

CHAPTER II

AN OVERVIEW OF THE RECORD OF FOREIGN CAPITAL INDUCEMENT IN KOREA

Korea had started to induce the foreign capital since 1962 because of foreign currency needs to fill up the internal gap between investment and domestic savings due to the launching of full-scale national economic development plan, external gap by the chronic balance of payments deficit and to service principal and interest of induced foreign capital. Therefore, we will review the historical procedure of external debt accumulation in this chapter.

A. The Trend of Foreign Capital Inducement

Korea has induced 54.6 billion dollars of foreign capital for 37 years from 1945, when she had been liberated from Japan, to 1982. Forty five billion dollars which composes 82 percent of total amount, was commercial credits including development loans even if 4.4 billion dollars were induced in the form of grants from United Nations or United States.

The inducement of commercial credit had begun in 1959 when the grants from U.S. started to change to form of loan. It became a big scale in amount and started to be various in type, i.e., loans, foreign direct investment and medium and short-term credit etc., from 1962 when government launched the First Five-Year Economic Development Plan.

Foreign capital inducement increased with very rapid

pace after government had finished institutional arrangements to induce foreign capital more positively, which contributed to deal successfully with the first oil crisis by inducing more than two billion dollars of foreign exchange a year in 1974 and 1975. Even after 1976, it kept on increase, so that 7-8.5 billion dollars of foreign capital was flown into Korea every year from 1979 to 1982.

The peculiarity of foreign capital inducement, as shown in TABLE 2.1, is that first, the proportion of foreign direct investment is slight while commercial loans are high, second, the percentage of short-term loan has increased in higher rate recently and third, the total amount of foreign capital inducement has become a big scale since late 1970's.

The loans, a type of long-term capital inducement, occupies biggest portion in foreign capital inflow, 43.7 percent, which amounts total 23.8 billion dollars during 1959-82 period. Except loans, other types of long-term capital, which include bank loans, International Monetary Fund credit(IMF credit) and bonds that foreign exchange banks in Korea issued in international financial market, reaches about 9 billion dollars.

Total 2.6 billion dollars of medium-term capital, one to three year maturity period for repayment, have been streamed into until 1982 with the types of long-term trade credits and short-term cash loans.

TABLE 2.1

THE TREND OF FOREIGN CAPITAL INDUCEMENT (1945-82, DISBURSED ONLY)

unit : million dollars

	Long-term (over 3 years)	Medium-term (1-3 years)	Short-term (less than 1 year)	Foreign Banks A	Others	Total
Sub-total	Loan	others	term (1-3 years)	Account		
-1961	4.4	4.4	-	-	3,135.0	3,139
1962	6.4	6.4	-	24.8	239.9	271
1963	43.2	43.2	4.5	37.0	218.5	303
1964	30.2	30.2	6.3	-1.5	152.4	187
1965	48.5	39.1	9.4	-29.2	142.1	161
1966	176.4	172.5	3.9	-13.9	108.1	285
1967	217.6	217.6	-	79.5	109.7	407
1968	436.2	364.2	72.0	21.3	120.6	698
1969	539.0	509.0	30.0	120.0	114.3	782
1970	454.7	429.7	25.0	-	107.9	958
1971	741.6	644.0	97.6	179.8	87.9	1,071
1972	756.1	736.1	20.0	13.4	66.3	894
1973	911.6	862.3	49.3	25.6	160.5	1,231

The inducement of short-term capital, which has less than one year maturity period, has come up to 9.5 billion dollars. This is second among the total foreign capital inflow. We can identify from the trend that it increased very fast just after the first and second oil shock, especially after the second oil crisis, the absolute amount rose promptly. Korea borrowed 7.5 billion dollars of big amount of short-term capital during 1979-82 period, which reflects instability of her foreign currency situation.

Foreign bank's A account, composing of business and operating fund of local branches of foreign banks, recorded 3.9 billion dollars until 1982. Thus, it has also been an important source of foreign currency.

Foreign direct investment, importance of which is increasing after multinational corporations had made an appearance, was totaled 1.3 billion dollars during 1962 - 82 period. This is only 2.4 percent of total foreign capital inflow and very low level compare to borrowings like loans.

B. The Record of Foreign Capital Inducement by Type

In this section, we will analyze foreign capital inflow more precisely into loans, foreign direct investments and others since loans have highest portion in amount, foreign direct investment can highly affect industrial development even if the amount of it is not big enough and others including bank loans and bonds etc. for better understanding of foreign capital procurement means.

1. Loans

Korea induced about 11 billion dollars of public loans and 12.9 billion dollars of private loans from 1959 when the foreign capital inducement has begun, to 1982. All the loans, induced during 1959 - 61 period, were composed of, as we can see in TABLE 2.2, only public ones but the private loans, which have been increased after 1962 when the First Five-Year Economic Development Plan had been launched, reach 54 percent level of total commercial loan until 1982. Especially, after 1965 when bilateral diplomatic re-

TABLE 2.2

THE RECORD OF LOAN INDUCEMENT (DISBURSED ONLY)

Unit : Million Dollars

	Public	Private	Total
1959 - 61	4.4	-	4.4
1962 - 66	115.7	175.7	291.4
1967 - 71	811.2	1,353.3	2,164.5
1972 - 76	2,379.3	3,028.9	5,408.2
1977 - 82	7,648.4	8,305.3	15,953.7
1977	638.0	1,241.1	1,879.1
1978	817.8	1,913.2	2,731.0
1979	1,120.9	1,578.5	2,699.4
1980	1,506.5	1,403.6	2,910.1
1981	1,687.9	1,250.5	2,938.4
1982	1,877.3	918.4	2,795.7
Total	10,959.0	12,863.2	23,822.2

Source : Economic Planning Board, Korean Economic Indicators, March 1983.

relationship between Korea and Japan was normalized, the inducement of private loans was increased with fast pace. Moreover, after 1974, the scale of loan inducement, led by private one, grew acceleratively until 1978 in order to supply big amount of capital due to the overambitious heavy and chemical industrialization policy of government. Reconsideration about excessive investment on heavy and chemical industry, however, was started from 1979, consequently the pace of increasing rate in loan inducement became blunt and inducement of private loan is showing decreasing trend.

(1) Inducement of Loans by Principal Lender Countries

According to the classification of loan inducement by principal country, out of total induced loans, U.S. comes first with 26.8 percent, 6.4 billion dollars followed by Japan whose proportion is 17.1 percent, 4.1 billion dollars, EC countries including

TABLE 2.3

LOAN INDUCEMENT BY COUNTRY (DISBURSED ONLY)

	Unit : Million Dollars					
	U.S.	Japan	EC	Others	Inter'l Finan'l Institu.	Total
1959 - 66	109 (36.8)	85 (28.7)	84 (28.4)	1 (0.3)	17 (5.7)	296 (100.0)
1967 - 71	965 (44.6)	505 (23.3)	406 (18.8)	194 (9.0)	94 (4.3)	2,164 (100.0)
1972 - 76	1,764 (32.6)	861 (15.9)	1,082 (20.0)	685 (12.7)	1,016 (18.8)	5,408 (100.0)
1977 - 82	3,532 (22.1)	2,629 (16.5)	3,341 (20.9)	3,354 (21.0)	3,098 (19.4)	15,954 (100.0)
Total	6,370 (26.8)	4,080 (17.1)	4,913 (20.6)	4,234 (17.8)	4,225 (17.7)	23,822 (100.0)

Source : Economic Planning Board, Korean Economic Indicators,
March 1983.

U.K. hold 20.6 percent, 4.9 billion dollars and other countries occupied 17.8 percent, 4.2 billion dollars. The amount of loans borrowed from international financial institutions like IBRD or ADB reaches 4.2 billion dollars, which is 17.7 percent of total induced loans.

As shown in TABLE 2.3, Korea has made U.S. and Japan a main source of loan inducement so far. Since 1959, when Korea started to induce loans, the loans from these two countries got 60 - 70 percent of total amount until early 1970's. However, the degree of dependency on those two countries has been lowered to 30 - 40 percent in 1980's due to the gradual diversification of the lender countries after the first oil shock.

United States provided not only highest amount of loans but more public loans than any other countries except international financial institutions during the period of 1959 - 82.

Loans from Japan, which started to be boosted since 1965 when diplomatic relationship between Korea and Japan had been normalized, came second. It is, however, quite different from loans from U.S. in composition, that is, the private loan is about double of the public in amount.

While the proportion of loans from U.S. and Japan dropped gradually after the first oil crisis, the loans from international financial institution like IBRD or others in EC or southeast Asian countries soured up. Except that sources of loans were diversifying,

another characteristic is that most of the loans from EC countries or other region excluding international banking system was composed of private ones. This reflects the fact that the inducement of loans in Korea is changing from multilateral economic cooperation among governments to financial transaction among local and foreign firms.

(2) Inducement of Loans by Industry

As we see at TABLE 2.4, the distinctives of loan classification by industry are as follows. The biggest amount of loans

TABLE 2.4

LOAN INDUCEMENT BY INDUSTRY (DISBURSED ONLY)

	Unit : Million Dollars				
	Agriculture Forestry & Fishery	Mining	Manufac- turing	Service & Others	Total
1959 - 66	39 (13.2)	9 (3.0)	156 (52.7)	92 (31.1)	296 (100.0)
1967 - 71	378 (17.5)	13 (0.6)	820 (37.9)	953 (44.0)	2,164 (100.0)
1972 - 76	499 (9.2)	- -	2,145 (39.7)	2,764 (51.1)	5,408 (100.0)
1977 - 82	1,322 (8.3)	24 (0.2)	4,839 (30.3)	9,769 (61.2)	15,954 (100.0)
Total	2,238 (9.4)	46 (0.2)	7,960 (33.4)	13,578 (57.0)	23,822 (100.0)

Source : Economic Planning Board, Korean Economic Indicators, March 1983.

Note : The numbers in Parentheses are percentage.

had been allocated to infrastructure, that reaches 13.6 billion

dollars -- 57.0 percent of total, and followed by manufacturing sector which is 8 billion dollars -- 33.4 percent. Into agriculture, forestry and fishery sector, total 2.2 billion dollars, 9.4 percent and mining sector, 50 million dollars, 0.2 percent were flown into. By these facts, we can conclude that the loans, so far, were induced to eliminate bottlenecks for economic development through the expansion of infrastructure, to elevate the efficiency of domestic economy and accelerate the development of industry lagged behind.

If we glance at the characters of loans by industry, it is a good contrast that in agriculture, forestry and fishery or infrastructure, public loans were more than private ones but in manufacturing sector private loans occupied most of all.

The allocation of foreign capital induced by in type of public loans was decided generally by the policy targets or faiths of government. Since 1962, the government allocated 8.5 billion dollars of public loans to expand infrastructure such as electricity, transportation and communication and 2.1 billion dollars to develop agriculture, forestry and fishery sector which is relatively lagged behind because of the intensive drive of industrialization policy. And also 400 million dollars of public loans was allocated to the key industries of country such as petro-chemistry, primary metal and general machinery.

When we look at the trend of public loans by industry, we can notice that a lot of public loans were flown into the country

for the sectors of infrastructure, such as transportation, storage and service, petro-chemistry and agriculture, forestry and fishery during the First and Second Economic Development Plan and that public loans especially to develop the primary sector have been occupied considerable portion even after this period. During the Third Five-Year Economic Development Plan (1972 - 76), high portion of public loans were allocated to the service sector, after this, the inducement of public loans for electricity, gas, nuclear energy increased with fast pace because of the first and second oil crises.

While, in inducement of private loans, we cannot eliminate the possibility that government may intervene but it is decided mainly by the commercial motive. Especially, private loans are closely related to productivity or profitability of induced loans because that has bigger burden of servicing debt with interest compare to this. During past twenty years, that quite big portion of private loans have been induced by manufacturing sector and among the infrastructural sector, such relatively high profitable sectors as electricity, gas, nuclear energy, transportation, storage and service even if it needs big amount of investment.

(3) Terms of Borrowing

The factors to decide the terms of borrowings are interest rate, spread, i.e., additional interest and maturity. We will, however, examine only the first and second terms here.

Total amount of loans including undisbursed ones during

1959 - 82 period is 29.4 billion dollars, of which 73 percent, 21.5 billion dollars are on the condition of fixed interest rate and 27 percent, 7.9 billion dollars are on the condition of floating interest rate. While public loans are mostly in terms of fixed inter-

TABLE 2.5

LOAN INDUCEMENT BY TERMS OF BORROWING
(BY THE END OF 1982, INCLUDING UNDISBURSED LOANS)

Unit : Million Dollars

	Public		Private		Total	
	Amount	%	Amount	%	Amount	%
Fixed Rate	14,423	92.4	7,052	51.1	21,475	73.0
0 - 6 %	3,392	21.7	774	5.6	4,166	14.2
6 - 7 %	264	1.7	1,421	10.3	1,686	5.7
7 - 8 %	4,181	26.8	1,603	11.6	5,784	19.7
8 - 9 %	5,144	33.0	2,691	19.5	7,835	26.6
9 - %	1,442	9.2	563	4.1	2,005	6.8
Spread of Floating Rate	1,187	7.6	6,738	48.9	7,925	27.0
0 - 1 %	868	5.6	4,741	34.4	5,609	19.1
1 - 2 %	248	1.6	1,940	14.1	2,188	7.5
2 - %	71	0.4	57	0.4	128	0.4
Total	15,610	100.0	13,790	100.0	29,400	100.0

Source : Economic Planning Board, Korean Economic Indicators, 1983

est rate, private ones are composed of both fixed and floating interest rate conditions with same proportion as shown in TABLE 2.5.

Though, theoretically, it is very difficult to sort out which one is better between fixed and floating interest rate, we can say that the loans under the condition of floating one is disadvantageous if we consider the continuous trend of high interest rates in the international financial markets since 1970's.

Through the trend of interest rate changes on both disbursed and undisbursed loans, we can find out that most of the loans induced in 1970's are on the condition of fixed interest rate, which is under 7 percent but after 1970's to 1980's the proportion of floating interest rate loans is getting bigger.

The distribution of interest rates under the condition of fixed interest rate, which is given in TABLE 2.5, is as follows. The case of 8 - 9 percent held biggest amount, 7.8 billion dollars and 7 - 8 percent, 5.8 billion dollars.

High interest rate over 9 percent also reaches 2 billion dollars, which is 9.3 percent of total loans under the condition of fixed interest rate. Such disadvantageous loans were decided to borrow during 1975 - 76 and 1980 - 82 periods, after the first and second oil crises were over.

The structure of interest rates, generally, which Korea has borrowed, had gotten disadvantageous after the first oil shock. The interest rates of loans induced before 1972 were mostly less than 7 percent but elevated gradually to 7 - 9 percent or more since 1973.

Among the loans under the condition of floating interest rate, one which is linked to Libor (London Inter-Bank Borrowing Rate) occupies highest portion, 6.3 billion dollars, one linked to U.S. prime rate holds 900 million dollars, another 500 million dollars are linked to Sibor (Singapore Inter-Bank Borrowing Rate) and remained 200 million dollars are linked to Euro-dollar market rate.

TABLE 2.6

TREND OF INTERNATIONAL INTEREST RATE (END OF YEAR)

	Unit : Percent		
	U.S. Prime Rate	Libor	Sibor
1971	5.25	6.50	6.56
1972	5.75	6.00	6.13
1973	9.75	10.19	10.50
1974	10.25	10.13	10.38
1975	7.25	6.56	6.69
1976	6.00	5.13	5.13
1977	7.75	7.25	7.33
1978	11.75	11.83	12.13
1979	15.25	15.00	14.88
1980	21.50	18.13	18.19
1981	15.75	14.00	13.88
1982	11.50	9.25	9.44

Sources : Morgan Guaranty Trust Co., World Financial Markets, various issues.

International Reports Inc., International Reports, various issues.

As shown in TABLE 2.6, since main international interest rates were not only on the trend of souring but also the margin of escalation was big, we can tell the loans under the condition of flexible interest rate are more disadvantageous than fixed interest ones.

Among floating interest rates, one linked to U.S. prime rate was worst because Libor or Sibor is not so much different from the interest rate of Euro-dollar market but it was higher than that. Thus, that the proportion of loans linking to U.S. prime rate increased means worsening of terms of borrowing.

While, spread, which is additional interest rate to the basic one, is determined by the composite factors such as fund conditions of international financial market, country risk and creditworthiness of borrowing country and so on. Out of all floating interest rate loans, ones with less than 1 percent of spread came first, 5.6 billion dollars, with 1 - 2 percent, 2.2 billion dollars and disadvantageous loans with over 2 percent of spread also reached 100 million dollars, which is seen in TABLE 2.5. Since spread is applicable to whole period including grace and maturity, even if it is small number, it can be a big burden.

2. Foreign Direct Investment

Foreign direct investment, which started from 1962, has been approved 881 cases, 1,436 million dollars, of which 1,307

million dollars have been arrived.

At the early days of foreign investment, during the First Five-Year Economic Development Plan, it totaled only 15 cases, not more than 23 million dollars, which we can see in TABLE 2.7. It

TABLE 2.7
RECORD OF FOREIGN DIRECT INVESTMENT

Unit : Million Dollars

	Approval		Arrival		
	Cases	Amount	Cash	Goods	Total
1962 - 66	15	23.0	15.4	5.8	21.2
1967 - 71	164	72.7	59.6	36.7	96.3
1972 - 76	450	565.2	293.1	264.0	557.1
1977 - 82	252	775.5	465.1	167.3	632.4
1977	37	65.9	85.1	17.2	102.3
1978	41	128.4	75.8	24.6	100.4
1979	42	107.3	84.8	42.2	127.0
1980	36	140.8	69.3	27.4	96.7
1981	41	145.3	84.6	20.8	105.4
1982	55	187.8	65.5	35.1	100.6
Total	881	1,436.4	833.2	473.8	1,307.0

Sources : Ministry of Finance, State of Foreign Direct Investment Approval, June 1983

Ministry of Finance, State of Foreign Direct Investment Arrival, June 1983

began, however, to become active since late 1960's due to the arrangement of related foreign investment law and establishment of free export zone after normalization of bilateral diplomatic relationship between Korea and Japan.

Government approved 450 cases of foreign direct investment which totaled 565 million dollars during the Third Five-Year Economic Development Plan (1972 - 76) and 252 cases, 776 million dollars during 1977 - 82, which increased a lot in amount though the number of cases decreased. The foreign investment became blunt during 1974 - 75 when there was oil shock and in 1980 when political instability was. This means that foreign direct investment is decided not only by profitability but stability.

The average amount of each foreign direct investment was 530,000 dollars during the First and Second Five-Year Economic Development Plan periods, 1.26 million dollars during the Third Five-Year Economic Development Plan period but it recorded big increase to 3.1 million dollars from 1977 to 1982. In the type of investment, 474 million dollars were made by capital goods and remaining 833 million dollars were in cash, out of total 1,307 million dollars arrived by the end of 1982.

As shown in TABLE 2.8, Japan, in the view of the foreign investment by country, has invested 676 million dollars, 625 cases, which is equivalent to 47.1 percent of total foreign direct investment and followed by U.S. which has recorded 29.1 percent

TABLE 2.8
FOREIGN INVESTMENT BY COUNTRY

Unit : Million Dollars

	U.S.	Japan	Holland	Others	Total
1962 - 66					
Cases	9	1	-	5	15
Amount (%)	21.9 (95.2)	0.7 (3.0)	-	0.4 (1.8)	23.0 (100.0)
1967 - 71					
Cases	34	118	2	10	164
Amount (%)	12.4 (17.0)	40.8 (56.1)	6.3 (8.7)	13.2 (18.2)	72.7 (100.0)
1972 - 76					
Cases	37	380	2	31	450
Amount (%)	67.9 (12.0)	376.9 (66.7)	58.7 (10.4)	61.7 (10.9)	565.2 (100.0)
1977 - 82					
Cases	74	126	4	48	252
Amount (%)	315.7 (40.7)	257.5 (33.2)	40.4 (5.2)	161.9 (16.9)	775.5 (100.0)
Total					
Cases	154	625	8	94	881
Amount (%)	417.9 (29.1)	675.9 (47.1)	105.4 (7.3)	237.2 (16.5)	1,436.4 (100.0)

Source : Ministry of Finance, State of Foreign Direct Investment Approval, June 1983.

of total -- 154 cases, 418 million dollars. This reflects that 76.2 percent of total foreign investment in Korea was dominated by these two countries. Except them, the number of countries which have ever invested in Korea reached 25, of which important ones are Netherland (7.3 percent), Hong Kong (3.1 percent), West Germany (1.7 percent) and so on. IFC (International Finance Corporation) which is founded to invest on productive private enterprises of developing countries, though it is not a country, also invested 38 million dollars (2.7 percent) in 9 cases.

In the view of foreign investment by industry, the investment in manufacturing sector reached to 1,023 million dollars, 71.2 percent of total amount 1,436 million dollars by the end of 1982. Investment in infrastructure including service sector occupied 27.6 percent, 397 million dollars while only 17 million dollars (1.2 percent) in primary sectors (see TABLE 2.9). Important sectors for investment among manufacturing industry are petrochemistry (30.0 percent), electric and electronics (15.4 percent), general machinery (6.2 percent) etc. while in the number of cases, electric and electronics (178 cases) comes first and followed by petrochemistry (140 cases) and general machinery (121 cases) and so on.

3. Other Foreign Capital Inducement

Korea has been gradually diversifying the type of foreign capital inducement since late 1960's so that facilitate financing

TABLE 2.9

FOREIGN DIRECT INVESTMENT BY INDUSTRY (APPROVAL BASE)

Unit : Million Dollars

	Agriculture Forestry & Fishery	Mining	Manufac- turing	Service	Total
1962 - 66					
Cases	1	-	14	-	15
Amount (%)	0.1 (0.4)	-	22.9 (99.6)	-	23.0 (100.0)
1967 - 71					
Cases	8	-	139	17	164
Amount (%)	1.0 (1.4)	-	59.9 (82.4)	11.8 (16.2)	72.7 (100.0)
1972 - 76					
Cases	19	7	391	33	450
Amount (%)	5.2 (0.9)	1.5 (0.3)	425.9 (75.3)	132.6 (23.5)	565.2 (100.0)
1977 - 82					
Cases	13	5	193	41	252
Amount (%)	7.6 (1.0)	1.4 (0.2)	514.3 (66.3)	252.2 (32.5)	755.5 (100.0)
Total					
Cases	41	12	737	91	881
Amount (%)	13.9 (1.0)	2.9 (0.2)	1,023.0 (71.2)	396.6 (27.6)	1,436.4 (100.0)

Source : Ministry of Finance, State of Foreign Direct Investment Approval, June 1983.

capital inducement since late 1960's so that facilitate financing for an economic development. By the end of 1982, out of total foreign capital inducement, long-term capital is 9 billion, medium-term 2.6 billion, short-term capital less than one year, 9.5 billion and 3.9 billion dollars are induced by foreign banks

TABLE 2.10

THE RECORD OF OTHER FOREIGN CAPITAL INDUCEMENT

	-1966	1967-71	1972-76	1977-82	Total
Long-term (over 3 years)	13.3	224.6	1,001.8	7,735.8	8,975.5
Bank Loan	-	184.5	525.9	5,918.5	6,628.9
IMF Credit	13.3	40.1	382.5	1,422.7	1,858.6
Bond	-	-	93.4	394.6	488.0
Medium-term (1-3 years)	25.3	178.0	571.0	1,833.3	2,607.6
Long-term Trade Credit	25.3	178.0	545.2	1,677.5	2,426.0
Short-term Cash Loan	-	-	25.8	155.8	181.6
Short-term (Net)	17.2	779.9	2,006.4	6,713.1	9,516.6
Short-term Trade Credit	15.0	310.0	998.8	2,076.7	3,400.5
Refinance	-	184.4	414.0	4,334.9	4,933.3
Others	2.2	285.5	593.6	301.5	1,182.8

Source : Economic Planning Board, Korean Economic Indicators, March 1983.

A account. Especially, these kind of foreign capital were mainly used as a breakthrough to settle the difficulties just after the first and second oil crises (see TABLE 2.10).

As long-term capital, 6.6 billion dollars of bank loan, 1.9 billion dollars of IMF credit and 500 million dollars by issuing the bond were induced. Out of these, foreign capitals by the bank loan and IMF credit recorded rapid increase just after the first and second oil shocks, in 1974 and during 1979 - 81 period. Korea, from 1974, diversified channels to raise a foreign fund by issuing bonds in the international bond market. So far, however, the amount of foreign capital induced by issuing bonds falls into insignificance. Generally, foreign capital inducement by issuing bonds in international bond market like Euro-bond market, is a very stable way of raising a foreign fund since interest rate is fixed and period is long enough.

As medium-term capital, 2.4 billion dollars have been induced by the type of long-term trade credit, 200 million dollars have been induced by the type of short-term cash loan. Long-term trade credit started to be flown regularly, since the first oil crisis, due to the increased imports. Short-term cash loan also had ever been induced when there was foreign currency constraint just after the first and second oil crises but the amount is very small.

Short-term capital has various types such as short-term

trade credit, refinance etc. It was also increased very fast since 1974 after the first oil shock, and thereafter quite big amount of it was induced every year except 1977 - 78 when there was enough room in foreign currency.

C. External Debt Outstanding and Debt Service Burden

In this section, we will survey debt outstanding, debt service payments and debt service ratio.

Total outstanding debt, by the end of 1982, reaches 37.2 billion dollars, of which 23.2 billion dollars are ^{long and} medium-term debt including loans, 10.2 billion dollars are short-term debt and 3.1 billion dollars are foreign banks A account.

Total outstanding debt has increased fast during last 20 years, so that 166 million dollars of it by the end of 1962 reaches 37.2 billion dollars at the end of 1982. This is 30.9 per cent increase every year in average terms. Since the peak year 1979, immediately after the second oil shock, the pace of increasing rate has becoming blunt from 1980's (see TABLE 2.11).

While the debt service payments on medium and long-term debts, which include principal and interest, shown in TABLE 2.12, increased rapidly from 1 million dollars in 1962 to 409 million dollars in 1972 and 4.4 billion dollars in 1982. It shows that debt service payments has increased to 11 folds since last ten years. Especially, the additional burden of interest payments

TABLE 2.11
THE TREND OF OUTSTANDING DEBT

Unit : Million Dollars

	Medium & Long-term Debt	<u>Loans</u>	Short-term	Foreign Banks A Account	Total
1962	166	166	-	-	166
1967	473	473	-	-	473
1972	2,950	2,671	600	40	3,590
1973	3,560	3,295	612	89	4,261
1974	4,700	3,996	1,136	103	5,939
1975	6,039	4,999	2,167	242	8,448
1976	7,479	6,145	2,681	364	10,524
1977	8,930	7,477	2,924	792	12,646
1978	11,011	9,399	2,593	1,262	14,866
1979	13,935	10,977	4,651	1,951	20,537
1980	16,737	12,827	7,575	3,036	27,348
1981	20,750	14,349	8,465	3,276	32,491
1982	23,159	15,728	10,163	3,912	37,234

Source : Economic Planning Board, Korean Economic Indicators, March 1983.

due to the trend of high international interest rate since late 1970's has been a reason why debt service payments on medium and long-term foreign debt has increased more.

TABLE 2.12

THE RECORD OF DEBT SERVICE PAYMENTS AND
NEW INDUCEMENT OF FOREIGN CAPITAL

Unit : Million Dollars

	Debt Service Payments (A)	Amorti- zation	Interest Payments	Interest Payments (short- term)	New Indu- cement (medium & long)	Roll- Over Ratio (A/B,%)
1962	1	1	-	-	6	16.7
1967	34	23	11	1	218	15.6
1972	409	255	154	7	806	50.7
1973	587	396	191	22	1,000	58.7
1974	601	376	225	99	1,518	39.6
1975	705	394	311	141	1,734	40.7
1976	1,003	626	377	139	1,948	51.5
1977	1,339	823	516	218	2,259	59.3
1978	2,082	1,363	719	310	3,410	61.1
1979	2,601	1,661	940	573	4,585	56.7
1980	2,948	1,578	1,370	1,258	4,390	67.2
1981	3,761	2,004	1,757	1,874	6,229	60.4
1982	4,416	2,121	2,295	1,528	4,662	94.7

Source : Economic Planning Board, Korean Economic Indicators, March 1983.

Not only increased debt service payments of medium and long-term foreign capital, but those of short-term capital. Thus,

total debt service payments of foreign capital has been heavier.¹ As interest payments on short-term capital transactions, which had become brisk throughout the first and second oil shocks, elevated much, annual interest payments reached more than 1.8 billion dollars in 1981 although it was less than 0.1 billion dollars.

As a result of highly increased debt service payments, roll-over² also has been soaring up gradually. This ratio, as we can see in TABLE 2.12, rose from 50.7 percent in 1972, to 59.3 percent in 1977, 60.4 percent in 1981 and 94.7 percent in 1982. This implies that the percentage of foreign capital induced for debt service is getting bigger than for filling up the balance of payments deficit.

Next, we will examine the debt servicing capacity of Korea by a very simple way using debt service ratio, which is usually used to evaluate this capacity.

Debt service ratio³ is the ratio of debt service payments on medium and long-term debt to the earnings from goods and ser-

¹When we calculate the amount of debt service payments, we consider, generally, only interest payments excluding debt amortization in the case of short-term debt because it has short maturity period and frequent transaction, so that the scale of both principal and interest become excessively large.

²This stands for the ratio of debt service payments to new inducement of foreign capital.

³We include investment income from abroad in service exports, so that debt service ratio in this study is slightly higher than the one when we exclude investment income.

vice exports. It is told that a country has gotten into danger in servicing debt if her debt service ratio reaches to 20 percent.

Korea recorded peak high debt service ratio, 20.1 percent in 1971 but it was lowered to 9.2 percent in 1977. From 1978, however, as the speed of increasing rate in debt service payments outpaced that of foreign exchange income in current account, it showed increasing trends -- 12.9 percent in 1981 and 15.5 percent in 1982 (see APPENDIX B). If we judge the debt servicing capacity in terms of debt service ratio, Korea does not have any difficulties to service debt yet.

When we compare the debt service ratio of Korea to that of other developing countries, we can find it is not so high. In 1981, that of Brazil exceeded 30 percent, Chile and Mexico also reached 27 - 29 percent level, while most of Asian countries had lower debt service ratio than Korea's 12.9 percent, i.e., India had 9.0 percent, Indonesia 8.6 percent, Philippines 10.6 percent and Thailand 7.0 percent.

The debt service ratio is an indicator to show whether a country has ability to acquire enough amount of foreign currency to service principal and interest of debt. Except this, it may be also meaningful to measure the ratio of foreign debt to GNP to judge whether that is excessive or not.

The ratio of total outstanding debt to GNP has been rising from 11.1 percent in 1967 to 25.4 percent in 1977, 33.3 per-

cent in 1981 and 35.1 percent in 1982, which implies that the scale of total outstanding debt has been grown faster than expansion of Korean economy. As a result of it, the ratio of debt service payments to GNP as well as interest payments to GNP also increased to 6.0 percent and 2.9 percent each in 1981.

The ratio of debt outstanding to GNP of Korea is quite high compare to other developing countries. Such developing countries as Brazil, Mexico, Chile, Turkey and Philippines have 14 - 24 percent level of it which is much lower than Korea, over 30 percent. Thus, the ratio of debt service payments or interest payments to GNP also much higher in Korea than in those countries. That is, the debt service payments to GNP ratios of Brazil and Mexico were 3.1 percent and 3.7 percent each in 1981. The interest payments to GNP ratio also was lower than Korea, i.e., Brazil 1.8 percent and Mexico, 2.0 percent. Therefore, it is needed to study the debt problem of Korea more carefully to evaluate the capacity to service external debt.