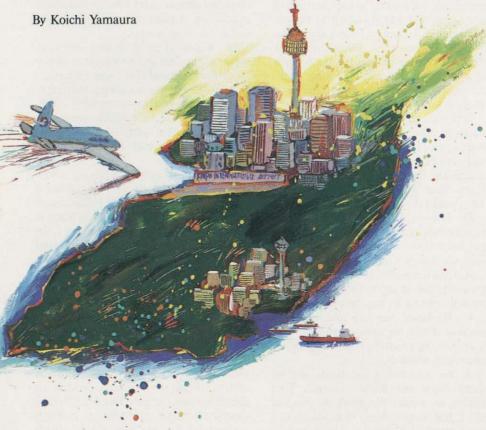


Koichi Yamaura is director of the North Asia Division at the International Trade Policy Bureau of the Ministry of International Trade and Industry.

One cannot possibly discuss the South Korean economy without referring to its external trade. The reason is simple: Exports in 1984 accounted for a massive 36% of the country's gross national product. Exports are the economy's locomotive. One can legitimately say that the expansion of Korea's export sector literally means the expansion of the entire economy. And thanks to its exports, South Korea can count on continued economic growth so long as the world economy. and particularly the U.S. economy, keeps on expanding.

In fact, the growth of Korean exports in recent years has gradually narrowed the country's trade gap, as is shown by the steadily shrinking trade deficit: \$4.4 billion in 1980, \$3.6 billion in 1981, \$2.6 billion in 1982, \$1.6 billion in 1983, and \$1.1 billion in 1984. According to Korean estimates, the 1985 trade deficit was a mere \$500-600 million, and the general prediction is that the nation's trade column will shift into the black within the next few years.

What is the secret behind this success? Of course, one may rightfully attribute much of it to the great wisdom of Korea's export policy, overcoming as it has the country's historical and geographical constraints. However, one must also note that this policy has been deeply entwined with the pattern of trade with Japan, most specifically Japan's one-sided technology exports and the flow of Japanese investment into the country. Such a relationship has predictably resulted in a continuous trade imbalance in Japan's favor (Table 1).



Importing to export

Following independence in August 1945, South Korea had practically no economic policy to speak of as it weathered the Korean War and long periods of political instability. In fact, it was not until 1962 that the government initiated the nation's first five-year economic development plan.

In planning for economic growth, Korea's leaders inevitably had to take into account the small domestic market, the paucity of capital accumulation, the unrestructured domestic capital market, and the nation's backward technology The policy they chose was: exports. Instead of selling in the domestic market, the Koreans took on the world market, training their sights straight at the United States.

Like Japan, South Korea is not bestowed with natural resources. What the two countries have in common is an abundance of relatively high-quality labor. So, as taught by the successful Japanese example, South Korea targeted finished products for export.

But this was no easy task. In order to manufacture finished goods that could compete on an equal footing with those from Japan, Korea has had to import not only production technology and technical know-how from Japan, but even raw materials, as Japanese materials are cheaper and often better than those produced domestically.

Economically speaking, the biggest difference between the two countries is not who started first; it is a question of the size of their domestic markets. Japan's population of 120 million provides an ideal market for modern mass production techniques. Moreover, it is only those battle-hardened survivors who manage to survive in the ruthlessly competitive domestic market both in terms of quality and price that go on to tackle the American market.

To a country like Korea, which has to fight an uphill battle in technology, capital, domestic market and lead time, the establishment of an export-oriented manufacturing industry logically seemed the best option. To businessmen charged with shoring up the economy, this policy also represents a choice involving minimum risk yet promising high profit yields. In fact, capital accumulation by Korean conglomerates has risen spectacularly as they have taken full advantage of the situation.

The founders of these conglomerates have always concentrated on Japan and the American market, constantly shifting their line of business to keep pace with changing times. Industrial development in South Korea in turn has always been tuned to the corporate strategy of the major conglomerates. The structure of Japanese-Korean trade, for instance, has remained practically unchanged for 20 years, even though the actual goods flowing from one country to the other have changed over the years.

Back when the Koreans were selling textiles to the United States, they imported textile machinery and synthetic fibers from Japan. Today, when the Koreans build ships for the world, it is again from Japan that they import steel,

Korea has proven itself a competitor in consumer exports.

engines and heavy electrical machinery.

The list goes on and on. Japan, for instance, supplies electronics assembly line equipment and components to Korea for the radios and TV sets it sells in the United States. The cars that it has recently been exporting to Canada and the United States are built with Japanese machine tools and Japanese auto parts. The same goes for the Korean semiconductor and VCR industries, which rely on Japanese-made silicon wafers and IC manufacturing and testing equipment.

Japanese exports to Korea consist primarily of electric components, chemicals and steel products (Table 2). Since Korea maintains a selective import policy toward Japan, with which it has its biggest trade deficit, not a single Japanese-built car is to be seen on the roads of Seoul, and Japanese-made VCRs are not sold in the electric appliances shops dotting the South Korean capital.

Yet despite such discriminatory import restrictions, South Korea has been unable to rectify its trade imbalance with Japan, a gap now structural in nature. The trade deficit has provoked emotional criticism in the South Korean press. Yet, it should be stressed that this trade gap is the result of a policy choice, and the most rational-one possible in view of South Korea's historical and geographical constraints.

Perhaps when the overall trade balance goes into the black, Koreans will be able to make a more objective appraisal of their trade imbalance with Japan. But even then, it will not be easy to disentangle the emotional element from Japanese-Korean relations.

Table 1 Japan-Korea Trade (in \$ million)

	Japan's Exports (A)	Japan's Imports (B)	Total	Trade Balance (A-B)
1974	2,656(148.5)	1,568(129.9)	4,224(141.0)	1,088
1975	2,248(84.6)	1,308(83.4)	3,556(84.2)	940
1976	2,824(125.7)	1,917(146.5)	4,741(133.3)	907
1977	4,080(144.4)	2,113(110.3)	6,193(130.6)	1,967
1978	6,003(147.1)	2,591(122.6)	8,594(138.8)	3,412
1979	6,247(104.1)	3,359(129.7)	9,606(111.8)	2,888
1980	5,368(85.9)	2,996(89.2)	8,364(87.1)	2,372
1981	5,658(105.4)	3,389(113.1)	9,046(108.7)	2,269
1982	4,881(86.3)	3,254(96.0)	8,135(89.9)	1,627
1983	6,004(123.0)	3,365(103.4)	9,369(115.2)	2,639
1984	7,227(120.4)	4,213(125.2)	11,440(122.1)	3,014
1985 (JanOct.)	5,660(94.6)	3,374(97.6)	9,034(95.7)	2,286

Note: Figures in parentheses denote percentage change over the previous year.

Table 2 Breakdown of Japan-Korea Trade (in \$ million)

Japan's Exports	1981	1982	1983	1984	1985 (JanOct.)
Machinery & equipment	2,301(40.6)	2,194(45.0)	2,953(49.2)	3,642(50.4)	2,918(51.6)
Metals	996(17.6)	753(15.4)	965(16.1)	1,201(16.6)	850(15.0)
Chemicals	840(14.8)	780(16.0)	866(14.4)	995(13.8)	813(14.4)
Japan's Imports					
Textiles	1,025(30.2)	992(30.5)	708(21.0)	1,004(23.8)	796(23.6)
Food	670(19.8)	672(20.7)	706(21.0)	839(19.9)	587(17.4)
Machinery & equipment	378(11.2)	302(9.3)	339(10.0)	488(11.6)	413(12.2)

Note: Figures in parentheses are percentage shares. Source: Japanese customs clearance statistics

Yet even objectively speaking, one may wonder whether it is actually possible to rectify the trade gap between Japan and Korea. The answer is: Yes, it can be done. But there is a catch. If the gap is removed, it might also wipe out the advantages that Korea has so far enjoyed under the present trading pattern.

Fill trade gap with domestic production...

One way to narrow the trade gap is for South Korea to produce domestically the raw materials it has heretofore bought from abroad. And in fact, the Koreans are already producing their own steel and parts for cars and ships, and petrochemicals for textiles and plastic goods.

As for electric and electronic products, the South Korean conglomerates chose to start with finished products, that is, those with the highest value added, and then moved on to relatively profitable components. In addition, as part of its industrial policy, the South Korean government is now nudging small firms to go into the parts business.

Domestic production of industrial components is, of course, highly desirable for it helps reduce imports, boost employment and consolidate a country's industrial base. However, such a policy is not without its share of problems. As is the case with Japanese parts producers, the parts industry commands extremely low value added, and the efficiency of capital is far from optimal. The reality in Japan is that the parts industry today is mostly in the hands of small firms. Moreover, even these small companies are moving to automate their operations or use sophisticated numerically-controlled machine tools in a bid to contain high labor costs. Hence, it is doubtful whether Korea should really plunge head-on into developing its own parts industry just on the dubious grounds that it is a laborintensive industry and hence suitable for Korea.

Or sales to Japan

The other solution for whittling down the trade gap is to launch an export drive to sell consumer goods in Japan. This, as Western countries have learned the hard way, is equally fraught with difficulties.

The Japanese market is structurally different from the North American market, where Korea has so far concentrated most of its export efforts. In Canada and the United States, the market is big, divided into broad segments, and multilayered. Korean products can find a niche of their own even in fields where they have to compete against Japanese imports. Just as Japanese and Korean exporters have been able to share the North American market with their cutlery and textile goods, so they will be able to share and share alike with subcompact cars and VCRs.

The Japanese market, however, is a different proposition. For one thing, Koreans face tougher competitors in Japan. And for another, while the Japanese market is more or less homogeneous, it leads the world in the growing trend toward greater variety and shorter production runs.

Take the textile industry, a field where

Korea is at its most competitive. Both China and the ASEAN countries are already competing in Japan for off-brand products. Therefore, it has become a matter of urgency for Korea to move upscale and concentrate on small-volume fashion products, which are more responsive to market trends. As for electric appliances and automobiles, one key to success-as the Koreans should know from their experience in the North American market-is to set up a consumer service network. If the Koreans can repeat the same stay-close-to-theconsumer marketing strategy and hit it big in the Japanese market, it will greatly bolster their confidence and will give them experience in anticipating the newest in world trends. In a sense, the Koreans' success in cracking the North American small car market means that already they are doing more than just selling things; it demonstrates that they have moved up to consumer businesses which require after-sales service. In other words, they have proved they have the capacity to join the ranks of the consumer-centered industrial powers.

Such industrial prowess is, in fact, already appearing in bilateral trade between Japan and Korea. In 1965, the year the two countries restored diplomatic relations, Japan's exports to South Korea totaled \$335 million, and its imports a mere \$72 million, resulting in a trade gap with a factor of 4.7. By 1984, this gap had narrowed to a factor of only 1.7. Another little known fact is that the Koreans now not only produce their own steel and petroleum products but also managed to export \$200 million worth of electric machinery and electronic parts to quality-conscious Japanese manufacturers in 1984.

Belatedly, South Korea has started sending export promotion missions to



Headed straight for the North American market

Japan. In fiscal 1985, the Korea-Japan Market Council dispatched four such teams, and another five to six missions are scheduled for fiscal 1986. Yet if anything, these numbers really only demonstrate how seriously Korean businessmen have failed to take account of the Japanese market until now, especially when one considers that it takes only two hours to fly from Seoul to Tokyo.

In the final analysis, Korea's success in selling to Japan will depend primarily on the ability of Koreans to develop their own finished products and how well they train their people to do this job.

Technology transfers:

An easy way for Korea to build up its export-oriented finished goods industry is to obtain manufacturing know-how and applied technology from Japan, a country which is not only nearby geographically but has also been successful in selling to the United States.

The Koreans themselves recognize this. Since the end of World War II, Japan has consistently been the greatest source of technology transfers to Korea in terms of number of cases, and the second largest in terms of money (Table 3). Needless to say, the content of these transfers has changed in keeping with shifts in the finished products themselves. Nonetheless, conscious that new technology could mean the difference between success and failure, Korean businessmen are forever eager in seeking new technology from Japan. On the other hand, from the seller's point of view, one has to constantly weigh the profits one can derive from producing and selling a product with the technology one has developed against the profits that come

Table 3 Technologies Introduced by Korea
Number of Cases

	1962-1981	1982	1983	1984	Total
U.S.	465(23.6)	68(22.1)	77(21.4)	98(22.7)	708(23.0)
Japan	1,123(56.9)	164(53.3)	199(55.3)	213(49.3)	1,699(55.2)
W. Germany	93(4.7)	14(4.5)	20(5.5)	33(7.6)	160(5.2)
Britain	70(3.6)	14(4.5)	13(3.6)	14(3.2)	111(3.6)
France	47(2.4)	16(5.2)	11(3.1)	19(4.4)	93(3.0)
Others	175(8.9)	32(10.4)	40(11.1)	55(12.7)	302(9.8)
Total	1,973(100)	308(100)	360(100)	432(100)	3,073(100)

Note: Percentage shares in parentheses

Royalties Paid by Korea (in \$ million)

	1962-1981	1982	1983	1984 (JanJuly)	Total
U.S.	188.9(33.4)	59.5(51.4)	80.8(54.0)	62.4(56.4)	391.5(41.6)
Japan	203.5(36.0)	29.3(25.3)	37.1(24.8)	29.0(26.2)	299.0(31.8)
W. Germany	22.2(3.9)	2.9(2.5)	3.7(2.5)	4.1(3.7)	32.9(3.5)
France	15.9(2.8)	3.7(3.2)	2.7(1.8)	2.1(1.9)	24.3(2.6)
Others	134.5(23.8)	20.3(17.6)	25.2(16.9)	13.1(11.8)	193.1(20.5)
Total	565.0(100.0)	115.7(100.0)	149.5(100.0)	110.7(100.0)	940.8(100.0)

Note: Percentage shares in parentheses Source: Korean Ministry of Finance

from selling the technology itself. Here the decision is greatly affected by the ability of the owner of the technology to nanufacture and market the product competitively on his own.

In Korea, there is a deep-seated perception that Japan is "dragging its feet" on technology transfers. Such charges ignore the reality that even in technology, the ultimate question is one of price between buyer and seller. There is very little room for ethical considerations in determining whether a particular transaction can go through or not. In this sense, different Japanese businesses possessing the same kinds of technology may not necessarily agree on how to proceed with their sale. In the case of automobiles. for example, some Japanese automakers prefer selling their technology to Korea, while others like dealing with Taiwan.

Furthermore, as recent trends show, some Japanese businesses are even selling production know-know for such high-technology products as semiconductors, optical fiber, compact disks and process control to South Korean firms.

While it is true that businessmen always want new technology, it is also true that some are blinded by the glamor of biotechnology, new materials, VLSIs, super computers and the like, and start shopping around even before the technology has been proven commercially viable. In fact, these are areas where neither Japan nor any other country has completely mastered commercial production. The enterprises which developed these technologies have yet to earn sufficient returns on their development costs. Put another way, technologies that are just in the process of finding commercial application usually command a formidable price; sometimes it is simply impossible to put a monetary value on them.

Technology of its own There are a number of things that Vorce could do to reform the one way

Korea could do to reform the one-way flow in technology transfers with Japan.

The first option, of course, is to under-

In a lifst option, of course, is to undertake its own research and development. In Korea today, overall funding for R&D is still tiny. What the Koreans should do, therefore, is to focus on a number of appropriately chosen projects and concentrate their resources to develop the necessary applied technology.



Korea's trade mission leader: courting the Japanese market

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One field where Koreans can put their R&D money to good work is computer software. At present, the United States leads the world in this field, and its success is often attributed to the creativity and originality of the American people.

As far as individual freedom is concerned. Korea is another country which places few constraints on the individual. and the society as a whole has few taboos. with the singular exception of the duties of "blood relations." In addition, the Koreans have a high regard for the arts and logic much more so than the Japanese. Add to these the Koreans' high educational level, and the social and intellectual environment seems right for taking a serious go at software.

In fact, the U.S. government has already invoked Article 301 of the U.S. Trade Act against some Koreans for exporting pirated computer game programs to the United States. The charge was that they had violated the intellectual property protection law, but the story itself demonstrates that Korea already boasts the talent to take computer programs apart and make identical, albeit legally dubious, copies of them.

In this sense, it is strange that a country which shows such great respect for the arts and displays such strong individuality should still postpone signing the international copyright convention and waver about whether or not it should protect intellectual property. Perhaps the Koreans are not yet aware of their own great potential in the computer software field. It is time that they provide computer programmers with the protection they need as part of upgrading the country's overall industrial infrastructure.

The other option is for the Koreans to get hold of advanced technology selectively from someplace other than Japan. In this way, the Korean economy can rectify in some way its structural reliance on Japan, while making it possible for the Koreans to master foreign technology



Secul capital city of Korea: abuzz with preparations for the 1988 Olympics and beyond

and develop their own technological base. Furthermore, it will strengthen their bargaining position when they find it necessary to buy technology from Japan. Of course, one disadvantage is that, since other potential technology suppliers are not geographically as close as Japan, it would not be as convenient for the Koreans to send their people to these countries for training, or to invite foreign engineers to Korea. Whatever the case, a number of European manufacturers have already sent feelers to Korea to sound out possible technology transfer deals in the form of joint ventures or direct investment

Such trends would be good for Japan too, because Korean access to Western technology would fire up the competitive spirit of Japanese firms and lead to greater Japanese efforts to promote technological development.

omplementary joint

The partners that Japanese enterprises choose for their overseas joint ventures usually follow the pattern set by Japan's external trade. Once upon a time, they tended to be labor-intensive industries like textiles and light industry. Then came electric appliances, and now automobiles and electronics.

In selecting a country for capital investment, Japanese businesses usually take into account site conditions such as water and power supply, as well as the size of the local market, the level of local technology, wage levels and the quality of labor. More recently, they have also looked into the availability of research facilities and what preferential treatment is possible for foreign investment. Today Japanese investments have spread throughout the world, from the United States to China, from Europe to the ASEAN countries.

What sort of attractions does South Korea possess, or should it possess, to attract foreign investment from Japan?

Growth in Japanese investment in South Korea has slowed in recent years (Table 4). But at the same time, both Japan and newly industrialized countries like Korea have gradually enhanced their position as the workshops of the world. Increasingly, multinational corporations are choosing to locate manufacturing units in these countries.

Japan's overseas investment has also shifted, from labor-intensive to capital-intensive industries. What is more, some Japanese businesses are joining hands with their Korean counterparts as a link in their worldwide corporate strategy. This is certainly the case with automakers and electric appliance manufacturers. Such partnerships are giving rise to a horizontally complementary relationship that makes the best use of each other's corporate strengths. In a sense, these partnerships are a sign of how the world has become a single, diversified market. They spell the end of the age when one firm within one country could build all the parts and products it needed for its business, and they herald an age of cooperative division of labor in the production of finished products.

What then do big investors want most from the country where they put their money? The answer is: political stability. South Korea is now bracing itself for a host of political unknowns: the North-South problem, the 1988 Olympics, the 1988 presidential election. How South Korea emerges from these challenging years is a matter of the keenest interest to us all.

Table 4	Tapanese	Investmen	t in	Korea

FY	Global		Korea		Korea's share (%)	
	Case	Value (\$ million)	Case	Value (\$ million)	Case	Value
1970	325	167	77	17	23.7	10.2
1975	513	1,100	37	93	7.2	8.5
1979	759	976	45	95	5.9	9.7
1980	646	1,186	23	35	3.6	3.0
1981	712	3,338	33	73	4.6	2.2
1982	2,548	7,703	26	103	1.0	1.3
1983	2,754	8,145	45	129	1.6	1.6
1984	2,499	10,155	57	107	2.3	1.1
1951-1984	34,313	71,431	1,207	1,548	3.5	2.2

Source: Japanese Ministry of Finance