

The Recent Liberalization of Korea's Foreign Exchange Markets, and Tests of U.S. versus Japanese Influence*

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Financial liberalization is a good thing for Korea, so long as proper SEC-type regulation is maintained. However, the beneficial implications for U.S. "competitiveness" of Asian liberalization in the area of exchange rate policy are less clear than one would infer from observing the amount of U.S. pressure applied. It is misguided for Americans to appeal to free-market principles to justify pressure on Asian countries to allow their currencies to appreciate against the dollar. American negotiators would perhaps be better advised to concentrate on negotiating the liberalization of trade in goods and services, the liberalization of which could benefit both countries. It is ironic, that U.S. government pressure on Korea to liberalize its financial markets and loosen its link with the dollar has resulted in a greater role for the yen and Japanese interest rates in Korea.

I. Introduction

Korea has recently pursued liberalization of its financial markets, both domestically and internationally, and moved away from a close link between the won and the dollar. The first part of this paper approaches the subject historically and politically, with a discussion of the role of U.S. government pressure in these policy changes. The last part of the paper approaches the subject econometrically, with an analysis of the links between Korean interest rates and U.S.

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and Japanese interest rates and the links between the won and the dollar and yen.

In October 1988 the Department of the Treasury, in its "Report to the Congress on International Economic and Exchange Rate Policy" required by the Omnibus Trade and Competitiveness Act of 1988, concluded that Korea and Taiwan "manipulated" their exchange rates, within the meaning of the legislation. In its October 1989 report, the Treasury announced that it would soon launch negotiations with Korea to induce that country to liberalize its financial markets, with improved treatment for U.S. financial institutions specified as one major goal, and appreciation of the won presumed to be another. The Financial Policy Talks took place in two rounds, in February and November 1990.

It is unusual for one nation to include alongside standard trade issues on its agenda for bilateral negotiations with another nation such matters as financial and exchange rate policy; they are normally thought to be purely a matter of sovereign choice. But Korea is not the only example. U.S. trade policy has recently included demands for structural reform in several Asian macroeconomies, in contrast to the usual focus on only microeconomic trade issues concerning barriers to specific American exports. As nations go beyond arms-length merchandise trade and become more deeply entangled financially in each others' economies, and as world leaders fail to adapt adequately the multilateral trade negotiation framework to new issues such as services and investment, we may see more bilateral negotiations of the U.S.-Korean type.

To understand the impetus behind recent financial and exchange liberalization in Korea we must begin by briefly considering trade developments in the United States. We shall then review the two areas of negotiation between the Korea and the U.S.: exchange rate issues, and other issues of financial liberalization. We will conclude with some empirical tests of the removal of financial barriers in Korea, and among other East Asian countries, and of the strengthening of financial ties with financial centers in New York and Tokyo.

II. The U.S. Trade Deficit, and Policy in the Reagan Years

Each of the years 1982 to 1987 set records for the U.S. trade deficit, particularly with respect to East Asian countries. Many in

Congress and the private sector saw the deteriorating trade situation as requiring an immediate response. Proposed responses included efforts to try to reverse the 1981-85 appreciation of the dollar, and even more often included "get-tough" trade policies.

Officials in the first Reagan Administration, 1981-84, often interpreted trade complaints as special interest pleading. They pointed out three fallacies: the belief that all trade deficits are bad, the belief that foreign trade barriers could best be addressed by unilateral retaliation, and the belief that the U.S. trade deficit could be attributed to foreign trade barriers.

In these points, the officials of the first Reagan Administration were on firm economic ground. Trade complaints *do* most often take the form of special interest pleading. Trade deficits, in some circumstances, *can* be good. (To take an example, the large Korean deficits of the 1970s reflected borrowing from abroad to finance investment in plant and equipment, which left Korea in the 1980s with the capacity for output and foreign exchange earnings needed to service the debt.) It *is* true that unilateral U.S. rulings that a foreign trading practice is unfair often do more to undermine the liberal world trading system than to promote it.

Finally, there *is* convincing evidence that the U.S. trade deficit of the 1980s could not be attributed to foreign barriers. First, the U.S. current account deficit averaged zero in the 1970s. In the early 1980s, when the trade deterioration occurred, trading partners in East Asia and elsewhere were, if anything, *reducing* somewhat trade barriers against the United States. Second, the deterioration in the U.S. trade balance took place against almost all trading partners, which suggests that the cause lies not with specific foreign countries engaging in unfair trade practices, but rather within the United States itself.

Other aspects of the early Reagan policy were on less firm ground. We will leave aside the point that free-trade Reaganite rhetoric was belied by interventionist and protectionist trade actions, such as the negotiation of supposedly voluntary export restraints in autos and steel, that were more numerous and more serious than had been undertaken by previous Administrations. Enthusiasm for an activist trade policy among Democrats and moderate Republicans was sufficiently great that one can only assume that others would have done a worse job than the Reaganites. The clearer problem was, rather, a failure to realize that the major source of the U.S. trade deficit was the switch in monetary/fiscal mix which

raised real interest rates sharply over 1981-84, causing the dollar to appreciate and U.S. producers to lose competitiveness on world markets. The trade deficit and capital inflow did not finance an increase in investment, but rather a deterioration in the federal budget and in private saving rates. (The first Reagan Administration pointed instead to a combination of other factors, which were admittedly somewhat relevant: more rapid growth in the U.S. than among trading partners, the loss in exports to heavily indebted countries when the international debt crisis hit, and stimulus to investment from changes in the tax code.)

In January 1985, with James Baker taking the helm at the Treasury Department, U.S. policy with respect to the trade deficit changed. Now it was agreed that the appreciated dollar was a major cause of the deficit, and that both the exchange rate and the deficit were problems that needed to be addressed. The reversal was most complete with respect to intervention in the foreign exchange market. Whereas the first Reagan Administration, as personified in this area by Secretary of the Treasury Beryl Sprinkel,¹ abjured intervention almost completely, the second Reagan Administration plunged into the foreign exchange market with gusto. The selling of dollars, which was coordinated with other industrialized countries most visibly at the Plaza Hotel in September 1985, helped reverse almost the entirety of the 1981-84 appreciation over the subsequent two years.

By 1986, there was still no sign of the U.S. trade balance improvement that economists were thought to have promised would rapidly materialize. The search began for explanations why the trade deficit continued to worsen despite the substantial depreciation of the dollar since February 1985. One of the many reasons given was that, although the dollar had depreciated substantially against the yen, mark and other currencies of the largest industrialized countries, it had not yet depreciated against the currencies of newly-important exporters such as the East Asian NICs.²

¹The starting team at the Treasury included, in addition to monetarists like Sprinkel who viewed free-market philosophy as requiring freely-floating exchange rates, supply-siders who viewed free-market philosophy as requiring fixed exchange rates (in order that the money constitute a stable store of value). In the first Administration the issue was decided firmly on the side of the free-floaters by Secretary Don Regan, who came to view negative statements about the strength of the dollar as equivalent to negative statements about the President's economic policies.

²In retrospect, the trade balance responded to the dollar depreciation with close to the standard two-year lag that economists had always specified. Many observers think that

Speaking in Seoul in July 1986, C. F. Bergsten urged Korea to allow the won to appreciate. U.S. Treasury Assistant Secretary David Mulford soon picked up the idea, and began to urge all four dragons to appreciate.³ Since Hong Kong and (to a lesser extent) Singapore had open trade and financial markets, American attacks on the smaller two of the four rang hollow. But with a tradition of heavy intervention in all aspects of the economy, and rapidly growing trade surpluses, Taiwan and Korea were obvious targets. Taiwan was at first the more vulnerable politically in that it was rapidly amassing what was almost the largest stock of foreign exchange reserves in the world (irrespective of GNP), while Korea could and did point to its large international debt (larger relative to GNP than the most problematic Latin American debtors in 1982) and the need to service the debt with export earnings.

Taiwan began to let the New Taiwan dollar appreciate sharply in mid-1987, and the pressure switched to Korea. In 1987 the Korean current account surplus, which had first gone into surplus the previous year, doubled to \$9.9 billion. The bilateral trade surplus with the United States reached a record \$9.6 billion.⁴ In a November 1987 speech in San Francisco, Mulford accused all four countries of artificially depressing the value of their currencies to run up huge trade surpluses with the United States, but reserved the harshest criticism for Korea and Taiwan. The attack on Korea was seen as somewhat surprising in light of the special U.S. military relationship with Korea and the delicate political transformation underway there at the time.⁵

Meanwhile, Congressional proposals for more activist trade policy, which had been held in abeyance by Baker's Plaza initiative, resurfaced with as much force as ever. The final outcome was the Omnibus Trade Bill of 1988. The bill included "Super-301" provisions mandating that the Administration identify "unfair traders" and negotiate elimination of the barriers in question, with automatic

there was a bit of an unusual delay because the pass-through of the exchange rate change into dollar import prices was slower than in the past, though even this bit of revisionism has more recently been attributed to a problem with the proper measurement of computer prices (Krugman 1991). The role of the NIC currencies was in any case only a relatively minor element of the overall U.S. trade situation.

³The first discussions with the Korean government took place in September 1986. (Wang 1991, p. 14-5, details the chronology of U.S. demands in this area.)

⁴Ohm (1991, p. 9). The bilateral surplus was to decline to \$2.4 billion in 1990 on Korean reckoning, \$4.1 billion on U.S. reckoning (U.S. Treasury 1991, p. 30).

⁵Preparations for elections were underway in Korea. (Kim 1990, p. 17)

retaliation if progress were not satisfactory. There was a requirement that the U.S. Treasury submit reports and updates to Congress twice a year on exchange rate policy and other aspects of international economic policy. Though Japan was the single target that the Congress had most firmly in mind, the Treasury reports devoted many pages to the East Asian NICs.

Three threads in U.S. financial policy towards Korea came together in 1989. First, the dollar depreciation strategy of 1985–86 had left a precedent for pressuring the East Asian NICs, particularly Korea, to appreciate their currencies against the dollar. Second, bilateral negotiations over Korean treatment of U.S. insurance companies had created a precedent, and the Primary Dealers Act of 1988 (the Schumer Amendment to the Omnibus Trade Bill, aimed mainly at Japan) had created a requirement, for the government to push East Asian countries for better treatment of U.S. financial institutions through a new policy of “reciprocal national treatment.” Third, negotiations with Japan beginning in the Yen/Dollar talks of 1983–84 constituted a precedent for the U.S. Treasury to pass judgment on the appropriateness of financial regulations in East Asian countries.

III. The Precedent of the Yen/Dollar Talks

The recent talks with Korea harken back to the campaign launched by the Treasury in October 1983 to induce Japan to liberalize its country's financial markets, where appreciation of the yen was the major goal, a campaign that reached fruition in the Yen/Dollar Agreement of May 1984 with the Japanese Ministry of Finance. Indeed, Treasury officials have cited the earlier agreement with Japan as a precedent for the negotiations with Korea. The similarities and dissimilarities between the yen/dollar talks of 1983–84 and the Korean financial policy talks of 1990 are discussed in Frankel (1989).

IV. Changes in Korea's Exchange Rate Policy

Korea maintained a fixed exchange rate against the dollar in the late 1970s. As the inflation rate was higher at home than abroad, the won became progressively more overvalued in real terms, and exports suffered as a result. In 1979 the government enacted an

important and needed program of macroeconomic stabilization and microeconomic reform. In January 1980 the won was devalued by 20 per cent. This devaluation, and the contractionary macroeconomic measures taken the preceding year, succeeded in stimulating rapid export growth and reducing the current account deficit. This left Korea as one of the few major debtors that was well-positioned when the 1982 international debt crisis hit.⁶

The official exchange rate policy in 1980 became one of defining the won's value in terms of a basket of five foreign currencies, rather than just the dollar.⁷ In principle, pegging to a basket has the advantage that it leaves a small country less vulnerable to movements in exchange rates among major trading partners, particularly the yen/dollar rate in the Korean case, over which it has no control, and is otherwise similar to pegging to a single currency. In practice, however, almost all countries that officially claim to be on a basket peg regime do not publicly announce what the currency weights are and frequently secretly change the weights and/or the level at which they peg to the basket, with the result that the exchange rate is as flexible as if the authorities made no commitment at all.⁸ Korea in the 1980s was a clear example of basket-pegging in name only.⁹ The equation that related the value of the won to the value of the dollar, yen and other currencies, included an additional "alpha" term that in practice could be varied at will. The IMF was perceptive enough to classify Korea as a "managed floater" rather than a "basket-pegger."

The phase of dollar depreciation that began in 1985, as represented by the Plaza Accord, was welcomed in Korea as one of "three blessings" in the world economic environment: low dollar, low interest rates, and low oil prices. For two years Korea kept the won close to the dollar, which meant a substantial depreciation against the yen and other currencies, and basked in the stimulus to its exports. But the country responded to U.S. pressure by apprecia-

⁶Balassa and Williamson (1990), Collins and Park (1989), and Kim (1990).

⁷Including the U.S. dollar, yen, mark, pound, and Canadian dollar (according to Lindner (1991a, p. 5), and Wang (1991, p. 3)).

⁸One can ascertain whether a country that is officially pegging to a basket is in fact doing so, by regressing the value of its currency against the value of major trading-partner currencies, and allowing for occasional changes in weights and in level. A true basket pegger will show up with an R^2 close to one. Such tests are reported in the last part of this paper.

⁹Balassa and Williamson (1990, p. 48)

ting the won against the dollar in 1987 and 1988.¹⁰ The Korean government also claimed to have adopted current account convertibility: "By deregulating a substantial portion of external transactions in November 1988, Korea accepted the obligations of IMF's Article VIII."¹¹

Despite the recent won appreciation, the U.S. Treasury pronounced Korea a country that manipulates its exchange rate in its first three reports to Congress called for by the 1988 Trade Bill: October 1988, April 1989, and October 1989. It sought further appreciation, citing as recently as the third report continued "indications of exchange rate 'manipulation' during the six months since the April report" (p. 26).¹²

The Treasury's October 1989 report included the announcement: "Recently, the Treasury Department and the Korean Ministry of Finance have agreed to initiate talks on financial policies, including the exchange rate system and capital market issues. We hope to encourage a more market-oriented exchange rate system in Korea within the framework of these talks" (p. 29). As noted, the Financial Policy Talks took place in February and November of 1990. Evidently, the 1990 talks did not explicitly focus on the level of the won/dollar rate *per se*. Rather, the Treasury sought to "encourage the liberalization of Korea's exchange rate system and of the capital and interest rate controls that impede the full operation of market force." But it seems clear that a likely consequence of this liberalization of the system was expected to be, under the recent economic circumstances at the time of the 1989 decision to hold talks, to allow the won to appreciate further. The Treasury did say that, parallel with the talks on financial policy, would be negotiations "to press for exchange rate policy to support further external adjustment," i.e. for more appreciation of the won to reduce the current account surplus.¹³

¹⁰Bergsten (1989), Layman (1988, p. 374), Noland (1990, p. 49-50), Oum (1989), Williamson (1989), Kwack and Kim (1990), Park and Park (1990), and Wang (1991).

¹¹Oum (1991, p. 4-5). See also Wang (1991, p. 19) and Lindner (1991a, p. 7). But the government still requires documentation in support of foreign currency transactions (Oum 1991, p. 8). According to 1989 Federal Reserve records, Korean export proceeds must be deposited in foreign exchange accounts in domestic banks (if not surrendered to the government), payments for imports of services are restricted, foreign borrowing by financial institutions is subject to ceilings and all outward bound capital requires approval.

¹²See also Balassa and Williamson (1990, p. 58).

¹³Fall 1990 footnote.

On March 2 of 1990, the Korean authorities adopted a "Market Average Rate" system of setting the exchange rate each week. (Hwang 1990, p. 15.) This reform led the Treasury to drop charges of exchange rate manipulation in its April 1990 report, where the earlier won appreciation was apparently not sufficient to convince it to do so.

The Market Average Rate (MAR) system sets the won/dollar exchange rate at the beginning of each business day at the weighted average of transactions in the inter-bank market on the preceding business day. Inter-bank and customer rates are allowed to float freely within specified margins.¹⁴ Presumably the width of the margins puts an upper limit on the amount by which the central rate can be adjusted each day (somewhat like so-called "circuit-breakers" imposed on some countries' stock markets). This leaves out the most important questions: Will the authorities systematically intervene, and if so how? Will they exercise influence over the banks? Also, the question that is of secondary importance except to the U.S., how fully will foreign banks be allowed to participate in the developing foreign exchange market?

A year later, the U.S. Treasury Report (1991, p. 15) found: "during the first thirteen months of the MAR system (through April 12, 1991), the won depreciated 4.4 in nominal terms against the dollar... Foreign banks accounted for a large share of transactions in the inter-bank market, generally 40-60% of the total. The Bank of Korea (BOK) was not a direct participant in the market, and other government-owned banks accounted for only a small share of inter-bank activity." this would seem to suggest a genuinely market-oriented system.

On the other hand, we are told that "The Korean authorities maintain a comprehensive array of controls of foreign exchange and capital flows. These controls prevent market forces of supply and demand from playing a fully effective role in exchange rate determination, distort trade and investment flows, and provide the Korean authorities with tools for indirectly manipulating the exchange rate..." In other words, Korea has moved to a floating exchange rate before removing capital controls or progressing far with other aspects of financial liberalization. This is an unusual response to emerge from a campaign for free markets, as the next section will

¹⁴See US Treasury (1991). The margins are being widened to 0.8 per cent (from 0.6 per cent, to which the range was widened in September 1991; Lindner (1991a, p. 8)).

discuss.

On the surface, it appears from the report that the Treasury cares primarily about the Korean foreign exchange system, that it be "fair," or free, or market-oriented, rather than about the level of the exchange rate per se. This would appear to follow from the fact that the Treasury continued to accuse Korea of manipulating the exchange rate after the won had appreciated substantially, and terminated the accusation during a period when its value fell but was set by the MAR system. If U.S. motives are interpreted more pragmatically however, the key change between 1988 and 1991 was the disappearance of the Korean current account surplus in 1989. (The two most important reasons for the deterioration in the trade balance were probably the large effective appreciation of the won in 1988-89 and rising labor activism.) Indeed the report concludes that "...with a return to external surpluses likely in 1992, we would expect to see a renewed trend toward appreciation of the won" (US Treasury 1991, p. 18).

The view from Korea is that the trade deficit is more likely to widen slightly than narrow in 1992, and a return to surplus is highly unlikely. Nevertheless, it is possible that capital inflow will create a potential surplus in the *overall* balance of payments, and thereby put upward pressure on the won. In current circumstances, allowing the won to appreciate very far would probably be unwise from the Korean viewpoint. It seems likely that the government would react by resuming sales of won to dampen such an appreciation, abandoning the floating rate system.

V. Do Free Markets Imply Freely-Floating Exchange Rates?

In one respect, the case for appreciation of the won was less confused than the 1984 argument for appreciation of the yen: the Korean central bank had indeed been buying dollars and selling won in foreign exchange intervention in 1987 and 1988, which is not what the Japanese were doing in the early 1980s. So it is at least true that a move to a freely-floating exchange rate system would have entailed stronger appreciation of the won in the late 1980s. Also there are some respectable economic arguments for letting the won appreciate, beyond the goal of helping to reduce the U.S. trade deficit. When a country like Taiwan or Korea attempts to keep the currency from appreciating, it may experience an inflow of reserves

too large to sterilize, resulting in undesired monetary expansion and inflation.

In general, my advice to a less developed country experiencing unwanted reserve inflows and fearing real appreciation of its currency is as follows: i) liberalize with respect to capital outflows, thus reducing the magnitude of the net inflows, and ii) liberalize with respect to domestic bond markets, thus allowing scope for central bank operations to sterilize reserve inflows. Korea did the right things in 1986–89: paying off external debt, and sterilizing reserve inflows by selling monetary stabilization bonds and raising reserve requirements.¹⁵ But the actions were not strong enough to prevent inflationary growth in the money supply. The absence of active domestic bond markets in which the Bank of Korea might have been able more fully to sterilize its purchases of dollars in exchange for won has been attributed to the cessation of financial liberalization in the period 1984–87.¹⁶ Further financial liberalization is indeed a good idea for Korea; facilitating sterilization operations in the future is one of the reasons.

In any event, the case against Korea and the other Asian NICs dampening appreciation of their currencies against the dollar has none of the legal or principled basis that is imputed to it by the Omnibus Trade Act of 1988. Small countries should be perfectly free to seek to maintain fixed exchange rates. There is nothing in the Articles of Agreement of the GATT or IMF, nor is there anything in idealized free-market principles, that discourages the attempt to maintain a fixed exchange rate. Indeed, the original goal of the IMF was to promote stable exchange rates even for large countries.¹⁷ Such fathers of “Supply-Side Economics” as Robert Mundell and Jack Kemp consider a return to exchange rate stability to be essential to their creed. (They actually consider proposals to solve world trade imbalances by depreciating the dollar against Asian currencies to be similar in character to protectionism!)

Even those who are more enamored of floating exchange rates for major currencies like the dollar and yen recognize that there is little point in a sufficiently small country — whether less-developed, newly-industrializing, or fully industrialized — having a floating exchange rate. The Optimum Currency Area argument of

¹⁵Lindner (1991b)

¹⁶Kim (1990, p. 17)

¹⁷Noland (1991, p. 176) notes that the IMF did not agree with the Treasury position that Korea should appreciate its currency after 1985.

undergraduate textbooks in international economics reminds us that for a small open economy like Hong Kong — or, in the limit, the San Francisco Bay Area — the advantages of a floating exchange rate (monetary independence, and automatic adjustment of the balance of payments) are probably outweighed by the advantages of a fixed exchange rate (no exchange rate uncertainty, and a credible commitment to low money growth and inflation). It would not be unreasonable for a country the size of Korea to opt for a fixed exchange rate. The countries of Europe are in the process of doing so. (For Korea, if it chose to go this route, I would recommend a true basket peg, with the weights publicly announced to enhance credibility.)

This is not to say that there might not be some valid economic reasons for Korean appreciation. The point is rather that Americans are mistaken to accuse small Asian economies of violating any rules of free-market economics or international commitments when they intervene in the foreign exchange market. The case for negotiating reductions in barriers to international trade has strong justification in the principles of economic theory and of international commitments like the GATT. The case for reducing barriers to international capital flows is also respectable, though its justification in principle is somewhat weaker, both in theory and under international commitments. The case for abstaining from intervention in the foreign exchange market has no such basis in principle at all. When Americans apply terms like “unfair” or “manipulate” indiscriminately, they undermine the rules and principles that truly are important.

A Presidential Commission on Economic Restructuring, established in April 1988, submitted a report to President Roh in October 1988 that called for internationalization of the Korean economy, including reduction of the country's then-surplus on the current account by means of liberalization of import restrictions *rather than by rapid appreciation of the currency*.¹⁸ As Korean Minister of Finance SaKong (1989, p. 15) has pointed out, pressuring Korea into further appreciation of the won could undermine import liberalization there by adding to domestic opposition:

Korea's first order of business at this point must be to eliminate existing market-distorting elements. In this regard, Korea has been doing its utmost to get rid of nontariff barriers still remaining in the economy and to reduce the average tariff. By so doing, Korea will be able to import more from the United

¹⁸Kim (1991, p. 55-6)

States, provided that US firms take full advantage of these measures. This, more than anything else, will help to restore a favorable bilateral trade balance. Accelerating the appreciation of the Korean won would act to preserve, and perhaps heighten, distortions in the economy, with negative ramifications for both Korea and the United States.

Americans would be as well-advised as Koreans to keep clear the distinction between policies that are based in principle and those that are based in expediency.

VI. Korean Financial Liberalization in the 1980s

Issues of financial liberalization fall into three areas: domestic liberalization, removal of international capital controls, and treatment of foreign providers of financial services.

In the 1970s, Korea met the description of a financially repressed economy. The banking system was kept underdeveloped (although an informal "curb market" became very large), securities markets were largely non-existent, and interest rates were kept negative in real terms to stimulate investment in favored sectors (especially heavy industry).¹⁹

By end of 1970s, the government recognized that financial repression was an obstacle to further growth. An early aspect of a financial liberalization program was the establishment of two open-end trust funds.²⁰ The road to banking deregulation started in 1982 with the privatization of five national commercial banks.²¹ Restrictions on bank management were reduced. The requirement that loans be made at preferential rates for policy purposes became less common in 1982. Further steps toward liberalization of interest rates were taken in early 1984. But the most effective agents of liberalization were the rapidly-growing non-bank financial intermediaries.

There seems to be general agreement that the pace of liberalization has been slow since 1984. "During [the 1984-87] period no important steps were taken to further liberalize the financial sector."²²

¹⁹See, e.g., Kim (1990, pp. 3-6), who argues that the resistance to currency depreciation in the late 1970s was in part due to the desire to keep interest rates low.

²⁰Kim (1991, p. 22)

²¹Oum (1991) and Kim (1990, p. 11)

²²Kim (1991). Others who note the slow pace of Korean financial liberalization include

In December 1988 more serious interest rate de-control was undertaken by the outgoing Finance Minister, Il Sakong.²³ (This process was soon slowed, however, when interest rates — rather predictably — started to rise.) At the same time, “citing unexpected economic changes, the Korean Government revised its original 1981 schedule to liberalize the securities industry.”²⁴ A new timetable was announced for the removal of controls on capital inflow and outflow. The measures announced in December 1988 include a schedule under which substantial liberalization is to take place in 1992.

Many Korean officials believe that further domestic liberalization “could further raise the market interest rates, pushing up the firms’ financing costs...”²⁵ One would think that *international* liberalization is the answer, allowing the firms to borrow much more cheaply abroad. But apparently the government position is the reverse: “It is recognized that in order to minimize the negative effects on the economy as a whole, the deregulation of interest rates and domestic financial markets need[s] to precede the liberalization of foreign exchange and capital transactions.” It is not clear what are these negative effects. Perhaps the authorities wish to avoid overborrowing like that experienced by Chile in its 1970s liberalization, which caused writers on the Optimal Order of Liberalization to warn against beginning with the removal of capital controls. According to Nam (1989, p. 157), “The fear of massive capital inflows attracted by relatively high domestic real interest rates and anticipated foreign exchange appreciation has prompted controls on capital inflows.”

One possibility is that the authorities are worried that a large capital inflow would bring about a real appreciation of the won: if the authorities intervened to resist the pressure toward nominal appreciation (which would itself require abandoning the free-float spirit of the MAR), then the inflow of reserves would be inflationary. Korean exporters would lose competitiveness. The solution, as I noted above, is to resist the nominal appreciation, but to sterilize the increase in reserves so as to prevent inflationary growth in the money supply.

Another possibility is that the authorities are worried that Korean “domestic financial institutions, especially banks, are not efficient and competitive enough compared to their foreign counterpar-

Fry (1990, 42-4) and Park (1991).

²³E.g., Kim (1991, p. 21)

²⁴U. S. Treasury (1990b; 1990a, p. 261).

²⁵Oum (1991, p. 7)

ts.”²⁶ One could argue that there are three natural stages of development in a country’s financial system. In Stage 1, business investment is financed out of family savings or — in a country where the government plays a more *dirigiste* role — by official loans. This is clearly the stage that Korea has been at up until now. One should hesitate before condemning Korean “financial repression,” given how successful the development process has been over the last thirty years.²⁷ Nevertheless, it may be time to move on to a new stage.

In Stage 2, financial intermediation by investment banks allows a more effective channeling of funds from savers to business. The Japanese post-war main bank system illustrates this system at its best, with the banks efficiently monitoring the activities of the firm managers to make sure they are not diverting the funds from productive investment projects toward their own purposes.²⁸ DeLong (1991) has argued that in the nineteenth century investment banks served this role in the United States as well.

In Stage 3, well-established corporations find that it is more efficient still to disintermediate. They switch from reliance on bank loans to issuing securities directly in developed financial markets, where a corporation with a good reputation and credit-rating can obtain capital cheaply. The United States and the United Kingdom have been at Stage 3 for some time, and Japan is apparently beginning to move there (though it is unclear whether or not this will constitute an improvement). The question is whether it is not premature for Korea to jump to Stage 3, without first having passed through Stage 2.

VII. Recent U.S.-Korean Negotiations over Financial Issues

The U.S. Treasury evaluation of progress in the 1990 Financial Policy Talks regarding financial services was negative. With respect to treatment of foreign banks, even though Korea had in 1984 declared national treatment for foreign-owned banks as part of a three-year deregulation plan,²⁹ the report found: “progress in resolving problems has been very slow and no timetable for dealing

²⁶Oum (1991, p. 7)

²⁷See Park (1991) on this point.

²⁸For a survey of this and other aspects of corporate finance in Japan, see Frankel (1991b).

²⁹Ohm (1991, p. 7).

with them has been produced.”³⁰ With regard to treatment of foreign securities firms, even though Korea had declared that 24 foreign firms would be allowed to establish branches,³¹ the report found (p. 11): “U.S. financial firms do not receive national treatment in Korean securities markets.”³² With regard to overall financial liberalization, the report found: “Until the Korean Government allows domestic banks to compete in a market environment, fully liberalizes interest rates, and eliminates credit allocation and exchange controls, there is little likelihood of major advances in equality of competitive opportunity for foreign financial service providers in the Korean market.”³³

In 1991, foreign securities companies were for the first time allowed directly into the country (as had been promised in the negotiations with the U.S.). The Ministry of Finance in March approved four out of nine applications for branch office securities licenses,³⁴ two of them American,³⁵ turning down all four Japanese securities companies (and one French-owned) that had applied. The reason given was reciprocity: Korean firms would be more able to enter American and British markets than Japanese and French. But in the interpretation of *The Economist*, “Few people doubt that dislike and fear of Japan had more to do with it.” Such developments are of interest, because there is the potential that as U.S. political pressure forces open Korean financial markets, the capital and financial firms that come in will be Japanese rather than American. On economic grounds, the flow of money from Japan to Korea is quite natural. On political grounds it is more difficult.

In June 1991 restrictions were lifted on the establishment of multiple branches of foreign banks. It was also announced that application of national treatment for banks will be “stepped up,” (Oum 1991, p. 8) and that the government of Korea was preparing a “master plan” to liberalize interest rates and to “rectify distortions in its term structure.”³⁶ (In its next report, the U.S. Treasury appeared unimpressed, however.³⁷)

³⁰U.S. Treasury (1990, p. 243)

³¹Eight of them American. Ohm (1991, p. 7)

³²U.S. Treasury (1990, p. 261)

³³U.S. Treasury (1990, p. 258)

³⁴*The Economist*, “The Korea that can say no,” March 23, 1991.

³⁵Oum (1991).

³⁶Oum (1991, pp. 10–11). Evidently there is a need to encourage more saving in longer-term securities, instead of short-term (Fry, 1990).

³⁷Lindner (1991a, p. 18).

At the beginning of 1992 foreign investors are to be free to invest in individual Korean stocks on the stock market.³⁸ Other reforms are planned as well. On December 17, 1991, the National Assembly approved revisions in a number of laws, including a revision to permit banks to engage in all foreign exchange business that is not specifically prohibited.³⁹

VIII. Tests of Financial and Monetary Links to the U.S. and Japan

A useful way of empirically measuring the magnitude of barriers separating a country's financial markets from the outside world is to look at differentials between onshore and offshore interest rates, usually with adjustments of some kind to make them more comparable. The idea is that if barriers are low, then arbitrage should equate onshore and offshore rates of return. We will review some empirical evidence on three questions:

- (1) How open are financial markets in Korea compared, for example, to other Asian countries?
- (2) Are financial links tighter with New York or Tokyo?
- (3) Of the barriers that remain, which are more important: currency factors or country factors?

A. Are Korean Financial Markets Becoming More Open?

A recent study by Reisen and Yeches (1991) estimates the degree of Korean links with foreign interest rates through a time-varying coefficients model. It finds an increase in financial openness in the first half of the 1980s, following the financial deregulation package that was part of an overall liberalization of the economy in 1981. But the degree of openness declined during 1985-87 (and remained below its 1985 peak as recently as 1990). This is the period when the won appreciated against the dollar as the result of dollar depreciation against major currencies, followed by U.S. pressure on Korea not to keep its currency tied to the dollar. Reisen and Yeches point out that despite the switch from a depreciation trend to an appreciation trend, which one would expect in a fully liberalized system to eliminate the premium demanded by investors to hold

³⁸Kim (1991, p. 22) and Oum (1991, p. 9). But apparently there will be a 10% limit on foreign ownership. (*The Economist*, March 23, 1991).

³⁹*The Korea Times*, December 19, 1991.

Korean assets, Korean interest rates remained far higher (16 to 20%) than U.S. interest rates. These are curb-market rates;⁴⁰ their still-high level represents some unknown combination of controls on capital inflow and the higher credit risk of curb-market obligations. But the fact that low-risk market-determined interest rates are still not available is even more direct evidence that the market is not liberalized.

The Korean CPI inflation rate averaged 4% during the period 1982-89, almost exactly as low as the U.S. CPI inflation rate. This suggests a differential in real interest rates between Korea and the United States in excess of 16 per cent. For purposes of comparison, the real interest differentials in other Asian Pacific countries averaged as follows: Japan -0.6%, Hong Kong -2.9%, Singapore +0.1%, Malaysia +0.8%, Australia +1.2%, and New Zealand +1.0%.⁴¹ This list of six countries is unrepresentative of Asia and the Pacific, in the sense that they are the ones whose financial markets are the most developed and open; the list was chosen because these countries are the only ones for whom data from the London forward exchange market are available.⁴² But the contrast between Korea and these six makes clear how far the former is from having open and fully-developed financial markets.

B. Are Financial Links Tighter with New York or Tokyo?

To tell whether a small country is more tightly linked to one major world financial center or another, one can run a regression of its interest rate against interest rates in the foreign countries. A regression of monthly Korean interest rates against major foreign three-month interest rates over the period December 1977 to March 1989 is reported in Table 1. It suggests that U.S. interest rates have the most influence, with Japan close behind (followed by the United Kingdom; the coefficient on German interest rate shows the wrong sign).⁴³ These effects appear to be highly significant

⁴⁰The Korean call money rate is lower, occasionally as low as offshore dollar interest rates.

⁴¹Over the period September 1982 to January 1988. Further statistics and data details are given in Frankel (1991a). For more tests of real interest parity in the region, see Glick (1987) and Glick and Hutchison (1990).

⁴²These data allow tests of covered interest parity, which show that capital controls and similar barriers to the movement of capital across national boundaries are as low in Japan, Hong Kong and Singapore, as in any European country.

⁴³These results use monthly observations of the Korean call money rate. Similar re-

TABLE 1
REGRESSION OF KOREAN INTEREST RATE AGAINST INTEREST RATES
IN U.S., U.K., GERMANY AND JAPAN: 1977. 12~89. 3

| Variable | Coefficient | <i>t</i> -ratio |
|----------|-------------|-----------------|
| Constant | -2.780 | -1.585 |
| i_{US} | 0.898 | 4.304 |
| i_{UK} | 0.405 | 2.143 |
| i_{GY} | -0.568 | -2.070 |
| i_{JP} | 0.873 | 3.596 |
| R^2 | 0.451 | <i>D.W.</i> |
| | | -359.39 |

Note: i_{US} = U.S. interest rate, i_{UK} = U.K. interest rate, i_{GY} = Germany interest rate, i_{JP} = Japan interest rate.

TABLE 2
REGRESSION OF KOREAN INTEREST RATE AGAINST FOREIGN INTEREST RATES
ON FIRST DIFFERENCES: 1978. 6~89. 3

| Variable | Coefficient | <i>t</i> -ratio |
|-----------------|-------------|-----------------|
| Constant | -0.077 | -1.328 |
| Δi_{US} | -0.108 | -1.831 |
| Δi_{UK} | 0.007 | 0.159 |
| Δi_{GY} | -0.061 | -0.431 |
| Δi_{JP} | 0.250 | 1.720 |
| R^2 | 0.060 | <i>D.W.</i> |
| | | 2.16 |

statistically.⁴⁴

One would expect that this relationship would have changed over time, particularly since Korea did not even begin to deregulate its interest rates until 1982. One way of addressing this issue is the technique of "rolling regressions," i.e., running a series of regressions that each update the sample to include one more observation. The coefficients in such regressions, with 95% confidence bands around them, are plotted over time in the figures (following Tables 1 and 2, respectively). The coefficient on U.S. interest rates has an upward trend, leveling out almost at 1.0 in the last three years of the sample. (The coefficient in the last month of the sample is by

gressions using a Korean 3-month financial bill rate from *World Financial Markets* show a greater role for U.K.

⁴⁴This significance disappears, however, when one tries the regression on first differences in response to the evidently high level of serial correlation, as shown in Table 2.

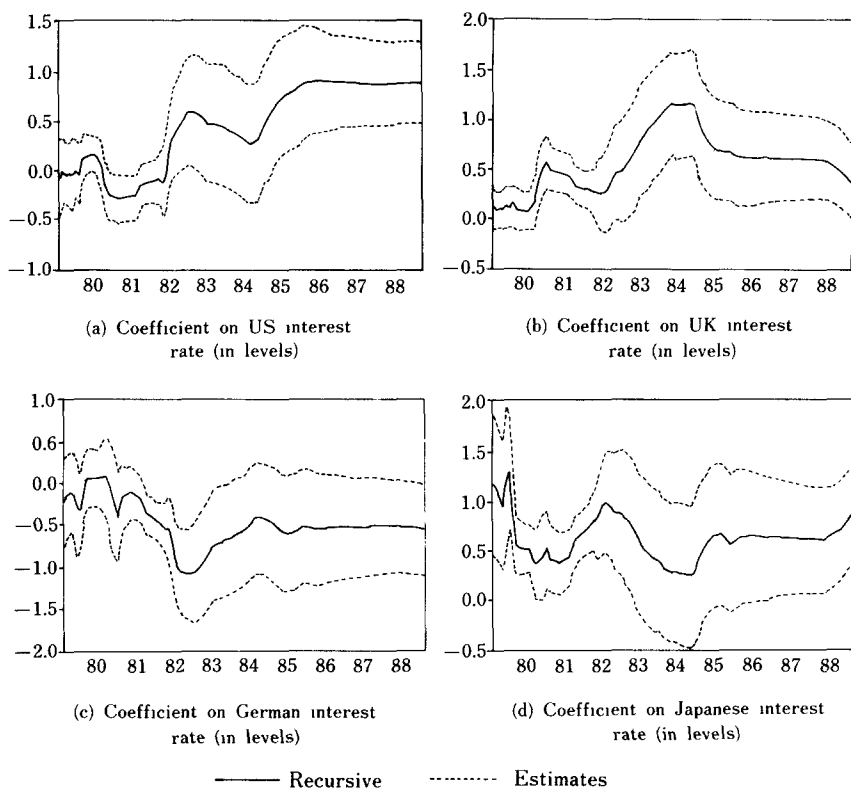


FIGURE 1
ROLLING-REGRESSION UPDATES OF COEFFICIENTS

construction the same as that reported in the preceding table.) Coefficients on the other foreign countries do not have such clear trends, though the Japanese coefficient starts out near 1.

Another way of investigating how the relationship changes over time is to allow for simple time trends in the coefficients. These results are reported in Table 3. The influence of Japanese interest rates, though high, appears to be decreasing over time. The same is true of German interest rates. The British interest rate is gaining influence over time. The U.S. shows no significant trend. When one takes first differences (in Table 4), the significance of the results regarding the role of Japanese interest rates remains (though there is nothing left of the German and British effects).

During most of this period, Korean interest rates were still tightly regulated. U.S. pressure to liberalize, and further steps in that

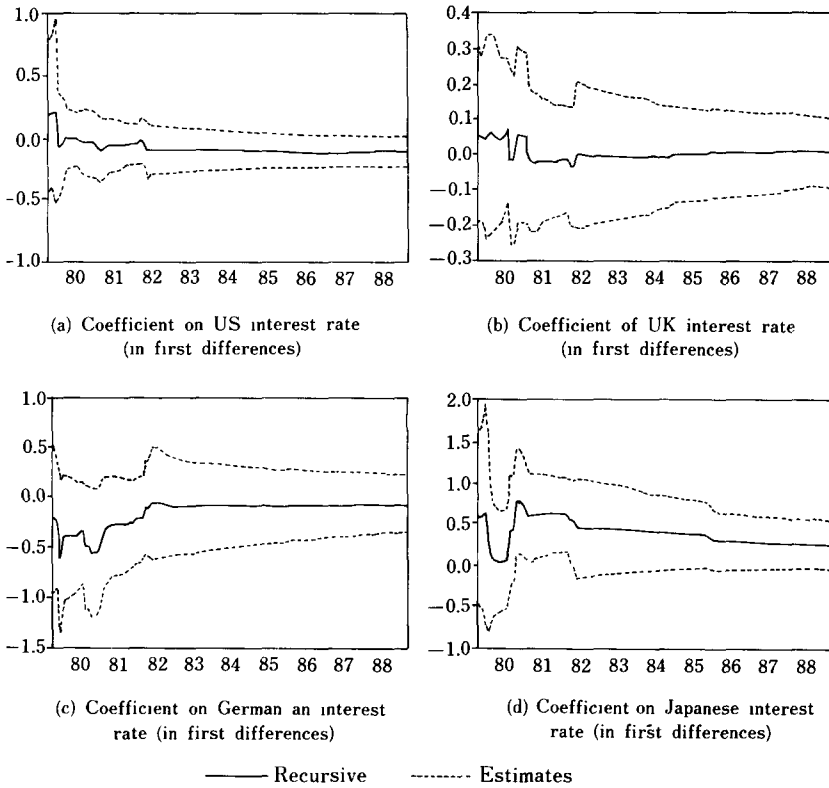


FIGURE 2
ROLLING-REGRESSION UPDATES OF COEFFICIENTS

TABLE 3
REGRESSION OF KOREAN INTEREST RATE AGAINST FOREIGN INTEREST RATES
ALLOWING FOR TIME TRENDS IN COEFFICIENTS 1977. 12~89. 3

| Variable | Coefficient | <i>t</i> -ratio |
|----------------|-------------|-----------------|
| Constant | 9.610 | 12.283 |
| i_{US} | 0.010 | 0.024 |
| i_{US} trend | 0.000 | 0.105 |
| i_{UK} | -1.056 | -3.365 |
| i_{UK} trend | 0.010 | 5.370 |
| i_{GY} | 3.541 | 4.311 |
| i_{GY} trend | -0.025 | -4.426 |
| i_{JP} | 3.070 | 6.818 |
| i_{JP} trend | -0.021 | -7.683 |
| R^2 | 0.931 | <i>D.W.</i> |
| | | 0.613 |

TABLE 4
REGRESSION OF KOREAN INTEREST RATE AGAINST FOREIGN INTEREST RATES ON
FIRST DIFFERENCES, ALLOWING FOR TIME TRENDS IN COEFFICIENTS: 1978. 6~89. 3

| Variable | Coefficient | <i>t</i> -ratio |
|-----------------------|-------------|-----------------|
| Constant | -0.090 | -1.534 |
| Δi_{US} | 0.157 | 0.369 |
| Δi_{US} trend | -0.001 | -0.590 |
| Δi_{UK} | 0.007 | 0.033 |
| Δi_{UK} trend | -4.15 | -0.029 |
| Δi_{GY} | -0.645 | -1.005 |
| Δi_{GY} trend | 0.003 | 0.893 |
| Δi_{JP} | 1.524 | 2.258 |
| Δi_{JP} trend | -0.008 | -1.911 |
| R^2 | 0.091 | <i>D.W.</i> |
| | | 2.188 |

direction, date from 1988. In Table 5, I tried the interest rate regression, against U.S. and Japanese interest rates, during the more recent time period 1988-91. New York and Tokyo appear to have equal effects on the Korean interest rate.⁴⁵ For purposes of comparison, the influence of Japanese interest rates in Taiwan and Singapore now appears to be greater than the influence of U.S. interest rates, while in Hong Kong (which is pegged to the dollar) it is the U.S. influence that is larger.

C. Which Sort of Barrier is More Important: Currency Factors or Country Factors?

There are many factors or barriers that can separate a country's interest rates from world interest rates. The barriers can be sorted into two categories: those that pertain to the political jurisdiction in which an asset is issued (capital controls, tax differences, default risk, risk of *future* capital controls, and information costs), and those that pertain to the currency in which it is denominated (expected currency depreciation and the exchange risk premium). To separate the two factors, one needs some way of adjusting for the prospect of exchange rate changes, such as forward rate data. Out of the 25 countries for which forward rate data are available, all but a few (none of them in the Pacific) show currency premia that are larger than country premia. For some, covered interest parity

⁴⁵Frankel (1992, Table 4).

TABLE 5
JAPANESE AND U.S. INTEREST RATE EFFECTS IN FIVE PACIFIC COUNTRIES

| | | Constant term | Tokyo effect | New York effect | R ² | D.W. |
|-----------|-----|-------------------|------------------|--------------------|----------------|------|
| Singapore | (1) | -2.29** (0.84) | 0.82** (0.07) | 0.43** (0.09) | 0.85 | 0.53 |
| | (2) | 3.30** (0.39) | -0.01 (0.03) | 0.27** (0.05) | 0.71 | 0.43 |
| | (3) | 1.47** (0.45) | 0.29** (0.05) | 0.41** (0.06) | 0.72 | 1.41 |
| Australia | (1) | -6.66** (2.32) | 0.74** (0.18) | 2.11** (0.26) | 0.73 | 0.19 |
| | (2) | 13.90** (1.40) | 0.10* (0.06) | -0.07 (0.12) | 0.03 | 0.20 |
| | (3) | 3.83** (1.13) | 0.07 (0.21) | 0.67** (0.20) | 0.76 | 1.36 |
| Taiwan | (1) | -4.93 (4.04) | 1.91** (0.32) | 0.32 (0.45) | 0.53 | 1.17 |
| | (2) | 7.14 (0.67) | 0.07 (0.08) | 0.10 (0.12) | 0.05 | 0.82 |
| Korea | (1) | -4.08* (2.33) | 1.29** (0.19) | 1.16** (0.26) | 0.69 | 0.78 |
| | (2) | 11.65** (0.32) | 0.04 (0.04) | 0.27** (0.07) | 0.55 | 1.28 |
| Hong Kong | (1) | -6.40** (1.51) | 0.25* (0.15) | 1.66** (0.17) | 0.79 | 0.59 |

Note: 1. Regressions of local interest rate against:

- (1) Japanese and U.S. interest rates
- (2) Japanese and U.S. interest rates adjusted for expectations of exchange rate changes as reflected in *Currency Forecasters' Digest*
- (3) Japanese and U.S. interest rates adjusted for forward discount.

2. *: Statistically different from zero at 90% significance level.
3. **: Statistically different from zero at 99% significance level.
4. Standard errors are reported in parentheses.

holds almost precisely, showing evidence of no country barriers at all. (Australia, in Table 5, shows a coefficient on the covered U.S. interest rate that is insignificantly less than one, indicating a failure to reject covered interest parity vis-a-vis the United States.) But these 25 are typically countries with relatively liberalized financial markets.⁴⁶

⁴⁶Frankel (1991a, p. 247-49).

Without forward rate data, which do not exist for Korea, it is difficult to decompose definitively the interest differential into a currency component and a country component. Survey data can be used in place of forward rate data to correct for expectations of exchange rate changes.⁴⁷ The hypothesis of a unit coefficient in the interest rate regression then becomes the condition of uncovered interest parity, rather than covered interest parity.

Table 5 reports the Korean interest rate regression with foreign interest rates adjusted for expected depreciation using the survey data. The apparent significance of the Japanese effect in Korea now disappears (as it does in Singapore and Taiwan). This finding suggests the possibility that the link between Korean and Japanese interest rates during the recent period may in part be due to currency factors: the won is less closely tied to the dollar than it used to be, partly as the result of U.S. pressure, and perhaps more closely to the yen. We now turn to a test of this question.

The hypothesis that the implicit weights assigned to major foreign currencies by the won changed during the course of the 1980s can be tested directly by regressing changes in the value of the won against changes in the value of other major currencies. There is a methodological question of what numeraire should be used to measure the value of the currencies. A simple solution is to use the SDR as numeraire. This approach suffers a bit from the drawback that the SDR is itself being a basket of five major currencies including the dollar and yen. An alternative approach that is neater theoretically is to use purchasing power over Korean goods (the inverse of the Korean price level) as the numeraire.

Regressions of the change in the real value of the won in Table 6 show a statistically significant weight on the value of the dollar throughout the period April 1980 to March 1986, with an estimated coefficient of 0.4 to 0.5. (The Canadian dollar, which was reputed to be included in the Korean basket, also shows up with a significant coefficient of 0.2 during part of the period.) There is a significant constant term (the "alpha") during this period: the value of the won declined during the early 1980s, whether measured by inflation or

⁴⁷There are by now a number of surveys of forecasts of participants in the foreign exchange market. Most deal only with the major 5 or so currencies. There is one, however, that covers more currencies, including a number of Asian ones: *Currency Forecasters' Digest* of White Plains, New York. This is the source for our survey data, obtained by subscription of the Institute for International Economics where the author is a Visiting Fellow

TABLE 6
WEIGHTS ASSIGNED TO FOREIGN CURRENCIES IN DETERMINING MONTHLY CHANGES IN VALUE OF KOREAN WON
(during 1980s and two-year sub-periods)

| Period | Constant | Yen | Dollar | Mark | Pound | Franc | Can. \$ | R ² | D.W. |
|--------------|---------------------|------------------|-----------------|----------------|----------------|----------------|-----------------|----------------|------|
| 1980.4-90.12 | -0.0038 -6.32*** | -0.03 -1.24 | 0.27 4.05*** | 0.10 1.42 | -0.01 -0.36 | -0.02 -0.34 | 0.14 2.40*** | 0.40 | 0.78 |
| 1980.4-82.3 | -0.0095 -4.86*** | -0.06 -0.44 | 0.50 1.17 | 0.21 1.39 | -0.05 -0.30 | -0.15 -0.89 | 0.29 0.99 | 0.70 | 1.72 |
| 1982.4-84.3 | -0.0027 -3.28*** | 0.01 0.18 | 0.41 3.24*** | -0.07 -0.97 | 0.02 0.65 | 0.07 1.19 | 0.11 1.64 | 0.67 | 1.38 |
| 1984.4-86.3 | -0.0033 -3.44*** | 0.03 0.68 | 0.40 2.77** | 0.36 0.85 | -0.03 -0.70 | -0.34 -0.71 | 0.08 0.82 | 0.46 | 1.32 |
| 1986.4-88.3 | -0.0001 -0.04 | -0.09 -2.54** | 0.36 3.20*** | 0.13 1.18 | -0.01 -0.19 | -0.04 -0.35 | 0.04 0.47 | 0.78 | 2.35 |
| 1988.4-90.3 | -0.0015 -1.04 | 0.18 2.60** | 0.11 0.79 | 0.34 1.44 | -0.06 -0.96 | -0.39 -1.67 | 0.11 1.49 | 0.56 | 2.02 |

Note: 1. The values of the won and foreign currencies are measured as purchasing power over Korean goods, as defined by the CPI.
2. *, (**), [***]: Statistically significant at 90% (95%)[99%] level.
3. *t*-statistics reported below coefficients.

depreciation, relative to foreign currencies. The dollar, like the other major currencies, is insignificant during the period April 1985 to March 1987. Its influence re-emerges from April 1986 to March 1988. But then during the final two-year sub-period, April 1988 to March 1990, the yen (with a highly significant coefficient estimated at 0.18) suddenly eclipses the dollar (with an insignificant coefficient of 0.11).⁴⁸ Thus the evidence confirms that Korea has loosened the link between the won and the U.S. dollar, as the United States urged, and has developed a link with the yen.

Another sign of the increased influence of the yen in Korea is the yen share of external debt, which increased from 16.6% in 1980 to 29.5% in 1988. For an average of five major debtors in the region, the yen share increased from 19.5% to 37.9% over this period. In the Asian region, the share of the yen in official reserve holdings rose from 13.9% in 1980 to 26.7% in 1988 (and then declined back to 17.5% in 1989).⁴⁹ To the extent that the emergence of a "Yen Bloc" in East Asia would not be welcome by the United States, it is ironic that internationalization of the yen was originally a goal of U.S. policy.

IX. Conclusion

Financial liberalization is a good thing for Korea, so long as proper SEC-type regulation is maintained. Allowing in providers of financial services, like allowing in foreign agricultural products, is consistent with comparative advantage, and would benefit both countries.

The beneficial implications for U.S. "competitiveness" of Asian liberalization in the area of exchange rate policy are less clear than one would infer from observing the amount of U.S. pressure applied. It is misguided for Americans to appeal to free-market principles to justify pressure on Asian countries to allow their currencies to appreciate against the dollar. It is perfectly appropriate for a small country to seek exchange rate stability if it so desires. American negotiators would perhaps be better advised to concentrate on nego-

⁴⁸When values in terms of the SDR are used, the dollar appears to maintain its significance much more strongly, but the finding of a highly significant yen in the last two years remains. (Such results are reported in Table 1 of the Hoover Institution version of this paper)

⁴⁹Tavlas and Ozekı (1991).

tiating the liberalization of trade in goods and services, where the appeal to principle is on secure ground. It is particularly ironic, from the viewpoint of popular American concern with declining influence in East Asia, that U.S. government pressure on Korea to liberalize its financial markets and loosen its link with the dollar has resulted in a greater role for the yen and Japanese interest rates in Korea.

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