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The Taxation of the Windfall from Internationalization of the Korean Capital Market

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Abstract

The paper describes the evolution of the corporate stock and bond markets in Korea and the Government's role in this evolution and its policy with regard to internationalization of the capital market. The paper analyzes problems encountered in gradually opening the Korean capital market to foreign participation and suggests alternative methods of taxing the windfall that will be generated. It also discusses the desirability of taxing the capital gains on financial assets as part of the global income tax in Korea.

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Summary

This paper discusses some of the problems encountered in gradually opening the Korean capital market to foreign participation and suggests methods of taxing the economic rent that will be generated. The paper focuses primarily on the growth of the market for corporate stocks and also describes the growth of the corporate bond market, but does not encompass the growth of the government bond market. The paper describes the growth of the Korean capital market during the past quarter century to one of the largest among the developing countries and examines the Government's role in this evolution as well as its policy with regard to internationalization of the capital market. It argues that the Government's policy of gradual internationalization of the stock market inevitably provides a significant windfall to certain foreigners and to Korean shareholders and that this should be partially taxed for the benefit of the Korean people as a whole. The paper provides some illustrative calculation of the possible magnitude of the internationalization windfall and of that portion that might go to foreigners. The internationalization of the Korean capital market during the 1980s primarily took the form of the issuance of closed-end mutual funds traded on foreign stock exchanges. These have been widely adopted by other countries and are now referred to as "country funds." The paper explores the reasons why the closed-end funds investing in Korea have traded at a hefty premium (generally 60-100 percent) above the net asset value of the fund's investments in the Korean Stock Exchange. Chief among these are that the Korean stock market is expected to have a strong performance in the future and that foreigners are not permitted to purchase Korean corporate shares directly.

The paper explores a number of alternative ways of capturing part of the windfall that goes to selected foreigners as a result of the further gradual expansion of indirect investment through such funds. It argues that the best mechanism for capturing the windfall would be to auction the right to any new indirect access by foreigners to the Korean capital markets. As an alternative to this auction mechanism, it explores various tax mechanisms. In addition, it argues that the existence of the internationalization premium adds to an already good case for including in the personal income tax the capital gains on the realized real appreciation in the value of corporate shares held by Korean investors.

I. Introduction and Conclusions

This paper discusses some of the problems the Korean authorities encountered in gradually opening the country's capital market to foreign participation and suggests ways of taxing the economic rent that will be generated. During most of the rapid growth period since the early 1960s, as concessional foreign assistance declined, Korea relied heavily on borrowing from foreign commercial banks. Direct foreign investment was encouraged on a selective basis and remained relatively modest, while portfolio investment was not permitted in any form until the 1980s, with no direct portfolio investment allowed so far, except by foreign residents in Korea. 1/

After briefly describing the recent evolution of the Korean market for corporate shares and bonds and the Government's policy with regard to internationalization of the capital market, this paper will develop a concept called the "internationalization windfall." After establishing the existence of this economic rent, the paper will discuss alternative policies by which the Government could tax part of it. It will be argued that the Government's policy of gradual internationalization of the stock market inevitably provides a significant windfall to foreigners and to Korean shareholders and that this should be partially taxed for the benefit of the Korean people as a whole. The paper will argue that the best mechanism for capturing the windfall would be to auction the right for any new indirect access by foreigners to the Korean capital market. 2/ In order to concentrate on the form that internationalization should take, the paper will not attempt to address the issue of the optimum pace of internationalization or the benefits to be derived from internationalization. It simply assumes that internationalization will take place gradually.

The Korean Government is likely to open the stock market only gradually for a number of reasons: (1) there is a strong demand by foreigners to invest in Korea and this, if granted, would put pressure on the won to appreciate. At a time when there is a current account surplus, there is no need to attract foreign capital inflows; (2) there is a desire to avoid foreign purchase and control of Korean firms; (3) there is a concern that foreign investors would have a speculative, short-term focus, which might lead to destabilizing movements in and out of the Korean market, particularly during any periods of serious

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1/ For a discussion of direct foreign investment, see Bohn-young Koo, "The Role of Direct Foreign Investment in Korea's Recent Economic Growth" in Financial Development Policies and Issues edited by Joong-Woong Kim, pp. 189-236.

2/ The argument presented in this paper is similar to that made for auctioning import quota licenses rather than simply giving away quota rights. Both New Zealand and Australia have auctioned import quota licenses. See Auction Quotas and United States Trade Policy, by C. Fred Bergsten, Kimberly Ann Elliott, Jeffrey J. Schott, and Wendy E. Takacs.

domestic unrest; and (4) it is believed that Korean securities companies need more time to develop before they are in a position to compete with foreign securities firms.

II. Recent Evolution of the Korean Capital Market

The development of the financial sector has generally lagged behind that of the rest of the economy during the rapid economic growth period that began in the early 1960s. Throughout this period the financial market has been repressed by controls on interest rates and government guidance on the allocation of credit. However, the extent of financial repression has varied widely, with relatively low levels of repression in the 1966-69 period and since 1980. There was a significant reduction in controls on interest rates in 1988.

The Korea Stock Exchange (KSE) was established in 1956, but was initially mainly a market for government bonds rather than for corporate stocks. However, under the 1962 Securities and Exchange Law the KSE was reorganized as a corporation as the Government sought to foster trading in corporate shares. This initial effort led to what was aptly called a "speculative orgy." 1/ The volume of transactions in corporate shares increased 200-fold in 1962, compared with the previous year. The majority of trades were in the shares of the KSE and the Korea Securities Finance Corporation. These corporations had extremely low asset values and no earnings, but their shares were bid up to incredible levels. The stock market index of the "security group" skyrocketed to a high of 2,500 in 1962, then plummeted to a low of 66 by January 1964. 2/ The market had to be closed completely for three months in early 1963. The investing public was described as naive, with the market subject to manipulation by a few speculators with large holdings, operating largely on a futures basis. Not surprisingly, the stock market acquired an extremely negative image and languished throughout the rest of the 1960s. During this period, Korean savers placed most of their funds in relatively short-term, fixed-rate bank deposits. Most of the rest of their funds went into real estate or were placed in the unorganized money market, which made short-term, high-interest loans. Given the disrepute of the capital market, the Korean authorities deemed it desirable to make both corporate bonds and corporate shares similar to bank savings deposits. Corporate bonds had to be guaranteed by commercial banks, and corporate shares were issued with dividend rates similar to bank interest rates on savings deposits with a high priority placed on making the dividend payments.

1/ For details on this experience see Korea Development Finance Corporation, Money and Capital Markets in Korea and the Potential for their Improvement, p. 24.

2/ Ibid., p. 25.

The Government took a number of policy measures to develop the capital market during 1968-72. 1/ Corporate tax rates were lowered significantly for publicly held corporations. Dividends were exempt from personal income taxation, except those of large stockholders, and interest income from corporate bonds, as well as capital gains on both corporate shares and bonds, were made tax exempt. 2/ At the same time, a high tax rate was placed on capital gains from real estate in order to discourage this form of investment. The incentives on the demand side, which also included forcing companies to issue new shares at below-market prices and to pay high dividends similar to bank time-deposit interest rates, were successful and resulted in a significant increase in the stock market composite index in 1971 and 1972. To increase the supply of stocks, the Public Corporation Inducement Law was passed in 1972 to empower the Minister of Finance to designate eligible corporations and force them to go public, primarily by threatening to restrict their access to bank credit. Government intervention in the stock market has been substantial up until now. The major tools for stabilizing the stock market have been changes in the margin transaction ratio and the credit available for such transactions, as well as urging government institutional investors to buy or sell stock.

By all measures the stock market expanded significantly during 1971-78: the number of listed companies increased from 50 at the end of 1971 to 356 at the end of 1978; the composite stock price index increased from 100 at the beginning of 1972 to an average of 574 in 1978 (dividends averaged about 13 percent a year during this period), and the total market value of the stocks listed on the KSE increased from W 109 billion at the end of 1971 (equal to 3.1 percent of GNP) to W 2,893 billion at the end of 1978 (equal to 12.1 percent of GNP) (Table 1). However, a large part of this expansion was reversed during 1978-83, as the second oil shock, the assassination of the Korean President, a slowing of export growth, and concern about the high level of foreign debt took their toll. During this period, the number of companies listed on the KSE declined to 328, the composite stock price index declined by about 16 percent, and the total market value of the stocks listed on the KSE declined to 5.7 percent of GNP. Relative to Korea's level of economic development in 1983, its stock market appeared to be one of the most underdeveloped in the world.

Even in 1985, after a considerable recovery in the Korea stock market, the total stock market capitalization as a percentage of GNP was less than 9 percent, compared with 17 percent in the Philippines,

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1/ For details on these measures see Il Sakong "An Overview of Corporate Finance and the Long-Term Securities Market" in Planning Model and Macroeconomic Policy Issues, edited by Chul Kyo Kim, pp. 228-62. Also, D. C. Cole and Young-chul Park, Financial Development in Korea, 1945-78.

2/ At present, dividend and interest income is taxed at preferential rates, while capital gains on corporate shares and bonds are tax exempt.

Table 1. Korea Stock Exchange Statistics, 1963-89

End of Year	Number of Companies	Number of Shareholders 1/ (thousands)	Total Market Value (W billions)	Total Market Value as a Percentage of GNP	Turnover Percentage of Market Value	Composite Stock Price Index 2/ (Jan. 4, 1980=100)
1963	15	15	10	...	259	...
1964	17	14	17	...	158	...
1965	17	15	15	...	165	...
1966	24	32	20	...	57	...
1967	24	33	38	3.0	74	...
1968	34	40	64	3.9	48	...
1969	42	54	87	4.0	55	...
1970	48	76	98	3.6	46	...
1971	50	82	109	3.2	37	...
1972	66	103	246	5.9	39	...
1973	104	200	426	8.0	45	...
1974	128	200	533	7.0	38	...
1975	189	291	916	9.1	48	90
1976	274	568	1,436	10.4	54	104
1977	323	395 3/	2,351	13.2	78	137
1978	356	963	2,893	12.1	66	145
1979	355	872	2,609	8.5	53	119
1980	352	735	2,527	6.9	44	107
1981	343	696	2,959	6.5	86	131
1982	334	682	3,300	6.3	66	127
1983	328	708	3,490	5.7	54	121
1984	336	723	5,148	7.3	74	142
1985	342	772	6,570	8.4	66	163
1986	355	1,411	11,995	13.2	107	273
1987	389	3,102	26,172	24.8	105	525
1988	502	8,541	64,543	52.2	140	907
1989(June)	535	...	65,204	...	...	942 4/

Source: Korea Stock Exchange, Stock.

1/ What is recorded is actually the number of accounts. Since many shareholders have multiple accounts, the actual number of shareholders is widely believed to be only one half to one third of the figures given.

2/ Because of several changes in the manner of calculating the price index and of the base years, no attempt has been made to calculate a consistent index on a single base for the whole period, and only data after 1977 are shown.

3/ This number appears to be a mistake and the actual number was probably much larger.

4/ September 1989.

21 percent in Taiwan Province of China, 55-60 percent in Singapore and Malaysia, and about 100 percent in Hong Kong and Japan. It was only slightly ahead of India, with an 8 percent ratio, and Thailand, with a 5 percent ratio. 1/ However, by the end of 1987, the ratio of the total stock market capitalization to GNP in Korea had increased to 25 percent and by the end of 1988, with the sale of government-held shares in the Pohang Iron and Steel Company, a record volume of new issues, and a further sharp increase in share prices, the ratio increased to 52 percent. By end-September 1989, the total market capitalization in Korea was equivalent to almost US$140 billion. In absolute terms, this was second only to Taiwan Province of China (US$244 billion) among developing countries. However, as a percentage of GNP, it was still lower than in Hong Kong, Malaysia, and Singapore.

From the beginning of 1984 to December 1988, the Korean stock market experienced a spectacular boom. The total market value of the shares listed on the KSE increased about 18-fold. The KSE composite index increased from 121 at the end of 1983 (January 1980 = 100) to 907 at the end of 1988. The number of companies listed on the exchange increased from 328 at the end of 1983 to 502 as of the end of December 1988. The average price earnings ratio of Korean stocks increased from 4.9 in 1983 to 21.6 in 1987 and over 26 in 1988 (Table 2). In 1988, the price earnings ratios in the other Asian newly industrializing economies were as follows: Hong Kong (12), Singapore (22), and Taiwan Province of China (46). The ratio in Japan was 58 and in Malaysia it was 28, while in most other developed and developing countries it was below 16 (Table 3). While considerable caution must be exercised in making international comparisons of price-earning ratios, because of different accounting conventions, it can nevertheless be deduced that the average price earnings ratio of Korean stocks has shifted from being one of the lowest in the world in the early 1980s, to being one of the highest in the world since 1987. The fact that Korea had the highest real per capita GDP growth rate in the world during the 1986-88 period contributed to the sharp growth in corporate profits and to a sharp rise in the price-earnings ratio. 2/

1/ A. Rowley, Asian Stock Markets, p. 10.

2/ The price-earnings ratio for Korea used here is on a weighted capitalization basis. The average price earnings ratio of the stocks listed on the KSE is a simple average, rather than the weighted average used by the Tokyo and New York Stock Exchanges. Since a number of large firms have high price earnings ratios, the average ratio for Korea yields a price earnings ratio which is about one half the weighted average ratio. Hence, it makes a big difference which of the Korean ratios is used in making comparisons with price-earnings ratios in other countries. The weighted capitalization measure of the price-earnings ratio for the KSE stocks is a better measure and is more comparable to that used in most other countries.

Table 2. Average Price-Earnings Ratio and Dividend Yield of Companies Listed on the Korea Stock Exchange, 1972-89

	Price Earnings Ratio of All Listed Companies 1/	Price Earnings Ratio of Companies Earning Profits		Average Dividend Yield 1/
		Simple Average	Weighted Average 1/	
1972	...	7.2	...	7.5
1973	...	9.4	...	13.8
1974	...	4.8	...	13.7
1975	...	5.3	...	13.7
1976	...	6.6	...	12.7
1977	...	5.9	...	14.2
1978	...	5.9	...	12.9
1979	...	3.8	...	17.8
1980	...	2.6	...	13.7
1981	...	3.1	...	10.0
1982	...	3.4	...	8.2
1983	4.6	3.8	4.9	5.9
1984	5.0	4.5	8.0	4.2
1985	5.9	5.2	12.0	4.9
1986	9.4	7.6	12.8	3.5
1987	11.4	10.9	21.6	2.1
1988	11.6	11.2	26.6 2/	1.4
1989 (June)	14.2	13.7	...	1.4

Source: Korea Stock Exchange, Stock.

1/ Weighted by the market value of the stocks.
2/ In July 1988 based on 1987 earnings.

Table 3. Comparison of Price-Earnings Ratios, Dividends, and Turnover Ratios, 1982 and 1988

	Price Earnings Ratio		Dividend Yield		Turnover Ratio 1/	
	1982	1988	1982	1988	1982	1988
Korea 2/	3.7	13.6	11.5	2.1	60	90
Australia	11.1	10.3	7.7	4.9	14	17
Greece	9.0	11.0	12.2	5.6	2	7
Hong Kong	8.6	11.7	6.3	4.3	20	31
Japan 3/	25.8	58.4	1.6	0.5	37	61
Malaysia	19.9	28.0	5.2	2.9	10	11
Mexico	2.7	5.0	11.4	3.0	28	33
Philippines	7.8	9.0	10.1	2.1	11	21
Singapore	20.9	22.0	5.7	1.6	7	19
Spain	6.1	15.6	13.5	4.0	9	23
Taiwan Province of China	16.4	46.1	4.9	0.8	66	233
Thailand	8.5	12.0	11.8	3.8	19	64
United States 4/	14.7	12.7	5.2	3.6	33	61

Sources: Euromoney Publications, The GT Guide to World Equity Markets; and IFC, Emerging Stock Markets Factbook, 1989.

1/ Ratio of value of trades during year to total value of all listed stocks at the end of the year. The calculation of this ratio differs from that in Table 1, which is calculated as the sum of the monthly turnover ratios.

2/ The average price-earnings ratio and the average dividend yield for Korea are based on simple averages as calculated by the Korea Stock Exchange and exclude all loss making companies. On a weighted average basis the price-earnings ratio for Korea was about 27 percent in 1988 (no estimate is available for 1982). The data for most of the other countries appear to be on a weighted-average basis.

3/ First section of Tokyo Stock Exchange.

4/ New York Stock Exchange.

While this paper will focus on some issues relating to internationalization of the stock market, a brief description of the evolution of the corporate bond market is useful. Corporate bond financing was little used until 1972, when a system of bank guarantees for corporate bond issues was introduced. Even in 1988, about 97 percent of corporate bonds were guaranteed by banks, which meant effectively that they were converted into a means of indirect bank borrowing. The real risk in holding corporate bonds is not the bankruptcy of the company, but the bankruptcy of the guaranteeing bank. Since all guaranteed bonds are backed by similar large commercial banks, interest rates on bonds issued by different corporations do not differ much.

The total amount of corporate bonds listed on the KSE increased sharply from zero in 1971 to W 1.0 trillion in 1979 and reached almost W 10.0 trillion at the end of 1987. Although the total value of listed corporate bonds is much less than the total market value of corporate shares, new corporate bond issues provided far more new funds to corporations during the 1980s than did new issues of corporate shares. Nonresident foreigners have not been permitted to purchase Korean corporate or government bonds, although in recent years, a few Korean companies have been allowed to sell convertible bonds in foreign markets.

III. Internationalization of the Korean Capital Market

In January 1981 the Korean Government announced its first Capital Market Internationalization Plan, which specified four stages of gradual movement toward full integration of the domestic and foreign capital markets. These stages and the timing originally envisaged were as follows:

1. Stage 1 (1981-84)

Allow foreign investors to invest indirectly in Korean securities. As a launching step, the Government allowed two domestic securities companies to set up international investment trust funds in Europe and allowed a closed-end fund (the Korea Fund) to be established in the United States. In addition foreign securities firms were encouraged to establish representative offices in Korea, while domestic securities firms were encouraged to establish branches in foreign countries.

2. Stage 2 (from 1985)

Allow limited direct foreign portfolio investment in domestic securities and the issuance and listing of Korean securities in foreign capital markets.

3. Stage 3 (late 1980s)

Relax limits on direct foreign investment in domestic securities. Allow domestic firms to raise equity funds in external markets with the prior approval of the Ministry of Finance. Also allow foreign security firms to conduct security business in Korea and domestic security firms to conduct overseas business.

4. Stage 4 (early 1990s)

Complete liberalization of the Korean capital market by allowing Korean investors to invest in foreign securities and foreign securities to be listed in the Korean capital market.

The plan for capital market internationalization was motivated by various considerations. First, it was in line with the Korean Government's efforts in 1979 and 1980 to pursue substantial liberalization of foreign trade, foreign direct investment, and foreign exchange transactions. It was part of the general effort to liberalize the economy to create a more competitive economic environment. It was believed that opening the capital market would help accelerate modernization of the domestic capital market by introducing foreign competition and new forms of financing to the security business. It was expected that permitting foreign portfolio investment in Korea would boost the demand for domestic securities, which had remained sluggish during 1979 and 1980. At the time the capital market liberalization was announced, Korea was experiencing an extraordinarily high current account deficit, almost entirely financed by reliance on borrowing from foreign banks. Liberalization of the domestic capital market was considered to be a necessary condition for Korea to join the Organization for Economic Cooperation and Development (OECD) of which, at that time, Korea expected to become a member country by the late 1980s.

The progress in capital market internationalization between 1981 and May 1988 is shown in Tables 4 and 5. There appeared to be two major concerns behind Korea's cautious internationalization of its capital market. To ensure first, that domestic firms not be taken over by foreigners; and second, that the scope of potential inward or outward capital flows not be so large as to seriously disrupt the stability of the domestic capital market or the won exchange rate. In light of these concerns, it was considered desirable to proceed gradually with internationalization of the capital market.

The sharp improvement in Korea's current account balance in the second half of the 1980s was not envisaged at the time the four-step internationalization plan was announced in 1981. 1/ Hence, it was originally envisaged that the purchase of Korean shares by foreigners would be liberalized more quickly than the purchase of foreign shares by Koreans. It was originally planned to have complete liberalization of inward flows of capital by the late 1980s and to remove restrictions on direct purchases of Korean shares by foreigners. However, because of the large current account surpluses and the accompanying problem of excessive money supply growth, the authorities have not allowed any direct portfolio purchases of Korean stocks, except for the purchase of convertible bonds issued by four large Korean companies; moreover, only very modest indirect inflows of portfolio capital were permitted in 1986-88. In light of the large current account surpluses the authorities have proceeded more slowly with the liberalization of inward flows of portfolio investment than had been originally envisaged. No plans have yet been announced to allow foreign firms to be listed on the Korea Stock Exchange or to allow Korean firms to be listed on foreign stock exchanges. While the planned liberalization of the inflow of portfolio investment has been delayed, the planned outflow of foreign investment has been speeded up. In the second half of 1988, an investment trust was set up to facilitate indirect stock purchases in foreign markets by Korean institutional investors.

1/ In 1980 the current account deficit was $5.3 billion (9.5 percent of GNP), while in 1987 the current account surplus was $9.8 billion (8.0 percent of GNP).

Table 4. Korea: Progress in Capital Market Internationalization

(In chronological order)

Year	Month	Name of entity established	In millions of U.S. dollars
1981	11	Korea International Trust	25
		Korea Trust	25
1984	5	Korea Fund	60
1985	3	Korea Growth Trust	30
1985	4	Seoul International Trust	30
		Seoul Trust	30
1985	12	Korea Small Companies Trust	2
		Samsung Convertible Bond (CB) issued	20
1986	3	Korea Emerging Companies Trust	3
1986	5	Daewoo Heavy Industry CB issued	40
1986	6	Korea Fund capital base increased	40
1986	7	Yukong CB issued	20
1987	3	Korea Europe Fund	30
1987	8	Gold Star CB issued	30
1988	7	Korea Europe Fund capital base increased	30
1988	7	Saehan Media CB issued	30

Source: Ministry of Finance.

Table 5. Korea: Investment by Foreigners in Korean Securities, 1981-88 1/

(In millions of U.S. dollars)

International Trust Funds (7 funds)	145
Korea Fund	100
Korea Europe Fund	60
Convertible bonds issued abroad (5 issues)	140
Total	445

Source: Ministry of Finance

1/ Value of the initial offerings, not present market value.

In early December 1988, Korea announced a revised program for internationalization of the securities market during the next four years:

a. The existing overseas funds for indirect foreign investment in the Korean stock market, including the Korea Fund, will be allowed to expand. The Korea Fund was to be allowed to increase its capital in 1989. Depending on the international capital market situation, there will also be an expansion of beneficiary certificates for foreigners issued by the Korean-managed international trusts.

b. Korean companies will be allowed to issue more convertible bonds abroad from 1989 and they will be allowed to issue bonds with warrants and depository receipts in 1989-90.

c. Foreigners who have bought convertible bonds in Korean companies will be able to convert them to equity, sell the equity, and invest it in the Korean stock market beginning in 1991.

d. Starting in 1992, foreigners will be allowed to invest directly in the Korean stock market, although initially there will be limits on individual and total foreign purchases as well as on the foreign holdings of individual stocks.

e. Korean institutional investors will be allowed to expand investment in overseas securities markets from 1989, all business enterprises will be allowed to make such investments from 1990, and individual investors will be allowed to invest in foreign stocks from 1992.

f. Foreign brokerage firms will be allowed to own as much as 40 percent of Korean securities firms starting in 1989, compared with the current limit of 10 percent.

g. Foreign securities firms will be allowed to set up branches in the country and to form joint ventures with Korean securities firms starting in 1991.

These measures were in line with general expectations regarding the likely pace of internationalization. The extent of liberalization in 1992 has not been announced in detail, but it appears that complete liberalization will not take place until later in the decade.

Since June 1981, seven international trust funds for foreign investors have been set up with a total initial investment amount of \$145 million. Foreigners can purchase beneficiary certificates in the trust funds, which are managed by Korean security investment trust companies. These are open-ended funds, 1/ which invest in Korean corporate shares and, in some cases, partially in bonds. While the beneficiary certificates are not listed on any stock exchanges, they are traded in informal markets arranged by a few foreign securities companies. Appendix Table 1 presents details of five of these investment trusts.

Two closed-end mutual funds 2/ with foreign managers have also been established. The Korea Fund was established in August 1984 with an initial capital base of $60 million, which was increased by $40 million in May 1986. The Korea Fund is listed on the New York Stock Exchange. The Korea Europe Fund was established in London in March 1987 with an initial capital base of $30 million, which was increased by $30 million in July 1988.

In addition to the above special funds, five Korean companies have been allowed to issue convertible bonds to foreign investors. The first convertible bond was issued by Samsung Electronics in December 1985. Appendix Table 2 gives details of three of these issues. In November 1985, the Ministry of Finance announced guidelines for allowing the largest Korean firms to issue bonds in the international bond market, which would be convertible into stock. The issuing companies were required to have assets of at least W 50 billion, to meet certain rating criteria of the Korean securities regulators, and to have a share price corresponding to complicated formula that sought to ensure that the company had had a strong performance in the recent past. The announced criteria limited the field of potential issuers to 14 major companies. Foreign investors were to be restricted to not more than 15 percent of

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1/ Open-end funds, commonly called mutual funds, are management investment companies that stand ready to redeem shares at or near net asset value at all times. All such companies are open in at least one direction, since outstanding shares may be redeemed at the shareholder's discretion. Hence the number of shares outstanding tends to fluctuate from day to day, with corresponding changes in the fund's investment portfolio. Net asset value refers to the value per share of the investment fund's financial assets in the form of cash, bonds or stocks, valued in the local currency of the country of the investment converted into foreign currency at the official exchange rate effective at the time of measurement.

2/ Closed-end funds are investment companies that do not stand ready to redeem shares continuously. Hence, the total number of shares outstanding does not change from day to day. Shares of closed-end funds are traded through brokers (usually on organized stock exchanges) at prices agreed upon by the parties involved. There is no necessary relationship between the price of such a share and its net asset value. Since the fund does not stand ready to redeem shares or to buy them in the open market at net asset value, there is no obvious floor under the price and since new shares cannot be purchased from the fund at the net asset value, there is no obvious ceiling.

the paid-in capital of the companies issuing convertible bonds, with a single foreigner allowed to hold up to 3 percent of the paid-in capital.

Foreigners have not been permitted to make any direct purchases of either corporate bonds or government bond issues in Korea. While the internationalization of portfolio investment has proceeded slowly, the Korean authorities have taken a number of measures to liberalize direct foreign investment in Korea, as well as to facilitate direct investment by Korean firms in foreign countries. In 1985, three foreign securities companies were allowed permission to purchase up to 10 percent of the equity of certain large Korean securities firms. The motivation for permitting such purchases was to facilitate staff training and managerial assistance from foreign securities companies and to increase the international business of the Korean securities companies.

The performance of foreign portfolio investment in Korea has been remarkable, with every type of investment yielding high returns (Table 6). In light of this performance and that of the Korean economy, it is not surprising that considerable excess demand by foreigners for participation in the Korean capital market has emerged. The magnitude of this demand is clearly reflected in the extent to which the stock in the Korea Fund has traded at high premiums over its net asset value. When they were initially issued in 1984, the Korea Fund shares traded at a premium in the 10-20 percent range, which increased gradually to reach a remarkable 157 percent at the end of August 1987, 1/ before the stock market crash in New York in October 1987. No other country's closed-end fund (or any other kind of closed-end fund) had ever reached premiums anywhere close to this level, with the exception of the Taiwan Fund, which reached an even higher premium at some points during 1987. Table 7 gives a comparison of the premiums of all of the country open-end funds traded in the New York stock markets during 1988.

Although all of the stock markets in the world that permit free capital flows dropped by 25-50 percent in October 1987, the Korean stock market composite price index actually increased by 5 percent. Although the KSE composite price index and the net asset value of the Korea Fund shares remained almost unchanged, the price of Korea Fund shares dropped sharply (even more than the Dow-Jones industrial average) so that the premium over net asset value was reduced to only 61 percent by the end of October. In the subsequent year, the Korean stock market was one of the most buoyant in the world, with the composite price index increasing by about 81 percent between end-October 1987 and end-December 1988. While the net asset value of the Korea Fund increased sharply, the price of Korea Fund shares increased slightly more, increasing the premium over net asset value to 66 percent as of end-December 1988. This premium increased further to 120 percent as of end-September 1989.

1/ The Korea Europe Fund reached an even higher premium of 194 percent at the end of August 1987.

Table 6. Performance of Portfolio Foreign
Investment and Convertible Bonds

(Prices in U.S. dollars)

Name and issue date	Issue Price	End 1985	End 1986	End 1987	End May 1988	December 14, 1988
Korea International Trust (11/81) 1/	9.94	...	21.5	34.4	43.9	59.2 2/
Korea Trust (11/81) 1/	14.95	...	27.8	40.4	51.3	67.5 2/
Seoul International Trust (4/85) 1/	9.95	...	17.6	26.0	32.1	42.0 2/
Seoul Trust (4/85) 1/	9.97	...	16.7	24.3	30.8	39.2 2/
Korea Growth Trust (3/85) 1/	9.94	...	16.4	25.1	31.6	40.5 2/
Korea Small Companies Trust (12/85) 1/	5.59	...	7.8	12.0	14.4	...
Korea Emerging Companies Trust (3/86) 1/	5.65	...	6.8	9.6	12.5	...
Korea Fund (5/84) 3/	12.7	17.6	34.0	55.1	80.0	81.4
Korea Europe Fund (4/87) 3/	10.71	...	...	19.0	29.5	...
Samsung (12/85) 3/	100	98.5	234.5	222.5	330.0	395.0
Daewoo (5/86) 3/	100	...	111.9	117.9	205.0	295.0
Yukong (7/86) 3/	100	...	101.0	122.5	185.0	195.0
Goldstar (8/87) 3/	100	...	...	92.5	105.0	125.0

Sources: Ministry of Finance; and Ssongyong Investment and Securities Company Limited.

1/ Net asset values.
2/ Market prices as of December 14, 1988 were approximately 45 percent above the net asset values.
3/ Market prices.

Table 7. Premiums or Discounts of Country Mutual Funds Listed in Stock Exchanges in the United States

(Percentage difference between share price and net asset value)

Name of Fund	May 27, 1988	December 9, 1988	June 16, 1989
Brazil	-19	-34	-44
First Australia	-18	-20	-19
First Iberian	-10	-20	...
France	-11	-17	-9
Germany	-7	-9	-15
Helvetia	-12	-15	-13
Italy	-25	-18	-19
Korea	+84	+65	+100
Malaysia	-17	-26	-12
Mexico	-22	-34	-20
Taiwan	+58	-9 1/	-6
Thai	+42	+18	+15
United Kingdom	-22	-16	-16

Source: Wall Street Journal.

1/ Data for December 2.

IV. The Korea Fund and Korea Europe Fund Premium

It is difficult to discern what determines the premium on the Korea Fund. 1/ Most closed-end stock funds, including all of the country closed-end funds for countries with open capital markets, sell at a discount, which typically ranges between 10 and 35 percent (see Table 7). 2/ This appears to reflect the fact that the shareholder has

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1/ Most of the discussion in this section will be based on the Korea Fund which has been in existence longer, but the nature of the issues raised is essentially the same for the Korea Europe Fund and the seven international trust funds.

2/ In September-October 1989 after this paper was written, closed-end country funds became the subject of an investment mania, which almost defies explanation and indicates that capital markets at times can be highly inefficient. As of September 1, 1989, the only closed-end country funds listed on American stock exchanges trading at a premium were Korea (105 percent), Spain (23 percent), India Growth (16 percent), and Thai (15 percent). On the same date the Germany Fund traded at a discount of 9 percent and the Italy Fund at a discount of 18 percent. At that point the premiums on the Korea Fund and the Thai Fund were not unusual, but the 23 percent premium on the Spain Fund was highly unusual in that no closed-end country fund for an open capital market had ever traded at a premium of this magnitude. However, this was just the start of the bizarre developments to follow. As of October 6, a larger number of country funds were trading at premiums as follows: Spain (145 percent), Korea (120 percent), Thai (48 percent), First Iberian (Spain and Portugal, 49 percent), Austria (38 percent), Germany (27 percent), India Growth (17 percent), Italy (10 percent), Malaysia (10 percent), and Helveta (Swiss, 1 percent). Press reports attributed the sharp increase in the premium of country funds to the recommendation of one or more Japanese brokerage firms to invest in the country funds of EEC members (especially Spain which was also expected to benefit from the Olympics in 1992) and certain emerging countries' markets (including Thailand and Malaysia). Given that it is possible for foreigners to purchase stock directly in Spain there would appear to be no good reason to pay more than 10 percent premium for the diversified portfolio and simplified transactions obtainable by purchasing shares in the Spain Fund. It was not surprising that as the premium reached unprecedented (and seemingly irrational) levels significant excess demand emerged to sell the Spain Fund short. The inability to execute orders to sell a stock short is highly unusual. (The supply of Spain Fund shares available to sell short was limited because relatively few shares were purchased on margin.) With the dramatic changes in Eastern Europe at the end of 1989 there was a second round of "country-fund" mania especially in neighboring markets, again according to press reports based on Japanese brokerage firm recommendations. As of January 12, 1990, the following premiums existed: Germany Fund (85 percent), Korea Fund (75 percent), Austria Fund (66 percent), Thai Fund (66 percent), Malaysia Fund 66 percent, India Growth Fund (48 percent). The analysis in the paper assumes that these high premiums on country funds in open capital markets will not persist.

no way of redeeming his stock at its net asset value, and the managers of the closed-end fund, who receive annual fees for operating the fund, have no incentive to liquidate the fund so that the shareholders can attain the difference between the share price and the net asset value. The annual managerial fees, as well as the initial underwriting charges, associated with the fund tend to lead to a discount equal to these fees as a percentage of the value of the portfolio of the fund. Since all new funds involve underwriting charges (typically 7 percent), they all have to be sold at an initial premium over the net asset value (i.e. the cash left over after underwriting charges are deducted). However, these negative features should be at least partly offset by the fact that the holder of the shares obtains a diversified portfolio, as well as professional managerial expertise in choosing stocks in a foreign market, and avoids the foreign exchange conversion costs of direct purchases in a foreign market.

The Korea Fund shares trade at a premium over their net asset value mainly because foreigners not resident in Korea cannot purchase Korean shares directly, and because the Korean stock market has been appreciating more rapidly than most stock markets and is expected to continue to do so. The extent of the premium would seem to depend on two major factors: first, the expectation of future increases in the value of shares in the Korean stock market relative to expected returns on investment in other capital markets and, second the magnitude and duration of restrictions on direct purchases of Korean stocks. The premium would be expected to virtually disappear once complete internationalization of the Korean stock market takes place.

In light of the long-term and recent performance of the Korean economy and the performance of the Korean stock market, it would be reasonable to expect the Korean stock market to have a superior performance in the future. Although Korean corporations' price-earnings ratios have increased sharply in recent years, they do not appear to be unreasonably high in light of the superior performance of most Korean corporations. The Korean Government clearly has modified its initial plan of capital market liberalization and, as indicated above, has announced a revised program of liberalization during the 1989-92 period. However, the extent to which foreigners will be able to make direct purchases starting 1992 has been left vague.

A third factor, of considerably less importance than the other two, contributing to a premium for the Korea Fund is the desire of international investors to further diversify their portfolios. Thus, there might be some willingness to pay a premium, even if the performance of the Korean stock market was expected to be equal to the rest of foreign investors' portfolios. However, it seems difficult to attribute the sharp reduction in the premium in the Korea Fund in the aftermath of the October 1987 stock crash, in most of the rest of the world, to changes in any of the above factors. It is possible that investors expected the stock market crash to lead to a reduction in the relative economic growth of the United States and Japan (Korea's main export markets) or to a general reduction in economic growth or world trade which would hurt Korea more than most countries. 1/ However, the relative stability of the Korean stock market indicated that Korean investors did not envisage any serious consequences to the Korean economy from the external stock market declines. Whatever its reasons, this dramatically different response to the valuation of Korean stocks between foreign investors and Korean investors appears to justify the concern of government officials that significantly increased direct participation in the Korean stock market by foreigners might lead to increased rather than reduced volatility in the face of major disturbances. Both the general sharp stock price decline in the major markets and the change in the price of the Korea Fund relative to its net asset value call into question the widely believed efficiency of capital markets.

Table 8 reveals that there was a sharp reduction in the premium (or increase in the discount) in the price of the shares of other developing or developed country funds during October 1987, after the crash in all of the major world markets. The buoyancy of U.S. stock values seems to significantly affect the premium of foreign country funds traded in the United States. Just as investors are willing to support higher price-earning ratios of U.S. corporations during buoyant periods, so they are willing to pay higher premiums for foreign country funds. The premiums on five of the six country funds shown in Table 8 increased between late-October 1987 and late-May 1988; the only exception was the Malaysia Fund where the discount became significantly larger, perhaps because of political factors.

1/ It is also possible that foreigners were more troubled by the political uncertainty resulting from the Presidential elections held on December 16, 1987. The low point in the Korea Fund premium of 30 percent was reached on December 4, shortly before the elections. However, the political uncertainty was already evident in August and September 1988, when the premium was very high and, if anything, the probability of the opposition gaining power diminished during October and November as it became increasingly clear that the main opposition parties would not be able to agree to support a single candidate.

Table 8. Korea: Comparison of Country Fund Premiums

	Difference Between Stock Price and Net Asset Value			Percentage Change in Price Between:	
	Oct. 9 1987	Oct. 23 1987	May 27 1988	Oct. 9 & Oct. 23	Oct. 9 & Oct. 28
Korea	137	70	84		
Taiwan	35	12	58		
Malaysia	22	-4	-17		
Mexico	-29	-42	-22		
Italy	-13	-27	-25		
United Kingdom	-19	-34	-21		
Dow-Jones Industrial Average			-21	-26	
Korea Fund				-28	-48
Korea Stock Exchange Composite Index				+1	-1

It is worth taking a somewhat closer look at the evolution of the premium on the Korea Fund shares since it was formed in 1984. As indicated earlier, it is normal for closed-end funds to trade initially at a 7 percent premium over net asset value, because of underwriting costs. Between its issue date in August 1984 and July 1985, the Korea Fund premium ranged between 10 percent and 30 percent; it has never traded at a discount (Table 9). During this period the KSE composite stock index remained almost stable. As indicated earlier, after a boom in 1972-78, the Korean stock market was lethargic during 1978-84. The only encouraging sign was an increase of about 10 percent in the stock market index during the early months of 1984. In brief, the performance of the Korean stock market for a number of years up until about November 1985 had been poor and gave little basis for a high premium for the Korea Fund shares. In fact, it was surprising that the premium remained in the 10-30 percent range. However, between October 1985 and August 1986, the KSE share price index almost doubled, and the net asset value of the Korea Fund more than doubled. During this period, the Korea Fund premium ranged between 19 and 70 and averaged about 43. Between August and December 1986, there was little change in the KSE composite price index or in the net asset value of the Korea Fund, and the Korea Fund premium averaged about 47. The KSE share price index increased by 78 percent during the first seven months of 1987. Even though the net asset value of the Korea Fund increased by only 40 percent during this period, the premium of the Korea Fund increased to a peak of 157 at the end of August 1987. Not only had the Korean stock market performed well during this period, but stock markets throughout the world had also performed exceptionally well.

It was not surprising that the Korea Fund premium reached a peak following a period of sustained strong stock market performance in Korea as well as in most of the major world markets, although it is difficult to understand why the premium reached such a high level. Moreover, as indicated earlier, the sharp drop in the premium from 157 percent at the end of August 1987 to 61 percent at the end of October and 30 percent in early December was surprising, given that the Korean stock market actually increased in value during this period. Not only was this change in the premium difficult to understand, but many other large month-to-month changes in the premium are equally difficult to explain by the fundamentals. Since there were no significant changes in the authorities' capital market liberalization policies until December 1988, this would not appear to be a factor causing month-to-month changes in the level of the premium. However, it was probably true that capital market internationalization progressed more slowly during this period than was generally expected, and this might have been one cause of the gradual increase in the level of the premium. The two other major factors I have mentioned--the performance of the Korean stock market, which is probably perceived as an indication of its future performance, and the performance of the stock markets in the United States, and perhaps other major markets-- have both significantly affected the level of the premium. However, changes in the buoyancy of the U.S. market appear to have been the dominant influence.

Table 9. Korea Fund and Korea Europe Fund Data, 1984-89

(U.S. dollars)

End-Month	Korea Fund Net asset value	Korea Fund Market price	Korea Fund Percentage market premium	Korea Europe Fund Percentage market premium
1984/8	11.12	13.250	19	...
9	11.21	14.375	28	...
10	11.29	14.625	30	...
11	11.39	14.625	28	...
12	11.46	14.125	23	...
1985/1	11.57	13.000	12	...
2	11.45	12.625	10	...
3	11.38	14.000	23	...
4	11.17	13.500	21	...
5	11.24	14.250	27	...
6	11.49	14.750	28	...
7	10.95	15.000	45	...
8	10.87	14.250	31	...
9	10.83	13.500	31	...
10	11.10	14.000	26	...
11	12.13	16.750	38	...
12	13.42	17.625	31	...
1986/1	14.40	17.125	19	...
2	15.83	26.875	70	...
3	17.89	28.625	32	...
4	17.75	29.375	65	...
5	21.76	32.250	48	...
6	22.36	33.375	49	...
7	24.26	33.500	38	...
8	23.52	37.375	59	...
9	23.11	36.750	59	...
10	22.25	31.500	42	...
11	24.01	32.500	35	...
12	24.49	34.750	42	...
1987/1	28.62	44.000	54	...
2	29.49	63.500	81	...
3	33.48	63.500	90	...
4	30.61	62.750	105	155
5	31.94	65.750	106	157
6	33.36	70.125	110	124
7	34.22	85.750	151	149
8	32.52	83.500	157	194
9	32.56	74.875	130	162
10	32.77	52.625	61	35
11	32.30	45.000	39	42
12	33.85	55.125	63	52
1988/1	37.61	63.000	68	79
2	37.29	81.250	118	93
3	37.48	71.500	91	100
4	39.31	72.000	83	91
5	41.57	76.500	84	87
6	42.22	70.250	66	80
7	42.02	74.875	78	60
8	37.60	66.625	72	56
9	37.60	60.000	60	49
10	41.85	66.000	58	58
11	13.80 1/	22.250 1/	61	54
12	15.93	26.500	66	69
1989/1	16.45	26.500	61	72
2	17.23	30.375	76	86
3	18.87	35.500	88	109
4	17.44	33.000	89	93
5	17.66	34.625	96	108
6	16.87	31.625	88	99
7	16.40	33.625	105	96
8	19.27	39.500	105	141
9	19.13	42.00	120	137

Sources: Daewoo Research Institute; Wall Street Journal; and International Finance Corporation.

1/ Data starting in November 1988 reflect a 3-for-1 split in Korea Fund shares.

The performance of the Korea Fund relative to the changes in the KSE composite share price index does not appear to have much influence on the magnitude of the premium over the net asset value. The Korea Fund generally did better than the market index up until 1986, but it significantly underperformed relative to the market index during 1987. During the six months before the premium reached a peak of 157 percent in August 1987, the net asset value of the Korea Fund's shares increased by only 10 percent, while the KSE composite share price index increased by 41 percent.

V. The Internationalization Windfall

Despite the sharp increase in the prices of Korean stocks during the past three years and a sharp rise in the average price-earnings ratio, the hefty premium in the price of Korea Fund shares indicates a strong foreign interest in investing in the Korean stock market and suggests that, from an international viewpoint, Korean stocks are still significantly underpriced. There is no way to measure the extent of this underpricing because the premium of the Korea Fund reflects the combined effect of the very limited foreign access to the Korean market at present, the higher expected profits of Korean companies in the future, as well as an expectation that the market will remain at least partially closed to foreign direct portfolio investment for a number of years.

The concept of an internationalization windfall used in this paper is defined as the total increase in the value of Korean shares that would occur if there were a quick, full internationalization of the Korean stock market. If the internationalization takes place over a longer period, the cumulative value of the internationalization premium will be larger but the present value of these future sums, appropriately discounted, should be about the same. This potential rise in the value of Korean stock represents hidden wealth of considerable magnitude. 1/ This raises the difficult issue of who should receive this windfall and how complete capital market internationalization should be implemented. A quick liberalization of the stock market could be done in such way as to give all the benefit to Korean stockholders, but a gradual liberalization would almost inevitably give a significant windfall to foreigners. While the total magnitude of the internationalization windfall cannot be measured, the part that goes to foreigners as a result of gradual liberalization can be fairly closely measured if liberalization takes the form of an expansion of closed-end funds 2/ traded in foreign markets. For each new issue of closed-end

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1/ It may be useful to provide an illustrative calculation, based on end-1988 data, of the possible magnitude of the internationalization windfall and of that portion that might go to foreigners. The Korea Fund and the Korea Europe Fund had a premium over net asset value of roughly 70 percent, which can be interpreted as the upper limit of the internationalization windfall. For illustrative purposes we will assume that the total value of Korean stocks would increase by 30 percent if there were to be a complete internationalization of the capital market in a brief period. This potential rise in the value of Korean stocks represents hidden wealth of roughly W 19 trillion (30 percent of end-December 1988 market capitalization of W 64 trillion), equal to 15 percent of 1988 GNP or more than 60 percent of 1988 central government revenue collections.

2/ This would also be true if it were to take the form of expansion of open-end international investment trusts similar to the seven already in operation.

shares, the windfall to foreign investors is the difference between the issue price (the net asset value plus the underwriting charges) and the initial market price in the foreign market. Thus, when $30 million worth of Korea Europe Fund shares were issued at a price of $10 a share in 1987 and the initial market price in London increased to $20 per share, the windfall to foreign investors was $30 million.

Once internationalization is complete, the premium over net asset value on Korea Fund type shares will disappear. This will be achieved by a combination of a bidding up of Korean stock prices and an increase in the volume of foreign holdings of Korean shares. While we do not know either of these magnitudes at present, it is worth making some assumptions in order to illustrate this phenomenon. As of December 1988, the total market value of all stocks listed on the KSE was about W 64 trillion, or $94 billion at an exchange of W 680 per U.S. dollar. The value in the Korean market of foreign portfolio holdings as of December 1988 was roughly $2 billion, or about 2 percent of the total share market value. If we assume that the total market value of listed stock will double by the time internationalization is completed, the market value at that time will be about $188 billion (assuming the exchange rate remains unchanged). If we assume that foreigners will then hold 10 percent of the total shares outstanding, 1/ valued at $18.8 billion, this means that holdings by foreigners would increase by $16.8 billion by the time internationalization is complete. We then wish to isolate the windfall that will go to foreigners as a result of new investments in foreign-held Korean funds, since the windfall on existing foreign-held Korean funds is already reflected in the premium of their prices over their net asset values. If we assume the value of the present holdings of foreigners doubles to $4.0 billion, this means that new foreign purchases will account for $14.8 billion. If we assume that the initial value of these shares when Korea Fund type issues are made is $9.7 billion and if we assume that the present premium over issue price is about 70 percent and that this percentage will decline on a straight-line basis as the $9.7 billion worth of securities is purchased, the windfall to foreigners from further gradual internationalization will be about $1.78 billion ($14.8 - $9.7 billion = $5.1 billion x 35 percent). This is clearly a rough guess as to the magnitude of the windfall that might go to foreigners, and I do not wish the reader to get distracted by the weaknesses of such a calculation. The only important point that needs to be made here is that the magnitude of the potential windfall to foreigners is very large.

1/ In 1985, foreigners held about 6 percent of the total value of Japanese shares and about 14 percent of the total value of Thai corporate shares; while foreigners may invest directly in the Thai stock market, there are limits (frequently 20 percent) on the proportion that may be held directly by foreigners, which in a number of cases have been reached. See A. Rowley, Asian Stockmarkets.

An even larger windfall will go to the direct domestic holders of Korean stocks. How the internationalization windfall is allocated could have a significant impact on Korea's wealth distribution, as well as on the wealth of the particular foreign investors who are given the valuable indirect right to invest in the Korean equity market in the period leading up to complete internationalization. If an announcement were made today that the Korean stock market would be completely internationalized one month from today, the average price of Korean shares would increase during this one-month period to a level that Korean investors believe foreign investors would be willing to pay when the market is internationalized. 1/ The important point is that most (perhaps all) of the increase would occur before any additional foreigners could participate directly in the market. The net asset value of Korea Fund type shares would increase sharply, but this would be offset by the elimination of the premium over net asset value, so that there would probably be some net decline in the value of these shares. After the capital market was fully opened to foreigners, there would be a further adjustment in the price of Korean shares, either upward or downward, reflecting the difference between what Korean investors expected foreign investors to be willing to pay for Korean stocks and what they were actually willing to pay. If the authorities were to announce today that there would be complete internationalization four years from now, there would be a sharp, but only partial, adjustment during the period after the announcement and then a gradual further adjustment (partly related to a higher level of uncertainty as to whether the authorities would carry out the announced plan after four years).

The authorities could proceed with a gradual internationalization in a number of ways. They could gradually expand the participation of foreign closed-end funds. Each infusion of foreign funds would presumably bid up the price of Korean securities and lower the premium over net asset value, with the price of the existing shares of foreign-owned, closed-end funds adjusting to reflect these opposing forces. This process could be continued until the premium on the price of closed-end funds virtually disappeared or a discount emerged, at which point complete internationalization could be implemented. However, it will be explained shortly that the gradual expansion of closed-end funds would provide a large immediate windfall to those foreigners permitted to make the additional indirect investments in Korea.

Given the present premium on the Korea Fund, how should expansions of this Fund or the issuance of similar funds be priced? As long as there is a significant premium over net asset value on the existing closed-end funds, any new similar funds issued at net asset value plus underwriting costs would be greatly oversubscribed, and the market price of such shares would be quickly bid up in the market after they were

1/ The increase is likely to be less than the present premium over net asset value of Korea Fund type investments.

issued. Thus a windfall would go to whomever obtained the shares in the initial allocation. Giving this kind of windfall to foreigners would seem a questionable policy. This is precisely what happened when Korea issued the Korea Europe Fund. The premium on the Korea Europe Fund shares increased by more than 100 percent before they were even placed on the market. It appears that this windfall went to the stockholders who received the initial allocation from the underwriters; however, the underwriters probably received a significant indirect benefit as well. In any case, investors who were able to purchase the shares at the issue price of $10.71 were able to sell them for $20 as soon as trading in the shares started and for $25 within a month. It is important to realize that the amount that is invested in the Korean stock market is only the original $10.71 a share minus the underwriting costs (usually 7 percent of the share value). When a decision was made to add to the capital of the existing Korea Fund in 1986, it was decided to price the new shares at the existing market price which reflected a considerable premium over the net asset value of about 82 percent. If the market is efficient, the average premium over net asset value should be only slightly lower for the now larger Fund. The premium over net asset value indicates the marginal value of indirect access to the Korean stock market.

A numerical example may help to explain this. Suppose that an existing fund has a market value of $60 a share and a total market value of $60 million, with a net asset value of $40 per share and a total net asset value of $40 million. Thus, the existing premium over net asset value is 50 percent. Now assume that an additional $30 million worth of shares is issued at the market price of $60 a share, raising the total market value of the fund to $90 million. However, the net asset value also increases by $30 million, raising the total net asset value to $70 million and reducing the premium per share over net asset value to about 28.5 percent. If the market is efficient, it should immediately bid up the price of the shares in the foreign market and the average premium so that the new average premium is close to the original premium of 50 percent. It is likely to remain somewhat below 50 percent, because the scarcity value of the limited foreign access to the Korean market should decline somewhat as the total foreign access increases (this represents an additional step toward internationalization). In actual practice, the price of the existing fund shares should be bid up as soon as the market hears the announcement that there will be a capital increase, thereby significantly raising the premium over net asset value. Then the market price, when the new shares are issued, should result in a premium over net asset value equal to that which existed before the announcement of the capital increase (ignoring the leakage in the form of underwriting costs). 1/

It is important to realize that just as much of the windfall goes to foreign investors in this case as in the case of the issuance of a

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1/ Assuming that any other factors that affect this premium are unchanged.

new foreign fund, with shares priced close to the net asset value. But in this case, the windfall will go to the holders of the existing shares in the Fund, not to the purchasers of the new shares or to the underwriters. Infusion of capital in this form will yield the same amount for investment in the Korean stock market and will have the same impact on bidding up the price of Korean stocks. The magnitude of the windfall to foreign investors should also be the same, although the particular foreign investors receiving the windfall may be different.

It is difficult to devise a mechanism of gradual capital market liberalization that does not provide a significant windfall to foreigners, although an auction mechanism may provide the best solution. For instance, if the Government were to auction the right to invest $100 million in Korean equities through a closed-end fund managed by a securities firm during 1990, with an assurance that no one else will be given this right in 1990, it is likely to receive a very substantial bid (close to the premium over net asset value on the existing closed-end funds). However, it might be difficult for the Government to resort to a tax or auction mechanism without giving some clearer indication of the future course of internationalization of the capital market. 1/ It is obvious that the value of being able to invest $100 million in the Korean stock market in 1990 depends on the course of internationalization in the future. It would be greatest if internationalization were to take place very slowly, and least if complete internationalization had already been announced and were to take place soon.

The use of an auction mechanism to decide which foreigners would have the right to make new investments in the Korean stock market might be enough to deter underwriters from making aggressive bids, since they may have little experience in assessing the risk of a change in the level of the premium over net asset value between the time when they make the bid and when they can actually distribute the fund shares. 2/ But they should be able to lessen or eliminate this risk by obtaining commitments from investors to purchase the new stock at a specified price that would yield the underwriters a secure and adequate profit. While use of the auction mechanism would probably yield the highest return to the Government for the planned new access by foreigners to the Korean market, close to the same result could be achieved by merely negotiating with a chosen group of underwriters. This would enable the authorities to continue to decide the country in which the new fund would be located as well as the specific underwriters, which have been important considerations to them. If the premium over net asset value of similar funds was 60 percent, the Government might offer the

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1/ As it has now given such an indication, it could be argued that now is an appropriate time to introduce such a mechanism.

2/ While the use of an auction mechanism for this purpose would be novel, this has been done in connection with import quotas to capture part of a similar form of economic rent.

underwriter the normal 7 percent underwriting fee and simply charge him slightly less than 60 percent of the value of the new fund for the right to set up the new fund. The present procedure simply gives all of this amount away as a gift.

An alternative to selling or auctioning off a specified magnitude of indirect investment opportunity in the Korean market each year until there is little or no auction premium paid would be to specify the level of a one-time tax on new indirect investment, say at 60 percent for the first year, and accept any quantity of new funds by foreign investors willing to pay that level of tax. The tax level on new investment could then be reduced each year until it was eventually reduced to a level close to zero, at which point the market could be opened to direct foreign purchase of Korean stocks. Another alternative would be to seek to tax the capital gains on these foreign funds invested in Korean stocks, but this would be impracticable in so far as the funds are traded in foreign markets. Still another possibility would be to place a tax on the premium of the price of the closed-end funds over their net asset values. A wide variety of mechanisms could be devised, but it would probably be best to levy a relatively small monthly tax of 1 to 2 percent on the premium at the end of each month, rather than to levy a higher tax rate once a year. It might be even less disruptive to the market for these funds to pay the tax at a still lower rate on a weekly basis. 1/ This tax would be paid by the managers of the fund out of its assets which, if the fund were fully invested, would require a small sale of the Korean stock holdings.

To summarize, the internationalization windfall that goes to foreigners goes entirely to the firm or individual given the right to purchase new shares at a price equal to the net asset value (plus underwriting charges) in the case of new closed-end funds, and to the present stockholders in the case of additions to the capital of the existing funds. The subsequent purchaser of such shares does not receive any windfall unless the Government changes its policy to curtail international access to the Korean market for a longer period than implicitly assumed at the time the new shares are issued.
It would appear appropriate to consider capturing part of this

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1/ Unlike the other mechanisms, which would seek to lessen or avoid the windfall to foreigners from new access to the Korean market, this mechanism could also be levied on the existing funds, although this might be deemed inappropriate. Unlike the other possibilities mentioned above, this would be an ongoing tax until the premium disappears, rather than a one-time tax.

internationalization windfall for the Korean people as a whole through an auction or tax mechanism. 1/

Besides foreign-managed, closed-end funds, Korea has used two other mechanisms for internationalizing its capital market, namely, domestically managed open-end investment trusts and convertible bonds sold in foreign markets. The next section explores whether these forms of internationalization also provide a windfall to foreigners.

While the international trust funds (open-end funds managed by Korean securities companies) were not set up to trade on foreign stock markets, 2/ they have in fact been traded between foreign institutional investors at significant premiums over their net asset value. At the end of July 1989 the premium on the beneficiary certificates issued by the international trusts was 72 percent for each of the five largest trust funds, compared with about 94 percent for the Korea Europe Fund and 105 percent for the Korea Fund. The premium on the beneficiary certificates has consistently been less than for the closed-end funds, although the magnitude of the difference has varied widely. One reason for the lower premium on the beneficiary certificates is that they are less liquid because they do not trade on any stock exchange and the minimum size of transactions is relatively large.

While these trust funds have been set up as open-end funds that can be redeemed with the managers of the trust funds at their net asset value, as long as they can be traded abroad at a premium, there is obviously no incentive to redeem the beneficiary certificates. Thus, in practice the international investment trusts have been treated essentially like closed-end funds. Usually, shares in open-end funds cannot be traded and can be redeemed with the issuer only at their net asset value. The various Korean international trust funds provide the same access to the Korean securities market as the closed-end funds. The ability of foreigners to purchase such beneficiary certificates is a significant windfall, and they would be willing to pay much more than the net asset value for such investments. A similar use of an auction system or tax mechanism could be used in conjunction with any new issues of such international trust funds.

1/ The revenue derived from taxing this windfall that goes to foreigners and the domestic capital gains tax suggested later in this paper could be used to meet the increased expenditure for social welfare is that likely to be an inevitable outgrowth of the sharp increase in per capita income in Korea and the more democratic government. This paper does not spell out the tactical considerations involved in introducing a tax auction mechanism on foreign access to the Korean stock market and how this issue might affect broader relationships regarding international trade.

2/ While the Korean Growth Trust was set up to be listed on the Hong Kong Stock Exchange, it does not appear to have been traded on that exchange.

In the present circumstances of excess demand by foreigners to invest in Korean stocks, it does not make much difference whether Korea internationalizes its market through expansion of open or closed-end funds as long as they can both be traded abroad. Foreign investors are willing to pay a premium for either. In practice, foreign investors will not wish to redeem open-end funds because they are worth more than their net asset value. However, they would be willing to pay a higher premium for closed-end funds because they provide the same indirect access to the Korean stock market but have the advantage of being more liquid. Investors can easily sell these funds on the market and realize their full value at any time, while they can realize the full value of the open-end funds only by holding them until internationalization of the market is complete or by selling them in a less organized market. 1/ Hence, if the Government were to attempt to capture the premiums foreigners were willing to pay, more revenue could be obtained by auctioning closed-end funds or by taxing the premium on them.

The third method of internationalizing the Korean capital market, which has been used so far, is through the issuance of major Korean companies of convertible bonds in foreign markets. As can be seen in Appendix Table 2, the first four convertible bond issues had U.S. dollar interest rates of 3-5 percent and conversion premiums of 50-55 percent. So far, even though the stock of Samsung Electronics has appreciated enough to permit conversion, none has taken place because the price of the convertible bonds has increased to a level far above the present conversion value of the underlying stock. In other words, convertible bonds have become similar in nature to the Korea Fund shares and trade at a price far above the conversion value (or the net asset value of the stock).

New issues of convertible bonds could be priced in a way that captured most of the internationalization premium for the company that issued the bonds, which would benefit its shareholders. This was an extraordinarily attractive form of financing for the Korean companies that were declared eligible to issue convertible bonds, and it is remarkable that more companies did not issue them. 2/ In 1988 convertible bonds could be issued with a lower interest rate and a higher conversion premium than were possible for the earlier issues. In September 1988, Saehon Media issued $30 million of convertible bonds with an interest rate of 1.75 percent and a conversion premium of 65 percent. 3/

1/ This paper ignores the fact that different funds may have different values because of differences in the quality of their particular investment portfolio.

2/ It is probable that there has been some restraint on the issuance of such bonds.

3/ This company is generally considered a second-tier company without a secure profit situation; a first-rank corporation would presumably have been able to get even more favorable terms.

If this method of internationalizing the capital market were used, little of the internationalization windfall would go to foreigners, but a major windfall would go to those companies deemed eligible. Just as future issues of Korea Fund type shares or investment-trust type shares could be auctioned or taxed, so could the right for Korean companies to issue any future convertible bonds in foreign markets. It is not practical to spread the windfall among all companies listed on the stock exchange because the amount of each foreign bond issue would be very small. Unless the windfall is fully taxed, the issuance of convertible bonds is less attractive than the other forms of internationalization, because it inevitably benefits particular companies, while the open- and closed-end stock funds potentially help the shareholders of all companies listed on the stock exchange. Once the Korean capital market has been fully internationalized, foreigners probably will not be willing to pay much premium for indirect access to the market, and a tax on such access would no longer be appropriate.

Although it will not be treated in this paper, most of the discussion on the internationalization of the Korean stock market also applies to the opening-up of foreign access to the Government and corporate bond markets. As long as interest rates in Korea are higher than in the major capital markets and this differential is not fully offset by the perceived exchange rate risk,, there will be high demand for access to such bonds, which can be subjected to various taxes.

Besides the question of who should receive the foreign component of the internationalization windfall, the issue arises as to whether the domestic component should be allowed to go completely to Koreans and foreign resident shareholders 1/ or whether some of it should be captured for the good of the Korean people as a whole. It should be recognized that the option of allowing the present Korean stockholders to obtain all of the benefit of the share price increase, that will accompany internationalization of the Korean market would probably make Korea's income and wealth distribution more unequal. Given the skewed pattern of share ownership, the relatively wealthy families would benefit more than the relatively poor. 2/ This is especially true since Korea has no capital gains tax on the appreciation of financial assets.

The domestic component of the internationalization windfall cannot be isolated from other influences on share prices and, accordingly, cannot be taxed separately. It might be possible to isolate this component and tax it separately if the Government were to announce a complete liberalization to take place in a short period and levy a 100 percent temporary capital gains tax on the increase in stock prices that occurred between the date of the announcement and, say, one month later, when

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1/ Foreigners who have been residents in Korea for six months or more are entitled to purchase shares in the Korean stock market.

2/ At the end of 1987, 1 percent of the shareholders owned 60 percent of the total shares. See Korea Stock Exchange, Stock.

the internationalization could be deemed largely completed. However, this would involve taxing unrealized capital gains and is not practical for a number of reasons. Still, the existence of the internationalization premium adds to the already good case for introducing a capital gains tax on the realized appreciation in the value of corporate shares.

VI. Capital Gains Taxation on Stocks and Bonds

Both in the economic literature and in the practices in different countries, there is a wide divergence of views on whether, how much, and in what form capital gains should be taxed. At present, the United States taxes fully both short- and long-term capital gains as part of its global personal income tax. Korea levies a high capital gains tax on real estate, but no capital gains tax on corporate shares or bonds. Japan also exempts capital gains on corporate shares from taxation unless an individual engages in enough trades to qualify him as a trader. During the early stages of capital market development, there is a strong case for not levying a tax on the capital gains in corporate shares. However, with the more than ten-fold increase in the total market value of Korean stocks in the last five years, the Korean capital market can now be deemed matured enough to no longer need incentives.

The introduction of a capital gains tax on bonds and corporate shares is entwined with the issues of the continued acceptance of "no-name" security accounts and the globalization of the personal income tax (combining all forms of personal income rather than taxing different forms of income separately, as under a schedular system). While it would be possible to introduce a flat rate, separate tax on capital gains, say, of 10 percent, it would be better to eliminate "no-name" securities, introduce a global income tax, and include interest, dividends, and capital gains as part of global income (perhaps with the capital gains component or all income indexed for inflation). Significant tax incentives for savings are no longer desirable in the new environment in which national savings exceed investment. Tax administration has also improved significantly so that enforcing a global income tax would not be too difficult. Increased concern about the horizontal and vertical equity of the tax system would also seem appropriate now that Korea's per capita income level puts it in the middle income level. Taxing personal income on a global basis would improve the equity of income taxation.

The introduction of a capital gains tax raises a host of other issues, which I do not consider appropriate to discuss at length in this paper. However, a few brief comments may be useful. There is considerable merit in adjusting the capital base through an appropriate index to take account of inflation and ensure that only real gains are taxed. There is also a case for some mechanism to adjust for the bunching of gains realized in a one-year period that may have occurred over many years. Other issues include whether there should be different treatment of short and long-term capital gains, whether the capital gains tax should be phased in gradually, and whether different treatment should be given to capital gains from securities and to those from real estate.

There is some advantage to having a capital gains tax on securities in effect before additional capital market internationalization measures are fully implemented. The gradual introduction of the capital gains tax would probably lessen the risk of a severe adverse stock market response. While many countries give similar tax treatment to capital gains from real estate and securities, there may be a good case for maintaining a significant differential in treatment in favor of securities. Korea has managed to do a better job of discouraging real estate speculation than has Japan, and a continuing effort to discourage real estate speculation is desirable and helps to channel savings into more productive investment.

It is not desirable to tax capital gains separately, even at progressive rates, because if this form of income is not combined with other forms of income, wealthy taxpayers receive disproportionate benefits. At first, only 20 percent of realized capital gains might be treated as part of the total income of taxpayers, and over time this ratio could be increased to whatever ratio is deemed appropriate.

Although there is no capital gains tax on securities at present, there is a securities transfer tax, which was first introduced in 1963, but abolished in 1971, and then reintroduced in 1979. The tax is levied on the sales of stocks at a rate of 0.5 percent of the sales value whether or not there is any capital gain. However, transactions of issues below par value are not taxed and sales resulting from newly issued securities at prices below the issue prices are not taxed if the sale takes place within one year of the public offering or before the record date for the first dividend after the exchange listing. The securities transfer tax was first established in lieu of a capital gains tax. 1/ It would be possible to increase this tax to capture some of the increase in the value of stocks. However, this tax is much less equitable than even a flat rate capital gains tax on all sales, which would not be applied to sales resulting in capital losses. It would probably be best to eliminate the securities transfer tax completely once any form of capital gains tax is implemented. While it might be continued as a means of discouraging short-run speculative behavior resulting in rapid turnover, if this is the objective, perhaps there should be an exemption if the stock is held for a minimum period.

1/ See The Korea Securities Dealers Association, Securities Market in Korea, 1987, p. 93.

Table 1: Outline of International Investment Trusts

	Korea International Trust	Korea Trust	Korea Growth Trust	Seoul International Trust	Seoul Trust
Date of Establishment	November 19, 1981.	November 29, 1981.	March 29, 1985.	April 19, 1985.	April 30, 1985.
Amount of Establishment	US$15 million (1,500,000 Units) Additional tranche of US$10 million (December 16, 1983).	US$15 million) (1,000,000 Units) Additional tranche of US$10 million (January 12, 1984).	US$30 million (3,000,000 Units).	US$30 million (3,000,000 Units).	US$ million (3,000,000 Units).
Objective	Long-term capital appreciation through investment in listed shares of Korean corporations.	Long-term capital appreciation through investment in listed shares of Korean corporations.	Long-term capital appreciation through investment in the securities and bond markets of of Korea.	Long-term capital appreciation through investment in the securities and bond markets of Korea.	Long-term capital appreciation through investment in the securities and bond markets of Korea.
Type of Trust	An on-shore, contractual type open-end fund.	Same.	Same.	Same.	Same.
Investment Policy	Achieve long-term capital appreciation.	Same.	Same.	Same.	Same.
	Invest in securities, primarily equities, listed on the Korea Stock Exchange.	Invest in securities, primarily equities listed on the Korea Stock Exchange.	Invest in securities, primarily equities, listed on the Korea Stock Exchange. A minimum bond content of 30 percent was required initially, reduced to 20 percent after December 31, 1985.	Invest in securities, primarily equities, listed on the Korea Stock Exchange. A minimum bond content of 30 percent was required initially, reduced to 20 percent after June 30, 1986.	Invest in securities, primarily equities, listed on the Korea Stock Exchange. A minimum bond content of 30 percent was required initially, reduced to 20 percent after May 31, 1986.
Dividend Policy	The Trust intends to distribute its net current dividend and interest income. Realized capital gains will not be distributed.	Same.	Same.	Same.	Same.
	Payment of dividends will be made annually.	Same.	Same.	Same.	Same.
Life of Trust	Terminate in 2001.	Unlimited.	Terminate at the end of the accounting period on March 31, 2005.	Terminate in the year 2005 unless extended.	Terminate at the end of the accounting period on April 30, 2005.

Source: Korea Stock Exchange.

APPENDIX

APPENDIX

Table 2. Outline of CB Issuing Terms and Conditions

	Samsung Electronics	Daewoo Heavy Industries	Yukong
Bond type	Nonguaranteed convertible bonds.	Same.	Same.
Issue amount	US$20 million.	US$40 million.	US$20 million.
Issue date	December 5, 1985.	May 15, 1985.	July 7, 1986.
Denomination	US$5,000.	US$5,000 bearer bonds US$15,000 (minimum) plus multiples of US$5,000 registered bonds.	US$5,000
Market for subscription	Euro-markets (public).	Euro-markets (public offering) and U.S. markets.	Euro-markets (public offering)
Coupon	5 percent annually, *in arrears*.	3 percent annually, *in arrears*.	3 percent annually, *in arrears*.
Maturity	15 years.	15 years, 7 months.	15 years.
Conversion price	The arithmetic mean of: (a) W 1,271 (the "spot price") plus 30 percent thereof; and (b) the average of the closing prices of the shares for the trading days in the seven calendar day period immediately preceding the commencement of the conversion period.	W 1,919 50 percent premium over base price of W 1,279 *Base price arithmetic average of the closing prices on the KSE during 6 business days immediately preceding the signing date.	W 5,226 55 percent premium over arithmetic average of the closing prices of the shares for the trading days in the seven calendar day period immediately preceding the signing date.
Conversion period	On and after October 19, 1987, and prior to the close of business on December 1, 2000.	Either on November 23, 1987, or from the date Korean authorities allow direct investment in shares by foreigners, whichever comes later.	On and after January 15, 1988, and prior to the close of business November 30, 2001.
Listing	Luxembourg Stock Exchange.	Luxembourg Stock Exchange.	Luxembourg Stock Exchange.

References

Bergsten, C. Fred; Kimberly Ann Elliott, Jeffrey J. Schott and Wendy E. Takacs, Auction Quotas and United States Trade Policy, Institute For International Economics, Washington, D.C., 1987.

W.I. Carr, (Far East) Limited, Korea Monthly Review, August 1988.

Cole, D.C. and Young-chul Park, Financial Development in Korea, 1945-78, Harvard University Press, Cambridge, Massachusetts, 1983.

The GT Guide to World Equity Markets 1988, Euromoney Publications London, 1988.

International Finance Corporation, Emerging Stock Markets Factbook, 1988, Washington D.C., 1988.

Koo, Bohn-young, "The Role of Direct Foreign Investment in Korea's Recent Economic Growth" in Financial Development Policies and Issues, edited by Joong-woong Kim, Korea Development Institute, Seoul, Korea, 1986, pp. 189-236.

Korea Development Finance Corporation, Money and Capital Markets in Korea and the Potential for their Improvement, Seoul, Korea, 1970.

Korea Securities Dealers Association, Securities Markets in Korea, Seoul, Korea, 1988.

Korea Stock Exchange, Stock, monthly issues, Seoul, Korea.

Lee, Young-ki, "Internationalization of Major Financial Sectors in Korea" paper presented at the Fourth KDI/CHIER Joint Seminar on Industrial Policies in the Republic of Korea and the Republic of China in Seoul, February 8-9, 1988.

Lucky Economic Research Institute, Korean Securities Market 1987.

Rowley, Anthony, Asian Stockmarkets, The Inside Story, Dow Jones-Irwin, Homewood, Illinois, 1987.

Sakong, Il, "An Overview of Corporate Finance and the Long-Term Securities Market" in Planning Model and Macroeconomic Policy Issues, edited by Chul Kyo Kim, Korea Development Institute, Seoul, Korea, 1977, pp. 228-62.

Tun Wai,U. and Hugh T. Patrick, "Stock and Bond Issues and Capital Markets in Less Developed Countries," IMF Staff Papers, July 1973, pp. 253-317.

Van Agtmael, Antoine W., Emerging Securities Markets, Euromoney Publications, London, 1984.