THE ROOTS OF KOREA'S CRISIS

The best manufacturing technology did not lead to high productivity ◆ Now is the time for deregulation ◆ But it must embrace both manufacturing and services

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WITH PER CAPITA INCOME SWELLING better than fivefold from 1970 to 1995, Korea was on the leading edge of the East Asian miracle. But 1997's financial crises brought the miracle to an abrupt end, raising questions about Korea's economic prospects and the underlying reality of the East Asian boom.

To help answer these questions, we studied Korea's current economic performance and used this knowledge to gauge what its medium- and long-term growth potential might be.* We examined how the regulatory

* *Productivity-led growth for Korea,* McKinsey Global Institute, Seoul and Washington, DC, March 1998.

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environment has affected Korean companies in four manufacturing industries (automobiles, steel, food processing, and semiconductors) and four service industries (retail banking, general merchandise retailing, housing construction, and telecommunications). Our main conclusions are:

- Overall, the old regulatory environment led to high inputs (especially in manufacturing), and low productivity (Exhibits 1 and 2).

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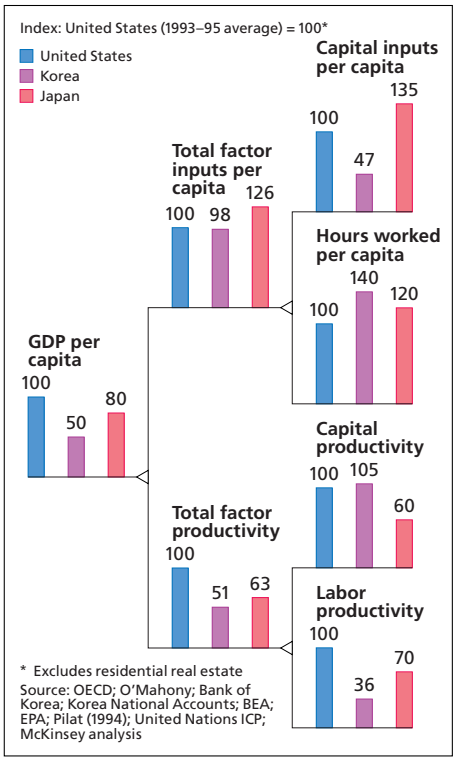
Exhibit 1

GDP per capita



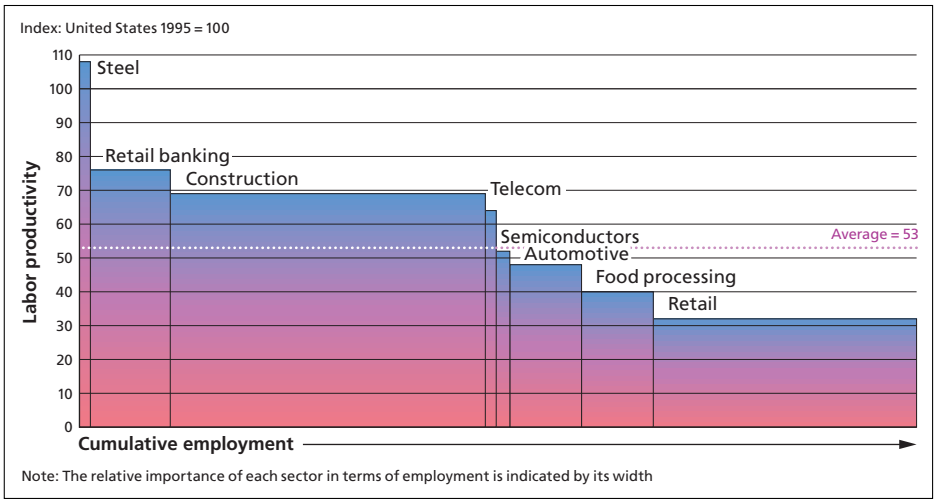
◆ Despite massive investment in the best available manufacturing technology, protectionism and poor corporate governance prevented Korean companies from adopting the best management practices. As a result, labor and capital productivity in most manufacturing sectors stands at less than half of US levels.

◆ Service sector industries were systematically starved of capital. As a result, companies are well below scale and highly inefficient. Their performance is further hindered by regulations – stringent zoning laws in retailing and product and pricing restrictions in retail banking – that dampened competition.

◆ Thorough reform of the economy is the only way to restore high growth and employment. This reform must include removing often-overlooked service sector regulations. Our work shows that Korea's old regulatory environment has reached its limit. Even with sustained high investment, the potential for annual GDP per capita growth under the current regulatory regime could not exceed 3 percent per year for ten years following

Exhibit 2

Labor productivity and employment by sector, 1995



stabilization, and even then the economy would still remain vulnerable to further financial crises. By contrast, GDP per capita growth was 6.7 percent per year between 1970 and 1996.

If growth in GDP per capita is to return to these levels, across-the-board economic reform is essential. Our previous studies have shown that the service sector is the engine of job growth in all major economies. Without reform, Korea's service sector will not create jobs for the workers displaced as manufacturing productivity rises. Reform plans that neglect the service sector and deal only with corporate governance and increasing foreign competition in the financial and manufacturing sectors are thus especially dangerous in the short term because they will increase unemployment.

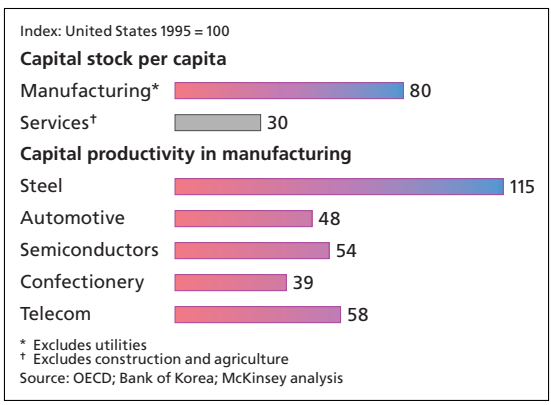
Rapid growth

Korea's impressive growth over the past 25 years can be explained largely by the fact that its people worked long hours and saved a great deal, which led to the rapid accumulation of capital. Coupled with strong exports, this meant that Korea was able to climb the technology ladder quickly. It began by exporting clothing, which provided the foreign currency to import machinery to build cars. More recently, it has been exporting cars and importing machinery to make semiconductors.

Most of Korea's investment has been directed into manufacturing, giving the country almost as much manufacturing capital stock per capita as the United States. Yet capital productivity in many manufacturing sectors is only half of US levels (Exhibit 3). This can be explained by the fact that although Korea has invested in best practice technology, it has failed to adopt best practice management techniques.

Exhibit 3

Capital allocation and capital productivity, 1995



In semiconductor manufacturing, for example, Korean companies use machines similar to those employed by US companies, but produce low-value DRAM chips instead of more complex microprocessors. Within the DRAM industry, Micron, the largest US manufacturer, boasts capital productivity 50 percent higher than that of the average Korean maker. Similarly, Korea's failure to implement lean manufacturing in the automotive industry means its car makers produce only half as many vehicles as their Japanese counterparts in a similar plant.

By contrast, the service sector has been starved of capital, leading to subscale and inefficient operations. Korea has almost no modern retailing formats, for example; family-run stores account for 70 percent of retail employment, compared with less than 20 percent in the United States.

Then the slowdown

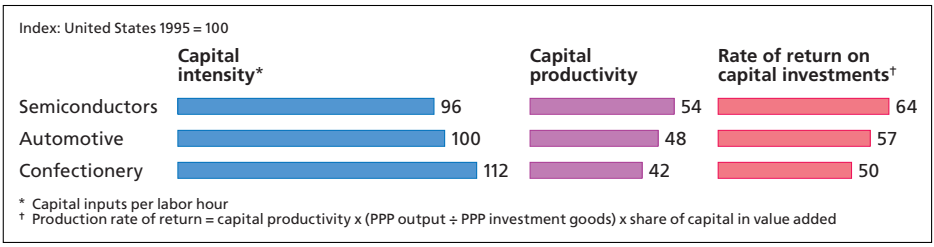
If existing regulations remained, they would slow Korea's recovery from its present crisis and possibly expose it to future difficulties. They would also depress growth in GDP per capita, for three reasons:

◆ Growth can no longer be fueled by increases in the proportion of the population that is of working age, and by the migration of workers away from agriculture. These two effects accounted for two percentage points of the 7 percent annual GDP per capita growth of the past ten years.

◆ Growth through new investment in manufacturing would decline. The failure to raise capital productivity and the negligible scope for technological improvement are leading to rapidly falling marginal returns on manufacturing investment (Exhibit 4). Capital productivity must be improved by the adoption of best management practices or Korea will remain vulnerable to financial crises that could jeopardize its growth.

Exhibit 4

Capital productivity and return on capital investments, 1995



But capital productivity will not improve much if Korea continues to finance uneconomic investments and resist the pressures of imports and foreign direct investment. In the past, it was relatively easy for Korean companies to gain an advantage in "simple" sectors such as clothing, because labor costs were low. Even in the more complicated integrated steel industry, government-imposed price pressures and Japanese assistance helped companies achieve best practice. But in the far more complex automobile and semiconductor industries, Korea is struggling to learn and catch up with ever-advancing competitors. Among car makers, for example, productivity growth is lower than it was in Japan at the same stage of development.

◆ Growth in services will remain slow as long as regulations restrict investment and productivity gains. Substantial barriers to growth exist in

each of the four service sectors we studied. In retailing, strict zoning laws and bureaucracy are blocking the development of larger, more productive stores in the suburbs. In housing construction, zoning laws and price ceilings favor standardized apartments. This prevents single-family homes and customized condominiums – the most efficient way to provide housing on a large scale, and the model for 70 percent of new housing in the United States and 60 percent in the land-starved Netherlands – from being built.

Similarly, in retail banking, restrictions on products and pricing limit competition between banks and lead to overpriced, mediocre products and underused, overstaffed branches. In telecommunications, pricing regulations limit growth in call volume and new services. If telecom companies were allowed to price local calls at near-zero marginal cost, network use would increase and service quality improve in many other industries.

Steps in the right direction

Reform plans currently under discussion cover the supervision and governance of the financial sector and the lowering of barriers to imports and foreign direct investment. Liberalization in these areas could reduce the risk of further financial setbacks, since companies would be forced by a combination of increased competition, better bank lending, and more demanding shareholders to adopt better management practices and improve returns on investment.

In addition, higher manufacturing productivity growth should enable per capita GDP to grow by 4 percent a year on average, more than could be achieved without reform. In effect, higher manufacturing productivity and lower import barriers would bring down prices and higher capital productivity would reduce the need for imported machinery, enabling domestic consumption to increase without raising the trade deficit or external debt.

Importance of service reform

However, these reforms are insufficient. The experience of developed economies shows that the performance of service industries becomes increasingly important for output and employment growth as incomes rise. Deregulating its service sector would enable Korea not only to employ the labor sloughed by more efficient manufacturers, but also to boost manufacturing output. Per capita GDP growth could return to 6 percent a year.

Relaxing zoning laws for retailers, for example, would allow the construction of large modern retail formats that provide new jobs and better service. While building high-productivity shopping malls would consume some additional land, the loss of green space would be small. If Korea raised its labor productivity in retailing to 69 percent of the US level, only an additional 4 percent

of existing commercial land or 0.1 of undeveloped but usable land would be needed. Moreover, building malls would generate jobs in construction. In banking, the removal of restrictions on investment products would lead to the creation of jobs in the design, marketing, and selling of products.

The rapid development of new services would bring benefits for manufacturing too. Modern independent retailers would force manufacturers to reduce prices and increase productivity. They would also stimulate demand with better marketing. Greater competitive pressure in retailing and retail banking would in turn force more companies to invest in information technology (service companies are the biggest users of IT), creating jobs among IT providers. The people who fill these jobs would then be likely to consume more manufactured goods.

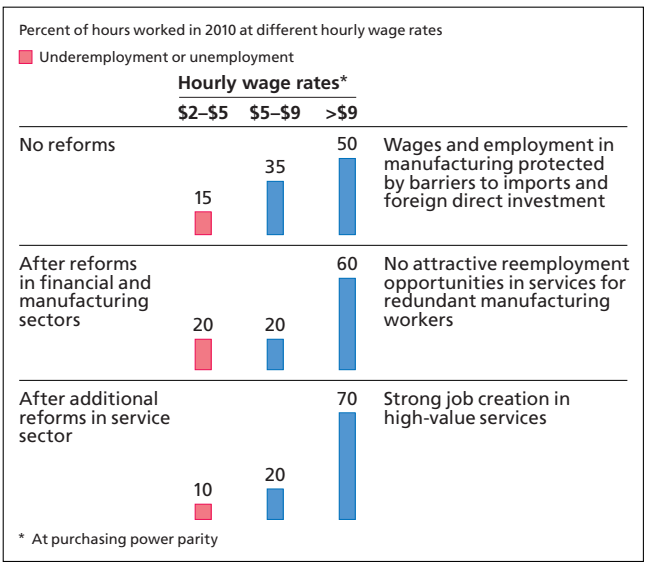
If all these measures were introduced, we estimate that with investment equivalent to 30 percent of GDP (realistic by Korean standards), the economy could grow by 6 percent a year, taking it to 90 percent of the United States' current per capita GDP by 2010. Productivity-led growth of this kind would be faster and more sustainable than the current Japanese-style input-driven variety.

Social problems

Only total reform will reduce Korea's susceptibility to future financial and social difficulties. Anything less would mean lower growth and could create serious employment problems.

Exhibit 5

Policy reforms and future wage distribution



Policy changes directed at manufacturers alone, such as the lifting of import barriers and the reform of the financial sector, would cause employment to fall in these areas because productivity would rise faster than output (Exhibit 5). This is a trend that has been observed in all developed economies. Unfortunately, job creation in service industries would be limited because present regulations inhibit the growth of new high-value services. Laid-off manufacturing workers and young people reaching

working age would be forced into low-value service jobs or, if the minimum wage were raised, unemployment.

Assuming that Korea imposed minimum wage and unemployment benefits at US levels, we estimate that a reform program that neglected the service sector could lead to unemployment of 12 percent. Reform that included the service sector, on the other hand, would lead to rapid growth in good service jobs and reduce the expected level of unemployment to 5 percent, even if the US minimum wage were set.

Implications

While a comprehensive reform program will take time and resources, there is no economic or social reason to delay. Korea should not fear the period of adjustment. On the contrary, a completely reformed economy would attract foreign investment and create jobs immediately, when they are most needed.

Important value-creation opportunities were present in almost all the industries we studied. In manufacturing, openings lie in making better use of existing machinery. In underdeveloped service industries, developing new markets is the key. Korean companies seeking to benefit from these opportunities must act quickly to reform their corporate governance, refocus their portfolios, and seek out partnerships with leading multinational companies in order to learn best management practices.

Korea's current crisis represents a unique opportunity for its government. It is a chance to embark on far-reaching changes that would enable the economy to return to rapid but balanced growth based on higher productivity in manufacturing and increased investment in services. Miss the chance, and the country could, like Latin America in the 1980s and Japan in the 1990s, lapse into a prolonged period of stagnation. Q