the end of the Korean War in 1953, the South was an economic basket case seen by many to be

destined to be dependent on foreign aid. Most of its industry was in the North so it was left with a predominately subsistence agricultural economy.

For more than a decade after the war concluded, South Korea remained poor and largely underdeveloped. Foreign aid was used to develop a light industrial base, but the effort suffered from corruption and reliance on an import substitution strategy. In 1960 popular dissatisfaction led to a change in the government and a series of major liberalizing economic reforms designed to reverse economic stagnation followed. In 1961 the Korean military seized power and the "economic miracle" began under authoritarian military rule.

As the economic growth model would predict, a well-educated labor force and radical mobilization of domestic and foreign savings, channelled first into investment in light industry and then into heavy industry, produced rapid growth in output. Using large-scale state intervention, President Park Chung Hee mobilized resources through five year economic plans. State-owned banks were created and the financial sector was heavily oriented to facilitating this investment-led export-oriented infant industry development policy. Exports were encouraged through selective inducements and rewards, but recipients of this assistance were allowed to fail if they did not meet performance standards. This approach had remarkable success; exports grew from 5 percent of GDP in the 1950's to 35 percent by the 1980's. National savings grew from almost nothing to a size that supported a financial sector largely controlled by government. By the late 1960's Korea had become a successful exporter of textiles and apparel.

To sustain the growth momentum generated by light industry, in 1973 the Korean government began the heavy and chemical industries (HCI) drive (presaged in 1967 by goals for exports and industrial production set in the second five-year plan). Following the Heavy and Chemical Industries Declaration of 1973, the government targeted a number of industries, including chemicals, steel, non-ferrous metals, industrial machinery, automobiles, shipbuilding and electrical industries for favored treatment, notably easy access to foreign and domestic credit, tax breaks and infrastructure investment. With the exception of POSCO, the state-owned steel enterprise, the

government relied mainly on incentives to direct private firms into the targeted industries. Favored entrepreneurs “followed the subsidies”<sup>7</sup>, investing in the same sectors with little regard for future profitability.

The HCI drive helped to create world class competitors in some industries but before the end of the 1970s a number of weaknesses and imbalances appeared. Inflation was increasing. Distortions were created as the government ordered financial institutions to channel most available resources into targeted industries. Economic power began to concentrate as the chaebol grew in size and ownership concentrated in fewer and fewer hands. Certain attitudes and practices, such as the expectation that the public sector would forgive bad judgments and failures (moral hazard), high rates of leverage, and a “too big to fail” mentality, sowed the seeds of future weakness. Wealth accumulated in the hands of a small number of families. Dissatisfaction with blatant inequality, even though average incomes had risen dramatically, together with reaction to heavy-handed intervention led to scaling back of state support to all but the steel, shipbuilding and heavy machinery industries. The HCI drive subsequently ended after General Park’s assassination in 1979, amid the fallout of the second oil price shock and a disastrous rice harvest. The new government moved to stabilize the economy, bringing inflation under control and reining in policy loans granted to the chaebol at negative real interest rates. Real wage increases were also significantly reduced.

By the early 1980s, the economy stabilized, the burden of adjustment was shared, and the economy was gradually opened. Current account transactions were liberalized, followed later by liberalization of capital markets and the exchange rate regime. As economic performance improved and with it expectations of greater democracy, labor unrest erupted and contributed to inflationary pressures and loss of macroeconomic discipline.

By the 1990s, despite recurring internal imbalances, Korea’s postwar catch up had been spectacularly successful. Domestic savings were successfully mobilized and channelled into capital investments in export-oriented industries. What is distinctive about the Korean record is that by their own efforts, including heavy public support, Korean firms

successfully entered the electrical and auto industries that account for nearly 40 percent of total world trade. Most of Korea's export gains came from the chaebol and through licensing arrangements or low-equity relationships with multinational firms. In semiconductors Korea moved in ten years from being a chip assembler to being a major player with the second largest memory chip and third largest semiconductor manufacturing operations in the world. In the auto industry, through OEM arrangements and licensing agreements, Koreans learned to design and develop their own models and eventually their own brands.<sup>8</sup>

But at what cost? The acid test of catch up is whether it is sustained by rising productivity. Did productivity increase during this period of picking winners? The verdict in the literature is mixed.<sup>9</sup> The McKinsey Global Institute (1995) study of Korea's firm- and industry-level productivity found that in most manufacturing sectors, the productivity of capital and labor averaged 50 percent of US levels (results varied across industries, with superior performance in the steel sector but average performance in autos and services – due to protection—and semiconductors – due to cyclical volatility). Their work corroborated earlier studies that found that capital productivity had been falling since the 1970s. Macroeconomic studies of TFP over the 1996-90 period found Korea's performance lagging (but not negligible), implying that economic growth was driven by simple capacity expansion rather than by efficiency gains.<sup>10</sup>

A recent comparative survey of selective government interventions in Japan, Korea and Taiwan (Noland and Pack, 2003) concludes that, on the basis of evidence from both econometric and input-output analyses, selective interventions, whether sector specific or general, made a minor contribution to the high rates of savings and investment, except possibly at the initial stages of industrialization. What then explains these high rates? Favorable macroeconomic policies? Public investment in infrastructure? Unmeasurable spillovers from interventions? The authors' explanations favor interactions. The opportunities for rising returns to higher education were provided by inflows of new technologies through imports of capital goods and intermediates necessary to produce exports. Labor market flexibility allowed workers to move without restrictions or work rules to new areas rather than protecting their positions in sectors facing increasing

competition. Export oriented development policies increased domestic competition. And openness to technology through licensing supplied ideas, techniques and skills that well-educated labor forces used effectively.<sup>11</sup>

Despite its remarkable emergence from economic basket case to miracle economy in a mere 40 years, however, the Korean economy was unable to weather the disturbances that wracked the world economy in 1997. Severe internal imbalances had developed during catch up that exacerbated its vulnerability to external shocks and a financial crisis. Some of these could be addressed by changing macroeconomic policy but the most severe problems had to be addressed by changing institutions and incentive structures.

## **2. Reforming to sustain growth**

As Korea shifted gear in the 1990s, from catch up to sustaining high rates of growth through higher efficiency, the world economy was also changing in ways that increased both the benefits of openness as well as the risks. Throughout much of the postwar period, Western governments had dismantled barriers to trade and FDI, thereby allowing freer movement across borders of goods, services and technology. Korea was a major beneficiary of the improvements in market access. In the OECD economies a macroeconomics revolution began in 1970's that led to smaller governments, balanced budgets and waves of privatization that stimulated FDI flows and cross-border acquisitions. With the fall of the Berlin Wall in 1989, erasure of the divisions between the two deeply different economic systems with the end of the Cold War propelled hungry new competitors into world markets. Korea faced special problems, for course, around the resulting uncertainty about reunification of the peninsula.

At the same time, the information and communications technology (ICT) revolution was transforming global linkages. It made possible different ways of doing business as multinationals spread their reach around the world and unbundled business activities, locating them where they could be most efficiently performed. Significantly, the ICT revolution made it possible to move capital almost instantaneously across borders in large amounts. The impact of capital flows on economic linkages and the transmission

of economic disturbances changed the face of external adjustment from being a gradual adjustment process through trade in the current account, to rapid adjustment on the capital account. Volatility of short-term capital raised the risks for open economies of externally generated disturbances and increased the likelihood that financial and economic crises would become systemic, rather than remain localized.

The 1997-98 financial and economic crises highlighted both these risks of openness and of changing institutions and incentive structures to bring them in line with the new realities of participating in a more complex and competitive international economy.

### *The crisis*

The 1997-98 crisis was caused by investor panic and by structural weaknesses that made Korea vulnerable to that panic.<sup>12</sup> Changes in the external environment and slow growth at home were key factors leading up to the financial crisis. Oil prices increased, semiconductor prices fell and the dollar appreciated against the yen creating problems on both sides of the corporate sector balance sheets. Equity prices declined, starting with the banks. A string of corporate bankruptcies began in 1997 that affected not only the chaebol but SMEs as well. As the crisis in Thailand unfolded following the depreciation of the Thai baht, international banks began to reevaluate their exposures throughout the region and concerns mounted about the health of Korea's financial system. In October, pressure on the Hong Kong currency and stock market was exacerbated as the Taiwanese authorities suddenly allowed the currency to depreciate. Korea as a close competitor came under intense pressure. A rating agency downgrade late in the month further undermined market confidence; capital flight and a credit crunch followed. As market participants scrutinized the Korean economy, structural weaknesses were highlighted, including lack of transparency in official data on the external exposures and non-performing loans. In November, a banking and currency crisis followed as corporate bankruptcies and non-performing loans increased. Foreign credit dried up making it difficult for heavily indebted Korean banks to roll over the large stock of external debt. Government support was ineffective and by the end of November the government was forced to seek short term financing from the IMF.

Crisis resolution efforts were aimed primarily at restoring confidence and stabilizing financial markets in order to resolve a conjuncture of macroeconomic and structural weaknesses introduced during three decades of state-led investment. A three-part policy strategy included macroeconomic policy adjustment, structural reforms and a large financing package from the International Monetary Fund.

The crisis was a catalyst for significant structural reforms, most of them institutional. Such a menu is not a very exciting one because it tends to deal with "plumbing" rather than dramatic changes in "architecture". Structural reforms are also difficult to pursue because they create winners and losers, the latter tending to be entrenched interest groups who oppose change that might undermine their interests.

As noted earlier, selective interventions at early stages of industrialization probably raised savings and investment rates. But as an economy modernizes and becomes more complex governments should withdraw from making business decisions and allow resource allocation by the freer play of market forces. Government should become less an intervenor and more a facilitator. Indeed, in a market economy, the traditional economic rationale for the role of government is to create and maintain the institutional infrastructure of the market economy, to provide public goods, to internalize externalities and to correct income distribution. Today, a business friendly policy framework consists of a stable and predictable macroeconomic framework; decentralized infrastructure; legal and political frameworks that provide transparent rules of the game; a strong human-resources base; and an incentive framework that encourages innovation and risk taking (promotes diffusion of knowledge; encourages funding for precompetitive research; provides tax incentives for R&D; and encourages venture capital).

As an economy integrates into the world economy, another key facilitating role for government is to ensure that institutions and structures are in place to anticipate and manage the risks of openness. In contrast, Korea's captured financial sector had concentrated risk rather than mitigating it, and was instead a source of vulnerability. A mature financial system is resilient to external shocks and assists in the intermediation of



volatile foreign capital flows. It has strong prudential supervision; transparency of accounting and disclosure, legal rights for minority shareholders; and a wide array of financial instruments through capital markets.

A third role for government is social: to ensure that adequate social safety nets exist to assist the losers from structural change to adjust rather than having to bear the entire burden of adjustment themselves.

### ***Evaluating the record of reform***

Even before the economic crisis Korea had made considerable efforts to transform its economy to a knowledge-based one. Following the crisis, efforts focused first on reducing the structural imbalances left by three decades of rapid growth -- reallocate resources, close down failing enterprises, and restructure and recapitalize the financial system – and on furthering the knowledge transformation.

Discussion of this record is organized around four criteria that reflect the essentials to be successful in the evolving world economy: ability to reallocate resources efficiently and quickly to new opportunities; openness but with a strong and resilient financial system to reduce risks; a social safety net that facilitates adjustment by the losers from reform; and an endogenous capacity to innovate. I summarize and evaluate progress using these criteria, relying on the timely results of official surveillance by the OECD, World Bank and IMF (IMF 2003; OECD 2003), as well as on independent observers. A summary is provided in Table 1. Much progress is evident, but there is still significant unfinished business.

### **1. Promote economic efficiency**

The crisis provided a lever for a newly elected President to establish a more balanced and transparent relationship between the state and the chaebol, many of which had been propped up despite their weak performance by banks ordered by the government to lend. Significant amounts of resources were trapped in these failing enterprises that could be used more productively elsewhere in the economy.

To reallocate resources and increase efficiency, incentives had to change. President Kim Dae Jung adopted a reform program based on five principles of corporate restructuring: enhanced transparency; resolution of cross-debt guarantees; improvement of the financial structure; streamlining of business activities; and stronger accountability.<sup>13</sup> Some of the changes in corporate governance and competition policy were facilitated by rules; changes in listing requirements to the Korean Stock Exchange strengthened minority shareholder rights and encouraged interest groups to monitor corporate behavior and press for more change. Permission for M&A activity and liberalization of rules governing FDI introduced checks on managers.

But too often discretion dominated rules. With public support, the President introduced a number of discretionary arrangements aimed at releasing resources from failing chaebol. One was the grand bargain between the chaebol and labor unions where each side made concessions needed to adjust and reform. The chaebol had to accept new incentive structures by introducing market forces into their ownership, governance and financing of the chaebol. Labor unions had to accept higher unemployment as a quid pro quo. Another measure was the big deal that allowed the top five chaebol to swap major business lines among themselves to realize scale economies. A third measure was the Capital Structure Improvement Plans that permitted asset sales, foreign participation, new equity issues, debt-equity swaps and other restructuring measures among the chaebol. A fourth was revision of the Fair Trade Law to prohibit the common chaebol practice of issuing cross-guarantees within their groups that had allowed them to subsidize loss-making units.

These measures were a start, but progress has been erratic. Discretionary changes have not eliminated entrenched bad practices and have had unintended consequences. For example, asset swapping to consolidate weaker operations with stronger ones has produced such troubled entities as Hynix, which persists to the present. CSIPs required the chaebol to reduce their debt to equity ratios to 200 percent by the end of 1999. The groups were encouraged to sell affiliates and raise new equity capital. However, equity raising has tended to take the form of preferred shares that can be sold without diluting the control held by existing shareholders. Other means to achieve the goal have

amounted to "creative accounting". The top 30 chaebol were required to prepare consolidated balance sheets and income statements conforming to international accounting standards. By 2000, none of the large groups had achieved the prescribed debt-equity ratios (Daewoo by then was bankrupt and in receivership).<sup>14</sup> Since then, there have been signs of progress. The average debt-equity ratio in manufacturing (Table 2) averaged 182 percent in 2001 and declined to 130 percent in 2002. In line with this trend, the average interest coverage ratio in large companies has risen, but the average is still less than the 300 percent coverage that indicates a financially healthy firm (Table 2).

Uncertainty also persists about whether Korea's largest business organizations will increase their efficiency and set forward looking strategic plans that add value for all shareholders. Many chaebol have shrunk in size. Daewoo and Hyundai were broken up; some Hyundai entities are still on the OECD's 2002 list of Korea's largest business groups (Table 3). About half of the top 30 in 1997 remain top ranked today (with three still in the top five). Government's role has been redefined along the lines of market-based principles, but much remains to be done to provide incentives and regulation based on the rule of law and principles of good governance. The recent handling of troubled SK Global is a very current test of government's determination to bring about permanent change. SK Global is a trading subsidiary of SK Corp, the SK Group's profitable oil refining business. Initially both the parent and the government resisted the temptation to bail out the subsidiary using public funds or by transferring money from another affiliate within the SK Group. Foreign investors who are shareholders of SK Corp have fiercely opposed the bailout as contrary to their interests. If SK Global is saved by swapping SK Corp's debt into equity, on the argument that the bankruptcy would damage Korea's financial markets (SK Global faces a \$1.2 billion accounting fraud), it would send a signal that the chaebol and their creditors, not market forces, still run the economy (Ward 2003a). In early June, the FTC launched an investigation into business practices within the Samsung Group and five other chaebol. This probe could shed light on whether the business practices at the root of the SK controversy (accounting fraud) are part of a more general persistent problem (Ward, 2003b).

Official observers highlight two areas where further reform is desirable. One is corporate reform. The OECD's most recent surveillance report suggests further easing of chaebol-specific regulations and further streamlining of bankruptcy procedures and the introduction of class action lawsuits. The IMF also encourages more progress on insolvency reform and corporate governance. A World Bank and OECD report recommends more analytic and enforcement power to the FTC, a mandatory code of corporate governance and stronger regulatory oversight (World Bank and OECD 2000). The second area is reform of the state owned enterprises (SOEs), seven of which appear in Table 3. Government, through the SOEs, still controls a significant share of Korea's resources; well run, but monopolies nevertheless. Privatization would increase efficiency, improve the quality of service and reduce government involvement in the economy. Much progress is apparent since the privatization drive was initiated in 1997 (61 out of the original 108 SOEs remained in 2000), but competition still needs to be encouraged, by allowing regulators more independence from government and by allowing more foreign participation. Even though Korea Telecom was privatized in 2002, for example, government still influences the business and investment plan of the private companies (OECD, 2003).

Independent observers are less measured in their criticism. Noland (2003) argues that, with signs of innovative startups much in evidence, keeping "zombie" firms alive traps resources that could be used more productively. "Every won of investment that goes to the zombies helps perpetuate dead-end jobs with no future and impedes the creation of new jobs with vastly better prospects". He would address the shortcomings with (a) further reforms to accounting and auditing to promote financial transparency making it easier for capital market participants to monitor management. (b) Encourage a greater role for institutional investors since they, too, are effective monitors. Laws that expand minority shareholders' rights would strengthen the hands of those committed to better corporate governance. (c) Legal reforms permitting bankruptcy and corporate reorganization should replace the tendency to politicize the still-discretionary process. For example, Korean investors have been permitted to form new entities called corporate-restructuring companies (CRCs) that are beginning to play a market role in reorganizing the smaller distressed financial companies (Song, 2003). (d) Reform of

labor relations is a critical but inadequately recognized element of the process. Union opposition has been able to block or slow restructuring in the financial and corporate sectors as well as in the public sector.

In summary, there is significant unfinished business to increase the efficiency with which Korea's economic resources are deployed. But the right direction has been established. Yet some observers believe the remaining task is more daunting than in 1998. The crisis atmosphere has dissipated; the process has become politicized and key groups like labor are distrustful and unconvinced that restructuring addresses their concerns. Numerous firms identified as nonviable in 1998 still operate, in most cases because of continuing loans that are little more than operating subsidies. SOEs still control a significant share of assets. For these reasons, the headlines in the world's economic press still convey skepticism: "Tough measures are paying off: but the country still faces serious challenges" said the *Financial Times*, 2002; "Unfinished business: reform of the chaebol is only half-way there" says *The Economist*, 2003.

## **2. Reduce the risks of openness**

Reform of the financial sector, the top priority following the crisis, has been more determined and more successful (though possibly no less politicized). Public ownership of banks posed a range of political economy problems, particularly temptation on the part of politicians to use banks for political ends and corresponding incentives for private firms to lobby state-owned banks and to shift risk to them. Banking reforms have modernized banks and made them efficient and competitive. Banks that were willing to reform had ready access to injections of public funds (amounting to 17 percent of GDP), but in return they were exposed to more prudential regulation, greater competition, foreign entry, modernized financial structures to develop capital markets and reduced reliance on bank financing. Most, but not all, regulatory and supervisory responsibilities of the Bank of Korea and the Ministry of Finance and Economy were transferred into the Financial Supervisory Commission (FSC). The FSC oversaw the re-capitalization and restructuring plans of the banks and assisted in the disposition of non-performing loans. Government funding was divided between the Korean Deposit Insurance Co. (KDIC)

for re-capitalization and coverage of losses, and the Korean Asset Management Corp. (KAMCO) that purchased and disposed of NPLs. Since only 12 Korean banks out of 26 satisfied international capital adequacy standards at the end of 1997, two banks were immediately nationalized. Rehabilitation plans were demanded from 12 unsound banks; five of these were not accepted and those banks were closed. Their assets were transferred to five healthy banks along with capital injections by the KDIC. By June 2002, 15 banks existed with assets amounting to 35 percent of the total assets of the financial system (Table 4), roughly the same share as in 1997.

The impacts of these reforms are positive. Although the swift restructuring was very costly, the banking system moved from being captured by government and self-interested borrowers to one that is more market-based, observing (and meeting) international standards of capital adequacy, transparency, loan classification and provisioning requirements (Table 5), and one that returned to profitability in 2001.

Even so, there is unfinished business in this sector as well. Six commercial banks are state-owned or controlled (4 nation-wide banks plus 2 local banks) (OECD, 2003). In 2002, 60 percent of banking sector assets continued to be government-controlled (IMF 2003a). A plan for transition to more competition has been announced; equity will be sold and domestic and foreign investors attracted (with ownership stakes limited to between 4-10 percent). One commercial bank is now foreign-owned and five others have foreign involvement (OECD, 2003). NPLs remain to be dealt with, as must issues of rising leverage among chaebol and state-owned entities (Table 3). IMF (2003b) observes that NBFIs are inadequately capitalized. More work is desirable to improve the FSC's monitoring and supervision of risks associated with new instruments such as off balance sheet exposures and derivatives being deployed by banks and non-bank financial institutions.

### **3. Creating a social safety net**

A social safety net that assists individuals who lose their jobs in economic restructuring is an essential ingredient of a serious reform strategy. Looking to the future, the safety net should also help to reduce people's fear of change and strengthen their ability to

anticipate it. Korea's labor-management environment has been volatile and adversarial since the late 1980s. Although unionization is low in Korea, unions have had a disproportionate impact on reform initiatives. Concerns about higher pay, better working conditions and job security have led to strikes and confrontation over plans for chaebol restructuring and privatization of large state-owned entities like KEPCO.

Even so, Korea has enjoyed sufficient labor market flexibility to bring about a drop in nominal wages after the crisis. There are distinctive reasons for this. The minimum wage is low and the prevailing labor market practice on salary negotiations is that they take place annually at the firm level. This contributes to a wage structure that is appropriate to the circumstances of the firm and one that is flexible.

Korea's dual labor market is another distinctive characteristic, segmenting regular employees with lifetime employment from non-regular employees (temporary and daily workers) which now make up 50 percent of the total. The latter are lower-cost and most are excluded from the Employment Insurance system that was created after the crisis. Movement by non-regulars to stable employment and better benefits offered in the regular sector is also difficult.<sup>15</sup>

While a number of labor market reforms were introduced after the crisis, including Employment Insurance, skills training and provision of public sector jobs, these programs have declined as unemployment has fallen. A priority going forward is to reduce the duality in the labor market by reducing lifetime employment guarantees in the regular sector and raising the costs of non-regulars by extending UI to them.

Other desirable features of the safety net include pension reform (Table 1) that would cover non-regulars more adequately and reform of education and skills training to prepare people for higher-skilled jobs and to change and upgrade their skills during their lifetimes. Again, changes are moving in the right direction, with remarkably rapid progress since the crisis, but more remains to be done to create labor-management harmony (strife is a deterrent to both domestic and foreign investors), and to invest in an agile and competitive work force.

#### **4. Promoting an endogenous capability to innovate**

Korea's ability to maintain rapid growth in the medium- and long-term will depend on the diffusion of knowledge and adoption of ICT. This development cannot be achieved just by boot strapping at home with one's own efforts. It requires linking domestic policies to policies for openness to trade, capital, people and their ideas.

Korea has developed significant strengths to underpin an innovation strategy. It has excellent technology and some of the world's best industrial companies. Its manufacturers' brand names are internationally recognized and respected. It has a well-educated and industrious labor force. It has developed an IT infrastructure that supports one of the world's highest rates of broad band and Internet penetration.

We know that the significance of the ICT revolution lies as much in its use as its production. Second generation reforms should focus on infrastructure development to channel diffusion in two ways. The first is domestic:

- A corporate governance system that promotes transparency, shores up shareholders' right and promotes external monitoring of firm performance.
- A financial system that reduces the risks of openness by efficiently intermediating international capital flows and is sufficiently diversified to support innovators and entrepreneurs that are often small and lacking assets to post as collateral.
- Recognition of the role of spillovers in the production of knowledge. Clusters have been shown to facilitate and enhance the diffusion of knowledge among innovating firms because many of the sources of innovation are in close proximity and are able to take advantage of the transmission of tacit knowledge quickly and more fully than would be possible from a distance. Support services are also necessary to take full advantage of the ICT revolution (eg. credit cards, logistics, order fulfillment arrangements, and legal services).
- A human resource development system that encourages research and lifelong learning. Korea's secondary and post-secondary enrollment rates are among the region's highest, but its education system is still highly centralized and



bureaucratic. Both OECD and IMF reports recommend a more decentralized system that allows more autonomy and experimentation. Korea needs stronger university research capabilities and enhanced R&D efforts in the private sector, with greater government emphasis on technology diffusion and the development of linkages between domestic and international actors. Half of Korea's skilled work force, that is its women, still face discrimination in both education and the workplace.

Increased funding to basic research in universities is desirable but approaches like the 21<sup>st</sup> Frontier Programme that target research areas are reminiscent of the 1970s picking industrial winners. Basic research is only part of the innovation process; competitive forces, often including foreigners, are necessary; commercialization of research is essential, and financial and technical support for SMEs to foster interaction with the chaebol, foreign firms and government research institutes are other ingredients.

The second channel of diffusion depends on the economy's openness through trade, FDI and factor flows. An economy that is open to international competition is likely to be more vibrant and innovative. While committed to the WTO talks, Korea has played an active role in regional initiatives such as ASEAN + 3 and in studies of bilateral trade links, particularly with Japan. Few of these latter initiatives have been acted upon, however. Through time, reduction of barriers to trade, FDI and the movement of business, technical and professional people will create a new regional distribution of industry based on comparative advantage. With the diversity of economic environments in the region, economic development should be a positive sum game, with the more advanced economies like Korea using ICT to move up the value chain, out of direct competition with standard technology production of the emerging market economies. Korea should have confidence in its ability to restructure and move up the value chain.

But a note of caution is in order. One of the troubling characteristics of a number of the proposed sub-regional trade deals is that they are contemplated because they require little domestic adjustment. This suggests the gains from liberalization will also be small, calling into question the value of the entire exercise. For dynamic gains, trading partners

must be prepared to restructure and specialize in products or services in which they have a competitive advantage and let sectors fail if they cannot compete.

The outcome of this approach can be surprising as an anecdote from Canadian experience illustrates. Although the Canada-US FTA contains exceptions for some agricultural products, one of the areas where Canada made concessions, despite political opposition, was to remove protection of grapes and wine. Canadian wine had never been considered internationally competitive. Within less than a decade after protection was removed, however, Canadian grape growers began to produce prize-winning wines. The reason? They were forced by the new competition to learn how to make really great wine, or die. Their choice to innovate could not have been foreseen, and indeed it may have been inhibited by protection.

The FDI regime also matters. Korea successfully used a learning by doing strategy during catch up to acquire and adapt foreign technology in electronics and automobiles and develop products that the rest of the world wished to buy. But as these goods increasingly become commoditized, knowledge becomes the future source of product and service differentiation. Recent comparative studies identify Korea as having one of the more restrictive policy regimes with respect to FDI in services, and as having one of the most protectionist regimes after China in telecommunications (Table 6). Korea has been an active outward investor in the rest of the region and around the world. In the future, however, the growing importance of services and innovations in advanced technology manufacturing production chains will mean that Korea's interests will be served by liberalizing the M&A regime to help this integration. China's proximity and emergence as the world's standard technology workshop has already attracted Korean firms. Indeed, in 2001 7 percent of China's total exports were the exports of foreign affiliates of foreign multinationals. But Motorola and IBM alone accounted for 1.5 percentage points of the total, which was about twice that of all Korean affiliates in China combined (UNCTAD, 2002). Success in China will require Korean firms to coordinate their commercial activities across borders, and adjust their production structures by relocating labour-intensive activities to China. This means that the quality

of ICT infrastructure will be important, as will the incentives to move up the value chain at home.

FDI and trade flows will not only link the production of firms across borders, but in the knowledge economy they link clusters of innovative activity. Increasingly clusters have been shown to be an important part of a country's innovation system because of the many positive spillovers of skills, technology and knowledge. A number of well known clusters exist in East Asia today, around Singapore's Research Parks, the Hsinchu Industrial Park in Taiwan, Tsukuba in Japan and Shenzhen near Hong Kong. How well known is the Daeduck Science Park in Taejon? How well is it perceived to have induced networking among transplanted or newly created research centers? Local industry? New start-ups?

## **Summary**

To summarize to this point, the recurrent theme in Korea's development and reform is state-led intervention. State-led industrialization produced significant accomplishments but contributed serious structural weaknesses and domestic imbalances. Post crisis, the state again led corporate and public sector reform, often with remarkable speed, but relying on discretionary measures that had unintended consequences. Financial sector reform in contrast, introduced and enforced rules necessary for market judgments and has been more successful. Substantial economic resources are still trapped in public corporations and inefficient business groups. These resources are allocated to Korea's past. They need to be re-channelled to its future. While Korea is in the forefront in building ICT infrastructure, further institutional reforms are needed to free resources for innovative startups that are likely to be small and far more transparent than the large entities of the past. Transparency, modern capital markets, labor market reforms and observing the rule of law are characteristics of a modern market-based economy whose prosperity will be sustained by technology rather than accumulation.

## **Lessons and Challenges**

This summary foreshadows some of the main lessons Korea can teach and the challenges it faces in the future. It received excellent report cards from the international

organizations in 2003. The 1997-98 crisis served as a powerful catalyst for reform. The economy is more open to the world as well as better able to anticipate and manage future risks. Much remains to be done, but the right direction is well established.

### *Lessons*

Korea has several lessons for other countries to learn, both developed and developing, about preparing for a knowledge-based world:

1. As an economy integrates into the world economy the role of the state should change; government should intervene less, relying more on markets and market-based institutions to allocate resources. Korea's determination to make this transition is almost unique in East Asia, exceeded perhaps only by China, which is still focused on catch up. This process is also still a work-in-progress. Imbalances are possible with unacceptable human costs of market outcomes that the state should rectify with social safety nets.
2. Korea is also almost unique in East Asia (along with Japan) in its past willingness to forego FDI and engage in technology based learning. But this choice is limited to mature technologies. The lesson for other East Asians is that openness to foreign capital -- both financial and human -- is an essential building block for a knowledge-based future.
3. Korea also has much to teach East Asians about the returns to modernizing and freeing up the financial system. A sound and diverse financial system is a fundamental building block for the more decentralized knowledge-based economy of the future.
4. Korea has developed its own "brand" as a country -- it is "cool", wired, pragmatic. Indeed, *The Economist* has observed that Korea might extend its brand by establishing itself as the most open and globally minded location in the region: tolerant, liberal, willing to tackle structural change, with a flourishing democracy.

### *Challenges*

Looking to the future, South Korea's great challenge is to deal with the uncertainties created by the escalating tensions between the United States and North Korea. So far,

the increased resilience of the economy to external shocks has mitigated the economic impact of this uncertainty, but it is a negative for short term growth prospects. In the longer term of course, reunification of the peninsula when it becomes politically possible will require the integration of the two starkly different economies which will be very costly, as various studies have suggested. But the country that emerges could be an extremely dynamic one with a population that is fifty percent larger than the South at the present time.

At the same time, South Korea must succeed in a globally integrating world economy. One of the emerging threats in this world is the extraterritorial application of unilaterally-defined rules and standards by powerful countries. Smaller countries must cooperate to promote the use of global rules-based systems to govern cross-border flows. But inevitably large neighbors will dominate regional markets; smaller countries will also have to be pragmatic in the way they align domestic policies to reduce unnecessary obstacles to factor flows and trade. While businesses will be prepared to live with these market outcomes, other interests such as civil societizing, are raising warning flags that will require governments to strike an acceptable balance between market forces and government intervention.

Korea's third long term challenge is to make the most of its unique location, between two of the world's largest economies, and as part of the region. Both of Korea's neighbors have traditionally been sources of threat as well as opportunity. Today, Korea has opportunities that flow from its proximity to both the burgeoning Chinese market and the wealthy, sophisticated, but stagnant, Japanese market. The risks and opportunities of proximity to large economies are familiar to Canadians. Proximity is at the same time attractive economically and a source of ambivalence politically and socially. In other words, borders still matter. Deeper integration is economically desirable using "smart" policies that are based on the country's economic-strategic interests. Smart macroeconomic policy can be conducted with the intent of producing a business environment that is slightly better than that of our large neighbor: slightly lower inflation (possible with an independent monetary policy); more prudent fiscal policies,

more neutral taxation policies and attention to better productivity performance are all within the realm of national choice.

Canada's external policies can be designed to leverage proximity to promote what the private sector does well. For us, this means overhauling our views of how we organize the economy, our people, institutions and trading arrangements to enhance productivity performance. The question is how we should organize ourselves as an open economy to interact more successfully with the rest of the world; how we should organize our four major urban centers to promote interaction among firms, large and small, domestic and foreign; among people and among such institutions as clusters and universities, to enhance productivity performance; and how we should organize and develop our human capital to support prosperity and productivity performance.

Singapore provides an interesting example of a mechanism for how to proceed. In 1998 it commissioned the Committee on Singapore's Competitiveness (CSC). The CSC Report proposed a strategy of domestic restructuring to transform Singapore into a knowledge economy by stepping up capacity building; expanding trade with the world's growth markets; and leveraging on market opportunities in the region's economies to form strategic partnerships.

Beginning with Japan, comparison of Korea's growth trajectory in GDP and incomes per capita with those in Japan implies that, if Korea is able to maintain its 5-6 percent annual growth rate over the next decade or more, it will begin converge on Japanese living standards and economic size. If reunification were to occur peacefully and successfully, the combined population of Korea might also approach that of Japan, which is projected by the United Nations to shrink by 14 percent by 2050 to around 100 million people (United Nations 2003). Thus, it seems quite possible for Korea to contemplate becoming one of the region's economic leaders in the first half of this century.

With respect to China, Korea's proximity is already seen as a major opportunity. As the smaller country, Korea stands to gain proportionally more from market access. Indeed, the private sector already sees this as growing FDI flows into China imply. But policy

facilitation of deeper integration is moving slowly. Talks about trade liberalization are only at the proposal stage. And while Korea outranks China in overall business environment indicators, it actually lags China in liberalization of FDI in significant areas of services (Table 6) that are critical to the knowledge economy.

With respect to Korea's linkages with the rest of the region, two of the most notable developments in the current proliferation of sub-regional free trade areas (SRTAs) are the agreements to proceed toward an FTA between China and the ASEAN economies and to negotiate a deeper economic partnership between Japan and ASEAN (India is also queued to pursue policy-led integration with ASEAN). While Korea and Japan have been talking about negotiating a FTA for the past five years, since 1998, this initiative has yet to proceed to tangible discussions. It seems possible that without a strategy to become included in these regional initiatives, Korea risks being left out. The current initiatives suggest a complicated set of hub and spoke arrangements that tend to serve the interests of the larger partners. Notable by its absence is a region-wide FTA that would include a common arrangement among the Northeast Asian economies and the Southeast Asian economies that would be more akin to a network than to hub and spoke arrangements. There would seem to be a strategic opportunity for Korea to advance the regional FTA initiative.

Finally, Korea faces the challenge of fully participating in the world technology revolution that is underway. This is not a race that can be won by Big Government and Big Business. It depends instead on new ideas often originating with individuals as well -- researchers, entrepreneurs, suppliers, buyers -- and SMEs. Increasingly, it is evident that location matters in the sense that learning occurs in clusters where all these actors are in close proximity to each other. Factor mobility also matters, in that ideas develop through networks of individuals working with and learning from each other across borders. By its very nature, the knowledge gap will be closed by the operation of market forces. As the CSC in Singapore counseled, government should focus on facilitating the development of the necessary infrastructure, much of which is institutional: the rule of

law to protect property right, particularly intellectual property and investment in education, R&D and ICT infrastructure.

In conclusion, Korea's postwar experience mirrors most of the major political and economic changes that have swept the world in the past fifty years. The country has come a long way in that time: from basket case to economic powerhouse; from state-dominated to market-driven; from follower to potential leader; and from autocracy to a thriving democracy. There have been stumbles along the way, but Koreans' willingness to learn from mistakes and overcome misfortunes has made the economy stronger and has earned the respect of others. Looking to the future, Korea could if it chooses play a significant role in addressing the challenges of globalization. Its distinctive identity and values can serve as an anchor offsetting tensions about political and cultural assimilation as its integration into the regional and world economy deepens. It might also blaze a trail in balancing the forces of liberalism and capitalism with ensuring social and economic progress for all.

## References

Coe, David T. and Se-Jik Kim. 2002. *Korean Crisis and Recovery*. Washington and Seoul: IMF and KIEP.

Dahlman, Carl J. and Thomas Andersson. 2000. *Korea and the Knowledge-based economy: making the transition*. Washington, DC: The World Bank and OECD.

*Economist, The*. 2003. "Keeping the lights one: A survey of South Korea". April 19.

*Financial Times*. 2002. "World Report: South Korea". Tuesday, October 29.

Graham, Edward M. 2003. *Reforming Korea's Industrial Conglomerates*. Washington, DC: Institute for International Economics.

Haggard, Stephan. 2000. *The Political Economy of the Asian Financial Crisis*. Washington, DC: Institute for International Economics.

Hamilton, Gary G. 1998. "Patterns of Asian Capitalism: The cases of Taiwan and South Korea". In Mark Fruin, ed. *Networks, Markets and the Pacific Rim: Studies in Strategy*. New York: Oxford University Press.



IMF. 2003 a. *Republic of Korea: Financial System Stability Assessment*. Washington, DC: IMF. Available at [www.imf.org](http://www.imf.org). March 2003.

IMF. 2003 b. *Republic of Korea: 2002 Article IV Consultation – Staff Report; Staff Statement*. Washington, DC: IMF. Available at [www.imf.org](http://www.imf.org). May 2003.

Kim, Linsu. 1997. *From Imitation to Innovation: Dynamics of Korea's Technological Learning*. Boston: Harvard Business School Press.

Kuczynski, Pedro-Pablo and John Williamson. 2003. *After the Washington Consensus*. Washington, DC: Institute for International Economics.

Mason, Edward S. et al, eds. 1980. *The Economic and Social Modernization of the Republic of Korea*. Cambridge, Mass.: Council on East Asian Studies, Harvard University.

Matthews, R.C.O. 1986. "The Economics of Institutions and the Sources of Growth". *The Economic Journal*. 96:903-18.

Noland, Marcus and Howard Pack. 2003. *Industrial Policy in an era of Globalization*. Washington, DC: Institute for International Economics.

North, Douglass C. 1994. "Economic Performance Through Time". *The American Economic Review*. 84:3. 359-368.

Sakong, Il. 1993. *Korea in the World Economy*. Washington, DC: Institute for International Economics.

Singapore, Government of. 1998. *Report of Committee on Singapore's Competitiveness*. Available at [www.gov.sg](http://www.gov.sg). May 2003.

Song, Kimberly. 2003. "Just one size doesn't fit all". *Far Eastern Economic Review*. May 8.

OECD. 2003. *Economic Survey of Korea, 2003*. Paris: OECD.

UNCTAD. 2002. *World Investment Report 2002: Transnational Corporations and Export Competitiveness*. New York: United Nations.

United Nations. 2003. "World Population Prospects: The 2002 Revision: Highlights". ESA/P/WP.180. 26 February. Available at [www.un.org](http://www.un.org) (May 2003).

Ward, Andrew. 2003a. "Bailout debate shows times are changing for the chaebol". *Financial Times*. June 5.

Ward, Andrew. 2003b. "Chaebol on trial as S Korea launches probe". *Financial Times*. June 10.

World Trade Organization (WTO). 2002. *International Trade Statistics*. Table 1.7.  
Available at [www.wto.org](http://www.wto.org). May 2003.

Yusuf, Shahid and Simon J. Evenett. 2002. *Can East Asia Compet?: Innovation for Global Markets*. Washington, DC: The World Bank.

**Table 1. Institutional Reform in Korea, 1997 and 2003**

<b>Criterion</b>	<b>1997</b>	<b>2003</b>
<b>1. Promote economic efficiency</b>	<ul style="list-style-type: none"> <li>-resources trapped in failing chaebol</li> <li>-opaque cross ownership ties, etc.</li> </ul>	<ul style="list-style-type: none"> <li>-enhance role of market mechanism in publicly-funded services</li> <li>-cross ownership ties still opaque</li> <li>-corporate governance and disclosure improved</li> <li>-accounting and auditing reforms short of best practice</li> <li>-corporate restructuring has progressed but 25% corporations unprofitable and highly leveraged</li> <li>-draft insolvency law circulated in late 2002</li> <li>-further streamlining of bankruptcy procedures desirable</li> <li>-environment for FDI could be more encouraging</li> <li>-ease chaebol-specific regulations</li> <li>-create independent and proactive regulatory bodies for telecomms/ electricity to ease transition to competition</li> </ul>
<b>2. Reduce the risks of openness</b>	<ul style="list-style-type: none"> <li>-weak financial supervision</li> <li>-bank-dominated financial system</li> <li>-government-directed lending by banks</li> <li>-opaque connected lending</li> <li>-financial standards and codes not best international practice</li> <li>-financial institutions insolvent</li> <li>-uncertainty re size of NPLs</li> <li>-central bank not independent</li> </ul>	<ul style="list-style-type: none"> <li>-FSC independent of MOFE</li> <li>-responsibilities of MOFE, FSC and FSS still unclear</li> <li>-Commercial, specialized banks recapitalized</li> <li>-privatize the banking system: government ownership has increased (8/15 comm. banks have significant gov't ownership; 60% banking sector assets government controlled)</li> <li>-foreign participation permitted in banking sector</li> <li>-weak asset classification and low provisioning rates</li> <li>-systematic and independent stress testing of individual institutions still weak</li> <li>-uncertainty about financial supervisor's ability to manage risks such as off balance sheet exposures of banks; capital position of insurance cos; derivatives activities of securities firms</li> <li>-money bond and FX markets less developed than in other countries of Korea's size</li> <li>-household credit concerns</li> </ul>

		-central bank independent but inflation targeting lacks medium term framework; increase neutrality of membership in Monetary Policy Committee
<b>3. Promote endogenous ability to innovate</b>	-intrusive role of state; competitive forces restrained; etc -centralized and rigid education system -weak global linkages	-national innovation system could stress strong university research capabilities; enhanced R&D effort in private sector; more gov't funding plus facilitate diffusion and linkages -more financial and technical support for SMEs -education reform could stress decentralization to improve teaching quality and expand choice in schools and curriculum -upgrade university system by allowing more autonomy and accountability for private institutions -improve efficiency of R&D system by promoting interaction among institutions; mobility of researchers; and international interaction -Cyber Korea 21 connects schools to Internet -world leader in broadband penetration
<b>4. Create a social safety net</b>		-reform pension system in anticipation of population aging -reform tax system to reduce distorting PIT allowances and tax credits; broaden CIT and VAT bases; level playing field for taxing capital income -maintain low level of structural unemployment by extending safety net to non-regular employees, enhance employment flexibility for regular employees

Sources: IMF, 2003a; IMF, 2003b; OECD, 2003.

Notes: PIT: personal income tax  
CIT: corporate income tax  
VAT: value added tax

**Table 2. Indicators of Financial Stability and Profitability in Manufacturing, 1997-2002**

	Korea						U.S.	Japan
	1997	1998	1999	2000	2001	2002Q3	2002Q3	2000
	(In percent)							
Debt/equity	396	303	215	211	182	130	159	160
Debt/total assets	54	51	43	41	40	33	28	30
Debt/sales	66	63	53	43	43	40	28	33
Interest coverage ratio 1/ (% of companies <100)	129	68	96	157	171	254	-	-
	-	-	(33)	(26)	(29)	(34)	-	-
Current assets/current liabilities	92	90	92	83	98	103	124	132
Operating income/sales	8.3	6.1	6.6	7.4	5.5	8.1	5.7	3.8
Financial expenses/sales	6.4	9	6.9	4.7	4.2	3.2	2.3	0.7
Ordinary income/sales	-0.3	-1.8	1.7	1.3	0.4	7.6	5	3.9

1/ Operating income to gross interest payments.

Source: IMF, 2003a.

**Table 3. The Large Business Groups**

(Trillion won as of April 2002)

Rank	Name	Number of affiliates	Assets	Rank in 1997	Debt-to-equity ratio	
					Excluding financial sector 2/	Total
1	Korea Electrical Power Corporation 1/		90.9	Not on list		72.1
2	Samsung		72.4	2		240.6
3	LG		54.5	3		206.8
4	SK		46.8	5		156.4
5	Hyundai Motors		41.3	Not on list		168.0
6	Korea Telecom 1/		32.6	Not on list		101.7
7	Korea Highway Corporation 1/		26.4	Not on list		100.4
8	Hanjin		21.6	7		294.4
9	Korea Land Corporation 1/		14.9	Not on list		373.4
10	Korea National Housing Corporation 1/		14.5	Not on list		185.2
11	Hyundai		11.8	1		977.6
12	Gumho		10.6	Not on list		503.1
13	Hyundai Heavy Industry		10.3	Not on list		219.4
14	Hanwa		9.9	9		238.3
15	Korea Water Resources Corporation 1/		9.5	Not on list		27.2
16	Korean Gas Corporation 1/		9.1	Not on list		256.0
17	Doosan		9.0	14		191.4
18	Dongbu		6.1	22		312.1
19	Hyundai Oilbank		5.9	Not on list		837.1
Total				-		171.7

1/ State-owned enterprises. Korea Telecom, though, was completely privatized in May 2002.

2/ Excludes affiliated companies in the financial and insurance sectors.

Source: OECD Economic Surveys: Korea 2001, 2003.

**Table 4. Korea: Structure of the Financial System, 1997 and 2002**

(As of the end of period, trillion won and in percentage)

	No. of Institutions		Total Assets				Assets as a % of GDP	
	1997	Jun-02	1997		Jun-02		1997	Jun-02
			Amount	%	Amount	%		
<b>Banking Institutions</b>	84	62	701.3	55.8	892.5	53.1	154.7	158.5
<i>Commercial Banks</i>	78	57	483.5	38.5	639.1	38.0	106.7	113.5
National Banks	16	9	379.0	30.2	530.8	31.6	83.6	94.2
Regional Banks	10	6	58.7	4.7	50.9	3.0	13.0	9.0
Foreign Bank Branches 1/	52	42	45.8	3.6	57.4	3.4	10.1	10.2
<i>Specialized and Development Banks</i>	6	5	217.8	17.3	253.4	15.1	48.1	45.0
<b>Non-bank Depository Institutions</b>	6,404	1,372	234.2	18.6	232.7	13.9	51.7	41.3
Merchant Banking Corporations 2/	30	3	77.9	6.2	13.1	0.8	17.2	2.3
Mutual Savings Banks	231	120	36.0	2.9	25.7	1.5	8.0	4.6
Credit Unions	1,666	1,248	19.3	1.5	23.6	1.4	4.3	4.2
Mutual Credit Facilities	1,733	n.a.	61.8	4.9	98.9	5.9	13.6	17.6
Community Credit Cooperatives	2,743	n.a.	29.8	2.4	40.4	2.4	6.6	7.2
Postal Savings	1	1	9.3	0.7	31.0	1.8	2.0	5.5
<b>Insurance Companies</b>	46	35	118.1	9.4	200.0	11.9	26.0	35.5
Life Insurance Companies	31	19	92.5	7.4	149.8	8.9	20.4	26.6
Non-Life Insurance Companies	14	15	19.9	1.6	33.0	2.0	4.4	5.9
Postal Insurance	1	1	5.6	0.4	17.2	1.0	1.2	3.1
<b>Securities Companies 3/</b>	36	44	27.4	2.2	51.7	3.1	6.0	9.2
<b>Collective Investment Schemes</b>	81	264	174.9	13.9	303.2	18.0	38.6	53.8
Investment Trust Management Companies 4/	49	31	94.6	7.5	165.1	9.8	20.9	29.3
Securities Investment Companies	-	214	n.a.	n.a.	8.9	0.5	n.a.	1.6
Trust Accounts of Banks 5/	32	19	80.3	6.4	129.2	7.7	17.7	22.9
<b>Total</b>	<b>6,651</b>	<b>n.a.</b>	<b>1,255.8</b>	<b>100.0</b>	<b>1,680.1</b>	<b>100.0</b>	<b>277.0</b>	<b>298.3</b>

1/ Number of foreign bank branches (in the banking institutions) is as of September 1997.

2/ Including investment and finance companies.

3/ Domestic companies only.

4/ The figures in 1995 are for investment trust companies.

5/ Assets in trust accounts of banks is defined as total trust assets minus securities investment trust of investment trust management companies.

Source: IMF (2003b).

**Table 5. Korea: Selected Financial Soundness indicators for Commercial Banks,  
1997-2002 (June)**

(In trillions of won and in percentage)

	1997	Jun-02
<b>Capital adequacy</b>		
Regulatory capital to risk-weighted assets(BIS ratio)		
All commercial banks	7.0	10.6
National commercial banks	6.7	10.5
Regional commercial banks	9.6	11.6
Shareholders' equity as a % of total assets	4.3	5.0
<b>Asset quality</b>		
Non-performing loans as a % of total loans 1/	6.0	1.9
Provisions for total loans as a % of NPLs	-	109.4
Credit concentration		
Total loans (in tri. won)	147.9	321.8
<i>Of which:</i>		
Share of loans to corporations	63.8	46.8
Share of loans to households	20.0	40.2
Share of housing loans 2/	13.8	11.4
Total credit exposure to Chaebol (tri.won) 3/	-	43.8
Total credit exposure to Chaebol % of total loans 3/	-	13.6

1/ Non-performing loans are defined as loans overdue for more than three months plus non-accrual loans.

2/ The loans for housing is the sum of housing loans (to corporations, households, public and others) and loans with National Housing Fund.

3/ Total Credit Exposure to top 30 Large Business Groups.

Source: IMF (2003b).



**Table 6. Indicators of the business environment for knowledge-based services**

<b>Indicator</b>	<b>Rank/Index</b>	<b>Notes</b>
Business environment	23 (rank in world)	Behind Singapore, Taiwan, Hong Kong, Japan Source: World Economic Forum, 2001
Perceived role of clusters	17 (rank in world)	“
Degree of protection of the telecom sector	68 (index)	Index: 100 = most restrictive; 0 = least restrictive China = 81; most restrictive in East Asia
Degree of restrictiveness to FDI in service sectors: - business services - communications - distribution - financial services - transportation services	57 (index) 60 “ 63 “ 88 “ 57 “	Index: 100 = most restrictive; 0 = least. China’s ranking: 36 82 28 45 46
R&D expenditures, 1997 (percent GDP)	3 (2.89 percent)	Behind Japan and Sweden in world ranking
FDI confidence index	17 (index)	Behind Poland, Thailand among others. Source: A.T. Kearney in Noland, 2002
Opacity index	31 (index)	31 out of 34, ahead of Russia, Turkey and Indonesia. Source: PricewaterhouseCoopers in Noland, 2002

Sources: Yusuf and Evenett, 2002; Noland, 2002.

## End Notes

---

<sup>1</sup> WTO, 2002

<sup>2</sup> UNCTAD, 2002: 176.

<sup>3</sup> For the rest of this paper, I will use the term “Korea” to refer to South Korea.

<sup>4</sup> See, for example, Hamilton, 1998: 195.

<sup>5</sup> North, 1994; Matthews, 1986.

<sup>6</sup> This section benefits from Mason et al. 1980 analyses in Sakong, 1993; Haggard, 2000 and Graham, 2003.

<sup>7</sup> Graham, 2003.

<sup>8</sup> See UNCTAD, 2002:177-81 and Kim, 1997.

<sup>9</sup> See Graham, 2003 for an alternative review.

<sup>10</sup> Yusuf and Evenett, 2002.

<sup>11</sup> Noland and Pack, 2003

<sup>12</sup> Coe and Kim, 2002.

<sup>13</sup> Haggard, 2000: Table 3.4 reflecting recently-adopted OECD principles of sound corporate governance. These include: guaranteeing shareholder rights; guaranteeing the equitable treatment of all shareholders, including minority and foreign shareholders; recognizing the role of other stakeholders in the firm, including workers and suppliers; ensuring transparency and full disclosure; and guaranteeing that boards of directors effectively monitor management.

<sup>14</sup> Graham 2003: 118 – 26.

<sup>15</sup> OECD, 2003.