

SPP 542
International Financial Policy
South Korea's Next Step



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1. South Korean Economy Outlook

From the mid-1960s to the first half of 1997, South Korea enjoyed the rapid economy growth. The pace of South Korean economic growth was so extraordinary that it was called a “miracle of Asia.” As South Korea joined the Organization for Economic Cooperation and Development (OECD) in December 1996, South Korea became one of the advanced economic countries. For example, now, South Korean gross domestic product (GDP) is the 10th and the total amount of exports and imports in South Korea is the 11th among OECD member countries.¹

Since South Korea accomplished around 10% annual GDP growth in the late 1980s and around over 5% in the 1990s before the Asian financial crisis, the pace at which South Korean economy grows during this period had been both quite fast and stable with relatively small business tides. Other economic indicators also seemed to suggest sound economic condition, except for a few factors. One of them is the current account deficit in the early 1990s [*Figure 1*]. Although the current account deficit itself is not a problem for a sound economic growth, the market moves to offset the current account deficit and the depreciation of home currency would be expected. The other unfavorable factor is the fact that South Korea had achieved its economic development mainly due to the strong export industries in 1980s. This implies that South Korean economic development was not sustainable under the spot exchange rate and needed an adjustment by depreciation or changing fiscal ease [*Figure 2*].

In terms of national account, there are four noticeable characteristics; those are, high domestic saving, high government expenditure, low domestic consumption, and high export/import, though these characteristics prevail not only in South Korea, but also in many other East Asian countries [*Table 1*]. This economic structure contributed to continuous investments in domestic industries. From the Philips curve, we estimate a natural unemployment rate in South Korea at around 2%. Surprisingly, even under the condition of full employment, the inflation rate is expected to be approximately 5% [*Figure 3*].

However, there was a significant economic drop in 1998. This was because of the Asian financial crisis. We will analyze this issue in a later chapter. After the shock by the Asian financial crisis, South Korean economy rapidly recovers, which is often called as the “V” recovery. The GDP growth rate became again around 5% [*Table 2*]. Economic reforms contributed to the improvement of the productivity in many domestic industries. From the macroeconomic perspective, one of the key factors in the rapid recovery of South Korean economy is the increase in net exports by the depreciation of the home currency. We will later explain the details of South Korean economic reform policies after the Asian financial crisis.

2. Foreign Exchange System Outlook

After the independence from Japan, Bank of Korea (BOK) was established as the central bank. Under the administration of the BOK, South Korea adopted the fixed exchange rate system against the US dollars, as other independent Asian countries did. However, by the late 1970s, the increased trade volume and foreign pressures to open Korean markets gradually made it difficult to sustain the fixed exchange rate. In February 1980, South Korean decided to adopt the multiple-basket pegged exchange rate system, which permitted the exchange rate to fluctuate against major currencies.² In 1990, further global economic integration and increased foreign pressures to open domestic markets

¹ Major Statistics of Korea among OECD Member Countries, Korea National Statistical Office
< http://www.nso.go.kr/eng/releases/e_dioe2002.htm> In GDP per capita, 24th.

² Foreign Exchange System, Bank of Korea, <<http://www.bok.or.kr/>>

The actual exchange rate was determined by the following formula.

Exchange Rate = $\alpha \cdot \text{SDR basket} + \beta \cdot \text{TWB} + P$ [$\alpha + \beta = 1$, TWB : trade weighted basket, P : policy variable]

made South Korea adopt the Market Average exchange Rate System (MARS). Under the new system, exchange rates were allowed to fluctuate around market average rates within certain limits.

Moreover, in December 1997, after the Asian financial crisis, it became impossible to sustain the system under the strong market depreciation pressures. South Korea decided to abolish daily fluctuation limits for the inter-bank exchange rate and Korean exchange rate system was finally shifted to a free-floating system. We will explain the details of effects of the Asian financial crisis on the South Korean economy later.

Because of the reasons mentioned above, South Korean foreign exchange rate before the Asian financial crisis was relatively stabilized at 800 won/\$. However, after the Asian financial crisis, the South Korean won depreciated about 30% against the US dollar (1,200 won/\$) and about 15% against the Japanese yen [*Figure 4*]. From this figures, both the increase in exports and the decrease in imports can be estimated, which would result in the improvement of the current account. In fact, the current account has improved after 1998, and this fact supports the economic theory.

3. The Financial Crisis in South Korea

From the last half of 1997 to 1998, the South Korea's favorable economic condition was suddenly overturned and South Korea experienced a severe financial crisis: huge international capital outflows. In July 1997, the devaluation of the Thai baht triggered the Asian financial crisis, which had a huge negative impact on South Korean economy. Doubting the strength of South Korean economy, foreign banks that had been lending a large amount of money to South Korean firms started to pull out their loans, and stock market investors tried to sell off their assets. In addition, South Korean financial institutions and firms needed to repay foreign currency obligation. Even South Korean citizens began to exchange their won-denominated assets with foreign denominated assets, doubting their economy. In this way, the demand for foreign currencies or assets increased rapidly. Since there were few foreign currencies available in South Korean exchange market, the South Korean won deteriorated against the U.S. dollar by as much as 30 %. During that period, South Korean real economy also suffered from a sharp downturn; many major companies and financial institutions collapsed, which increased an unemployment rate from about 2.1 % in 1997 to about 7 % in 1998. South Korean GDP fell from US\$ 4,766 million to US\$ 3,177 million; the economic growth rate became -6.7 %.

There were several reasons why the international capital outflows happened. One reason is the structural flaws of financial systems. The systems had potential risks in its convention: less transparent banking system, inappropriately close ties between businesses and the government, insufficient supervision systems of banking sector and the absence of independence of the central bank, BOK. In particular, the failure of the government to deregulate the banking sector should be pointed out. Though the economy of South Korea grew rapidly, the government left the financial systems unchanged from 1960s. Financial institutions in South Korea were considered as reliable because the government was believed to supervise the financial systems and would bail out the institutions in case of difficulties. However, in fact, the government did not effectively supervise South Korean financial institutions. Accordingly, even though the institutions were in danger of default, the government was not able to provide effective measures to solve the crisis. Another reason is that South Korean firms had borrowed an inappropriately huge amount of money to expand its scale since 1960s. Because of too much investment, South Korean firms suffered from excess supply and a huge amount of debt since 1990s.

While South Korean economy remained stable, foreign investors were not concerned about these structural flaws of South Korean economy. However, these flaws became serious threats to investors once South Korean economy went into the downturn. Since 1995, depreciation of Japanese yen caused South Korean export goods relatively expensive compared to Japanese products. Then, South Korean exports started to decline, which made South Korea lose its trust

from foreign investors. At last, in July 1997, these problems were associated with the devaluation of Thai baht, then, won continued to depreciate, and South Korea was caught up in the Asian financial crisis.

Dealing with the lack of foreign currencies, the BOK tried to provide foreign currencies to both the financial institutions and the firms that could not meet foreign currency obligations. However, South Korean foreign reserves decreased from US\$ 22.3 billion in November to US\$ 6 billion in December in 1997. Considering this scarcity of the foreign reserves, Korean government found it impossible to solve the crisis by itself and was forced to ask financial aids from the International Monetary Fund (IMF). Responding to the request, the IMF decided to provide South Korea with a financial aid package of approximately 58 billion US dollars (the amount included the aid from the U.S., Japan, the World Bank, etc.) in return for implementation of economic reform plans the IMF recommends. The plans included (1) a contractive monetary policy: higher interest rates to limit the exchange rate depreciation, (2) efforts to avoid large budget deficits and (3) structural reforms, such as the deregulation of financial systems.³

4. Kim's Presidency: After the Financial Crisis

South Korea was forced to reform its economic structure rapidly to receive loans from the IMF. Although South Korea had already grown into one of the largest economies in 1990's, as we explained, its economic structure was still immature, which might have been the biggest reason why South Korea got into the crisis in 1997. To recover from the biggest crisis after the Second World War, South Korea began drastic economic reforms in such areas as large exporting firms, financial industries, the public sector and the labor market. Of these four areas, the reforms of large exporting firms and financial industries had made South Korean economy leaner, more transparent, and more efficient.

First, since large exporting firms in Korea could easily get loans for further investments, these firms were induced to expand their investments without calculating their returns minutely. In fact, the rule of 'too big to fail' that the government would never discard big exporting firms prevailed in South Korea at that time. Considering that this generous attitude of the government resulted in the deterioration of financial conditions of these large firms, the government began drastic reforms after the crisis in 1997. Among top thirty firms in the country, sixteen were closed or re-organized. Remaining firms were also forced to undertake internal reforms. For example, they withdrew from non-performing businesses and tried to improve their financial conditions by selling assets. Finally, South Korea was able to get rid of the traditional 'too big to fail' custom, which led to the deterioration of the efficiency of big firms.

Second, South Korea also tried to reform its volatile financial industries. Although the government liberalized the financial industries during 1980's, to some extent, they were still immature. To strengthen structures in financial industries, South Korea discarded weak banks and gave subsidies to remaining banks to amortize their non-performing loans. In addition, the country also tried to strengthen monitoring functions in financial industries. These kinds of reforms led to the improvement of the volatile structures of South Korean financial industries. For example, non-performing loans rapidly decreased from 13% in 1999 to 3.4% in 2001. Banks could make 5.2 trillion won profits in 2002, though they made 4 trillion won loss in 1998.

Because South Korea succeeded in reforming its weak economic structures after the crisis in 1997, its current economic performance seems to be better than that in other developed economies, such as the U.S. and Japan. In 2001, South Korea paid all the remaining loans from the IMF and became a donating country; its GDP grew at 3.1% in 2001; the unemployment rate is now stable at around 4%. After recovering from the devastated condition, South Korea now is trying to strengthen

³ IMF Stand-By Arrangement, Republic of Korea <<http://www.imf.org/external/np/oth/korea.htm>>

the competitiveness of prospective industries in the twenty-first century. For example, the president declared in 2002 that South Korea tries to strengthen the competitiveness of such areas as IT (Information Technology), BT (Bio Technology), CT (Technology in Cultural Industry), ET (Environment Technology), NT (Nano Technology), and ST (Space Technology). In addition, South Korea also tries to increase the popularity of South Korean products in the world market.

5. Current Policy Problems and Recommendations

Although the current economic indicators in Korea, such as the growth rate of GDP and unemployment rates, are more favorable than those in other developed countries, we think that the country still needs further economic reform to strengthen its economy. Thus, we will analyze the current policy problems in South Korea and propose recommendations.

(1) High Savings and Large Government Expenditure

As we pointed out, high domestic saving and low domestic consumption is one of the most remarkable characteristics of the South Korean economy. The ratio of gross saving compared to disposable income (26.8%) is much higher than that in other developed countries, such as the United Kingdom (6.9%), the United States (7.6%), France (12.6%), and Japan (13.7%) [Figure 5]. Although a high saving rate leads to active investments by private firms, as we explain, excessive private investments in South Korea had resulted in the “over-supply,” which made South Korean economy heavily reliable on foreign demands. Therefore, we recommend that Korea stimulate private consumption through such measures, as the decrease in consumption tax rate.

Furthermore, South Korean economy still relies on large public demands. Although the government expenditure plays an important role when the economy is in its development stage, it would be desirable for private consumption and investments to substitute for the government expenditure after the economy develops, to some extent. For example, Japanese economy has been stagnant, partly because its continuous reliance on public demands has weakened Japanese economic structure. In addition, after the Asian financial crisis, Korean government increased taxes to offset the government debt by the request of IMF. Though the policy may improve the balance sheet of government, there is crowding out of private consumption and investment. Instead, we recommend that South Korea decrease the government expenditure to be a “small government.”

(2) Unique Industrial Structure in South Korea

As we explained, the portion of exports in South Korean economy is larger than that in other developed countries (around 35% of its GDP) [Figure 6]. This number is much larger than those of the United States (8.0%), Japan (9.7%), the United Kingdom (19.5%), and France (22.5%). The fact that South Korea relies heavily on demands in other countries indicates that its economy is forced to fluctuate as the exchange rate moves up and down. This excessive dependence of South Korean economy on external demands can be explained in the AA-DD diagram [Figure 7]. The slope of the DD curve for South Korea is flatter than those for other countries. In this case, the negative external shock, such as large fluctuation of foreign exchange rates, is magnified. To make South Korean economy more stable, we recommend that the country adopt economic reform policies to expand domestic demands rather than exports. To decrease exports and stimulate domestic demands instead, it seems to be necessary to increase investments in such areas as service industries that would result in increase in domestic consumption in the future. If new investments succeed in making commodities in South Korean service sectors more attractive, consumption in the country would increase to offset the decrease in exports.

In addition, since South Korea imports precision capital goods from Japan, which has resulted in a chronic trade deficit (around 10 billion deficit per year) with Japan, imports, instead of domestic investments, necessarily increase when South Korea tries to increase exports. If South Korea comes to produce these capital goods domestically, its economy also becomes more immune from the fluctuation of the foreign exchange rate. Therefore, we recommend that South Korea make

additional reform policies to increase domestic investments or to induce further foreign direct investments in manufacturing sectors that produces these capital goods.

(3) Volatile Foreign Exchange Market in Asia

Although the current South Korean economy are subject to the fluctuation of the foreign exchange markets, the country does not have formal cooperative systems, such as the G8 summit, that enables Asian countries to negotiate with one another concerning the issue of volatile foreign exchange markets. Since Japan, China, Hong Kong, Taiwan and Korea are the top five economies in terms of foreign currency reserves, we also recommend that South Korea take an initiative to establish a new regional system to monitor movements in the foreign exchange markets and to give emergent funds to countries that are heavily affected by external negative shocks.

6. Analyses of Our Recommendations

While our recommendations seem to strengthen the economic structure in South Korea, they also have a few limitations. Thus, we then analyze whether these recommendations are practical solutions for further reforms of South Korean economy.

(1) Limitations of the First Recommendation

Increase in private consumption might harm the sound economic development, because it necessarily decreases private firms' investments. However, as we pointed out, South Korea had faced with severe economic downturn in late 1990's because of the excessive supply. Therefore, it might be plausible to pay more attention to consumption rather than further savings and investments.

On the other hand, the decrease in government expenditure is usually difficult to propose, because it would harm some workers that rely on public demands in such industries as construction and transportation industries. It implies that such a policy will face strong political oppositions. Thus, the strong presidential leadership is required to achieve this policy.

(2) Limitations of the Second Recommendation

While reforms of the current South Korean industrial structure would decrease the role of exports and increase domestic demands, which, as a result, would strengthen South Korean economic structure, the transition of economic and industrial structure generally takes a long time. In addition, it is also true that such transition would be costly policies at least in the short run. Therefore, it might be difficult to persuade politicians to adopt our recommendations that would have favorable effects only in the long run. In fact, South Korea now tries to strengthen its economy by further increasing exports.

(3) Limitations of the Third Recommendation

Although further cooperation among Asian countries is indispensable for the establishment of new regional systems, it would be difficult to coordinate policies among Asian countries. For example, financial authorities in large Asian countries, like South Korea, Japan and China tend to pay more attention to the fluctuation of their local currencies against the US dollars, because the United States is the biggest trade partner for these countries. In addition, the current condition in the East Asia region does not satisfy any criteria for optimum currency area [Table 3]. In fact, though the economical synthesis in this region started only around 20 years ago, this is quite different from the situation in Europe. Furthermore, the difference in political systems in this region will also prevent Asian countries from coordinating financial policies.

(4) Conclusion -The Importance of Our Recommendations-

Although it might be difficult to adopt our recommendations, due to such reasons, as political infeasibilities, negative external shocks (speculative attacks on won or sudden decrease in foreign demands on South Korean products, etc.), might damage South Korean economy in the future. Thus, we recommend that the South Korean government reform its economy structure that seems to be vulnerable to the fluctuation of foreign exchange markets by utilizing our proposals. We assert that South Korea's next step is to make its economy as immune to external shocks as possible.

Appendix

[Table 1]

Composition of National Accounts

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
C	52.3	52.9	53.4	54.4	54.7	55.8	56.3	54.6	56.2	57.3	59.1	60.2
G	10.5	10.8	10.5	10.2	9.7	10.2	10.1	11.0	10.4	10.1	10.4	10.6
I	39.0	37.0	36.2	36.0	36.7	36.8	35.1	29.8	27.8	28.4	27.0	26.7
EX	27.4	27.7	27.5	27.8	30.2	29.5	34.7	49.7	42.3	44.8	42.2	40.0
IM	30.4	29.1	27.5	29.0	31.7	33.6	35.7	36.3	35.5	41.7	40.0	38.6
S	37.3	36.4	36.2	35.5	35.5	33.8	33.4	33.9	32.9	32.4	30.2	29.2
Sp	29.9	28.9	28.1	26.9	25.8	23.5	22.8	24.4	23.2	19.3	17.6	16.5
Sg	7.4	7.5	8.1	8.6	9.7	10.2	10.6	9.6	9.7	13.0	12.6	12.7

(Source: IMF)

Note: The government figures (**G** and **Sg**) only include the portion of central government expenditures/revenues. Considering the definition of government widely, these figures may be more than 20% of total GDP.

[Table 2]

GDP / GDP Growth Rate

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
GDP (100 million US\$)	2951	3147	3457	4024	4894	5200	4766	3177	4058	4617	4273	4766
GDP Growth Rate	9.2	5.4	5.5	8.3	8.9	6.8	5.0	-6.7	10.9	9.3	3.1	6.3

(Source: Bank of Korea)

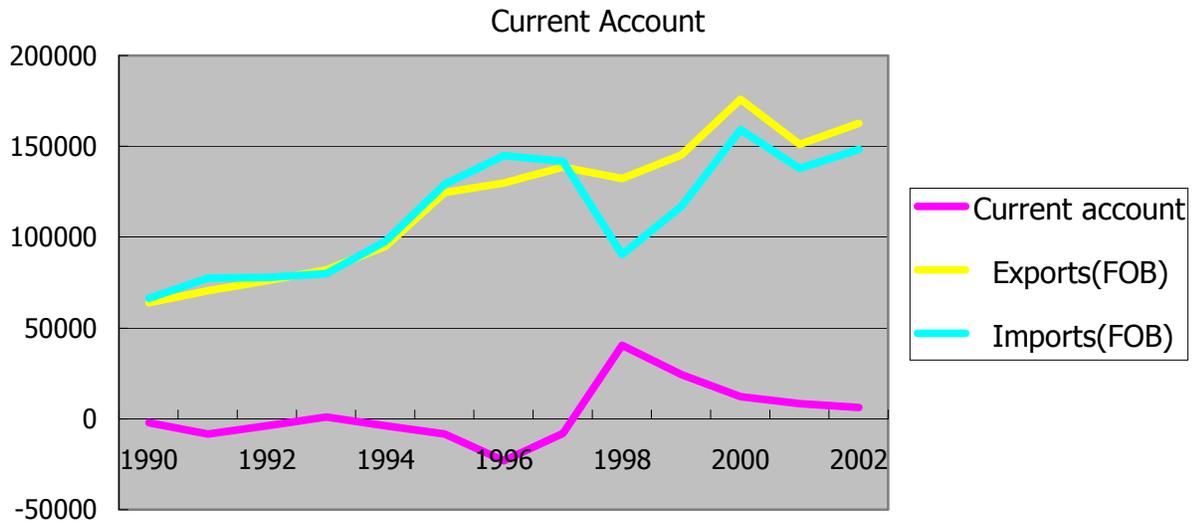
[Table 3]

Diagram for Optimum Currency Zone

	East Asia	Euro	US
Export/Import per GDP	Below 10%⁴	10-20%	70%
Labor mobility	Quite low (Strict immigration laws)	Low	Med
Similarity of Economic Structure	Low	Med-low	Low
Fiscal Federalism	No (Strongly)	No (But Existence of EU)	Yes

⁴ Estimate from IFS etc. The percentage of trade per GDP in East Asian countries is around 15 -20%. Of these exports, the portion of intra-Asian trade is around 45%. Therefore, the ration of intra-Asia trade as of Asia GDP can be estimated as below 10%.

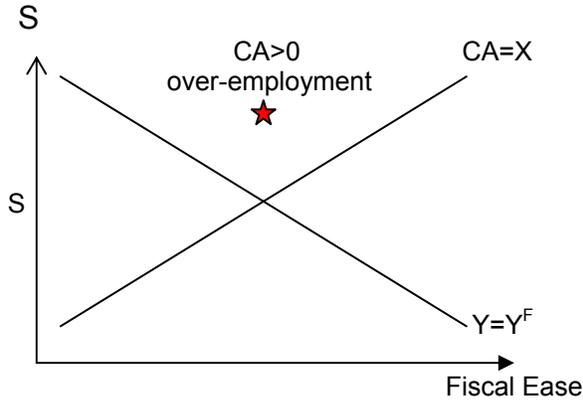
[Figure 1]



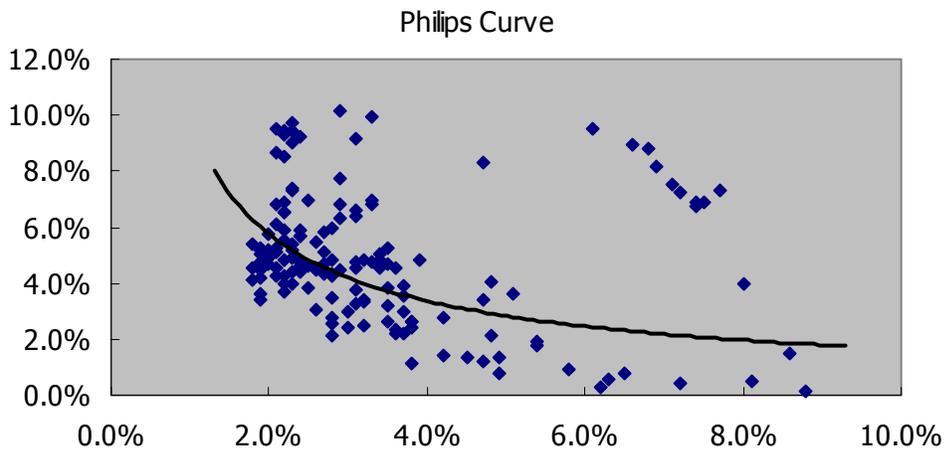
(Source: Bank of Korea)

[Figure 2]

Korea in early 1990s

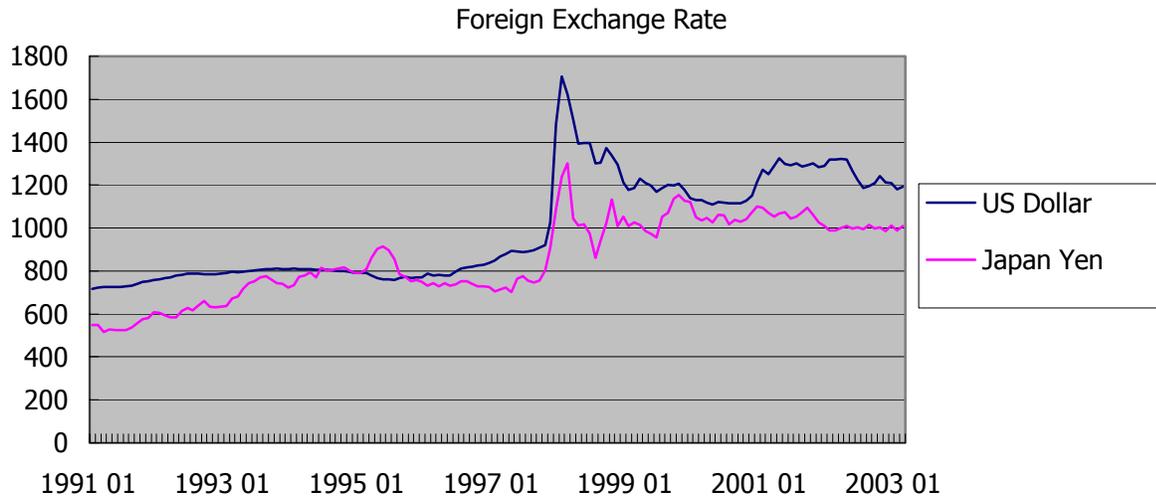


[Figure 3]



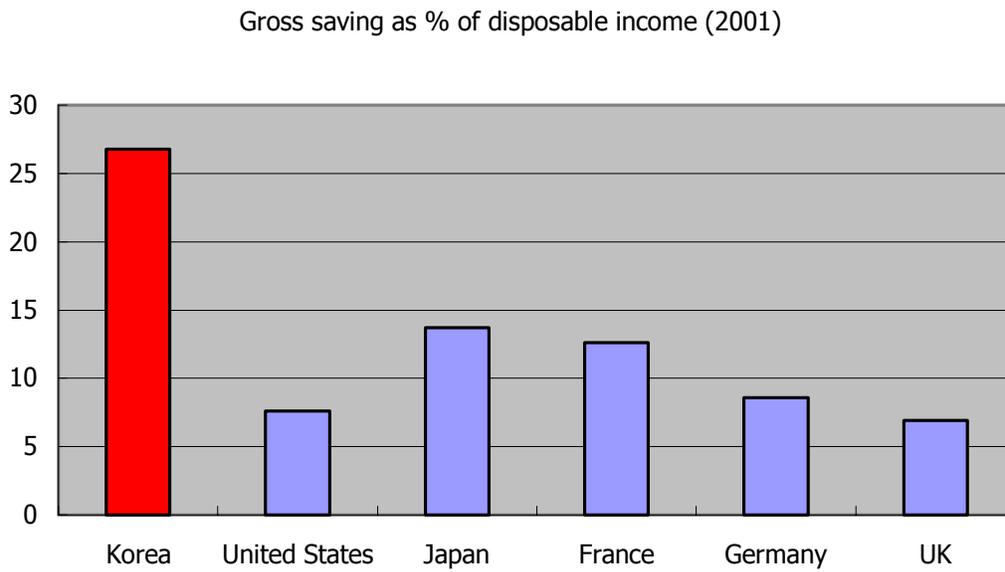
(Sources: Bank of Korea and Korea National Statistical Office)

[Figure 4]



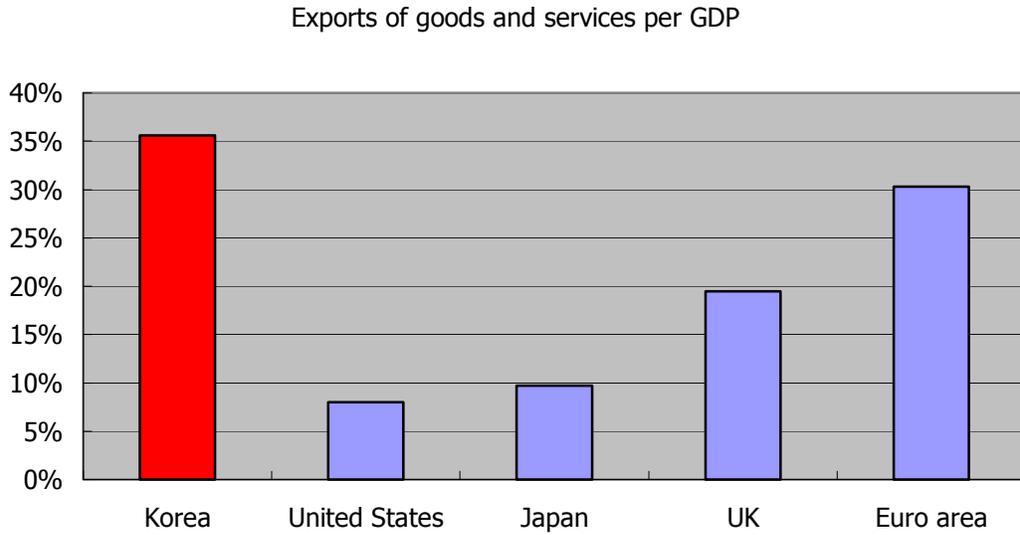
(Source: Bank of Korea)

[Figure 5]



(Source: OECD)

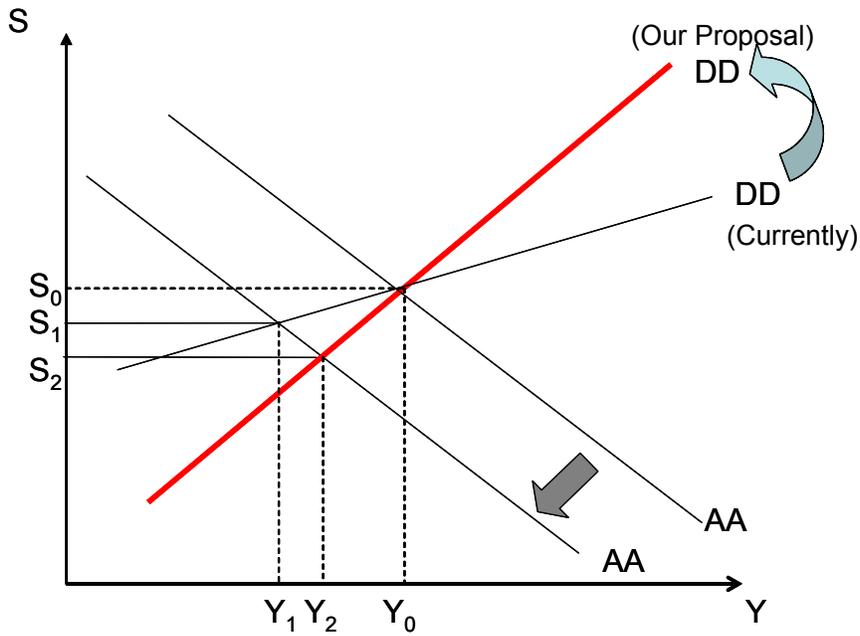
[Figure 6]



(Source: OECD)

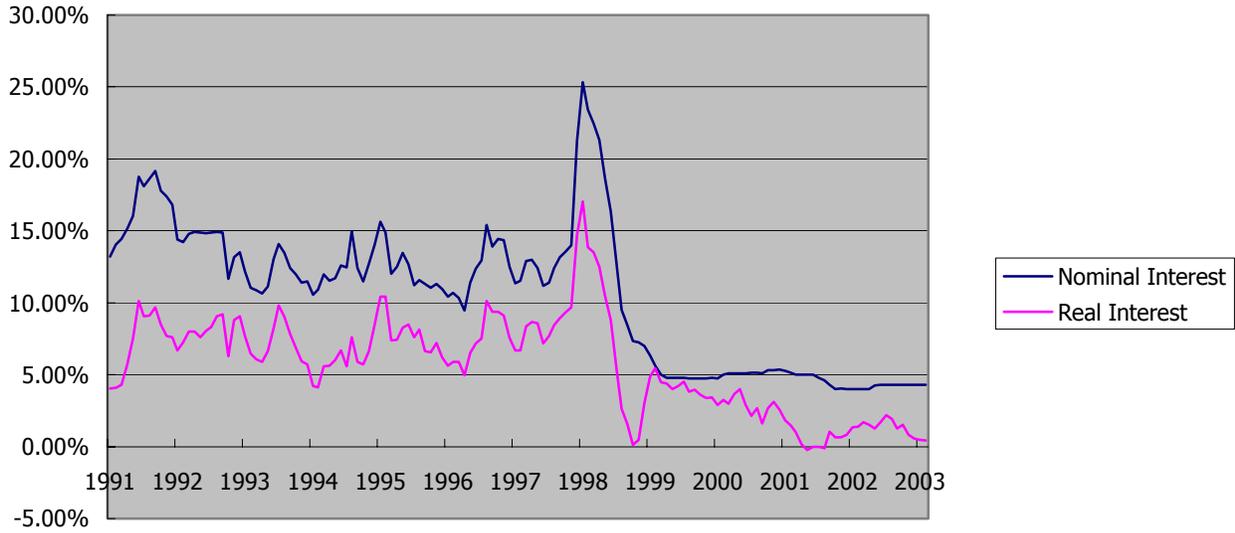
[Figure 7]

The case if there is an external economic shock to shift AA curve to the left.



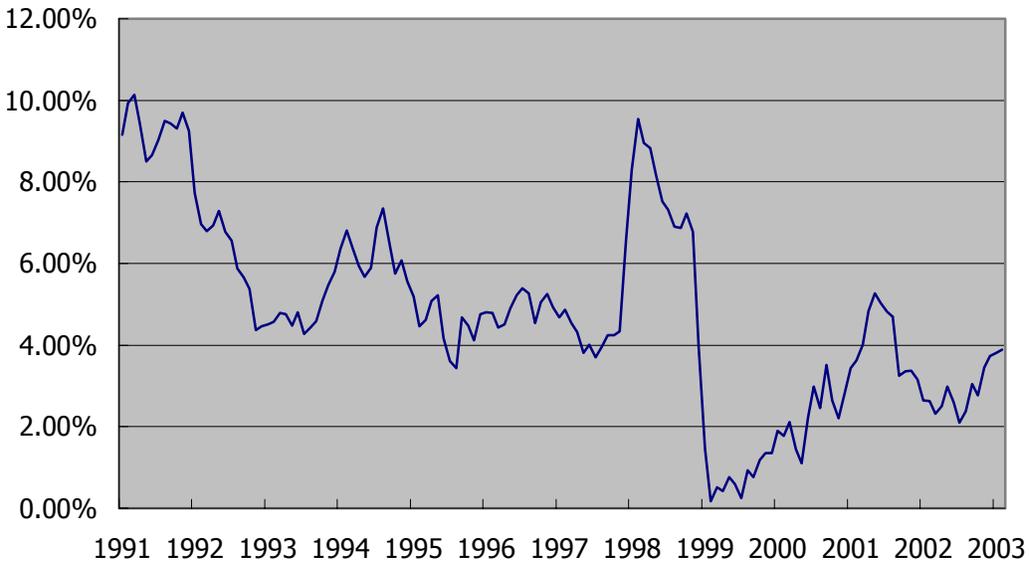
Supplemental Data

[Figure 8] Interest Rate



(Source: Bank of Korea)

[Figure 9] Consumer Price



(Source: Korea National Statistical Office)