

## Korea in 1997 and Turkey in 1994 How Did the Crisis Happen?

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**T**urkey experienced a foreign exchange crisis in 1994. In the course of the crisis Turkish currency (Turkish Lira) depreciated by 60%, economy recorded a negative growth rate of 6 percent, Turkish Central Bank lost \$3 billion of its international reserves and three small banks collapsed.

Korean financial crisis resulted in 40% depreciation of Korean Won, a financial sector on the brink of collapse, a 5.8 percent contraction of the economy and soaring unemployment.

Though the crises hit the economies in the same manner by strong depreciation of the currencies, the causes and results were different from each other. While Korea suffered a huge damage by the crisis with a slow growth for

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the coming years, Turkey absorbed the impact of the shock successfully and resumed a very high growth rate of 8.1 percent in the following year.

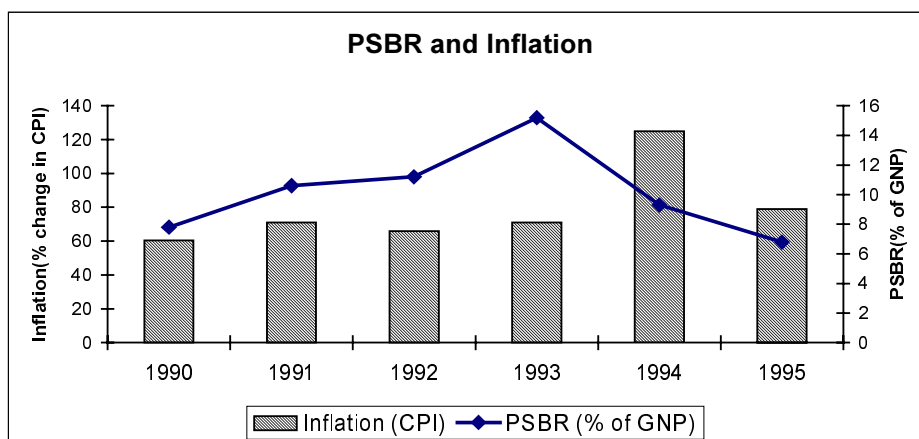
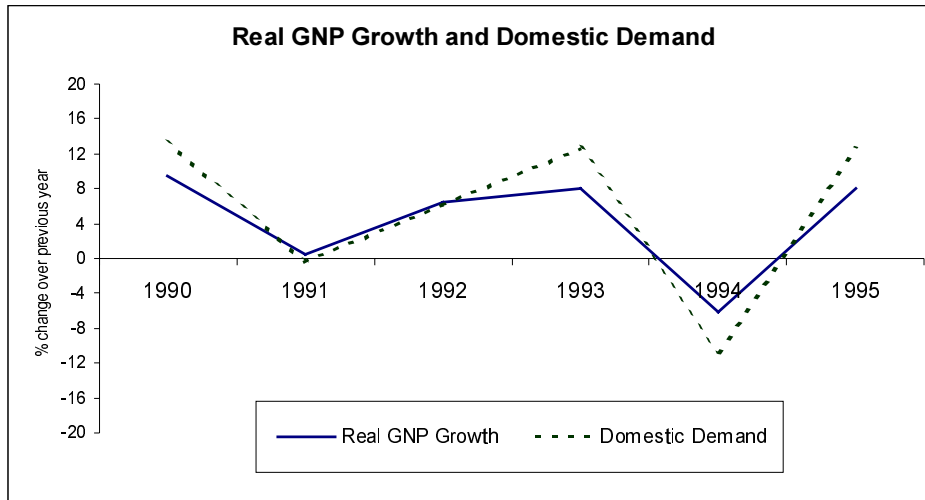
The reason for different paths of development for the crises is attributable to the causes of the crises in both countries. We shall point out that Turkish crisis was result of excessively high public deficits while the problem in Korea was caused by a temporary illiquidity in the foreign exchange market. We accept that there were growing concerns about the performance of the Korean economy due to various reasons. Nevertheless, we believe that the deteriorating indicators were not strong enough to trigger a crisis in the last quarter of 1997. Therefore we tend to subscribe the argument of Sachs and Radelet (1998) in Korean case arguing that the Korean crisis was a result of a panic in international financial community due to Asian Financial Crisis.

The first section of our paper will cover the development of Turkish currency crisis. The second section will be exploring the causes of Korean financial crisis. The third section will compare and contrast both crises and present the differences between two crises.

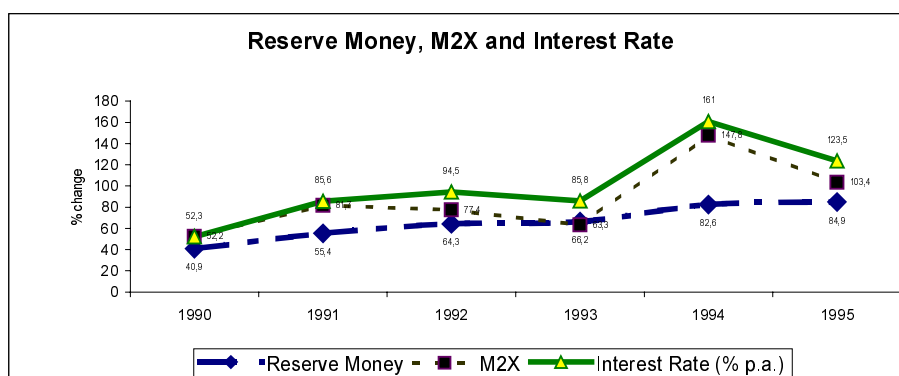
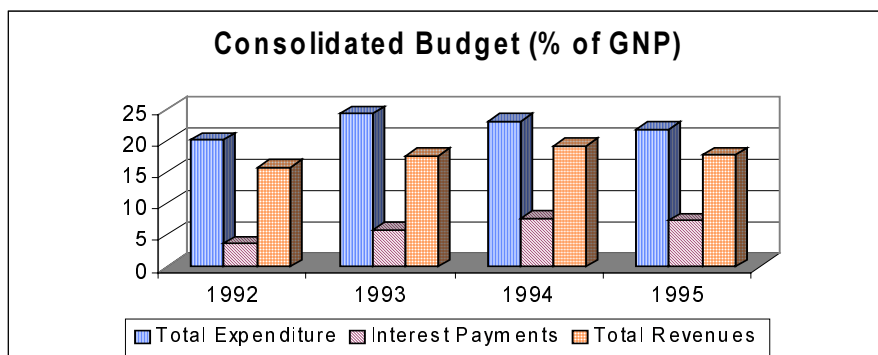
### **I. TURKISH CURRENCY CRISIS OF 1994**

Over the last decade with the introduction of market oriented reforms in 1980s, Turkey registered relatively high rates of GNP growth. At the same time macroeconomic imbalances became increasingly pronounced due to the expansionary public sector policies after 1988. These imbalances resulted in high inflation of 60-70 percent a year and weakening of external balances which culminated in 1994 crisis.

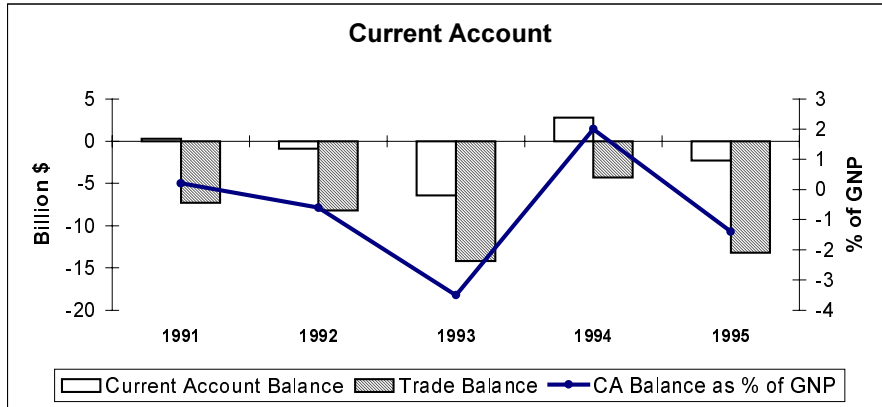
In 1993 real GNP continued to grow rapidly domestic demand increasing 12.6% supported by loose monetary policy and growing fiscal deficit. The surge in domestic demand caused a sharp widening of current account deficit and accelerating inflation to 71.1%.



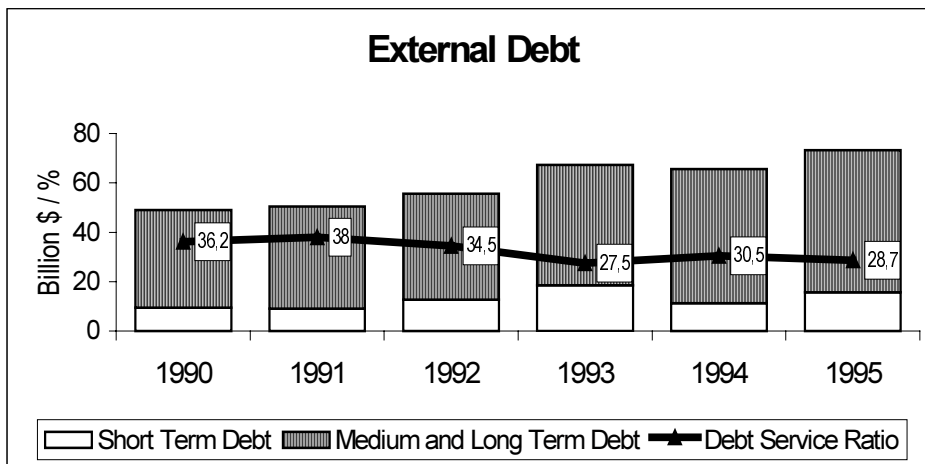
Fiscal performance was disappointing in 1993. The PSBR increased from 11.2 percent of GNP in 1992 to 15.2 percent in 1993. The personnel expenditures and interest payments increased substantially. Implicit subsidies to money losing state enterprises rose along with the high agricultural price support policy of the government. Social security institutions which were experiencing deterioration in their already weak financial positions were also supported by the government. In consequence the public sector needed to finance the increasing deficit or introduce a structural reform to overcome these difficulties.



“While the government’s reliance on net domestic financing has been increasing, it initially refrained from monetizing the deficits by issuing short term debt at high interest rates. However as domestic interest payments rose in 1993, the importance of short term advances from the Central Bank (*monetization*) in financing the deficit increased.” (Agenor, Mc Dermott, Ucer, 1997) Therefore relaxation of monetary policy at the beginning of 1993 led to the above mentioned expansion in domestic demand and worsened current account deficit. Interest rates fell subsequently along with the depreciation of the exchange rate. The intention of authorities was to reduce the interest cost of the public debt and to help the competitiveness of exports.



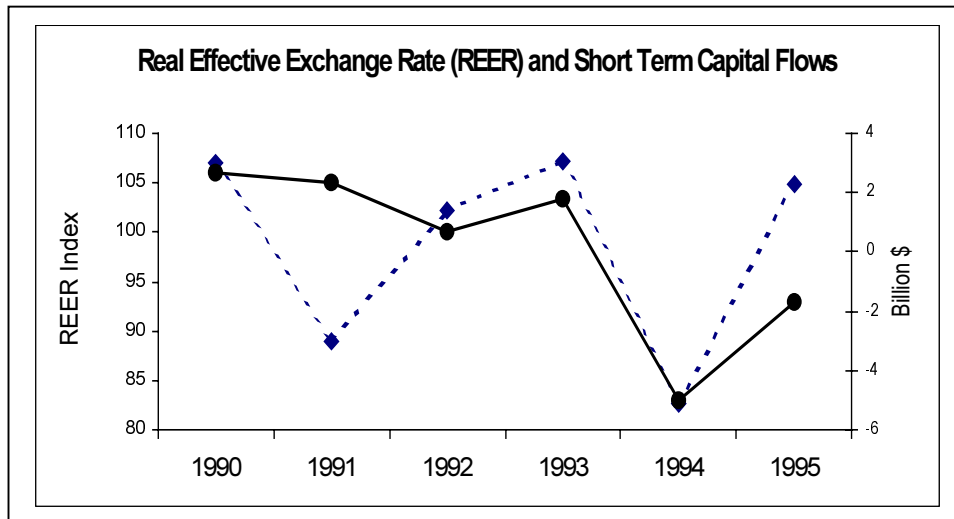
Though exports continued to grow, imports increased outpacing the growth in exports due to expanded domestic demand. Furthermore on the invisibles side of the current account, tourism revenues did not reach the expected level for 1993. Therefore current account deficit deteriorated from 0.9 percent of GNP in 1992 to 3.5 percent of GNP in 1993 recording an almost four fold increase in one year time. Turkey was able to finance the deficit in 1993 though the composition of capital flows shifted toward short term credit and portfolio investment. At the end of 1993, Turkey's foreign exchange reserves stood at 7.8 billion dollars (2.5 months of imports) while its foreign debt increased from 55.6 billion dollars in 1992 to 67.4 billion dollars in 1993. The short term debt increased from 12.7 billion dollars in 1992 to 18.5 billion dollars in 1993 while that of long term changed from 42.9 billion dollars to 48.8 billion dollars in 1993.



Given the background of unsustainable fiscal deficit, excessive liquidity expansion through short term advances from Central Bank to the Treasury and growing concern in the international economic agents, the exchange rate crisis broke out in 1994.

<b>External Debt of Turkey by Borrower</b>					
<i>in billion \$</i>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>
<b>Long Term</b>	41.372	42.932	48.823	54.291	57.577
Government	32.59	33.598	36.237	39.55	39.175
Central Bank	6.53	6.15	6.618	8.597	10.486
Private Sector	2.252	3.184	5.968	6.144	7.916
<b>Short Term</b>	9.117	12.66	18.533	11.31	15.701
Central Bank	557	572	667	828	993
Deposit Money Banks	5.216	7.157	11.127	4.684	6.659
Other sectors	3.344	4.931	6.739	5.798	8.049

The Treasury's continued reluctance to sell securities in the market by canceling Treasury bill auctions or offering small amounts in the auctions along with the heavy borrowing from the Central Bank, the announcement of 1994 budget envisaging no fiscal adjustment and downgrading of Turkey's credit rating by S&P and Moody's ignited the foreign exchange crisis. The crisis broke out in January 1994 and brought the April 5 austerity measures of substantial fiscal adjustment, monetary tightening and structural reform. During this period Turkish Lira depreciated 60% and the Central Bank lost 3 billion dollars of its international reserves.

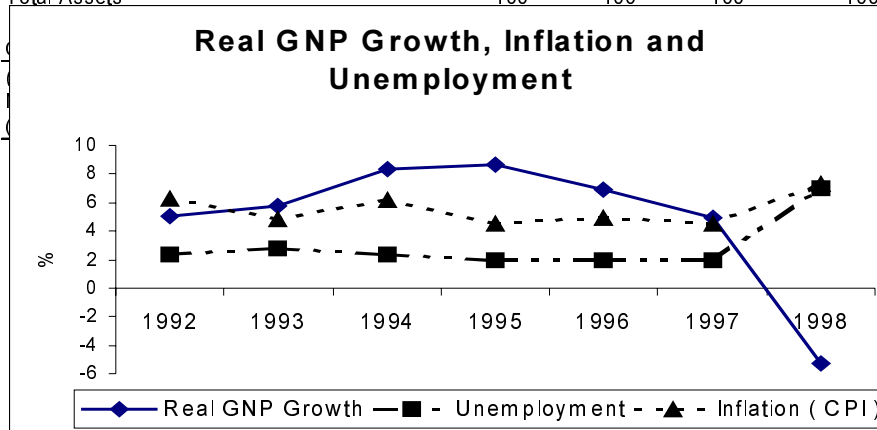


Financial system suffered by the collapse of three small banks and a number of brokerage firms due to their open foreign exchange position and the rising interest rates in financial markets. To avoid a bank run government declared a 100 percent guarantee on all domestic and foreign currency deposits.

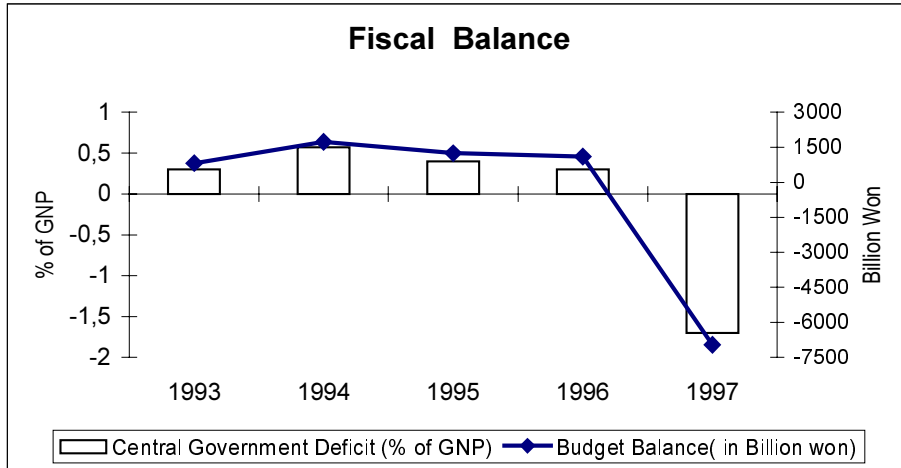
## II. KOREAN FINANCIAL CRISIS

**Non-Performing Loans and Selected Assets in Total Commercial Banking System**  
(As a percentage of total assets)

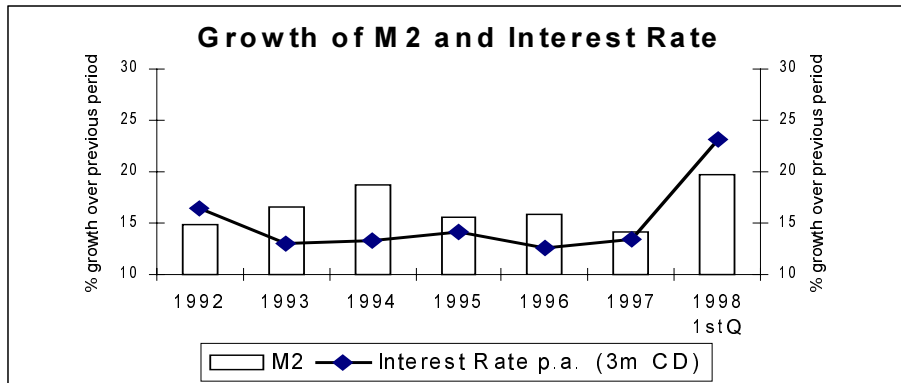
	1992	1993	1994	1995
Treasury Bills and Bonds	9,7	9,4	8,6	7,4
Other Securities Issued by the Public Sector	0,4	0,4	1,3	1,2
Bank Loans	41,3	39,8	37,7	41
<b>Non Performing Loans (Gross)</b>	<b>1,5</b>	<b>1,5</b>	<b>1,6</b>	<b>1,2</b>
Provisions	0,9	1	0,9	0,7
<b>Non Performing Loans (Net)</b>	<b>0,6</b>	<b>0,5</b>	<b>0,7</b>	<b>0,5</b>
Total Assets	100	100	100	100



The Korean economy's growth rate began to slow down from 9 percent in 1995 to 7.1 percent in 1996 followed by a 6.2 percent growth in the first half of 1997. The government deficit was negligible around 0.4 percent of GDP in 1995 and 0.3 percent of GDP in 1996. Inflation was not a big headache for the government which leveled around 4.5 percent during 1995-96. Unemployment was also low around 2 percent during these years.

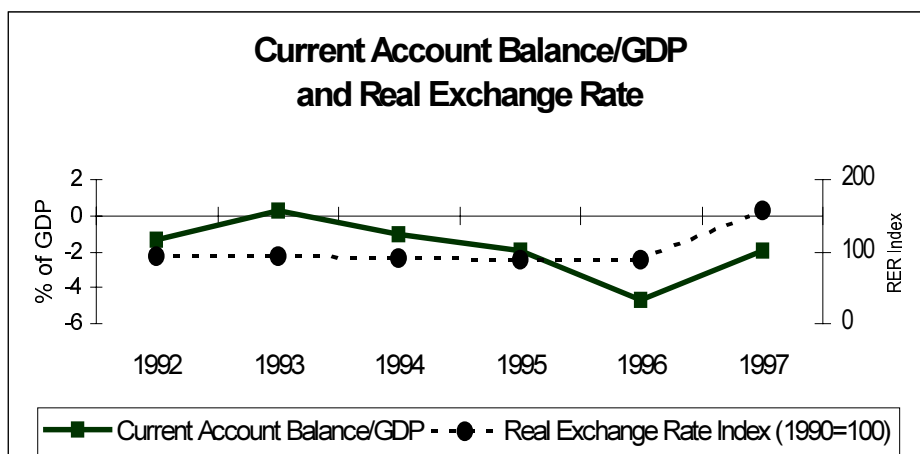


The figures of macroeconomic aggregates did not display a need for significant adjustment in Korea.



However the growth from "1996 onwards resulted from an increase in inventories as firms failed to adjust their production in line with the reduced demand", leading to the decline in corporate profitability -ROE of manufacturing firms in 1996 fell dramatically to 2.0 percent as against 11 percent of 1995 (Bank of Korea,1998). In the mean time current account deficit deteriorated to 23 billion dollars in 1996 due to deceleration of growth of exports largely explained by the fall in prices of Korea's major export items and increasing imports of capital and consumer goods. The deficit was financed heavily by short term capital flows into the country.





The deteriorated current account balance of 1996 (4.9 percent of GDP) improved to \$8 billion in 1997. The degree of overvaluation of won was not significant at that time.

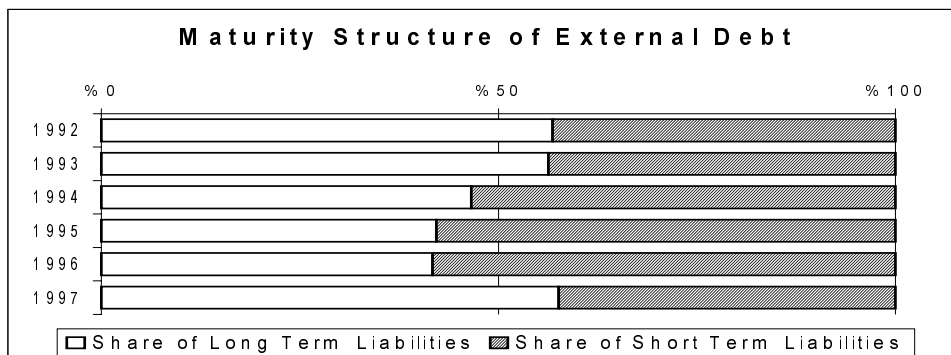
It is argued that the economic structure of Korea has become vulnerable to the unfavorable shocks. The vulnerability was explained by two sources; overly short term oriented external debt structure and insufficient foreign exchange reserves (Hahm, 1998). The external debt significantly increased during 1995 and 1996 from 56.9 billion dollars in 1994 to 78.4 billion dollars in 1995. The rise in debt in 1997 was also very high reaching 104.7 billion dollars (if off-shore borrowing added 157 billion dollars) level. The rapid increase in debt was explained by the comprehensive financial deregulation and liberalization measures taken during the accession to OECD. Given the lower interest rates abroad rapid increase in private sector borrowing was the main reason for soaring external debt of Korea. Indeed most of the short term corporate debt was borrowed very recently since government relaxed the regulation on external borrowing of corporate firms as a response to the SouthEast Asian Financial Crisis and growing shortage of domestic liquidity in the market (Krause, 1998).

Trend of Total External Liabilities						
Billion \$						
	1992	1993	1994	1995	1996	1997
<b>External Debt</b>	<b>42.8</b>	<b>43.9</b>	<b>56.9</b>	<b>78.4</b>	<b>104.7</b>	<b>120.8</b>
I. Long Term	24.3	24.7	26.5	33.1	43.7	69.6
Public	5.6	3.8	3.6	3	2.4	18.1
Firms	6.5	7.9	9	10.5	13.6	17.6
Financial Institutions	12.2	13	13.9	19.6	27.7	33.9
II. Short Term						
Public	7.2	7.8	11	15.6	22	24.6
Financial Institutions	11.3	11.4	19.4	29.7	39	26.6
<b>Off-shore Borrowings</b>	..	..	..	..	52.8	33.6
Long Term ..	..	..	..	..	13.8	16.4
Short Term ..	..	..	..	..	39	17.2
<b>Total External Liabilities</b>	..	..	..	..	<b>157.5</b>	<b>154.4</b>
Long Term ..	..	..	..	..	57.5	86
Short Term ..	..	..	..	..	100	68.4
<i>by sector</i>						
Public ..	..	..	..	..	2.4	18.1
Firms ..	..	..	..	..	35.6	42.2
Financial Institutions ..	..	..	..	..	119.5	94.1

At the end of 1996 the share of short term debt in total external debt reached 58 percent and the reserves of the Bank of Korea began to erode.

The highly leveraged corporate structure was another problem related with increasing vulnerability of the country against external shocks. The Korean companies' debt/equity ratio has been traditionally high due to management practices. However as the growth slowed down and big business conglomerates could not adjust themselves in the new business environment, this high ratio began to be the haunting factor for them. Moral hazard problem is presented as the root cause of the high debt/equity ratio since the big business groups and their creditors thought that the government would not allow them to fail.

The deterioration of the terms of trade in 1996 was the second largest



after the first oil shock of 1974. The highly leveraged financial structure of

companies led to a series of bankruptcies at the beginning of 1997. As the bankrupt companies could not honor their obligations to the domestic banks which had large exposures, the soundness of the financial system began to be questioned by international financial markets. The share of nonperforming loans in banks' assets increased seriously in 1997.

<b>Non Performing Assets of Financial Institutions</b>	
(Percentage of total credit as of the end of March 1998)	
Banking Institutions	9,34
Commercial Banks	10,36
Specialized Banks	7,49
Non Bank Financial Institutions	12,83
<b>Total</b>	<b>10,5</b>

Yet at the beginning of 1997 there was no expectation that Asian Financial Crisis would be affecting Korea. Indeed at an OECD meeting, the Korean delegation told that there was no possibility of a crisis in Korea as the macroeconomic fundamentals are sound in the country and only a decline in the external trade of the country had been posed as a problem. (OECD, Economic Developments Review Committee, October 1997)

As bankruptcies mounted and government intervened to the foreign exchange market to stabilize the won, concerns were began to be pronounced. There were also rumours in international financial markets that the announced foreign exchange reserves of Korea was not in a level that can be used readily. (Hahn, 1998). Indeed the Bank of Korea was depositing foreign exchange to the overseas branches of Korean banks who were unable to rollover their debt due to deteriorating credit standing of Korea. This as explained led to the deterioration of international reserves of Bank of Korea.

Following these developments Standard and Poor's and Moody's downgraded Korea's long term sovereign debt rating in October 1997. A panic started. Korean banks and companies were refused to rollover their debt to foreign financial institutions and Korean Stock Exchange fell as the portfolio investment began to recede from the country.

As the supply of foreign exchange dried very rapidly and demand for foreign exchange was ever high to meet the foreign exchange denominated obligations of Korean banks and companies, the pressure on the exchange rate

was enormously increasing. In November 1997 the allowed fluctuation band of foreign exchange rate was increased to  $\pm 10$  percent from the existing band of  $\pm 2.25$  percent of the previous day's value. Nonetheless this improvement was not enough due to the deep instability in the market. The foreign exchange market was suspended on November 16<sup>th</sup>. As the Bank of Korea struggled to defend won by supplying foreign exchange to the market, its usable international reserves dwindled bringing Korea on the verge of national bankruptcy. The Korean won was allowed to fluctuate subsequently. Korean government requested the help of IMF on November 21<sup>st</sup> and a stand-by agreement signed on December 3<sup>rd</sup>, 1998 giving a support of 8.3 billion dollars.

### Official Foreign Exchange Reserves

*\$ billions*

	1996	Oct 1997	Nov 1997	Dec 1997
1. Official Foreign Reserves	33,2	30,5	24,4	20,4
2. Overseas Branch Deposits	3,8	8	16,9	11,3
3. Others	..	0,2	0,2	0,2
Usable Official Foreign Reserves (1-(2+3))	29,4	22,3	7,3	8,9

### III. COMPARISON AND CONCLUSION

Turkey and Korea have different economic structures and economic policy traditions. While Turkish per capita income was around \$ 3.000 in 1997, Korean per capita income was \$10.000 before the depreciation of the currency.

Our paper tried to highlight the different causes of currency crises in both countries. If it is noticed, throughout the paper we refer Turkish case as currency crisis but the Korean case has been referred as financial crisis. Turkey had a currency crisis much known as a canonical type crisis in the literature. Increasing current account deficit stemmed from unsustainable fiscal deficit and high demand, accommodating loose monetary policy, overvaluation and eventually loss of credibility and quick depreciation of the currency. The internal policy mismanagement caused the problem, there was no external shock or disturbance to the system. As policymakers opted for financing rather than adjusting for existing imbalances in the economy the extent of the depreciation and correction got larger. It should be noted that Turkish currency crisis was an isolated one not in the context of a regional crisis therefore no contagion effect was there. Moreover Turkish case was not as dangerous as the Korean crisis for the financial system. As the comparison of the non-performing assets of financial institutions show, the burden of non-performing loans was not

significant in Turkey. Though there was a rush to the banks when three little banks collapsed, the full deposit insurance was enough to stop it. Turkish companies being experienced living with high inflation were able to cope with the effect of the crisis. Turkish labor market flexibility also proved to be a contributing factor for the overcoming of the crisis. As the remaining companies were stronger after the crisis the recovery was very fast. Turkey fully liberalized her capital account in 1989; therefore the crisis cannot be attributed to the opening of financial markets. Yet it is true that some financial institutions and companies borrowed from abroad as it was profitable given the interest rate differential over the expected depreciation of the currency. This resembles the Korean case where private sector heavily borrowed due to the interest rate differential. However one important thing to note is that the share of private sector in external debt is less than 20 percent in Turkey while that of Korea is around 98 percent. Therefore when the Korean companies borrowed abroad it meant a lot to the external debt as a whole. Korean government was traditionally averse to the fiscal deficits so the indebtedness of Korean government as we have seen is insignificant given the huge public debt of Turkey. In Korea the companies were the most affected ones from the crisis due to their large debt and subsequently their failure brought the systemic risk to the financial system. It was the whole financial system that is going under in Korean case not few banks. The expectations for low future growth is also related with the damage made in the real side of the economy. The Korean crisis, given the companies' strict constraints to cope with the financial burden through flexible labor policies and inexperience in dealing with uncertainties, heavily damaged the real economy. Whereas, as it is discussed, Turkish companies' flexible labor policies and their long developed ability to live in an environment of uncertainties provided to be an invaluable asset in overcoming the crisis. Turkish firms were also able to fund themselves in the market so there was not necessarily a financial credit crunch as it prevailed in Korea.

Few similarities existed between the Turkish and Korean cases mainly pertaining to the triggering of the crisis: the government intervention in the market - interest rate manipulation in Turkey and intervention in the foreign exchange market in Korea- and the downgrading of the credit ratings of the countries by rating agencies. Current account deficit was shown as the most important indicator of the crisis in Turkey but in Korea, though it was very large in 1996, 1997 was the correction year for current account deficit. Therefore current account deficit cannot be cited as primary cause of Korean crisis.

Once the credibility of the policies were damaged the panic started without looking at the fundamentals. Turkey had every reason to have the crisis but Korea was heavily affected by the prevailing atmosphere about South East

Asia and the herd behavior of the international financial markets which could not distinguish the different structure of economies. A temporary illiquidity problem that even would not have been occurred in normal times turned into a nightmare for the country in the presence of South East Asian Financial Crisis.

## NOTES

1. The tables and graphs on Turkey are derived from the *Turkey Recent Economic Developments and Selected Issues*, November 1997
2. The tables and graphs on Korea is derived from the Bank of Korea Research Paper on *Financial Crisis in Korea-Why It Happened and How It Can Be Overcome?*, July 1998

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