FRBSF WEEKLY LETTER

Number 95-37, November 3, 1995

Is Pegging the Exchange Rate a Cure for Inflation? East Asian Experiences

A common argument for pegging the nominal exchange rate is that linking to a stable foreign currency enforces discipline on domestic monetary policy, thus stabilizing inflation expectations. In particular, exchange rate pegging can increase the credibility of a central bank's announced low-inflation goal, by allowing policymakers to import some of the credibility for stable monetary control associated with foreign policies. For example, pegging the exchange rate contributes to lower inflation if pressures for domestic currency depreciation are met by tighter monetary policies.

To varying degrees, East Asian economies (outside Japan) have pegged their currencies to the U.S. dollar. Most have also achieved relatively low inflation, certainly by the standards of developing countries. Can the relatively successful performance of East Asian economies be attributed to their exchange rate policies?

This *Letter* argues that the nominal exchange rate pegging policies of East Asian economies are not the explanation for their low inflation. In East Asia, most currencies have faced pressure to appreciate. Under these circumstances, resistance to currency appreciation had an expansionary effect and contributed to higher inflation. Factors other than pegging, discussed briefly below, appear instead to be responsible for Asia's low inflation. (For a fuller discussion, see Glick, Hutchison, and Moreno (GHM) 1995.)

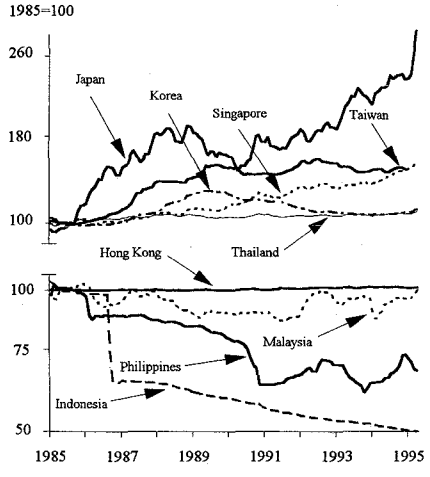
Pegging to the dollar

The exchange rate regimes of East Asian economies have varied widely—for example, Hong Kong maintains a unilateral peg to the U.S. dollar, Indonesia, Malaysia, Singapore, and Thailand have fixed or adjustable pegs to a currency basket, and Korea has a managed float.

Despite this variety, policymakers in almost all economies have tended to limit adjustment of their currencies against the U.S. dollar. Figure 1 illustrates this phenomenon, by means of indices of monthly nominal bilateral exchange rates against the U.S. dollar over the period 1985:01 to 1995:04 (for the New Taiwan dollar to 1994:12); the indices are constructed so that an increase implies an appreciation of the local currency. The top panel shows currencies which have on average appreciated against the dollar (including Japan as a reference); the bottom panel shows currencies that have not appreciated or have depreciated.

The figure shows that no currency has appreciated as much as the Japanese yen and with the

Figure 1
East Asian Dollar Exchange Rates



Note: An increase is an appreciation of the East Asian currency.

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exceptions of the Singapore dollar and the Indonesian Rupiah, the trends in the exchange rate appear to be dampened, in the sense that they have tended to return to their previous levels against the U.S. dollar or settled on new plateaus. In all cases (including those of Singapore and Indonesia) monthly fluctuations in exchange rates against the dollar appear to be smaller than in the case of the Japanese yen. The dampened trends and the relative smoothness of the series appear to reflect policies designed to stabilize the value of these currencies against the U.S. dollar.

Efforts by East Asian countries to stabilize their currencies against the U.S dollar are also apparent in Frankel and Wei's (1993) finding that over the period 1979–1992, the weight of the U.S. dollar in estimated currency baskets averaged over 90 percent for East Asian economies, compared to a 6 percent weight for the yen, and a 3 percent weight for the deutsche mark.

Appreciation versus inflation

In many developing countries, particularly those experiencing hyperinflation, exchange rate pegging is often an essential part of government efforts to enhance the credibility of its commitment to disinflation. In East Asia, it is more likely that pegging reflected efforts to avoid any adverse effects of currency fluctuations on international trade flows in these highly open economies. In fact, such pegging may have contributed to inflationary pressures in East Asia after 1985.

To see this, it is worth recalling the distinction between the *nominal* exchange rate, which is the relative price of two currencies, and the *real* exchange rate, which is the nominal exchange rate adjusted for inflation and reflects the price at which a representative basket of domestic goods may be exchanged for a representative basket of foreign goods. A real appreciation means that domestic goods cost more relative to foreign goods. A nominal appreciation means that a country's currency costs more relative to foreign currencies.

The equilibrium real exchange rate depends on relative demands for goods and assets. For example, an event that leads to excess demand for domestic goods or assets will tend to appreciate a country's real exchange rate. This equilibrium real appreciation can occur in two ways. If policymakers allow the nominal exchange rate to appreciate in response to the excess demand—implying a higher foreign currency price of domestic currency—domestic goods will cost more relative to foreign goods, resulting in real appreciation. However, if the nominal exchange rate is pegged, the appreciation in the real exchange rate will necessarily occur through higher inflation at home than abroad.

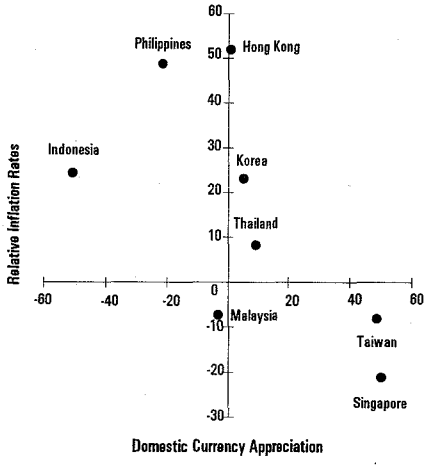
After 1985, two factors contributed to pressures for real exchange rate appreciation in East Asia. First, between 1985 and 1987, the strong depreciation of the U.S. dollar against major currencies, such as the yen and the deutsche mark, created a competitive export advantage for economies in the region leading to significant increases in their trade balances. Second, the decline of U.S. interest rates between 1989 and 1993 encouraged investors to look for foreign investment opportunities, spurring capital inflows to East Asia.

Under these conditions, monetary authorities had the choice of allowing their nominal exchange rates to appreciate more freely, or to attempt to resist pressures for appreciation. However, pegging policies that resisted nominal exchange rate appreciation contributed to higher inflation. In particular, those economies whose currencies did not appreciate freely in response to the depreciation of the dollar experienced an (inflationary) increase in aggregate demand associated with more competitive exchange rates. As discussed by GHM, inflationary pressures also arose from balance of payments surpluses associated with increased capital inflows or greater trade surpluses. Reflecting efforts to peg the exchange rate through intervention, the balance of payment surpluses put upward pressures on money supplies, contributing to higher inflation.

The phenomenon that more limited nominal exchange rate appreciation is associated with higher inflation is illustrated in Figure 2, a scatter diagram relating average annual nominal exchange rate appreciation against the U.S. (horizontal axis) and domestic consumer price inflation relative to United States inflation (vertical axis) over the period 1985–1994. Figure 2 shows that in countries where the nominal exchange rate did not appreciate against the dollar, domestic inflation tended to exceed U.S. inflation. In contrast, countries that allowed some nominal appreciation experienced smaller inflation or greater price declines relative to the United States.

The tradeoff between adjustment through nominal exchange rate appreciation or through higher relative inflation is illustrated by the cases of Hong Kong and Singapore. Hong Kong's exchange rate has been fixed against the dollar and since 1985 it has experienced a cumulative inflation relative to the U.S. that exceeds 50 percent. In contrast to Hong Kong, Singapore has allowed its nominal

Figure 2
East Asian Currency Appreciation and Relative Inflation Rates



Note: Positive values indicate domestic currency appreciation relative to U.S. dollar or higher domestic CPI inflation relative to U.S. CPI inflation.

exchange rate to appreciate by about 50 percent against the U.S. dollar, limiting cumulative inflation to 20 percent less than the U.S. over the 1985–1994 period.

Why was Asia's inflation low?

If exchange rate policies did not contribute to Asia's relatively low inflation rates, what did? In many economies, there are strong pressures to print money—with corresponding inflationary effects—in order to offset sluggish output growth or to finance fiscal deficits. One explanation for East Asia's low inflation is that these types of pressures have been far smaller than in other countries. The average growth of per capita GNP in this region exceeded 5 percent during 1965–1990, more than twice that of other regions in the world (including industrial countries). In addition, budget deficits in East Asian economies are by and largely sustainable, or easily financed through conventional means. Budget deficits have been limited in some cases by imposing caps on the permissible deficits, insulating the budget process from political pressures, and avoiding central bank subsidies to banks or large state enterprises. Even in those cases where budget deficits were large, inflationary pressures were limited. Rapid growth and high rates of private saving increased the demand for money and domestic financial assets, thus raising the proportion of budget deficits that could be financed by printing money without inflation, as well as the overall level of government borrowing that was willingly financed by domestic and foreign residents.

Another explanation for East Asia's low inflation is that the costs of such inflation may be high in comparison to other regions. These economies are highly open—the ratio of exports plus imports to GNP ranges from a low of about 30 percent for the Philippines and Indonesia to a high of 260 percent for Singapore. Such dependence on international trade means that high inflation may generate relatively high economic costs if it results in real exchange rate appreciation and a corresponding loss of international trade competitiveness. Analysis of the data supports this view, as it reveals that greater openness in East Asian economies is associated with lower inflation.

Conclusions

The preceding discussion suggests that the nominal exchange rate pegging policies of East Asian economies are not the explanation for their low inflation. On the contrary, since 1985, those economies whose currencies who have been most stable in value against the U.S. dollar have tended to experience higher inflation. Factors other then pegging, such as rapid growth, sustainable budget deficits, and relative openness most likely explain their relative success in achieving low inflation.

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Index to Recent Issues of *FRBSF Weekly Letter*

DATE	NUMBER	TITLE	AUTHOR
4/7	95-14	Responses to Capital Inflows in Malaysia and Thailand	Glick/Moreno
4/14	95-15	Financial Liberalization and Economic Development	Huh
4/21	95-16	Central Bank Independence and Inflation	Parry
4/28	95-17	Western Banks and Derivatives	Laderman
5/5	95-18	Monetary Policy in a Changing Financial Environment	Glick/Trehan
5/12	95-19	Inflation Goals and Credibility	Judd
5/19	95-20	The Economics of Merging Commercial and Investment Banking	Kwan
5/26	95-21	Financial Fragility and the Lender of Last Resort	Schaan/Cogley
6/9	95-22	Understanding Trends in Foreign Exchange Rates	Kasa
6/23	95-23	Federal Reserve Policy and the Predictability of Interest Rates	Rudebusch
7/7	95-24	New Measures of Output and Inflation	Motley
7/28	95-25	Rebound in U.S. Banks' Foreign Lending	Zimmerman
8/4	95-26	Is State and Local Competition for Firms Harmful?	Mattey/Spiegel
8/18	95-27	Productivity and Labor Costs in Newly Industrializing Countries	Golub
9/1	95-28	Using Consumption to Track Movements in Trend GDP	Cogley/Schaan
9/8	95-29	Unemployment	Walsh
9/15	95-30	Gaiatsu	Kasa
9/22	95-31	Output-Inflation Tradeoffs and Central Bank Independence	Walsh
9/29	95-32	Inflation-Indexed Bonds	Huh
10/6	95-33	California Dreamin': A Rebound in Net Migration?	Gabriel
10/13	95-34	Interest Rate Smoothing and Inflation, Then and Now	Huh
10/20	95-35	Russian Banking	Jaffee/Levonian
10/27	95-36	Consolidation: California Style	Furlong/Zimmerman

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