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FOREIGN EXCHANGE POLICY, MONETARY POLICY,
AND CAPITAL MARKET LIBERALIZATION IN KOREA

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ABSTRACT

In this paper, I investigate the interactions between foreign-exchange policy, monetary policy, and developments in Korean capital markets. A large increase in Korea's external position, combined with a relatively inflexible exchange rate, led to very large potential increases in money growth between 1986 and 1989. The sterilization of the foreign exchange intervention required an unprecedented monetary tightening on other fronts--a tightening that could have created serious distortions in the financial markets had direct credit controls been utilized. Consequently, the use of open market operations, rediscount policy, and reserve requirements was expanded and adapted to be more responsive to other market rates.

In addition to its sterilization efforts in 1986-89, the Korean government allowed the won to appreciate against the dollar and liberalized some capital outflows, thereby reducing the external pressure for money growth. Additionally, in March 1990, the government introduced a more flexible exchange rate system that will help reduce future external pressure on the money supply. However, because daily changes in spot rates are currently limited, pressure on the money stock may occur again if market pressure for exchange rate changes exceed the allowed bands.

Foreign Exchange Policy, Monetary Policy, and
Capital Market Liberalization in Korea

Deborah J. Lindner¹

Introduction

In this paper, I investigate the interactions between foreign exchange policy, monetary policy, and developments in Korean capital markets. A large improvement in Korea's external position, combined with a relatively inflexible exchange rate and rigid capital controls, generated pressures for potentially large increases in money growth and inflation between 1986 and 1989. This situation presented a challenge for the Korean government, because it introduced conflicts among official policy objectives. Leaving the existing controls on the exchange rate and capital flows (and the trade regime) unchanged would continue to generate balance of payments surpluses that required large scale foreign exchange intervention. However, sterilization of the foreign exchange intervention required an offsetting monetary contraction--a tightening that could have created serious distributional and political consequences had the more traditional tools of direct credit controls or even reserve requirements been utilized alone.

The Korean government tackled the situation on a number of fronts. As a short run response, the government created additional

^{1/} The author is a staff economist in the Division of International Finance. This paper represents the views of the author and should not be interpreted as reflecting the views of the Board of Governors of the Federal Reserve System or other members of its staff. I have benefitted from the comments of Yoon Je Cho, Robert F. Emery, Dale W. Henderson, Steven B. Kamin, Michael P. Leahy, and Charles J. Siegman, and discussions with Robert B. Kahn and Ralph W. Smith, Jr. Of course, any errors are my own.

instruments and adapted existing instruments to enhance their ability to sterilize the foreign exchange intervention. Reserve asset management was used extensively to sterilize the monetary impact of the external surplus. Sales of monetary stabilization bonds issued by the Korea's central bank exploded in 1986-89 and foreign-exchange stabilization fund bonds began to be issued by the central government in 1987. Rediscount policy was tightened and its industrial policy function was reduced. Sales of monetary stabilization bonds and the tightening of rediscount operations helped slow the growth of reserve money in 1988 and 1989 after a very rapid increase in 1987. Furthermore, reserve requirements were more than doubled, effectively reducing the money multiplier.

As a longer-term solution, the government made changes in its exchange rate policy, capital controls, and trade policy to reduce the balance of payments surplus. Aside from the massive sterilization efforts in 1986-89, the Korean government allowed the won to appreciate about 30 percent against the dollar and approved additional capital outflows, thereby reducing the external pressure for money growth. Perhaps the most important change in capital flows was the prepayment of external debt, which totalled 27 percent of the exports of goods and services in 1986-1989. In March 1990, the government introduced a new more flexible exchange rate system that allows the won to move slowly in line with market pressures. Trade liberalization over this period also contributed to a decline in the current account surplus.²

^{2/} Factors outside of the control of the government, such as labor disputes and the subsequent large increases in wages, were also important in reducing Korea's current account.

This paper discusses the interaction between Korea's exchange rate system, monetary policy, and capital controls and how those systems were adapted in the second half of the 1980s in response to Korea's balance of payments surpluses. In the following section, I provide some background on Korea's foreign exchange system and the favorable external shocks Korea faced in the mid-1980s. Subsequently, I describe the implementation of monetary policy and the efforts of the Korean government to reduce the inflationary potential of the balance of payments surplus. In the final section, I present some concluding observations.

Foreign Exchange Policy and the "Three Blessings"

This section provides some background on Korea's foreign exchange policy in the 1980s and the positive external shock it faced in the mid-1980s. The Foreign Exchange Control Act (FECA), enacted in 1961, is the backbone of Korea's foreign exchange control system. The Act provides the framework for governmental control over all foreign exchange transactions, short-term capital inflows, and all capital outflows.³ The Act prohibits all external transactions in principle; allowable transactions are defined in regulations issued by the Ministry of Finance or its delegate, usually the Bank of Korea, Korea's central bank.

In early 1980, Korea's fixed exchange rate against the dollar was replaced by a managed rate in which the Bank of Korea (under guidance from the Ministry of Finance) set the mid-rate for the won against the

^{3/} The Foreign Capital Inducement Act regulates longer-term capital inflows: foreign direct investment and large loans with maturities over three years.

dollar based on the SDR basket and an unspecified trade-weighted basket of major foreign currencies, as well as on other unspecified factors.⁴ Some of the other factors considered were domestic and foreign price trends and the balance of payments position.⁵ All other exchange rates were set at small margins from the official mid-rate.⁶ In the second half of 1980, forward contracts between the won and foreign currencies were introduced.⁷ Except for interbank transactions, it was required that the amount and term of any contract be based on a bona-fide trade

4/ Under this system, the dollar remained the intervention currency. Official rates for transactions between the won and other currencies were determined by the cross-rate of the won-dollar mid-rate and dollar-nondollar rates in international markets. According to Kim (1989), the currencies in the trade-weighted basket included the yen, U.S. dollar, Deutsche mark, pound sterling, and Canadian dollar (the only currency not in the SDR).

5/ Bank of Korea, *Annual Report*, 1981, 1983, 1984, and 1985. For example, ". . . foreign exchange policies focused on improving further the current account and reducing significantly the growth of the external debt." (1985, page 28.) "To support export competitiveness, exchange rates were managed flexibly, in response to the changes in the price differentials between at home and abroad and movements in the exchange rate of our major export competing countries." (1985, page 30-31.)

6/ Buying (selling) rates for the dollar used for official intervention in the interbank market were set by subtracting (adding) a small spread (0.4 percent in 1989) from the mid-rate (expressed in won/dollar). Interbank rates were freely set. However, in practice, of course, the rates remained within the Bank of Korea's intervention rates. Customer rates offered by foreign exchange banks were also set at a given percentage from the mid-rate. The largest spread, for customer cash rates, was 1.5 percent. In September 1989, foreign exchange banks were allowed to set telegraphic-transfer rates for the dollar within (no longer necessarily at) a 0.4 percent band around the mid-rate. The band for non-dollar transactions was expanded to 0.8 percent. The band for cash rates was removed; these rates were liberalized.

7/ In July 1980, forward contracts between the won and dollar were approved; in October, forward contracts between the won and other major foreign currencies were approved. Prior to July 1980, only forward contracts between foreign currencies were allowed.

transaction.⁸ Ceilings on foreign exchange positions for foreign exchange banks were set by the Bank of Korea; the Bank of Korea acted as a bank of last resort in settling the residual open foreign exchange positions of the foreign exchange banks.

Under this system of managed exchange rates, the won depreciated about 46 percent against the dollar in nominal terms and 35 percent in real (CPI-adjusted) terms from the end of 1979 to the end of 1985. The won's real depreciation against the yen was comparable over this period. Although the decline of the won against the dollar was fairly steady over the first half of the 1980s, the decline against the yen occurred in large part in 1985. (See the top panel of Chart 1.) In addition, in 1986-87 when the won began to appreciate against the dollar, the won depreciated considerably further against the yen.

Korea's current account shifted from deficit to surplus over the 1980s. (See the bottom panel of Chart 1.) The current account balance improved from a deficit of \$5.3 billion, a historical high at 8.5 percent of GDP, in 1980 to a deficit of \$0.9 billion in 1985. The "three blessings" of low oil prices, an appreciated yen relative to the dollar (resulting in a depreciated won relative to the yen), and low international interest rates contributed to a dramatic turnaround in Korea's current account balance. In 1986, Korea recorded its first substantial current account surplus at \$4.6 billion, and in 1987, the surplus grew to \$9.9 billion. The surplus expanded to \$14.2 billion in 1988 with a pickup in industrial-country (especially U.S.) growth. As

^{8/} Approved forward transactions include those related to export and import and some capital transactions, such as the payments on long-term foreign currency loans.

the Bank of Korea intervened to reduce the rate of appreciation of the won, foreign exchange reserves rose from \$2.8 billion at the end of 1985 to \$15 billion at the end of 1989. This rapid increase in external assets by the Bank of Korea threatened to generate a substantial monetary expansion and consequent inflationary pressures.

Implementation of Monetary Policy in Korea

This section describes Korea's monetary policy, focusing on the problems that developed with the use of traditional instruments and policies, particularly in sterilizing the massive growth of reserves. Korea's monetary policy has traditionally been a mixture of industrial policy and more conventional liquidity adjustment measures.⁹ In the 1970s, the Korean authorities supplied credit through the financial sector at low, controlled interest rates primarily to the larger industrial firms. These industrial policy goals constrained the use of monetary policy to achieve price stability.¹⁰ In addition, they produced a misallocation of resources and weakened the banking system. In the 1980s, the government placed greater emphasis on price stability in the conduct of monetary policy, and it began to shift away from the direct allocation of credit and to move toward the use of indirect instruments of monetary control.¹¹

^{9/} Vittas and Wang (1991) provide a summary of arguments in the literature on the costs and benefits of credit policies in Korea.

^{10/} Consumer price inflation averaged 15 percent per annum in Korea in the 1970s.

^{11/} Consumer price inflation averaged 8 percent per annum in Korea in the 1980s.

The Bank of Korea uses several instruments for monetary control: direct credit and interest rate controls, reserve requirements, rediscount operations, and open market operations. However, the primary instruments have historically been direct credit and interest rate controls. All of these instruments involve banks and development institutions. However, with a few exceptions, only open market operations and interest rate controls apply to other financial institutions.

Direct controls over the expansion and allocation of credit as well as controls on interest rates have been used widely in Korea. The Bank of Korea can set maximum deposit and loan rates for all financial institutions and can set ceilings on credit expansion (even to the extent of approving individual loans). Although direct credit controls have been reduced in Korea relative to the 1970s,¹² interest rate controls are still pervasive and adjusted infrequently. Therefore, monetary policy changes are reflected primarily in quantity adjustments rather than price adjustments.

Although these direct controls historically were effective in achieving some of the targets of monetary policy--in particular, the price and availability of credit--they have important costs. The costs usually associated with direct monetary controls are the inefficiencies associated with the non-price allocation of credit. In the 1970s, the

^{12/} In 1981-83, commercial banks were privatized and two new banks were established. In 1982, the Bank of Korea made many changes to its regulation of banks. The Bank of Korea abolished credit ceilings for individual banks and its direction of loans to particular sectors was reduced. Its power to approve or dismiss senior bank officers was removed. Preferential rates on policy loans by commercial banks were removed. The scope of commercial banks activities was expanded.

chemical and heavy industry sector received a large share of preferential credit, despite the fact that investment in other sectors may have had a larger rate of return.¹³ A side effect of the inefficient allocation of resources in Korea is a financial system that is generally unprofitable due to non-performing loans and dependent on government subsidies.

Another disadvantage of direct credit controls is that their effectiveness can be somewhat asymmetric; in practice, the ability to undertake large contractions is not the same as for expansions. When the balance of payments is not a source of expansion in the monetary base, money policy goals aimed at price stability and the use of direct credit policies--even for industrial policy purposes--may be consistent.¹⁴ However, when the balance of payments provides a separate source of monetary expansion, as was the case in Korea in the second half of the 1980s, domestic credit may need to be contracted. In this situation, industrial policy goals and monetary policy goals directed at price stability are generally in conflict. Governments are often unwilling to cut off credit to preferred sectors in order to prevent the monetary

13/ According to Roh (1990), a "significant characteristic of Korean corporate finance in the past has been the disregard of financing costs and the efficiency of investments. This is a problem associated with the government's control of the financial sector and the allocation of preferential credit to strategic sectors designated by the government. . . . (Throughout most of the 1970s, the real cost of bank loans, a major source of corporate debt, was negative.) . . . These factors encouraged many firms to grow recklessly and undertake projects which might have otherwise been declined."

14/ In the late 1970s and the first half of the 1980s, Korea's balance of payments deficit had a contractionary effect on the monetary base. Some expansion of domestic credit--even through directed credits to preferred sectors--was consistent with the goal of price stability over this period.

aggregates from expanding at an inappropriate rate. A more politically neutral monetary instrument would be more effective in this situation.

Given the uneven application of direct controls across financial institutions and the segmentation of the financial system in Korea, monetary actions implemented through direct credit controls may have important, but unintended, distributional consequences.¹⁵ As noted in Mathieson (1988), firms that obtain funds from the external sector are often quite different from those that obtain central bank credit.¹⁶ A contraction in directed credits required to sterilize the inflow associated with a balance of payments surplus can lead to serious financing difficulties in some sectors of the economy. Mathieson also notes that in countries where credit is rationed primarily by interest rates, a similar sterilization would be unlikely to have the same sectoral consequences since credit would flow more easily from one sector to another.

In addition, as the bulk of credit controls have been placed on banks but not on other financial institutions, these direct controls have become less effective at determining the availability of credit, because

15/ Although the sectoral allocation of credit varies across deposit money banks and non-bank financial institutions in Korea, it also varies over time (in part depending on what sector the government is currently supporting). The most consistent difference in credit allocation regards loans to agriculture, hunting, and fishing sector. About 9-1/2 percent of loans and discounts by deposit money banks went to the agriculture sector in the 1984-90 period, but less than 1 percent of loans and discounts by non-bank financial institutions went to agriculture.

16/ Mathieson's focus is on capital flows. However, sterilizing the impact of a current account surplus generally involves restricting credit to non-trading firms to offset the money expansion resulting from the exchange of foreign exchange earnings of trading firms. In Korea, as well as in many countries, trading firms are quite different from non-trading firms.

non-bank financial institutions have developed a large market share over the 1980s.¹⁷

Reserve requirement policy has played an important role in monetary control. This instrument was used heavily prior to the 1980s and was the primary instrument used to drain excess liquidity generated by previous balance of payments surpluses.¹⁸ However, in the early 1980s, the required reserve ratio was reduced substantially in order to help weak bank profits. In the second half of the 1980s, the required reserve ratio was raised several times to help reduce the effect on the monetary aggregates of the large increase in the monetary base, due to the inability or unwillingness of the Bank of Korea to sterilize completely the impact of its foreign exchange intervention on the monetary base.

The monetary stabilization account was introduced in 1967 as a flexible method to absorb excess liquidity. It was used heavily in the 1980s. This account is similar to required reserves in that it is a mandatory deposit at the Bank of Korea. However, the requirement for depositing in such an account can be applied to any depository institution, unlike required reserves;¹⁹ in that respect, the use of this

17/ At the end of 1989, 64 percent of deposits were held in non-bank financial institutions in Korea compared with 30 percent in 1980. In addition, the share of financing for the business sector by non-bank financial institutions was 28 percent in the second half of the 1980s, compared with 20 percent for banks. In the second half of the 1970s, the share of financing by non-bank financial institutions was only 15 percent and the share by banks was 26 percent.

18/ In the 1970s, Korea's balance of payments was in surplus in 1972, 1973, 1976, and 1977; the current account was in surplus only in 1977.

19/ As noted above, reserve requirements apply only to banks, not to non-bank financial institutions.

account by the Bank of Korea functions more like an open market operation than required reserves. In the first half of the 1980s, deposits in the monetary stabilization account often exceeded bank reserves. These deposits, however, fell dramatically in the late 1980s as the Bank of Korea expanded its sales of monetary stabilization *bonds*.

Rediscount operations by the Bank of Korea have two important dimensions--the rediscount rate and the rediscount ratio, which determines an upper limit on the proportion of bills that can be rediscounted at the Bank of Korea. The Bank of Korea supplies credit to banks by rediscounting commercial bills or extending loans against approved collateral. In addition, general loans, the majority of the Bank of Korea's loans and discounts in recent years, are available for policy purposes (generally at subsidized rates) or for banks short of required reserves (at higher rates). Rediscount policy is used as both a monetary instrument and an industrial policy instrument in which subsidized credits are supplied to favored sectors. In the past, the industrial policy function of rediscount activities by the Bank of Korea has generally dominated the monetary function. Although this ordering has changed somewhat in recent years, policy loans can generally be more easily discounted at the Bank of Korea and typically have lower discount rates. However, most rediscount rates are low relative to other sources of bank funds.²⁰ Therefore, changes in the rediscount ratios, not rates, are generally what determine the allocation of central bank credit to banks.

^{20/} Funds to supplement reserve deficiencies are loaned at a penalty rate, which is greater than the interbank call rate.

Examples of the mixed policy function for rediscount operations abound. In July 1986 and again in September 1988, the Bank of Korea increased rediscount rates and lowered the rediscount ratios for foreign trade bills and commercial bills, but left the rates unchanged for other loans, which make up the bulk of Bank of Korea loans and discounts. Also in 1986, the rediscount ratios for agricultural loans were raised. In 1987, the Bank of Korea lowered its rediscount ratio on export-related bank loans, but raised the ratios for loans to small- and medium-sized firms and farming and fishing households.

Although monetary stabilization bonds, liabilities of the Bank of Korea, were introduced in the 1960s, open market operations have not traditionally been an important tool of monetary management. The government bond market has developed only recently--largely in the second half of the 1980s--and is still very limited, with most bonds being placed with non-bank financial institutions at below market rates.²¹ Public sales of monetary stabilization bonds by competitive tender were introduced in December 1988 and represented 10 percent of the issuance of these bonds in 1989. No public sales by competitive tender occurred in 1990. Although monetary stabilization bonds account for the majority of open market transactions, Treasury bills and foreign-exchange

21/ The government traditionally financed its fiscal deficits by direct borrowing from the Bank of Korea. The government issued more securities in the 1980s; however, fiscal deficits were small or negative, so the need for bond financing has not been very large. Monetary stabilization bonds account for the majority of government and public bonds. The rates on the monetary stabilization bonds have generally been similar to interest rates on time deposits of a comparable maturity. These bonds have been sold at discount in the secondary market in recent years.

stabilization bonds, issued by the central government, are also actively used.

Sterilization Measures

The large increase in Korea's external position, combined with a relatively inflexible exchange rate, led to very large increases in foreign currency assets held by the Bank of Korea between 1986 and 1989. (See Chart 2.) The increase in Korea's foreign exchange reserves over the four-year period amounted to about 175 percent of the reserve money stock at the end of 1985.²² If unsterilized, the inflow from the foreign exchange conversion could have led to very rapid money growth and inflation.

The sterilization of this foreign exchange intervention required a large offsetting monetary contraction--a tightening that could have created serious distortions in the financial markets had direct credit controls been utilized alone.²³ Consequently, the use of open market operations (undertaken primarily with non-bank financial institutions) and reserve requirements (for banks) was expanded, and rediscount operations were shifted somewhat from industrial policy goals toward monetary control goals. Sales of monetary stabilization bonds by the Bank of Korea exploded. In the four-year period 1986-1989, the

^{22/} Reserve money is currency in circulation plus bank reserves.

^{23/} Of course, in general, a monetary expansion due to a balance of payments surplus (and associated foreign exchange intervention) need not be offset by a contraction in domestic credit if the expansion is consistent with the government's monetary targets. This was not the case, however, in the second half of the 1980s in Korea; despite Korea's sterilization efforts, realized money growth consistently exceeded money growth targets.

outstanding amount of monetary stabilization bonds increased 9-1/2 times to 31 percent of the M2 stock in 1989 and 12 percent of GNP. In addition, the central government issued foreign exchange stabilization fund bonds and Treasury bills.²⁴ Reserve requirements were more than doubled and rediscount policy was tightened. The increase in required reserves absorbed a rising proportion of reserve money growth in 1986-89; the increase in required reserves was slightly over one-third of the increase in reserve money in 1986 but rose to about three-fourths in 1989. Rediscount rates were increased in 1986 and 1988, and rediscount ratios were lowered over the 1986-89 period. Although not all the changes in rediscount policy applied equally across all sectors of the economy, in 1988, the Bank of Korea unified the rediscount rates for most purposes and simplified the rediscount ratios on bank loans.²⁵ After growing nearly 30 percent annually in the first half of the 1980s, loans and discounts at the Bank of Korea were little changed on balance between 1986 and 1988, and in 1989, rose less than 6 percent, in part through a large contraction in the rediscounting of foreign trade loans.

24/ Foreign exchange stabilization bonds were first issued in 1987; 1.4 trillion won was outstanding at the end of 1989, about 1 percent of GNP. Treasury bills had been issued in the 1970s and early 1980s; however, the outstanding balance in 1985 was zero. At the end of 1989, the value of Treasury bills outstanding was 2.5 trillion won, about 1-3/4 percent of GNP.

25/ Rediscount ratios had been 30-80 percent depending on the purpose of lending and the size of the borrowing firm. In 1988, the ratios were reduced to 50 percent for bank loans to small- and medium-sized firms and 30 percent for larger firms. In addition, the Bank of Korea abolished some rediscount facilities associated with policy-based lending. In 1989, the spread between the rediscount ratios for small- and medium-sized firms and larger firms was increased substantially, as rediscounting for large firms was abolished or undertaken at a 20 percent rediscount ratio and the rediscount ratio for small- and medium-sized firms was increased to 60-70 percent.

Sales of monetary stabilization bonds and the tightening of rediscount policy limited the increase in reserve money to about 30 percent in 1988 and 1989 after a rise of nearly 50 percent in 1987.²⁶ (See Chart 3.) Increases in reserve requirements lowered the money multiplier so that the monetary aggregates grew less rapidly than reserve money.²⁷ In addition, consumer price rose 7.1 percent in 1988, after rising by less than half that in the previous five years.

Other Policy Measures to Reduce Potential Inflationary Pressure

In addition to massive sterilization efforts in 1986-89, the Korean government reduced the external pressure for money growth in other ways. They allowed the won to appreciate against the dollar, restricted some capital inflows, and liberalized some capital outflows.²⁸

With the improvement in Korea's external balances, the won was allowed to appreciate in nominal terms against the dollar 3.3 percent in 1986, 8.7 percent in 1987, and 15.8 percent in 1988. However, the won continued to depreciate against the yen in 1986 and 1987 by about 17 percent annually; in 1988, the won appreciated against the yen by 17.3 percent. In 1989 when Korea's current account surplus declined, the won appreciated slightly against the dollar and continued to appreciate

^{26/} Reserve money rose less than 6 percent annually in 1981-85.

^{27/} M2 growth was only 20 percent per annum in 1986-89, after increasing 18 percent annually in 1981-85.

^{28/} Giavazzi (1987) discusses Germany's success in using controls on capital inflows to help in its sterilization efforts in the 1970s and argues that if current account surpluses in Korea persist, liberalization of capital outflows would become necessary for monetary control. I am indebted to Susan M. Collins for providing me with a copy of this paper.

against the yen. On balance between the end of 1985 and 1989, the won appreciated against the dollar 31 percent in nominal terms and about 38 percent in real terms; against the yen, the won depreciated about 6 percent in nominal terms and appreciated about 8 percent in real terms.²⁹

Perhaps the most important change in capital flows was the prepayment of external debt. Prepayments totalled \$16 billion or 27 percent of exports of goods and services in 1986-1989. To reinforce this effort, in 1986, the terms of foreign borrowing and domestic foreign-currency borrowing were tightened. In 1987 and 1988, controls on the use of foreign exchange for tourism and remittances were eased.³⁰ In 1987-89, approval procedures for overseas direct investments were simplified and tax benefits for inward direct investment were reduced. In addition, approved Korean firms were allowed to purchase foreign real estate and securities and retain more foreign exchange earnings overseas.

Trade liberalization also contributed to monetary and price stability. Trade liberalization often targeted scarce products to help reduce domestic prices. Tariff reductions or less binding quotas had the immediate effect of reducing the price of imported goods, as well as the

29/ According to simulations presented by Kwack-Lee (1991), a 10 percent nominal depreciation (appreciation) of the won against the dollar increases (decreases) Korea's current account balance by about \$8.3 billion after three years. Holding constant the dollar-won rate, a 10 percent depreciation (appreciation) of won against the yen increases (decreases) the current account by about \$5.6 billion. (The simulated changes are from a 1988 baseline when Korea's current account surplus was \$14.2 billion.)

30/ In November 1988, South Korea formally accepted the obligations of Article VIII, Sections 2-4 of the International Monetary Fund Agreement. This obligated Korea to eliminate its remaining restriction on payments and transfers for current account transactions.

intermediate effect of reducing the trade surplus, the source of monetary expansion, and therefore, of inflationary pressure in the first place.

Concluding Thoughts

The Korean government took many steps to relieve the potential inflationary consequences of the large balance of payments surplus that developed in the second half of the 1980s. These measures included steps toward liberalizing Korea's exchange rate and capital control system, domestic interest rates, and system of allocating domestic credit. However, as the external surplus was eliminated, some of these measures have been reversed in part (the liberalization of some capital outflows and the reduction in directed credit) and the implementation of others was postponed or repealed (interest rate liberalization).³¹ In addition, some of the measures to offset the balance of payments surplus involved additional tightening of existing controls (primarily on capital inflows).

In general, it appears that liberalization was undertaken with particular purposes in mind--in part, to reduce the inflationary impact of the balance of payments surplus--rather than as a comprehensive plan

^{31/} In December 1988, the liberalization of loan rates, longer-term deposit rates, and money market rates was announced. This liberalization could have improved the distribution of monetary changes and reduced the distributional impact of the sterilization measures. However, as Korea's current account surplus fell dramatically in early 1989, the implementation of the interest-rate liberalization plan was delayed and eventually cancelled.

to improve the efficiency of Korea's economy.³² However, this conclusion is offset somewhat by evidence that liberalization is continuing in a number of areas, albeit at a slower pace, despite Korea's current account deficit.³³ For example, the Korean government introduced a new foreign exchange system in March 1990 that sets the official mid-rate of the won against the dollar as the weighted average of the previous day's interbank rate for spot transactions. Exchange rates are allowed to float daily within relatively narrow margins and, therefore, to move slowly in line with market pressures.³⁴ Foreign exchange liberalization will help relieve future external pressure on the money supply. However, because daily changes in spot rates are currently limited, pressure on the money stock may occur again if market pressure for exchange rate changes exceed the allowed bands.

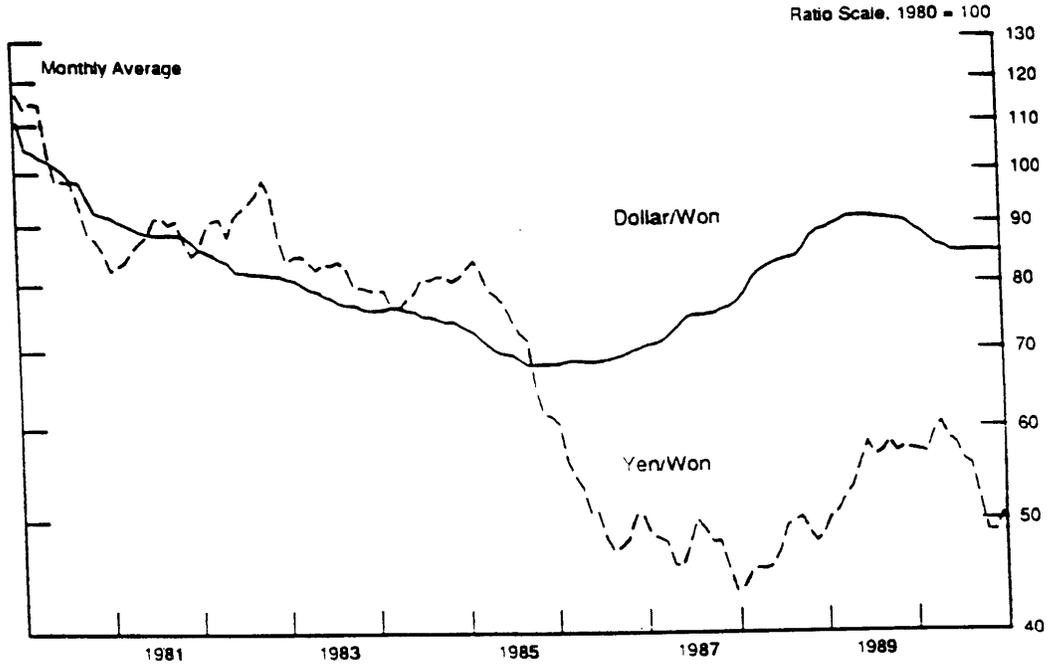
32/ Other specific purposes were at least as important as monetary control for some of these measures. For example, trade and exchange rate liberalization took place in part to respond to pressures by major trading partners, especially the United States.

33/ In March 1990, the Korean government introduced a new foreign exchange system, and in July 1991, the Ministry of Finance announced a proposed revision to the FECA. In contrast to the current version of the Act, foreign exchange transactions would be permitted in principle under the proposed plan, with exceptions explicitly listed in regulations. The plan has been submitted to the National Assembly for consideration. In addition, the Ministry of Finance released a revised interest-rate liberalization plan in August 1991 that proposed freeing rates over a six-year period. The first phase of the program was implemented in late November. Beginning in January 1992, limited foreign investment through the stock market was permitted.

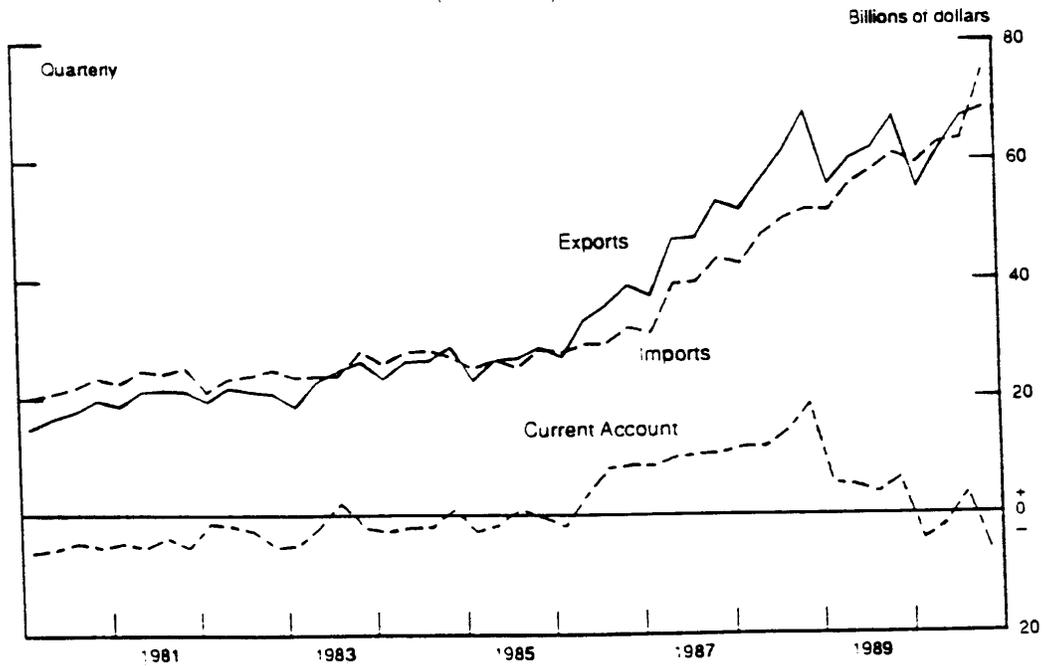
34/ These margins differ by size and denomination of transactions but are generally less than 1 percent.

Chart 1

Nominal Exchange Rates for Korea



Korean Trade
(Annual rate)



Source: Bank of Korea: BOP basis.

Chart 2
Bank of Korea's Assets and Liabilities

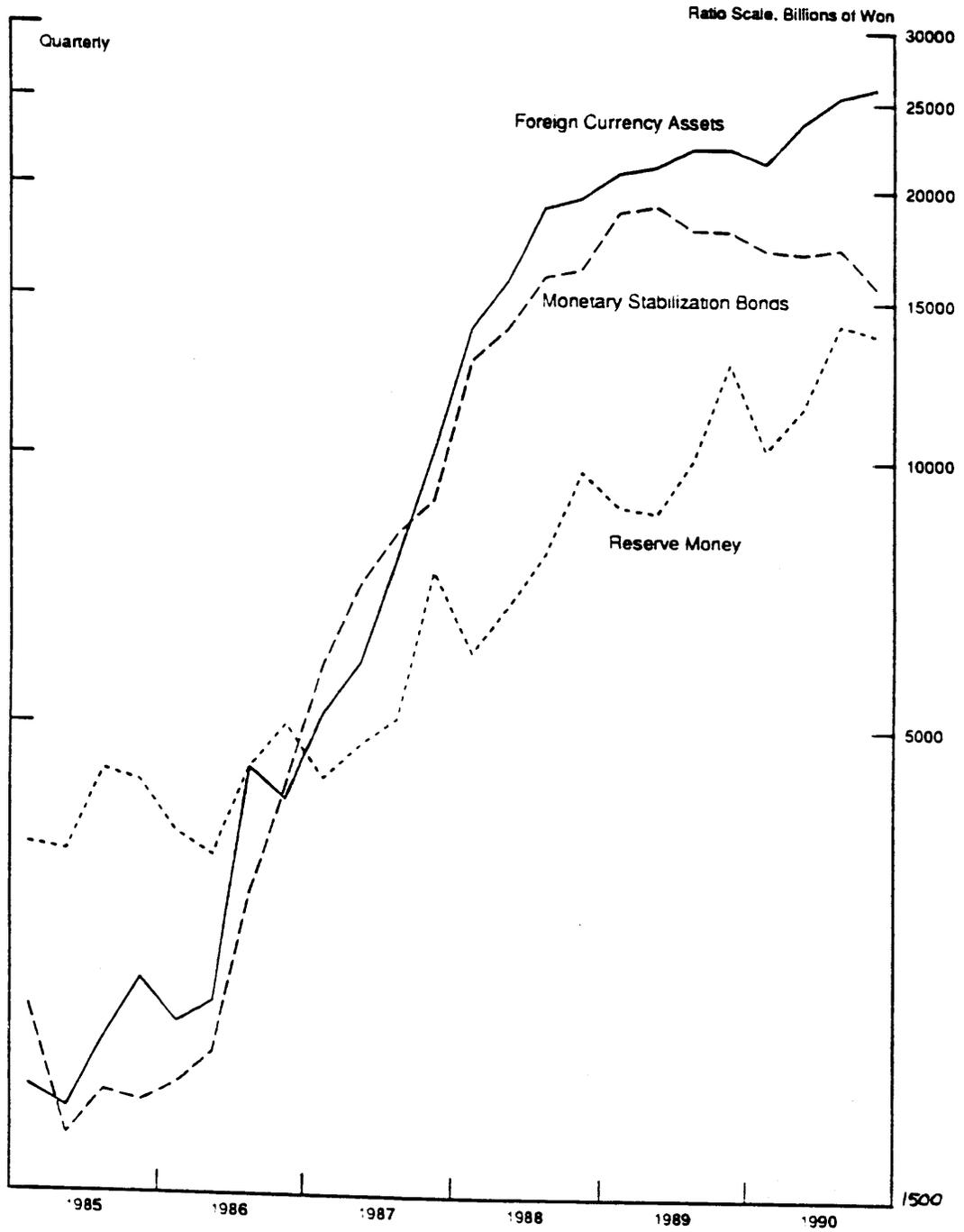
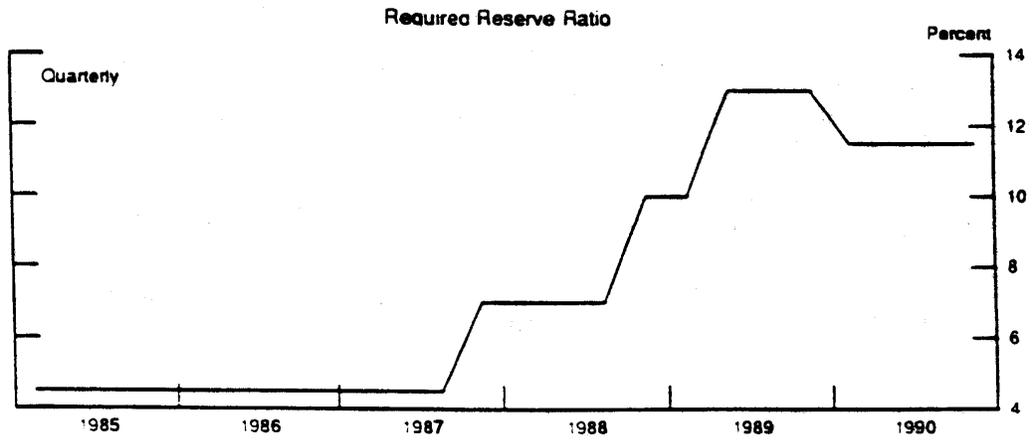
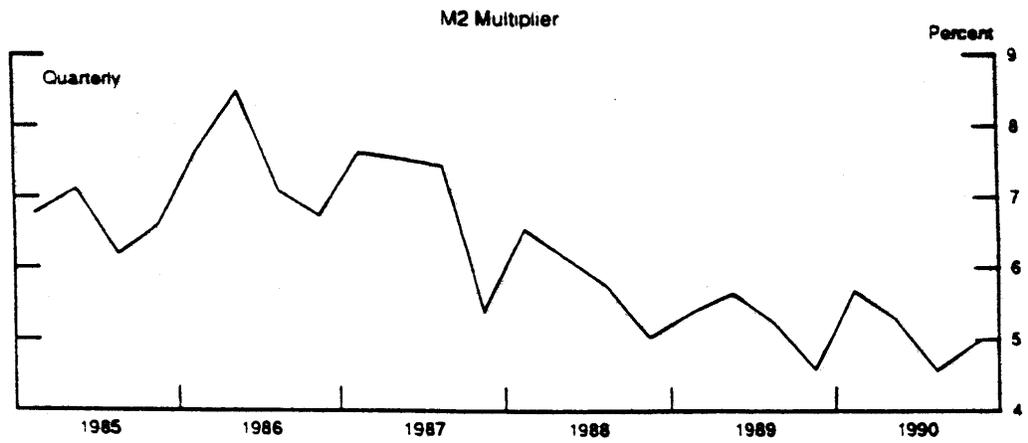
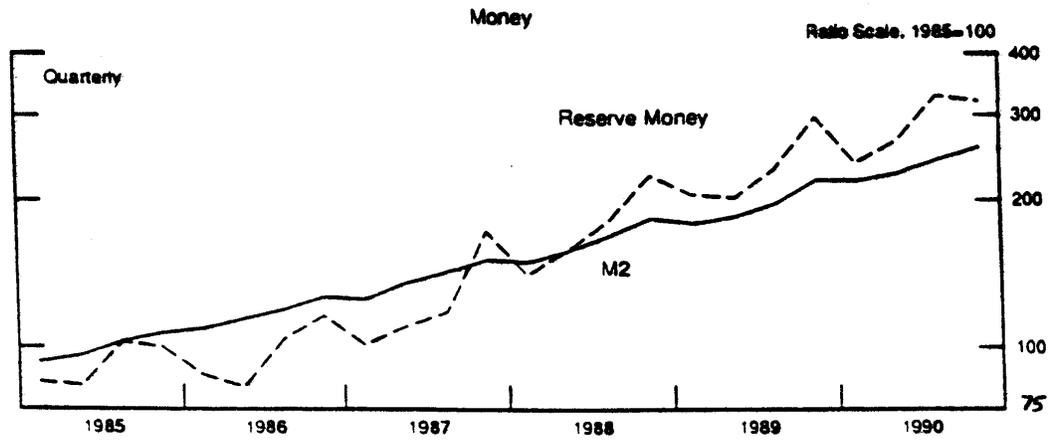


Chart 3



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